The Meliora Imperative

A Self-Study Prepared for the
Middle States Commission on Higher Education

MELIORA
1850

UNIVERSITY *of*
ROCHESTER

March 2014

Executive Summary

Inspired by the University's motto, *Meliora* (ever better), this comprehensive self-study of the University of Rochester is entitled "The Meliora Imperative." The name reflects the University's determination to continue to strengthen its research, educational, and service activities.

The context of the current self-study is one in which University planning is deeply affected by numerous significant local and national factors. At the local level, the University recently completed a University-wide strategic plan. This followed a 2008 strategic plan that called for strengthening the University's research activities, considerable growth in the University's student body and its programs, and significant expansion of University facilities. In spite of the economic downturn that occurred shortly after the adoption of those plans, the University was able to accomplish much of what it set out to do. The 2013 strategic plan, building on those accomplishments, calls for major commitments to the emerging field of data science; to continued development of systems to provide the highest quality health care to the community; faculty growth in Arts, Sciences & Engineering; new or expanded programs to support learning and research; and significant new facilities to support University activities. In addition, the University will complete a $1.2 billion capital campaign, the first University-wide comprehensive capital campaign since 1924.

The context of the current self-study is also affected by several major national issues. The widespread discussion of the value of higher education and concern about the opportunities open to students upon graduation make it essential that the University, and especially the undergraduate College, provide an ever more valuable residential experience to its students. At the same time, the decline in federal support for sponsored research and the transformation of health care present significant challenges to research universities with major medical centers.

Chapter 1 of this study introduces the University by describing its schools and Medical Center, characterizing its campuses, and explaining its steadily growing relationship to the Rochester community.

Chapter 2 addresses three of the Middle States standards: *Mission and Goals*; *Planning, Resource Allocation, and Institutional Renewal*; and *Institutional Resources*. The chapter begins with an account of the University's motto, vision statement, and its recently adopted mission statement:

> LEARN, DISCOVER, HEAL, CREATE—
> AND MAKE THE WORLD EVER BETTER.

This statement succinctly captures the University's broadest goals and establishes the framework for University planning. The second part of the chapter describes the University's planning processes, including both strategic planning and the annual budget process. Planning is led by the president and the Board of Trustees, with the deans of the schools driving the process within their divisions. This section includes summaries of the strategic planning goals the University established in 2008 and in 2013, as well as details on the progress made toward the achievement of the 2008 goals, including growth of the student body, addition of new programs, the undertaking of 24 major facilities projects, and a reduction in endowment payout. The chapter then turns to the University's financial profile and the systems in place to manage resources. The University's resources are diversified, with the Medical Center becoming an ever increasing component. The chapter contains discussion of the management of the endowment, valued at $1.918 billion (as of December 31, 2013), and the major capital campaign currently under way. The chapter also includes discussion of facilities, both on campus and off. The latter projects illustrate ways in which recent University developments are strengthening connections to the areas adjacent to the River campus. The College Town project, currently under way, has the potential to significantly affect the campus and the nearby community.

The next three Middle States standards, *Leadership and Governance*, *Administration,* and *Integrity,* are addressed in Chapter 3. This chapter begins with a description of the University's bylaws, which define the roles and responsibilities of the Board of Trustees, the president, and the senior leaders. It includes a characterization of the board's committees and explains the ways in which they oversee the University's activities. The section on integrity explains the University's fundamental commitment to respect for the individuals who make up the University community. It reviews the code of conduct governing student life, and the set of communal principles on which the code is based. The principles reflect the University's strong commitment to diversity, which is also described in this chapter. The chapter concludes that the governance systems are working effectively and that the University's efforts to improve communication about important issues has been beneficial and should be continued.

In Chapter 4, the report turns to the seventh Middle States standard, *Institutional Assessment*. This chapter describes the multiple methods of assessment the University regularly undertakes through the activities of its board committees, senior leadership, and standing committees. In addition to these regular planning processes, the University actively identifies prominent local and national issues that require clear and effective institutional policies and activities. The chapter provides examples of the ways in which the University addresses its capacity to assess such issues through the appointment of special committees to review and benchmark policies and provide recommendations for improvement. Examples include recent reviews of security and of campus programs involving minors.

Standard 8, *Student Enrollment and Retention*, is covered in Chapter 5. This chapter focuses on the undergraduate units, the College (the undergraduate division of Arts, Sciences & Engineering) and the Eastman School of Music, but also covers graduate admissions and retention. The chapter examines admissions policies and describes some of the efforts to assure a diverse and talented student body. It then examines the efforts to boost retention and graduate rates, particularly in the College. The College

has seen notable growth in applicants, improvement in student quality, and increases in retention and graduation rates. One key goal, noted in the chapter, is continued improvement in these areas.

Chapter 6 covers the next Middle State standard, *Student Support Services*. The chapter separately covers student support services provided to undergraduates in the College and in the Eastman School of Music, and to graduate students. The undergraduate divisions provide an array of support services including academic advising, career counseling, mental health counseling, and more. There is extensive support for at-risk students, including an online system for notifying staff of students who are struggling. Student life on campus is vibrant, and there is an effective system for managing and advising student clubs and organizations. Some of the ways in which the College attempts to strengthen its community are highlighted in this chapter. Support for graduate students at many universities has been less robust than what is provided for undergraduates, but the University has made a concerted effort to increase support for graduate students in recent years. The chapter also reviews a number of centralized services, such as Parking and Transportation, Dining, and others. The University recently completed a review of options for updating its student information system. Following the recommendation of a committee appointed by the provost to assess the University's needs, the University has joined several peers to become design partners with Workday to develop a new student information system for the higher education market. It is noted in the chapter that student services would benefit from the adoption of such a system. There has been a significant increase in international students at the University in recent years, and the chapter concludes with a recommendation that efforts to promote interaction among all students should be encouraged.

Standard 10, *Faculty*, is the topic of Chapter 7. The chapter provides a profile of the faculty, including faculty counts and qualifications. This is followed by a description of faculty roles and responsibilities, a summary of promotion and tenure policies, and an

account of the faculty's research productivity. It also describes the University infrastructure that provides support for research. The chapter concludes with information about survey results indicating faculty satisfaction, increasing efforts to provide support for faculty development, and an analysis of age trends in the faculty. The chapter recommends continued attention to faculty support and development.

In Chapter 8, the report turns to Middle States standards 11–13, which all address educational programs: *Educational Offerings, General Education,* and *Related Educational Activities*. The chapter provides descriptions of the College's distinctive curriculum, which replaces traditional distribution requirements with a "cluster system" that divides offerings into three divisions (humanities, social sciences, and natural sciences) and requires students to complete a major in one division and a cluster of three related courses in each of the other two. It also describes the Eastman School of Music's general education program for undergraduates. The chapter also reviews the broad range of additional programs available to students, including study abroad, undergraduate research, internships, and the unique Take Five program which provides students with a tuition-free additional semester or year to pursue academic enrichment outside their majors. This chapter also includes descriptions of academic support services available to students in all divisions of the University and the ways the faculty of the various schools manage the curriculum. The University encourages interdisciplinary programs, and the chapter includes descriptions of many of the partnerships that flourish on the campus. The chapter concludes with descriptions of the ways in which academic programs and policies are publicized for students, policies regarding transfer students, management of summer programs, online education, and a branch campus.

The final Middle States standard, *Assessment of Student Learning*, is discussed in Chapter 9. In the past decade, the University has made enormous strides in the effectiveness with which it assesses student learning. The chapter describes the provost's formation of the University Assessment Liaison group, with a representative from each unit within the University, for coordination of assessment activities. Unlike the Hajim School of Engineering & Applied Sciences and the professional schools, which have longer histories of assessment through their accreditation agencies, there had been less attention paid to formal assessment in Arts & Sciences. Within the undergraduate College, the director of assessment, a position created several years ago, oversees assessment activities. All departments have clearly identified learning goals and have implemented assessment programs. The College has also established a process for assessing its cluster system. The chapter details these developments and describes assessment activities in all the schools. The chapter notes the need to strengthen alumni surveys so that there will be greater understanding of students' experiences at the University and their subsequent careers.

Finally, the self-study concludes with a summary of its findings and recommendations. The key conclusion is that the University is well positioned to achieve the ambitious goals formulated in its strategic plans.

Organization of the Self-Study

During the 2011–2012 academic year, President Joel Seligman appointed Richard Feldman, dean of the College, and Donna Brink Fox, associate dean of academic and student affairs at the Eastman School of Music, as cochairs of the University of Rochester's Middle States Accreditation Steering Committee. In consultation with then Provost Ralph Kuncl, Deans Feldman and Fox identified 12 individuals to join the Steering Committee, serving as cochairs of six Working Groups. Members of the six Working Groups, the Self-Study Timeline, and administrative and staff support are listed in Appendix 1.1.

Executive Committee

Joel Seligman, President

Peter Lennie, Provost and Executive Vice President (summer 2012)

Lamar Murphy, General Secretary and Chief of Staff

Richard Feldman, Professor of Philosophy and Dean of the College

Donna Brink Fox, Eisenhart Professor of Music Education and Associate Dean of Academic and Student Affairs, Eastman School of Music

Steering Committee

Richard Feldman (cochair)

Donna Brink Fox (cochair)

Brian Brent, Earl B. Taylor Professor of Educational Leadership; Associate Dean for Graduate Studies; Chair, Educational Leadership Program

David Bushinsky, John J. Kuiper Distinguished Professor of Medicine; Chief, Nephrology Division; Associate Chair for Academic Affairs in Medicine

Matthew Burns, College Dean of Students

Thomas Eickbush, Professor of Biology

Harry Groenevelt, Associate Professor of Operations Management; member, Faculty Senate

Logan Hazen, Assistant Professor of Educational Leadership

Margaret Kearney, Professor, School of Nursing; Vice Provost and University Dean of Graduate Studies

Vivian Lewis, Professor, Department of Obstetrics and Gynecology; Vice Provost for Faculty Development and Diversity and Deputy to the President

Elizabeth Marvin, Professor of Music Theory

Barbara Masi, Director of Educational Initiatives and Assessment for Arts, Sciences & Engineering

Suzanne O'Brien, Associate Dean, Arts, Sciences & Engineering

Nancy Specht, Assistant Dean for Institutional Research and University Registrar

Steering Committee Charge

The Steering Committee charge was to oversee and provide leadership to the self-study process.

1. Identify the key issues for the self-study

2. Develop the self-study design

3. Establish and define the charges of the working groups

4. Provide oversight for and coordinate tasks of the working groups

5. Define, implement, and track the established timetable for the self-study process

6. Ensure that consistent and clear communication with the University community was encouraged and planned through open forums and stakeholder meetings

7. Arrange the institution-wide review of the self-study draft, and collect the responses to this draft

8. Oversee the completion of the self-study for submission to Middle States; and coordinate the visit of the Middle States Review Team

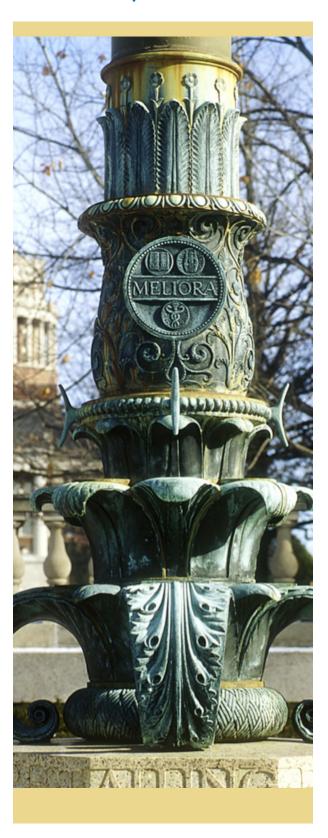Its charge included, but was not limited to the above.

Table of Contents

Chapter 1

An Introduction to the University of Rochester

An Overview of the University of Rochester

The University of Rochester, founded in 1850 as a Baptist-sponsored institution, has grown into a complex private research university composed of six academic divisions:

- Arts, Sciences & Engineering, home to the School of Arts & Sciences, the Hajim School of Engineering & Applied Sciences, and the undergraduate College
- The Margaret Warner Graduate School of Education and Human Development
- The William E. Simon Business School
- The Eastman School of Music
- The School of Medicine and Dentistry
- The School of Nursing

In addition, the University is home to the University of Rochester Medical Center, many research centers such as the Laboratory for Laser Energetics and the Mees Observatory, and arts institutions such as the Memorial Art Gallery and the Eastman Theatre. (The following links can be used to access organizational charts for the University as a whole and for the Medical Center.)

The University's campuses include 170 buildings that house more than 200 undergraduate majors and more than 100 graduate programs, nearly 2,500 instructional staff, and some 10,500 students, approximately half of whom are women. Approximately 6,000 students are undergraduates, 5,000 of them in the College (the undergraduate division of Arts, Sciences & Engineering) and about 500 in the Eastman School of Music. Smaller numbers of undergraduates are enrolled in the School of Nursing's RN to BS program or are nonmatriculated students. Of the approximately 4,500 graduate students in the University, approximately 1,200 are in Arts, Sciences & Engineering, 1,000 are in the Simon Business School, 900 in the School of Medicine and Dentistry, and smaller numbers in the Warner School of Education, the Eastman School of Music, and the School of Nursing. Rochester attracts an increasing number of

applicants each year from across the United States and all over the world.

The University is located in Rochester, N.Y., a mid-sized city of about 211,000 people in Monroe County (1,054,000 metropolitan statistical area) on the southern shore of Lake Ontario in western New York. By car Rochester is about a 6-hour drive northwest of New York City, one hour east of Buffalo, and three hours southeast of Toronto. As the birthplace of Bausch & Lomb, Xerox, and Eastman Kodak, Rochester has been a leader in the imaging industry for more than a century, offering the community support and collaboration critical to the growth of a research university.

Campuses

River Campus
The University's main grounds are located on the River Campus, 154 acres along a bend of the Genesee River about two miles south of downtown Rochester. The River Campus, dedicated in 1930, is the third home of the University. The private men's college officially opened in 1850 in a former hotel in downtown Rochester and moved a decade later to the Prince Street Campus, just east of the city's center, where women were first admitted in 1900, due in large part to the efforts of Susan B. Anthony. Today's River Campus is home to Arts, Sciences & Engineering, which enrolls more than 80 percent of the University's undergraduates. The Warner School of Education and the William E. Simowww.rochester.edu/SBA/legacydinner.htmln Business School, as well as the graduate programs of Arts, Sciences & Engineering also are on the River Campus.

University of Rochester Medical Center
Located adjacent to the River Campus, the University of Rochester Medical Center is home to the School of Medicine and Dentistry, the School of Nursing, Strong Memorial Hospital, Golisano Children's Hospital, the Eastman Institute for Oral Health, and the James P. Wilmot Cancer Center. The University of Rochester Medical Center forms the centerpiece of the University's

health research, teaching, patient care, and community outreach missions. With more than $145 million in federal research funding, the School of Medicine and Dentistry research funding ranks in the top tier of U.S. medical schools.

Eastman School of Music
The Eastman School of Music is located in downtown Rochester, approximately three miles from the River Campus. In addition to housing the Eastman School of Music, this campus also houses the Eastman Theatre and is just blocks away from the Memorial Art Gallery.

South Campus
The University's South Campus, located a mile south of the Medical Center, is home to the Laboratory of Laser Energetics, the Alumni and Advancement Center, and several residential facilities.

University Leadership

Joel Seligman became the 10th president of the University in July 2005. President Seligman is a graduate of Harvard Law School and a leading authority on securities law. Prior to his appointment, he was dean of the Washington University School of Law.

The president is joined in senior leadership by Peter Lennie, ninth provost of the University, who was appointed in 2012. Provost Lennie also serves as Dean of the Faculty of Arts, Sciences & Engineering and is a professor of brain and cognitive sciences.

Senior administrative officers span the University's major divisions and areas of activity. Administrative and financial matters are overseen by Ronald J Paprocki, who serves as senior vice president for administration and finance and chief financial officer and treasurer for the University. In addition, Douglas Phillips is Senior Vice President for institutional resources and manages University investments for the University's endowment and other funds.

Legal issues and policies are managed by a team of University attorneys, led by Gail Norris as vice president and general counsel for the University.

Research administration, including human subjects protection, technology commercialization, and entrepreneurship, is overseen by Robert Clark, senior vice president for research.

Within the University's outward-facing units, James W. Osterholt is interim senior vice president and chief advancement officer. William Murphy is Vice President for Communications, and oversees all University press releases and publications.

In the Medical Center, Bradford Berk is CEO and University senior vice president for health sciences. He is joined by a team of senior administrators, including Stephen I. Goldstein as vice president of the Medical Center and president and CEO of Strong Memorial and Highland Hospitals, Raymond J. Mayewski as vice president and chief medical officer, Peter G. Robinson as vice president and chief operating officer, and Michael C. Goonan as vice president and chief financial officer.

The deans of the University's seven schools oversee academic affairs, finances, and general operations within their units. On the River Campus, Peter Lennie is Dean of the Faculty of Arts, Sciences & Engineering and is supported by Richard Feldman as dean of the College, Joanna B. Olmsted as dean of the school of arts & sciences, and Robert Clark as dean of the Hajim School of Engineering & Applied Sciences. Raffaella Borasi is dean of the Margaret Warner Graduate School of Education and Human Development and Mark Zupan is dean of the William E. Simon Business School.

Jamal J. Rossi is dean of the Eastman School of Music on the University's downtown Rochester campus.

Within the Medical Center, Mark B. Taubman is dean of the School of Medicine and Dentistry and University Vice President for Health Sciences. Kathy Rideout is dean of the School of Nursing and Medical Center vice president.

Academic Units

The academic units enable the University to offer a comprehensive set of undergraduate and graduate programs. While the programs are largely managed at the level of the individual schools, there is extensive collaboration on multidisciplinary programs. Rochester offers more than 200 undergraduate programs, 49 doctoral degree programs, and approximately 70 master's degree programs.

Arts, Sciences & Engineering

Arts, Sciences & Engineering at the University of Rochester is an integrated academic unit composed of the School of Arts & Sciences and the Hajim School of Engineering & Applied Sciences. The College, home for all Arts, Sciences & Engineering undergraduates, offers the intellectual excitement of a major research university and the intimacy and opportunities of a great liberal arts college.

The School of Arts & Sciences encompasses the major academic areas of the Humanities and Arts, the Social Sciences, and the Natural and Physical Sciences. The 18 academic departments and more than 265 tenure-track faculty in Arts & Sciences provide training for undergraduate and graduate students in core disciplines. Educational opportunities are offered through other programs, including interdisciplinary work that involves faculty from multiple departments. The Hajim School of Engineering & Applied Sciences, with a faculty of tenure-track faculty of 86, consists of six departments, and provides training in its core disciplines and opportunities for interaction with students and faculty throughout the University.

The graduate training provided by the departments and programs of Arts, Sciences & Engineering accounts for more than 60 percent of the PhD degrees awarded by the University. Students at both the undergraduate and

graduate levels are able to enrich their education further by drawing on all the other schools of the University.

Undergraduate education in the College is guided by the philosophy that students learn best when they are passionate about what they study. That is why the College's distinctive Rochester Curriculum gives students extraordinary flexibility. Students pursue a major in one of the three divisions—humanities, social sciences, and natural sciences—and complete at least a cluster of three or more related courses in the two divisions outside their major. (Students in accredited engineering programs have reduced cluster requirements.) The result is an education that reflects students' priorities.

Learning at Rochester is on a personal scale. Rochester remains one of the smallest top-research universities, with approximately 5,000 students in the undergraduate College. This more intimate size allows for smaller classes, a low 10:1 student to teacher ratio, and increased interactions with faculty. From the first year of study, students have the opportunity to engage in collaborative research with professors and peers, join labs, or conduct their own research projects. Many undertake internships and nearly a third study abroad.

Student life in the College offers a rich array of opportunities. The residential nature of the College community is strong, with almost all freshmen and sophomores and large majorities of juniors and seniors living on campus, and most of the remaining students living in nearby neighborhoods. More than 240 student clubs and organizations provide students with ample possibilities, and many undertake leadership positions. Year round, more than 70 percent of College students volunteer for community service projects, Greek life, student-run media, arts and performance, and athletics combine to make an active campus life.

Eastman School of Music
The Eastman School of Music enrolls a total of about 900 students (500 undergraduates and 400 graduate students). Students come from almost every state, and approximately one quarter are from other countries. They are guided by more than 95 full-time faculty members. Seven Pulitzer Prize winners have taught at Eastman, as have several Grammy Award winners. The Eastman Campus is located in downtown Rochester in the heart of the city's cultural district.

At the Eastman School of Music, students hear and perform the full spectrum of music: from opera to jazz, and from medieval music to brand-new pieces composed by their fellow students. Beyond technical mastery, students are challenged to make their art matter through programs like the Institute for Music Leadership.

School of Medicine and Dentistry
The School of Medicine and Dentistry (SMD) was founded in 1921 and resides in the Medical Center. School of Medicine employs 1,200 full-time faculty members and 650 voluntary clinical faculty members organized into 32 departments and centers.

Clinical faculty members provide tertiary and quaternary services to the Upstate New York region and the Northeast and provide primary and specialty health care to the local population. They train some 600 residents and fellows, who are drawn from all corners of the United States and beyond, to be the next generation of practitioners and academic leaders.

The school also trains 500 graduate students to become the fundamental, translational, and clinical investigators of the future, maintaining the critical link between scientific discovery and improved health. In the medical education program, with more than 400 medical students, the concept of integrating cutting-edge, evidence-based medical science and the relationship-centered art of clinical medical practice is embodied in the School of Medicine's "Double Helix Curriculum," which combines basic science and clinical work throughout all four years of medical school. This blend of the art and science of medicine distinguishes the school's postgraduate medical education, where residents and fellows receive intensive, specialized training in virtually all medical specialties and subspecialties.

The Eastman Institute for Oral Health houses an internationally recognized dental residency program in addition to its research and clinical care programs.

School of Nursing

The School of Nursing was founded in 1925 and is home to a broad range of health-related programs, including programs designed for non-nurses with a bachelor's degree who want to enter the nursing profession; BS, MS, PhD, and postgraduate programs designed for nurses and non-nurses. For nurses, the School of Nursing offers a bachelor's completion program, various primary care and specialty nurse practitioner Master of Science degrees, as well as a Doctor of Nursing Practice degree. The School of Nursing offers programs for other health care professionals. The Leadership MS programs and PhD programs are open to nurses and non-nurses alike. In addition, the School of Nursing offers an accelerated undergraduate program for people with bachelor's degrees who want to enter the nursing profession.

The School of Nursing enrolls approximately 600 students and has a core research and clinical faculty of approximately 70. The school's research and education programs are based on the Unification Model—an approach pioneered at the University of Rochester that is now a model for other nursing programs across North America. Under this model, faculty members blend practice and research into nursing education with the goal of having students learn not only how to care for patients, but also how to do clinical research and translate those research results into the most effective patient care practices.

William E. Simon Business School

The Simon Business School is considered one of the United State's top business schools. The school was recently ranked #35 among American business schools by *US News and World Reports*, and its MBA program ranked #55 globally by the *Financial Times*. The school offers full-time, part-time, and executive MBA degrees; MS degrees; and PhD degrees. In recent years Simon Business School has enrolled more than 1,000 full- and part-time students.

Simon Business School is noted for its economics-based approach to business education, emphasizing the interactive nature of business decisions. The 68 faculty members in the school teach students to frame and analyze complex business problems and effectively communicate solutions.

Margaret Warner Graduate School of Education and Human Development

Founded in 1958, and renamed the Margaret Warner Graduate School of Education and Human Development in 1993, the school is a regional leader in advancing educational knowledge and developing innovative research techniques that prepare practitioners to achieve in academia and the classroom.

The Warner School of Education moved into a new building, LeChase Hall, in January 2013 and continues to offer master's and doctoral degree programs in teaching and curriculum, counseling, human development, school leadership, higher education, and educational policy.

The Warner School of Education enrolls approximately 650 full- and part-time students. Students enter the Warner School at various points in their educations and careers. Some enter directly from undergraduate institutions and many have educational work experience. The instructional staff consists of more than 40 full-time and part-time faculty, with additional adjunct, practitioner, and field-based faculty in place to complement Warner School of Education's course offerings.

Research and Innovation

The University research expenditures in 2013 were approximately $375 million, and the University has consistently ranked among the top 35 universities in federally financed research and development expenditures. Each school has an active research portfolio, with a diverse range of funding sources. In addition to the faculty, graduate students, and staff supported through grants and contracts, most College

undergraduates are engaged in research over some portion of their academic experience. The seamless integration of research and education is a hallmark of the University of Rochester and one of the benefits afforded by a compact campus.

The senior vice president for research encourages multidisciplinary collaboration, supports innovation through a technology development fund and the office of UR Ventures, and facilitates corporate relations through a newly established Center for Business Engagement. The Research at Rochester web page provides additional information as well as links to the research websites for each of the schools. It also provides information about the University's many research centers and institutes.

Libraries and Museums

With combined holdings of more than 3.9 million volumes, Rochester ranks among the top 100 academic research libraries in the United States and Canada. The main libraries are

- Rush Rhees Library, River Campus
- Carlson Science and Engineering Library, River Campus
- Sibley Music Library, Eastman School of Music
- Edward G. Miner Library, Medical Center
- Charlotte Whitney Allen Library, Memorial Art Gallery

The River Campus Libraries (Rhees and Carlson) hold more than 3 million books in both print and electronic formats and over 40,000 active journal titles. The Sibley Music Library is recognized as one of the world's preeminent research libraries devoted to all aspects of the study of music. The library holds nearly three-quarters of a million items, plus the Ruth T. Watanabe Special Collections, which include rare books, archival collections, the Eastman School of Music Archives, and the Eastman Audio Archive. The Miner Library specializes in medical research and medical education, holding almost 300,000 print volumes, 8,000 health science e-journals, and 200 health science databases. The

Allen Library in the Memorial Art Gallery is a top regional visual arts library with holdings on local artists, art history, and artistic technique. All libraries are open to the University community.

The Memorial Art Gallery (MAG) was founded in 1913 by Emily Sibley Watson as a memorial to her son, architect James Averell. The MAG was established to be "a means alike of pleasure and of education for all the citizens of Rochester." The first endowment for acquisitions, the Marion Stratton Gould Fund, allowed the MAG to begin purchasing works for the collection in 1938. Currently, the MAG contains a permanent collection of more than 12,000 objects and operates visual arts education programs for the University and Rochester community. The museum has been called the best balanced in the state outside of metropolitan New York City.

The University and the Community

Since its founding 164 years ago, the University has sought to have a strong local presence. It has grown as a research university with significant national and international connections, but it has also assumed a greater role in the Rochester community. Some of these connections are highlighted in a recent community address by the president and in a report on Community Outreach at the University of Rochester.

The University has become the greater Rochester region's largest employer with 22,450 full-time equivalent jobs, making the University the seventh largest private employer in New York State, with an increasing role in the community as the provider of 47,000 direct and indirect jobs, $2.4 billion in direct and indirect wages, $66.9 million in uncompensated health care in 2012, and, since 1996, 55 startup companies using University-licensed technology. Additional information may be found in a recent Economic Impact Report.

President Joel Seligman and other University leaders are actively involved in the Rochester community. President

Seligman, for instance, has recently served as a cochair of the Finger Lakes Regional Economic Development Council, one of six such councils in New York State charged by the governor with developing strategic plans for long-term economic growth. He has also chaired the local United Way Campaign.

As the University has grown in recent years, it has also established a greater presence in the areas adjacent to campus. The University has cooperated with private developers on housing and office space in the Brooks Crossing neighborhood to the west of campus and on College Town, a $100 million project that will bring dining, shopping, and other services to an area adjacent to the Medical Center. Additional information about these projects is presented in Chapter 2.

In addition to its economic impact, the University's programs in the arts and in medicine are significant contributions to the community.

- The University's Memorial Art Gallery is one of the country's few university-affiliated art museums that also serves as a community art museum. The MAG's collection spans 5,000 years from the ancient world to the 21st century. In addition to its collection, the gallery offers a year-round schedule of temporary exhibitions, lectures, concerts, tours, and family activities. The gallery also operates the Creative Workshop, one of the largest museum arts schools in the country.

- The Eastman School of Music hosts more than 700 concerts a year in three performance halls in downtown Rochester. Opened in 1922, the original Eastman Theatre was recently renamed Kodak Hall at Eastman Theatre after a major renovation. The 2,326-seat hall remains Rochester's preeminent performance space. Kodak Hall serves as the primary concert hall for performances by the Eastman School of Music's orchestras, wind ensembles, jazz ensembles, choral ensembles, and Eastman Opera Theatre. The Rochester Philharmonic Orchestra performs in this hall. Chamber music and solo recitals are presented daily in Kilbourn Hall in the Eastman School of Music and the new 220-seat Hatch

Recital Hall. These spaces are used by Eastman Community Music School, where more than 1,500 community students ranging in age from 4 months to more than 90 years old are regularly enrolled in music lessons, classes, and ensemble experiences.

- The Medical Center is the region's leading health care provider and is a nationally recognized center for research and medical care. It encompasses the School of Nursing, Strong Memorial Hospital, Golisano Children's Hospital at Strong, the School of Medicine and Dentistry, Eastman Institute for Oral Health, and several other affiliated hospitals and medical programs. The Medical Center is a regional destination for specialized patient care, offering a regional trauma center, pioneering transplant programs, programs for neuromuscular illnesses like Parkinson's disease and epilepsy, cancer and cardiac care, and specialized pediatric services. The Medical Center runs more than 120 community health programs such as the Smilemobile, a dental office on wheels for urban children, and Project Link, a treatment program for individuals struggling with chronic mental or substance abuse disorders. By one calculation, the Medical Center provided nearly $451 million in care to the uninsured or underinsured (see the Economic Impact Report). With a recent expansion in research facilities, the Medical Center now attracts additional National Institutes of Health research grants with a focus on translating innovative technologies and methods into treatments for patients.

Finally, there are numerous community service programs originating in the University.

- Arts, Sciences & Engineering has a wide range of outreach and engagement programs, including the David T. Kearns Center for Leadership and Diversity in Arts, Sciences & Engineering (which houses a variety of programs in city public schools including Upward Bound) and the Rochester Center for Community Leadership (home to numerous community service programs

engaging undergraduates in the Rochester community).

- The Warner School of Education is home to numerous programs for the local schools, including the Horizons Program, which provides a summer enrichment opportunity for K-8 Rochester City School District students, as well as programs for math and science teachers.

Context for the Current Self-Study

The context for the current self-study is established by two University-wide strategic plans, one adopted in 2008 and one in 2013, and by the challenging climate in which research universities currently find themselves. These issues will be discussed in Chapter 2.

In 2005, President Joel Seligman identified and adopted several priorities for the University, drawn from the 2004 Middle States self-study and other internal analyses of the state of the University. These priorities included maintaining and growing academic excellence, enhancing the University's Advancement and Communications programs, increasing focus on diversity and on community relations, and a strengthened strategic planning process. The planning process that followed led to a University Strategic Plan, adopted by the University Board of Trustees in 2008. The goals of this plan were highlighted in the 2009 Periodic Review Report, which focused on the University's goals in creating "one University," improving planning processes, and expanding student learning assessment activities. In spite of the economic downturn that soon followed, the University has continued to make progress in these areas.

In 2013, the University undertook a new round of strategic planning. The Strategic Plan (2013–2018), approved by the Board of Trustees on October 11, 2013, builds on the success of the earlier plan. The new plan sets priorities and implementation timelines designed to strengthen the University's ability to continue to be a leading research university and to be known for high

quality education, improved health care, and service to the community. The recommendations from the Strategic Plan, in addition to those from this self-study, provide a platform for the University to respond to future challenges in higher education and academic research.

Key Figures

To access key figures about the University of Rochester—including enrollments, gender and race/ethnicity of students, and faculty counts—please see the Office of Institutional Research Fact Book.

Chapter 1 Links

This list provides the URLs for the hyperlinks in Chapter 1 of this report.

University as a whole
http://www.rochester.edu/provost/middlestates/report/admin.pdf

Medical Center
http://www.rochester.edu/provost/middlestates/report/medctr.pdf

Efforts of Susan B. Anthony
http://www.rochester.edu/SBA

University of Rochester Medical Center
http://www.urmc.rochester.edu/

Strong Memorial Hospital
http://www.urmc.rochester.edu/strong-memorial/

Golisano Children's Hospital
http://www.urmc.rochester.edu/childrens-hospital/

Eastman Institute for Oral Health
http://www.urmc.rochester.edu/dentistry/

James P. Wilmot Cancer Center
http://www.urmc.rochester.edu/cancer-center/

Eastman Theatre
http://www.esm.rochester.edu/concerts/halls/kodak/

Memorial Art Gallery
http://mag.rochester.edu/

Laboratory of Laser Energetics
http://www.lle.rochester.edu/

Arts, Sciences & Engineering
http://www.rochester.edu/college/

School of Arts & Sciences
http://www.rochester.edu/college/sas/

Hajim School of Engineering & Applied Sciences
http://www.hajim.rochester.edu/

The College
http://www.rochester.edu/college/academics/

Rochester Curriculum
http://www.rochester.edu/aboutus/curricula.html

Eastman School of Music
http://www.esm.rochester.edu/

Institute for Music Leadership
http://www.esm.rochester.edu/iml/

School of Medicine and Dentistry
http://www.urmc.rochester.edu/smd/

School of Nursing
http://www.son.rochester.edu/

Unification Model
http://www.son.rochester.edu/welcome/unification-model.html

William E. Simon Business School
http://www.simon.rochester.edu/index.aspx

Margaret Warner Graduate School of Education and Human Development
http://www.warner.rochester.edu/

Research at Rochester
http://www.rochester.edu/research/index.html

Research centers and institutes
http://www.rochester.edu/research/a-to-z.html

Community Address
http://www.rochester.edu/community.html

Community Outreach at the University of Rochester
http://www.rochester.edu/provost/middlestates/report/community.pdf

Economic Impact Report
http://www.rochester.edu/provost/middlestates/report/UR-2011-Impact-Final-Report-6-4-12.pdf

David T. Kearns Center for Leadership and Diversity in Art. Sciences & Engineering
http://www.rochester.edu/college/kearnscenter/

Rochester Center for Community Leadership
http://www.rochester.edu/college/rccl/

Strategic Plan (2013-2018)
http://www.rochester.edu/strategic-plan/

Fact Book
http://www.rochester.edu/provost/ir/factbooks/2012-2013Factbook.html

Chapter 2
Mission, Planning, and Resources

Standard 1: Mission and Goals

The institution's mission clearly defines its purpose within the context of higher education and indicates who the institution serves and what it intends to accomplish. The institution's stated goals, consistent with the aspirations and expectations of higher education, clearly specify how the institution will fulfill its mission. The mission and goals are developed and recognized by the institution with the participation of its members and its governing body and are used to develop and shape its programs and practices and to evaluate its effectiveness.

Standard 2: Planning, Resource Allocation, and Institutional Renewal

An institution conducts ongoing planning and resource allocation based on its mission and goals, develops objectives to achieve them, and utilizes the results of its assessment activities for institutional renewal. Implementation and subsequent evaluation of the success of the strategic plan and resource allocation support the development and change necessary to improve and to maintain institutional quality.

Standard 3: Institutional Resources

The human, financial, technical, facilities, and other resources necessary to achieve an institution's mission and goals are available and accessible. In the context of the institution's mission, the effective and efficient uses of the institution's resources are analyzed as part of ongoing outcomes assessment.

Introduction

This chapter addresses Standards 1–3, which concern the ways in which the University identifies its goals, develops its plans, and allocates its resources to achieve them. The first section of the chapter describes the University's newly adopted mission statement and provides a broad characterization of its aspirations and goals. The second section of the chapter describes the

strategic planning processes the University has undertaken and spells out the ways in which the decentralized budgeting model functions. The final section of the chapter describes the University's resources, revenues, expenses, assets, budgeting, facilities, and master plan. The chapter also discusses the University's workforce.

Mission, Vision, and Goals

The University of Rochester seeks to be an international leader in research and education across its range of disciplines as well as in clinical care. The adoption of its vision and mission statements within the past several years provides a clear statement of the shared values and interdependence of the various parts of the University.

The University motto of *Meliora* (translated as "ever better") succinctly articulates the University's character and its aspirations. The word is prominent on campus, appearing on an ornate flagpole on the Eastman Quad, the iron gates of Rush Rhees Library, and on a building named Meliora Hall. "Meliora Weekend" is the name of the University's annual homecoming, which features a wide range of educational, cultural, and athletic events. The University asks alumni to share their personal "Meliora moments." Meliora is thus more than a slogan; it serves to foster within the University community an understanding that there is always room for growth and it encourages discovery and improvement.

In the past 10 years, the University has more clearly articulated its vision and goals, beginning in 2004 with the adoption, by the Board of Trustees, of a "Statement of Educational Philosophy":

> The University of Rochester seeks to provide the best possible environment for excellence in learning, research, and teaching at the collegiate, graduate, and professional levels. To accomplish this, we bring together faculty, students, and staff who have achieved excellence or show great promise toward that goal, who are dedicated to learning, and who

will help to build a community that encourages all of its members to succeed and grow.

Our University's distinctive heritage—bolstered by foundational community and university leaders such as abolitionist Frederick Douglass, women's rights activist Susan B. Anthony, and corporate leader and philanthropist Joseph C. Wilson, as well as numerous pathbreaking scholars—leads us actively to seek out and include persons from diverse backgrounds and origins who carry with them their own valued and important perspectives.

Building on this foundation, the board approved its vision of a "University of the Highest Order" in March 2010. The Vision Statement makes plain the direction the University will pursue in its long-term planning. Vowing to "help solve the greatest challenges of the 21st century," it states that the University of Rochester intends to

- accelerate the University's progress as an international leader in sciences, engineering, social sciences, health science, business, and music

- empower students to fulfill their academic and professional passions in a University that is diverse, welcoming, and inclusive for all students, faculty and staff

- create innovative connections among education, humanities, music, the social sciences, science, engineering, and health science

- strengthen support for a dynamic faculty dedicated to teaching, mentoring, research, clinical care, and the creative and performing arts

- serve the community of alumni and friends through imaginative programs that enrich their lifelong relationship with the University and that expand our collective contributions to the world

- embrace the University's leadership position in Rochester and the world by making it a model for partnership among academic, civic, cultural, health care, and business organizations

President Seligman asked the provost to lead a process to create a University Mission Statement that would encapsulate the University-wide goals. This culminated in the adoption, in May 2011, of the following mission statement:

> Learn, Discover, Heal, Create—
> and Make the World Ever Better.

This brief statement captures the broadest goals of the University and its units. The University community has embraced the new Mission Statement. It is prominently displayed on campus and has served as the organizing principle of the two most recent annual University reports. The outward focus of the mission statement is deliberate and important. It directs the members of the community to strive for something more than individual greatness, something more than bringing greater distinction to the University, but instead to seek to improve the world. Members of the University of Rochester community are reminded that their studies, discoveries, and creations, their very work as students, faculty, and staff must and will serve the global community.

The Mission Statement and the Vision Statement express clear general goals that guide the University's research, teaching, and service programs.

Planning

The University's planning is guided and informed by the University's vision and mission. Deans and faculty drive the processes at the school level, with oversight and direction provided by the President, others in the central administration, and the Board of Trustees.

Strategic Planning (2006-2012)

After his first year in office, President Seligman launched a University-wide strategic planning effort. In his initial remarks to the University community on this topic ("Envisioning the Future: A Framework for Strategic Planning" [2006]), the president provided an overview of the "strategic environment and common challenges

that each school, the Medical Center, and the University are likely to face in preparing strategic plans."

At the time, the key drivers of the environment included global economic transformation and the shift from a manufacturing economy to a knowledge-based economy; the marked increase in the number of people pursing postsecondary education and the need to reevaluate the University's enrollment targets; and the rising importance of interdisciplinary research and academic programs.

The president's report outlined six themes that would help guide the strategic plans of the Medical Center and each school:

- Identifying and devoting substantial resources to strengthen existing programs

- Developing student and faculty growth strategies while simultaneously improving academic quality

- Fostering a culture of "interdisciplinarity" in research and academic programming

- Strengthening the central infrastructure of the University in specific areas within the context of the longstanding institutional commitment to decentralization

- Ensuring that diversity remains a fundamental value of the institution

- Understanding the University's pivotal role in the greater Rochester community

The final theme — the University's role in the community — served as a particular point of emphasis, with the president calling for a campus master plan that would explore the possibility of establishing a "College Town" contiguous with campus, and for a Tech Transfer and Commercialization Plan that would articulate the institution's commitment to fostering job growth and economic development in the greater Rochester region.

The ensuing two-year strategic planning effort, led by the Board of Trustees' Strategic Planning Advisory Committee, the president, and the provost, challenged the University's core academic, medical, and

administrative units to "balance ambition with realism," and develop plans that were "grounded in a realistic assessment of financial expense and risks."

The key goals emerging during this period included strengthening the research profile of the University, expanding the student body to about 10,000 students with a commensurate increase in the number of faculty, improvements in the quality of campus life, a variety of new programs and facilities, improvements in annual giving, and a reduction of the draw on the endowment.

Strategic Planning and the Global Economic Downturn

Completion of the University's strategic planning efforts in October 2008 coincided with the beginning of the global economic downturn. The schools and the Medical Center reviewed strategic plans in light of the new economic reality. In every instance, the strategic objectives of the plan were reaffirmed. In some instances, they chose to moderate the scale and the time path for implementation of initiatives. The University took actions to maintain financial stability, including a reduction of approximately $10 million of endowment used to support the operations of Arts, Sciences & Engineering. The University successfully navigated the economic crisis without disruption or diminution in the quality of its programs. Moreover, objectives set forth in the strategic plans of 2008 have been substantially met.

Throughout this process, the University was kept informed about the impact of the economic downturn. The president shared strategic planning information with the Faculty Senate in the form of addresses in January 2009; September 2009; January 2010; and May 2011. He also shared several reports with the broader University and Rochester communities through presidential memos, statements, and addresses.

Results of the 2008 Strategic Plan

The goals established by the 2008 Strategic Plan have largely been met.

- The University's research strength continues to grow. When normalized for faculty size in 2011, the University ranks 15th in federal research funding among the 176 top funded research universities, with more than $400 million in total sponsored research during each of the prior two years and $348 million in 2012.

- Undergraduate education has been significantly enhanced. Undergraduate student quality has been been strengthened, during a period of growth in the size of the student body, with increases in the College two-score equivalent SAT from 1304 to 1368 in the current academic year. Simultaneously the percentage of underrepresented minority and international students has increased. The College has added 14 new majors, enrolling 17 percent of the current student body. Since 2005, the University has received $157.3 million in commitments for scholarships, fellowships, and other support for students.

- The University has grown substantially. The student body grew to 10,510 in 2012–13, exceeding the target set for 2015. Tenured, tenure-track, clinical, and other instructional staff have grown from 2,009 in 2004 to 2,499 in 2012. The University has created or received commitments to create 71 new endowed professorships and deanships.

- New programs have been developed throughout the University. In addition to 15 new undergraduate majors, the University has established new research and graduate programs including the Health Sciences Center for Computational Innovation; the University-wide Center for Integrated Research Computing; the Center for Medical Technology Innovation jointly developed by the School of Medicine and Dentistry and the Hajim School of Engineering & Applied Sciences; and the Technical Entrepreneurship and Management program.

- The University has undertaken 24 major facilities projects since 2005 with an aggregate budget of $723 million. These include Goergen Hall (Optics and Biomedical Engineering); the Eastman Theatre Renovation and Expansion;

LeChase Hall (the Warner School of Education); Rettner Hall (Digital Media Studies); O'Brien Hall (a residence hall); James P. Wilmot Cancer Center; the Saunders Research Building; and Golisano Children's Hospital. (Additional details on many of these projects will be presented in the discussion of facilities later in this chapter.)

- Endowment payout has been substantially reduced. The payout rate in 2000 was 6.9%. It is 5.9 percent in this year's budget. This decrease has been achieved by a notable reduction in endowment payment in Arts, Sciences & Engineering, achieving unusually low administrative costs for research programs, and cost efficiencies in University hospitals.

- The University has embarked upon a comprehensive capital campaign, *The Meliora Challenge:* The Campaign. This is the University's first comprehensive capital campaign since 1924. Through February 2014, $1.050 billion of the Campaign's $1.2 billion goal had been raised.

- The University's relationship with the Community has been strengthened. The University facilitated the separately financed development of Brooks Crossing across the Genesee River; the University helped facilitate development of College Town, a long-contemplated commercial and entertainment area near the Medical Center; and the University worked with local, state, and federal governments to secure funding for the new Interstate 390 road network, which will provide the basis for future growth at the University.

Strategic Planning (2012–2013)

The President's 2012 Annual Report initiated a new strategic planning process by the schools and the Medical Center, with guidance and direction from the Board of Trustees and its Strategic Planning Committee. In setting the framework for this process, President Seligman reiterated the University's broadest goals, but set them in the context of increased globalization, transformations in health care, declining national support for sponsored research, increased public focus on the costs and value of higher education, and the digital revolution.

The schools and Medical Center developed their plans in months that followed, and in October 2013, the Board of Trustees approved Aiming Higher: The University of Rochester Strategic Plan (2013–2018). The central themes of this plan are

- **Being one the nation's leading research universities** through the recruitment and retention of outstanding faculty and students. One anticipated area of growth, extending to numerous disciplines in many parts of the University, is in Data Science.

- **A continued emphasis on quality education** by developing new programs, strengthening teaching support and making effective use of technology. The plan calls for faculty growth in Arts, Sciences & Engineering from 350 to 380, for implementation of an Institute for Innovative Education in the Medical Center, for the development of a branch campus in New York City, for the development of a new undergraduate program in convergent media and a graduate program in music leadership in the Eastman School of Music, and further exploration of online and hybrid programs in the Warner School of Education, School of Nursing, and elsewhere.

- **Being a university known for improved health care** by implementing transformative approaches to clinical care throughout the development of a nationally recognized accountable care network and an integrated University-based medical faculty practice group. The initial phase of the Golisano Children's Hospital will be completed in 2015.

- **Being a university known for service to its community** by enhancing programs that support K–12 education and health care, by being a leader in economic development and technology transfer, and completing the Brooks Crossing and College Town projects in nearby neighborhoods.

- **Successfully completing the capital campaign, *The Meliora Challenge*.**

- **Developing fully sustainable financial models** that will assure that the draw on the endowment never exceeds 5.9 percent and maintains the University's target of 5.5 percent.

Annual Budget Planning

The University of Rochester has well-defined, comprehensive processes for developing its annual operating budget and capital budget and plan. Under the University's decentralized system, detailed budget development takes place at the divisional (school, Medical Center) level under the supervision of the president, provost, and chief financial officer. The associate vice president for budgets and planning shepherds the overall budget process, consolidates information into a single University plan, and orchestrates reviews at various levels.

Budget development at the divisional level is the responsibility of the respective dean or vice president. Budgets are developed under a responsibility center model in which all revenues and expenditures (both direct and indirect) are reflected in the divisional (school, hospital, etc.) budgets. Expenses associated with central University administrative functions and shared services such as purchasing, human resources, security, and research administration, etc., are allocated through a cost accounting process which distributes the costs to each of the divisions. The Office of Budgets and Planning informs the divisions of the University-wide assumptions such as salary ranges, benefit rates, and allocated cost estimates. Each dean meets with the provost regularly to review school initiatives, and the provost also works through the Deans' Council to ensure that academic priority initiatives are known across the schools and shared resources or opportunities for collaboration are discussed.

The budget process is iterative. Regular meetings between divisional leaders and the president, provost, chief financial officer, and associate vice president for budgets and planning take place throughout the course of the year. Each meeting includes an assessment of current-year budgetary performance as well as the budget being planned with discussions commencing in the fall at the conceptual level addressing objectives, plans for growth, major initiatives, and market conditions. By the end of the planning cycle in the spring, detailed budgets for revenues, expenditures, and capital plans are reviewed. For all major initiatives, including capital projects, business plans are required and are reviewed by the president, the provost, and the chief financial officer.

During the course of the year iterative discussions take place within other groups as well. Discussion of the current environment, budgetary outlook and major initiatives takes place within the President's Cabinet. The Faculty Senate Budget Committee follows the progress of the development during its meetings and receives detailed briefings on the operating and capital budgets prior to their presentation to the Board of Trustees. It is customary for the chair of the Faculty Senate Budget Committee to attend the May meeting of the Board of Trustees at which operating and capital budgets are approved. The chair of the committee delivers remarks to the Board of Trustees at that meeting.

The Board of Trustees is kept informed about financial issues in general and matters of budgetary planning on a regular basis. The budgetary outlook and key budget assumptions for the following year are discussed at the March meeting of the Board of Trustees. The Trustees Committee on Financial Planning reviews all major projects and all issues of financial consequence. During April of each year, the Financial Planning Committee reviews in detail the proposed University-wide operating budget and capital budget and three-year capital plan for the following year. Following this review, the committee issues its recommendation to the Board of Trustees for approval at the May Board meeting. The capital budget and three-year capital plan are also reviewed with the Trustees Committee on Facilities. The committee also issues its recommendation to the Board of Trustees for approval of the capital budget and plan. In addition, the committee also reviews in detail during the course of the

year capital projects with a cost of more than $1,000,000. The Office of Budgets and Planning, which reports to the chief financial officer, supports planning by providing analytical support, financial modeling, review of central administrative departmental budgets, review of divisional budget submissions for conformity with budget guidelines and consolidation of divisional budgets into an overall University plan. That office also works with the divisions to prepare multiyear financial projections that are harmonized with the strategic plans.

Institutional Resources

This section discusses the financial status of the University, its strategies for managing its financial resources, its facilities and the Campus Master Plan, and its human resources and information technology resources. The University conducts regular reviews in these areas to ensure that its resources are allocated and deployed efficiently. It also works with numerous third-party agencies to meet local, state, and federal regulatory requirements. The section highlights some of the most significant recent developments in these areas.

Expenses and Revenues

The University's consolidated revenue resources are diversified, with hospital and patient care, sponsored research, and net tuition being the largest components (Table 2.1). The consolidated financial statements include all the integrated units of the University including the academic divisions, three hospitals, the medical faculty group, and several affiliated entities. Hospital and patient care revenues comprise 68 percent of the University's resources as of June 30, 2013.

Between fiscal year 2005 (the year prior to Joel Seligman's installation as president) and fiscal year 2013, operating budget revenues increased by slightly over $1 million (or 54 percent). This increase was mainly driven by growth in patient care services. Gifts and pledges have increased more than 100 percent as a result of the capital campaign and the University's increased emphasis on fund raising (see below — Advancement).

The University's major expenses are instruction, research, hospital and patient care, and general and administrative support. Between fiscal year 2005 and fiscal year 2013, operating expenses increased $1.04 million (55 percent), the largest component of the increase being for employee compensation. Table 2.2 summarizes operating expenses over this time period.

Assets

The University's net assets increased from $2.2 billion in 2005 to $3.0 billion in 2013. In fiscal year 2009, net assets declined to $2.2 billion (from a high of $2.7 billion in 2008) as a result of the economic crisis, which had a significant impact on endowment values.

The Endowment

The University's endowment provides perpetual annual support for student financial aid and faculty salaries as well as certain facilities and academic programs. Spending from the endowment also helps to stabilize the University annual budget. As of December 2013, the University endowment was valued at approximately $1.918 billion and is one of approximately 60 college and university endowments valued above $1 billion. The University invests in the Long Term Investment Pool (LTIP) with a goal of stable growth.

Table 2.1. University of Rochester Operating Revenues FY2005 to FY2013				
	June 30, 2005*	June 30, 2013*	$ Change*	% Change
Net Tuition and Fees	$120,175	$225,165	$104,990	87
Grants and Contracts	365,017	400,772	35,755	10
Hospital and Patient Care	1,232,087	2,075,553	843,466	68
Gifts	51,027	77,940	26,913	53
All Other	208,786	261,130	52,344	25
Total Operating Revenues	$1,977,092	$3,040,560	$1,063,468	54

*($ in '000's)

Table 2.2. University of Rochester Operating Expenses FY2005 to FY2013				
	June 30, 2005*	June 30, 2013*	$ Change*	% Change
Total Compensation	$1,154,884	$1,895,424	$740,540	64
Supplies	255,538	374,058	118,520	46
Business and Professional	163,865	192,725	28,860	18
Maintenance and Facilities Costs	75,325	130,624	55,299	73
Depreciation	119,976	184,320	64,344	54
All Other	125,636	156,695	31,109	25
Total Operating Expenses	$1,895,224	$2,933,806	$1,038,582	55

*($ in '000's)

The Long Term Investment Pool is allocated to both publicly traded investments (domestic and international equities, and fixed income) as well as alternative investments that do not trade on public markets such as private equity (buyouts, distressed and venture), hedge funds, real assets (real estate and natural resources), and other assets. The allocation between traditional and alternative investments helps assure growth in favorable economic conditions and offers a measure of protection against severe losses during economic downturns. The LTIP is highly diversified and managed by approximately 85 external investment advisors located across the globe. Performance for the 2012 calendar year was 12 percent, net of all fees and expenses, compared with the benchmark return of 13.8 percent. Performance exceeded the benchmark by 1 percent or more, net annualized, for 3–, 5–, and 10–year periods.

The LTIP is managed by a professional internal staff, the Office of Institutional Resources, led by a chief investment officer, and consisting of four additional investment officers and 3–4 other support staff. At least quarterly, the investment staff reports to the Investment Committee of the University's Board of Trustees. This Committee establishes an Investment Policy Statement to guide investment practices over a period of five years or more, establishes an annual Policy Portfolio to guide asset allocation, approves the hiring and termination of investment firms, monitors the office actions to ensure compliance with policies, and monitors the returns and characteristics of the LTIP relative to the policy portfolio and peer group.

The University has reduced its overall endowment payout rate from 6.9 percent in fiscal year 2000 to 5.8 percent in fiscal year 2013, which was one of the key priorities outlined in the 2008 Strategic Plan.

For more information, please refer to the Endowment web page.

Advancement — *The Meliora Challenge*
President Seligman's administration has greatly strengthened the University's development and fundraising activities. The University's advancement office has grown substantially and it has dramatically increased its contact with alumni and other supporters. In 2007, the University launched the George Eastman Circle, an annual giving campaign in which members make five-year unrestricted pledges of $1,500 or more to designated areas of choice. More than 2,850 members have made the George Eastman Circle an enormously successful campaign that has brought more than $50 million to the University.

In October 2011, the University announced the *Meliora Challenge*, its first comprehensive campaign since 1924. As of February 2014 a total of $1.050 billion had been raised, or 88 percent of the University's $1.2 billion goal. Despite a challenging economic landscape, the campaign has been a success and is ahead of planned projections for this point in its lifespan. The campaign reflects the collective needs of the units and the University — including annual fund support, facilities/capital support, faculty support (particularly endowed professorships),

program support, and student support (particularly endowed scholarships and fellowships). Bolstering these resources is critical to the financial sustainability of the divisional financial plans and allows the schools to invest in quality initiatives while limiting the use of endowment.

Updated information about the Campaign is available on the Campaign website.

Financial Management and Oversight

The president, the provost, the senior vice president for administration and finance and CFO, and the Board of Trustees oversee management of the University's financial resources. The Faculty Senate Budget Committee regularly receives and reviews financial and University budget reports. Given the decentralized nature of University governance, the deans of the various schools develop their own budgets in light of the needs of their faculty, students, and staff. The deans develop their budgets within parameters established by the president and CFO, and final budget approval comes after extensive discussion and interaction. Additional information about annual budgeting processes may be found earlier in this chapter.

The Board of Trustees fulfills its oversight responsibilities primarily through the activities of its Committee on Audit and Risk Assessment. This committee meets formally at least four times a year and consists of 10 trustee members plus two ex-officio members. The committee reviews the procedures in place to assess and minimize significant risks, overseeing the quality and integrity of financial reporting practices (including the underlying system of internal controls, policies and procedures, regulatory compliance programs, and ethical code of conduct), and overseeing the overall audit process. The committee also reviews the University's internal controls as well as its processes for risk assessment and compliance with laws, regulations, and standards. The committee's activities and

responsibilities are detailed in its charter, which it reviews with the Board of Trustees from time to time. The University's continued growth in sponsored research and its position as the seventh largest private employer in New York State gives it increasing visibility and responsibilities. There are challenges in complying with federal, state, and local laws that accompany these expanding responsibilities. The University Compliance Committee oversees and coordinates how best to reduce compliance risks and will be discussed in more detail in Chapter 4. Prioritization of risks and periodic reviews and audits of major potential risks are the foundation of this approach.

Compliance at the University is managed through administrators in areas such as Environmental Health and Safety, Information Technology, Human Subjects Research, Medical Billing, Financial Controls, and Research Administration. These administrators, joined by several members of senior leadership, comprise the Compliance Committee. It is co-chaired by the senior vice president for administration and finance and CFO and the University's vice president and general counsel.

External Evaluations

The University has a clean audit opinion from the external public accountants, PriceWaterhouseCoopers, each year. For more information, please see the Financial Statements web page.

The University regularly receives favorable ratings from the rating agencies. In August 2013, Moody's reaffirmed its Aa3 rating, noting the University's conservative budgeting practices and improved operating efficiencies. Standard & Poors upgraded its rating to AA– in November 2012, noting the University's reduction in endowment spending and anticipated success of its capital campaign. Standard & Poors reaffirmed their upgraded rating in September 2013.

Facilities

The University's campuses include the River Campus, the Medical Center, the Eastman School of Music, the

South Campus, and the Memorial Art Gallery. The River Campus is the center of the University's academic and administrative activities. It is located on a hill overlooking a bend of the Genesee River about 2 miles (3 km) south of downtown Rochester and covers about 200 acres and four million square feet of facilities. The site was the former home of the Oak Hill Country Club golf course. Today it is bounded by Bausch & Lomb Riverside Park, an 18-acre public park along the east bank of the Genesee River, and Mount Hope Cemetery, where the grave sites of Susan B. Anthony and Frederick Douglass can be found.

The University of Rochester River Campus has been the beneficiary of effective facilities planning from its inception in 1926. The original buildings of the campus were dedicated in 1930. The main academic buildings, designed in the Greek revival style, are on the Eastman Quadrangle (generally referred to as the academic quad), which is formed by Rush Rhees Library and Dewey, Bausch & Lomb, Morey, and Lattimore Halls. Rush Rhees Library is also home to the Hopeman Memorial Carillon, the largest carillon in New York State, featuring 50 bells that chime on the quarter hour. During the summer, the carillon features a recital series in which various artists perform on the instrument.

Over the course of the last several decades, other academic buildings have been built south of the Eastman Quad, including Meliora Hall (1972), Hoyt Hall (1962), Harkness Hall (1946), Gavett Hall (dedicated with the Eastman Quad in 1930), and the Hopeman Engineering Building (1963). The southernmost part of the River Campus contains the new Science and Engineering Quadrangle: Hutchison Hall (1972), Hylan Building (1971), the Computer Studies Building and Carlson Library (1987), Wilmot Building (1961), the Robert B. Goergen Hall for Biomedical Engineering and Optics (2007), and LeChase Hall (2013).

Students often congregate outdoors during the warmer months on the various quads. Other centers of student life include Todd Union, Douglass Dining Center, locations inside Rush Rhees Library, and Wilson

Commons, a student union designed by the architectural firm of I.M. Pei. Many academic buildings, including Rush Rhees Library, are connected by tunnels, which are used extensively, especially during unfavorable weather. Most academic buildings and common areas, as well as residence halls, have Wi-Fi Internet access.

The College recently received a report from consultants who had completed an assessment of the quantity and quality of its teaching space. The analysis indicates that the College has enough classrooms and adequate lab space to manage its teaching needs adequately. There is a shortage of classrooms designed for classes of 75–100 students. The current management system for classrooms leaves many classrooms under the control of departments, with the result that they are not managed as efficiently as they could be. Some of the teaching space is in excellent shape, most notably the state-of-the-art organic chemistry laboratory completed in 2011. However, the consultants report that the overall condition of classrooms is poorer than those of peers. The College is initiating steps to improve the classroom management system and will devote its resources for classroom renovation to the projects where the return will be greatest.

The College also recently received a report from consultants who reviewed space for student life and student activities. The analysis indicates that there is enough space, but not in all cases of the right kind or in the right places. The chief areas of need are space for the College's unusually large number of student organizations to hold meetings and additional space for studying and informal gatherings of small groups of students. The College is currently analyzing this report and identifying spaces that can be used to address these needs. (For discussion of University libraries, please see Chapter 8.)

Recent Facilities Projects
In 2008, the University developed a University-wide, multi-decade Campus Master Plan that is used to guide major campus development across the University. The Campus Master Plan was developed in concert with the

University's strategic plans and was led by a special subcommittee of the Board of Trustees Committee on Facilities. Constituents from every part of the University were included in the planning process through focus groups with faculty, staff, students, administrators, neighbors, community leaders, and planners. The guiding principles for the plan were to reinforce the "One University — One Plan" objective through coherence, compaction, and connections.

In 2012, the University completed a Landscape Master Plan to preserve and strengthen the quality of open spaces on campus. The plan identifies major axial pathways and provides guidance on selection and detailing of materials and plants. The plan recognizes the University grounds as an arboretum with notable collections. A Utilities Master Plan was also initiated during this time and recently updated to ensure the infrastructure of the University is supporting the strategic initiatives and future growth. This has led to the recent approval of a new electrical substation and expansion of chilled water capacity.

Twenty-four new major facilities projects have been completed or initiated since 2005 with an aggregate budget of $723 million. These projects have enabled the University to expand its teaching and research capacity, better serve its patients in the Medical Center, and maintain the residential character of the College through a period of significant growth. (See Chapter 5 for discussion of growth in the College.) Key projects include

- **Eastman Theatre Renovation and Expansion:** a major renovation of the historic theater, with improvements to teaching and rehearsal facilities, a recording studio, and atrium featuring a Dale Chihuly chandelier
- **Goergen Hall:** home to both the Institute of Optics and the biomedical engineering department, it was the first campus building designed with the sustainability standards set by the leadership in Energy and Environmental Design (LEED) program

- **Wilmot Cancer Center:** offers outpatient medical and radiation oncology treatment and houses two inpatient units
- **Rettner Hall:** a home for the media arts and innovations programs
- **O'Brien Hall:** a state-of-the-art, LEED Gold–certified, 148-bed residence. This is the first residence hall built on campus in 42 years.
- **Golisano Children's Hospital:** an 8-floor, 245,000-square-foot hospital dedicated to the needs of children and their families. (Currently under construction.)
- **LeChase Hall:** a new home to the Warner School of Education, opened in January 2013
- **Saunders Research Building:** houses the Clinical and Translational Science Institute, as well as other medical center research programs in areas including cardiovascular disease, neurological disorders, and cancer. It was designed to both meet LEED standards and to facilitate collaborations between scientists.
- **Fraternity Quad Renovations:** a $4 million project to restore and renovate several University-owned fraternity houses were completed in the summer of 2013

Facilities: The University and the Community

One way in which the University has in recent years significantly deepened its connections to the Rochester community is through major developments in neighborhoods adjacent to campus.

In May 2013, University officials joined local community members to celebrate the groundbreaking of College Town, a $100 million project to provide dining, shopping, and services in a 14-acre area adjacent to River Campus. The project, a result of many years of planning, will transform the neighborhood and provide a wide variety of services, including a bookstore, a hotel, and a fresh food market to the University and members of the community. Information about tenants and other aspects of the project is available at the College Town website. College Town is scheduled to open in fall 2014.

Across the Genesee River from the River Campus is the city of Rochester's 19th Ward. Prior to the construction of a pedestrian bridge in 1995, the University had less engagement with this nearby neighborhood. The completion of that bridge was the first of a series of steps that have significantly enhanced the University's connection to this neighborhood. The following are the key developments in the area near the west (City) side of the bridge:

- **Riverview Apartments**: a privately owned 400-bed apartment complex, managed by the Residential Life system, housing undergraduates in the College.

- **Brooks Crossing**: a development including a hotel, an office building (with the University as lead tenant), and retail space. Currently under construction is an additional 170-bed apartment building that will be occupied by College students under the Residential Life system. The new apartment building is scheduled to open in August 2014.

These projects, in which the University has cooperated with local developers, have been a great benefit to the community and have expanded opportunities for students. In addition to the projects listed here, several affiliated organizations that serve students, including the Chabad House and the M. K. Gandhi Institute for Nonviolence, have moved to the neighborhood.

Renewal and Replacement

Maintaining what the University already has while simultaneously building for the future is the most significant physical plant challenge. Approximately 30 percent of the University buildings (the School of Medicine and Dentistry, the School of Nursing, the majority of River Campus, the Eastman School of Music, and the Memorial Art Gallery) were constructed in the late 1920s and early 1930s. The institution has grown at a rate of approximately 1 million square feet per decade to its current size of approximately 12 million square feet of owned space. Allocating resources between what is needed to sustain current operations and what is needed to support growth is a significant challenge.

Resource allocation for renewal and replacement is reviewed during the annual budget process as well as through assessment of specific needs (annual stewardship and one time capital). One example is deferred maintenance. Routine periodic Facility Condition Assessment (FCA) inspections by independent third-party consultants (combined with observations by in-house staff) are used to identify ongoing maintenance requirements and maintenance that has been deferred. These inspections focus on building infrastructure (i.e., the building foundation, building envelope, and mechanical, electrical, and plumbing systems). They are supplemented by benchmarking (again assisted by a third-party consultant, in this case Sightlines) to validate the accuracy of the information and compare the University to peer institutions. The University uses those reports and information generated on a daily basis by its in-house staff to plan for deferred maintenance expenditures. In addition to the building infrastructure areas noted above, the University's priorities are ensuring safety and compliance with regulations.

The operating budget for deferred maintenance increases a modest percentage annually while specific capital projects address major segments of deferred maintenance through project budgets. Deferred maintenance is also addressed in the central utilities operating and capital budgets as well as in numerous renovation projects. The University Facilities and Services department works closely with divisional staff and with Campus Planning, Design and Construction Management to, where appropriate, incorporate deferred maintenance into renovation projects. During the annual capital budget presentation to the Board of Trustees Facilities Committee, a five-year trend of deferred maintenance expenditures by division is reviewed.

A comprehensive utility infrastructure is essential to support the University's teaching, research, and patient

care missions. The University's utility infrastructure includes steam, hot water, chilled water, electricity, domestic water, storm and sanitary sewers as well as building automation systems. With existing infrastructure at various life cycle points and with changing requirements as new space comes on line, the University must invest capital dollars in maintaining and improving what exists while at the same time identifying and constructing what will be required for the future. Between 2005 and 2012, the University spent nearly $100 million to improve its infrastructure. For the next 10 years, investments of a similar magnitude will be required.

A Utility Master Plan was initiated in conjunction with the Campus Master Plan, addressing both renewal and capacity expansion. This plan was recently updated and reviewed with the Trustees Facilities Committee during the spring of 2013. The plan projects capital expenditures necessary to maintain reliability and meet capacity needs. These projects have been incorporated into capital and debt planning. The University's most pressing needs, for additional electrical and chilled water capacity, are being met with the construction of the new electrical substation on the South Campus and the expansion of the Mid Campus Chiller Plant currently under way.

Technology Resources

Information Technology

The vice president for information technology oversees information technology for the University. Each school also has its own IT support personnel as part of the University's decentralized structure. To ensure that the University makes the most effective use of its IT resources, the unit has recently reorganized IT governance, with overall strategy and policy being directed by an IT Steering Group comprised of senior University administrators and chaired by the provost.

The IT Capstone Report, February 2013, describes progress on strategic initiatives in this domain, including a University-wide collaboration on the development of

high performance computing to support research, enhancement of security of information, improved support for administrative systems including finance and accounting, modernization of the University's web presence, and establishment of an appropriate identity management system.

University IT seeks to advance the University's mission by providing the systems and infrastructure necessary to support the teaching, research, patient care, performance, and support functions of the University community. In collaboration with the distributed IT community across the institution, University IT supports email services, web services, research support, medical records systems, networking and wireless services, and other systems necessary in a contemporary research university. University IT also manages an energy-efficient, shared Data Center that houses services supporting the University's research, clinical, and academic missions. The state of information technology at the University is summarized in the IT Annual Report.

Among the IT services most affecting students are email, wired and wireless network access across campus (including residence halls), learning management services (Blackboard), and the student information system (ISIS). The latter is a legacy system in need of replacement. In the fall of 2013, the provost appointed a committee to review options for replacement. The committee recently recommended that the University join several peers to become design partners with Workday to develop a new student information system for the higher education market. That recommendation has been approved and implemented.

The Center for Integrated Research Computing (CIRC) provides researchers across the University with hardware, software, training, and support necessary to utilize computational science and computing technology in research activities in all areas of academic scholarship. The CIRC currently supports more than 600 users across the Medical Center and River Campus from more than 35 departments and centers, including disciplines

from medicine, engineering, and the biological and physical sciences. The Center also maintains systems with an aggregated computational performance of 240 teraFLOPS, 640 terabytes of disk storage, and a variety of advanced scientific software applications and tools.

Educational Technology

The University supports teaching and learning technologies, including technology in classrooms, teaching labs, campus-wide computing, learning management system (LMS) support, support for media production, conversion and usage in classrooms, video conferencing, and other needs specific to academic disciplines. A dedicated support team is responsible for providing technology support for faculty, maintaining the audio/visual and computing technologies in over 100 classrooms and 750 computers campus wide. More than 80 distinct pieces of software are deployed for teaching and learning activities, with 36 additional software titles offered for productivity purposes.

Several schools have recently moved actively into online education. Additional information on school-based education activities and the Committee on Online Learning can be found in Chapter 8.

Human Resources

The University is the largest employer in the Rochester area, employing approximately 22,450 people. The University's Office of Human Resources, headed by the associate vice president for human resources, oversees the University's employment, benefit, and wellness programs. Its goals are to enhance organizational effectiveness, assure the quality of the workforce, and promote and recognize the diversity of the University community.

Human Resources uses formal employee surveying, direct feedback obtained from faculty groups, as well as multidisciplinary task forces to evaluate satisfaction with benefit plan designs and ongoing administration. In addition, Human Resources has plans to embed 18 human resources specialists within key units. These

individuals will work to enhance communication, service delivery, and employee satisfaction with University benefits.

Human Resources leadership's participation in national association groups and surveys provides insight into the state of the industry and emerging trends. Feedback from University and Medical Center board members and administrators is also important for planning and managing new and existing benefit plans.

Summary and Findings

The University of Rochester's commitment to being an international leader in research and education is supported by strong systems for planning and resource allocation. These resources allow faculty, staff, and students to succeed individually, and also to improve the world around them. The community ties resulting from these achievements are a strong expression of the University's mission and goals.

In recent years, the success of the University's commitment has been evident. The University has improved the quality and size of its incoming undergraduate classes, developed extensive new student support and education programs, and improved the physical space for learning across all of its campuses. Research activities have continued to thrive, with faculty continuing to be leaders in their field and having success in securing funding for their projects.

The current capital campaign will allow the University to build upon these achievements. Resources from the campaign will increase the number of endowed professorships, enhance University physical space, expand student support services, and contribute to important University initiatives in global outreach and data science.

University procedures for allocating resources are inclusive and iterative. The budgeting process involves the input of the Board of Trustees, central administration and school leadership, allowing all

stakeholders significant input into setting priorities. Similar processes are in place for other important University services, including information technology, facilities, and human resources. The success of this approach is evident in the development of new human resource systems, new building projects, and the creation of IT centers and programs across the University campuses.

The University will continue to increase its community participation in the future. The development of commercial and business space at Brooks Crossing and College Town will advance economic development in the city, while also providing needed services to the campus community. The economic impact of the University's role as Rochester's largest employer is further enhanced by these two projects.

The University must also address some internal needs. The improvement of campus buildings will be a major challenge. Deferred maintenance on campus buildings has been increasingly addressed in the budgeting process and will continue to remain a major emphasis. Adequate space, especially the availability of larger-size classrooms, has also been a problem in some cases. The issue of "right spaces in the right places" will be a concern moving forward.

The University has a clear mission to become "ever better" in all its endeavors. The resources and allocation mechanisms to achieve these goals are robust. Despite certain challenges, the University is well positioned to enhance the campus community and to strengthen its ties within Rochester and beyond.

Chapter 2 Links

This list provides the URLs for the hyperlinks in Chapter 2 of this report.

Meliora Moments
http://meliora.rochester.edu/index.php

Statement of Educational Philosophy
http://www.rochester.edu/diversity/philosophy.html

Vision Statement
http://www.rochester.edu/aboutus/mission.html

Eastman's Institute for Music Leadership
http://www.esm.rochester.edu/iml/

Envisioning the Future: A Framework for Strategic Planning
http://www.rochester.edu/president/memos/2006/strategic_planning_expanded.html

January 2009
http://www.rochester.edu/president/memos/2009/progress2009.html

September 2009
http://www.rochester.edu/president/memos/2009/state_of_the_university/index.html

January 2010
http://www.rochester.edu/president/memos/2010/faculty_senate_spring/index.html

May 2011
http://www.rochester.edu/president/memos/2011/faculty-senate-spring/index.html

Presidential memos, statements, and addresses
http://www.rochester.edu/president/memos/index.html

President's 2012 Annual Report
http://www.rochester.edu/president/memos/2012/faculty-senate-fall/index.html

Aiming Higher: The University of Rochester Strategic Plan (2013–2018)
http://www.rochester.edu/strategic-plan/

Endowment Web page
http://www.rochester.edu/endowment/

Campaign website
http://campaign.rochester.edu/

Financial statements
https://www.rochester.edu/adminfinance/statements/

Organic chemistry laboratory
http://www.chem.rochester.edu/highlights/fall11.php

Campus Master Plan
http://www.rochester.edu/adminfinance/masterplan/

College Town website
http://www.collegetownrochester.com/

Chabad House
http://www.chabadrochester.com

M. K. Gandhi Institute for Nonviolence
http://www.gandhiinstitute.org/#

University Facilities and Services department
http://www.facilities.rochester.edu/

IT Capstone Project
http://www.rochester.edu/provost/middlestates/report/bylaws.pdf

University IT
http://www.rochester.edu/it/

IT Annual Report
http://www.rochester.edu/it/cio/ITAnnualReport.html

Center for Integrated Research Computing
http://www.circ.rochester.edu/

Office of Human Resources
http://www.rochester.edu/working/hr/

Chapter 3
Governance, Administration, and Integrity

Standard 4: Leadership and Governance

The institution's system of governance clearly defines the roles of institutional constituencies in policy development and decision-making. The governance structure includes an active governing body with sufficient autonomy to assure institutional integrity and to fulfill its responsibilities of policy and resource development, consistent with the mission of the institution.

Standard 5: Administration

The institution's administrative structure and services facilitate learning and research/scholarship, foster quality improvement, and support the institution's organization and governance.

Standard 6: Integrity

In the conduct of its programs and activities involving the public and the constituencies it serves, the institution demonstrates adherence to ethical standards and its own stated policies, providing support for academic and intellectual freedom.

Introduction

The first section of this chapter describes the system of governance and administration within the University. It presents the University bylaws, which clearly define the role and responsibilities of the Board of Trustees, the president, and senior leaders in policy development and decision-making. It also reviews the University administrative structure and describes the ways in which it facilitates learning, fosters research, strives for quality improvement, and supports the University's governance and organization.

The final section of this chapter examines the policies and practices the University has established to assure that it operates in accordance with highest ethical standards and that it guarantees academic and

intellectual freedom. The section discusses ways in which the University expresses its fundamental commitment to support its diverse community of faculty, students, and staff in a climate that fosters inclusivity and mutual respect. It also reviews some of the ways in which it communicates its policies and procedures to the members of the University community.

Governance and Administration

University of Rochester Bylaws

The University of Rochester's system of governance is outlined in its bylaws, which are posted on the University's website, and are freely accessible to not only the University community, but to the public as well. The bylaws describe the overall organization of the University and the respective roles and powers of the Board of Trustees, the University's officers, and the faculty.

The bylaws assign authority and accountability for policy development and decision-making. Article III of the bylaws gives the president "general responsibility for the work of all departments." Article IV establishes board committees and charges them with responsibility for policy and planning in their respective areas, such as financial planning, facilities, development, and academic affairs. Article VII defines the role of the faculty and empowers the faculty with "control of the determination and administration of its own curriculum."

The bylaws outline the selection process for governing body members. The Board of Trustees elects new members to the board. Members of the board's committees are put forward by the Committee on Nominations and Board Practices and elected at the board's annual meeting. The board is comprised of 50 voting members, 61 lifetime members, and 13 committees, each of which draws on constituencies as needed for input and discussion. The Board of Trustees reflects the following major constituencies:

- More than 35 voting trustees are alumni

- More than 10 voting trustees are parents of current or recent students

- Trustees include the former Mayor of the City of Rochester and several current or former CEOs from the area's top employers.

- More than 10 trustees have MBA degrees, and more than 25 trustees are or have served as the top executive in their companies (e.g., CEO, chairman, president, managing director).

- Seven trustees are or have been professors, deans, or presidents at colleges and universities.

University bylaws provide that the president is a trustee *ex officio* and provide separately for appointment of the chair of the board. Twenty trustees, including the president and the chair of the board, sit on the Executive Committee, which has the authority to act on behalf of the full board in intervals between board meetings.

Role and Responsibilities of the Board of Trustees

The bylaws delineate the responsibilities for which the board is accountable. New board members are informed in a detailed legal memo from the General Counsel of their legal duties of care and loyalty to the University and the extent of liability under New York law if these are breached. The Board's Committee on Nominations and Board Practices is charged to review and advise the Board of Trustees and the Executive Committee on board practices, which shall be broadly interpreted to include such matters as the orientation of new trustees, the performance of trustees, the conduct of board and committee meetings and other trustee business, communications with trustees, continued training and education programs, and strengthening of relationships between the board and University alumni organizations.

The Board of Trustees assists in generating resources needed to sustain and improve the University. Trustees chair the capital campaign programs of five major academic divisions. Nine trustees serve on capital campaign committees for special initiatives such as athletics, diversity, libraries, and scholarships. Four trustees serve on regional campaigns for the Chicago/

Midwest area, Florida, and San Francisco Bay area. The executive committee of the Campaign Cabinet is comprised primarily of trustees. Trustees set the example in major giving: over the past three years, 10 trustees collectively have pledged more than $60 million to the University.

A thorough orientation is provided for new trustees. New trustees attend a daylong orientation program and are provided with training material. Orientation sessions include legal responsibilities and communications, academic structure, institutional finance, research and government relations, advancement, and health affairs. The University's bylaws require the Committee on Nominations and Board Practices to advise the full board on orientation of new trustees.

The University has a Trustee Conflicts of Interest Policy that carefully characterizes situations in which a conflict of interest may arise. Every trustee receives this policy annually and then completes a Disclosure Form. Trustees are excluded from involvement in decisions and votes on matters in which they have a conflict of interest.

The Board of Trustees is sufficiently autonomous to assure institutional integrity. Its primary responsibilities are to set policy and develop and allocate resources in a manner consistent with the University mission, with input from faculty, staff, students, and community members.

University Leadership

The President

The University of Rochester's president serves as the chief executive officer for the University, and is responsible for the administration of the institution and leading the University toward achieving its goals. He devotes himself full time to these activities. The president's broad powers and responsibilities are described in Article III of the University's bylaws. He reports to the Board of Trustees on the institution's state and progress and leads the University's strategic planning processes.

The president works closely with key senior administrators and relies upon four primary mechanisms in performing an internal managerial role – budget reviews, facilities approvals, strategic plans, and meetings with the members of the Cabinet and Senior Leadership to address issues that are of University significance.

The president also has a broad external role, including alumni and advancement; working with local, regional, state, and federal governments; building relationships with local businesses, faith-based, creative arts, and educational communities; and being the representative of the University in many public events.

The Provost

Advocacy and support for the University's academic enterprise and the intellectual life of its community define the role of the provost. The provost provides leadership for academic programs and initiatives involving faculty and students and works with the entire campus community to ensure that faculty and student needs are met and the University's mission fulfilled.

The provost's areas of oversight include coordination of University-wide academic activities, general oversight of faculty affairs, the promotion of multidisciplinary scholarship, and the administration of University awards and honors. The provost chairs a number of administrative and academic committees, including the Dean's Committee on Administrative Practices and the University Dean's Council. The Provost Office manages the University Committee for Interdisciplinary Studies and Student Learning Assessment Liaison Committee. The office also arranges the Phelps Colloquium, offering faculty and academic leaders an opportunity to learn about interesting research being conducted at the University.

Senior Administrative Officers

Senior administrative officers oversee the primary areas of University business, including the Medical Center, finance, university operations, legal counsel, advancement, and communications. These officers report directly to the president, but work closely with

the provost on issues that impact academic affairs. Qualified and experienced individuals hold these nonacademic officer positions, and many incumbents have extensive past experience in senior management at peer institutions. Charts showing the University's central administrative organization are publicly available and easy to follow.

Academic Leaders

Academic leaders have significant reputations as scholars and/or practitioners in their chosen fields. Most leaders also have prior experience in leadership positions at other institutions. Charts showing the University's academic leadership are publicly available.

The dean is the highest academic and administrative officer for each school, and oversees all aspects of academics, faculty affairs, finances and logistics, and facilities. The dean establishes a vision and priorities for these areas and delegates authority to implement that vision to a supporting group of associate and assistant deans. The supporting deans establish policies and oversee administrative staff in their area, as well as communicate school goals to faculty and students. Individual department chairs work with the deans on specific academic and administrative issues and meet annually with the dean of the school to set departmental goals and establish yearly budgets.

Faculty Senate

The Faculty Senate, discussed in more detail in Chapter 7, works with the Board of Trustees and the president to make recommendations for the University's academic development and welfare and to serve as a channel of communication between the various faculties of the University and the president and provost. The Faculty Senate is the sole established representative faculty organization whose elected members relate the faculty of all the schools to the University's central administration and, through the administration, to the trustees of the University. The standing committees of the senate are the Executive Committee, the Elections Committee, the Academic Affairs Committee, the Faculty Budget

Committee, the Research Policy Committee, and the University Committee on Tenure and Privileges.

The senate consists of 45 members, and each school is entitled to at least one senator. Senators are elected for three-year terms from among the full-time members of the faculties of the University, and each holds the rank of professor, associate professor, or assistant professor. The president, the provost, and the university dean of graduate studies are *ex officio* members of the Senate. The senate ordinarily meets nine times during the academic year.

Other Faculty Governance Bodies

The faculty play a significant role in the governance of each of the schools. The Faculty Council in Arts, Sciences & Engineering is an elected group empowered to act in the name of the faculty, on any matter in which the faculty has jurisdiction except in the award of degrees and distinctions. The council, through its Steering Committee, appoints all standing committees of the faculty. The council consists of one full-time faculty member from each department in the College, two student members (one undergraduate and one graduate student), and the dean of the faculty as its chair *ex officio*. Council members must have the rank of assistant professor or higher and serve two-year terms, with right of re-election but to no more than two consecutive terms. The student members each serve a one-year term.

The Medical Faculty Council fosters communication between the dean and the faculty of the School of Medicine and Dentistry. The council serves as a forum for discussion and expression of faculty views in matters relevant to the faculty and brings key issues concerning the faculty to the dean. The dean uses the council to explore new ideas and strategies and may request that the council vote (as representative of the entire medical faculty) on any new initiatives requiring faculty approval. Faculty representatives serve for three-year terms and must have at least a full-time or academic part-time appointment. Every department must have at least one representative; larger departments (50+

faculty) may select two representatives, but still only have one vote on ballots. The council meets once every other month over the course of the year.

Faculty governance in the other schools occurs through Committees of the Whole, in which the full faculty discuss issues under faculty jurisdiction. The relatively small size of these faculties makes this structure effective within these schools.

Oversight and Review of Administrative Structures

The Board of Trustees plays an active role in the review of the University's leadership. The Board of Trustees rigorously assesses the president, provost, and other academic leaders every five years. The review includes a detailed self-study, a campus-wide anonymous survey, a survey of faculty managed by the Faculty Senate Executive Committee, and other data sources.

The University's Board of Trustees has several standing committees that oversee the core operations of the institution. Its Executive Committee meets monthly and plays an active role in University management. The standing committees of the board include the Committees on: Facilities; Audit and Risk Assessment; Personnel; Health Affairs; Academic Affairs; Research and Innovation; Financial Planning; Student Affairs; Compliance and Compensation; and Development. The work of these committees is detailed in Chapter 4. Board members are active and engaged stewards of the University. The standing committees meet regularly throughout the year to review analytical reports, analyze financial and endowment data, and provide feedback on key University initiatives.

The board considers and approves all major changes to the University's administrative structure. Two notable recent examples include the appointment of the new provost in 2012 and the decision to establish a new position of senior vice president for research in 2013. In both cases, an incumbent dean was appointed into an additional role, with the dean of the faculty of Arts, Sciences & Engineering taking on the role of provost

and the dean of the Hajim School of Engineering also serving as senior vice president for research. The president worked closely with the board to assess the potential impact of appointing one individual to two roles and determined that this arrangement best served the University in its current situation. This is an important example of how the president works with the board to recalibrate the administrative structure to balance responsibilities and efficiency in an increasingly complex environment.

Integrity

Fundamental Commitments

The University considers respect for each individual to be fundamental to its health and success. Relevant policies are spelled out in the General Personnel Policy Statements. To foster this respect for the individuals who make up the Rochester community, there are published, fair, and impartial processes, in place to address the grievances of students, staff, and faculty.

The "Standards of Student Conduct: A Guide to the University of Rochester Conduct Process and Policies" emphasizes the University's commitment to ethical integrity:

> The principles of fairness and openness are fundamental to the operations of this community — its processes for decision-making, problem solving, and doing the work of the institution. Every person has the right to, and should expect, fair treatment according to openly stated and clearly articulated expectations, policies, and procedures and in accordance with the fundamental rights and privileges of a free society. Every person is encouraged in parallel ways to use fair and open methods of communication and action, including wherever possible, those provided by existing institutional channels, in voicing concerns and seeking solutions to problems.

For discussion of academic honesty, please see Chapter 6.

The University's clearly stated policy against discrimination and harassment applies to faculty, staff, and students. It stipulates protection of whistle-blowers and documents both informal and formal processes for reporting possible anti-discrimination policy violations. The University makes a concerted effort to assure that its policies and practices conform to the highest standards. A notable example is the recently adopted Policy on Programs for Minors and Children. Following the incidents at Penn State University, the president appointed a senior-level committee to review practices and policies around the University for programs in which minors might participate. This review resulted in the new policy, specific appropriate safeguards for programs that include minors and requiring that all such programs be registered.

Conflicts of Interest

The University has a number of policies in place to avoid (actual and potential) conflicts of interest for faculty, staff, business offices, and research teams. Researchers (including graduate students) complete annual forms declaring conflict of interest in research.

The University's Code of Conduct for Business Activities stipulates how all grants and contracts, gratuities, and other sources of income are handled; how violations are reported; and possible consequences for violating either the law or University policies. The senior vice president for research oversees a campus-wide Conflict of Interest Committee; the School of Medicine and Dentistry maintains its own Conflict of Interest Advisory Committee.

Grievance Procedures

Handbooks of the individual schools specify grievance procedures for students. In the College, the Complaint Form provides a mechanism for student grievances. In the School of Medicine and Dentistry and the School of Nursing student handbooks, the context and steps for filing and reviewing student grievances appear in posted handbooks, accompanied by the expected duration of review process.

Inclusivity and Diversity

As a community, the University of Rochester strives for equitable and consistent treatment of its various constituencies. The president has made the promotion of a diverse and inclusive community one of his highest priorities. He himself serves as the chief diversity officer, and he provides annual public progress reports on the University's progress toward an increasingly diverse community. He has appointed a vice provost for faculty development and diversity, and issues annual reports on diversity. A Panel of Advisors, including trustees and others, serves as a sounding board for discussion of diversity issues. Each school in the University has its own faculty diversity officer. The diversity officers meet regularly with the vice provost for faculty development and diversity to gain a University-wide perspective on issues of mutual concern. Additional details are available on the Diversity at the University website. For a discussion of faculty diversity, please see Chapter 7.

The University's Educational Philosophy Statement illustrates its commitment to open and inclusive exploration of ideas:

> . . . productive inquiry best takes place when individuals can explore and share their experience and thoughts as equal members of our community, uninhibited by prejudice or discrimination. Thus, our pursuit of excellence requires that the University create and support a community of faculty, students, and staff who together and individually enhance diversity and who strive to make themselves and our community ever better.

The University welcomes and supports numerous affinity groups and clubs for a broad range of constituencies. An annual diversity conference, a Presidential Diversity Award, special funding, and ongoing staff positions focused on inclusiveness further demonstrate this commitment.

Student life is guided by a set of communal principles designed to encourage an inclusive and welcoming

campus. The principles are Fairness, Freedom, Honesty, Inclusion, Respect, and Responsibility. These principles are actively promoted through the Office of the Dean of Students' Communal Principles Project, which identifies one principle each year and supports and encourages student organizations that sponsor programs emphasizing the selected principle. The College maintains an active Diversity Roundtable, charged with providing a forum for open discussion of issues related to diversity and has posted summaries of Campus Climate Surveys for 2008 and 2010. These results are discussed in Chapter 6. The College has also recently established an Intercultural Center, dedicated to promoting intercultural understanding and interaction. For a more detailed discussion of diversity as it applies to student support services, please see Chapters 6 and 8. Individual schools and departments strive to promote this climate of respect and inclusivity. For example, the Warner School of Education faculty has a scholarly interest in approaches to enhancing campus climate for diverse groups

The Undergraduate Studies Bulletin and Graduate Studies Bulletin, both online, detail the standards of academic and nonacademic conduct and the policies and processes for addressing grievances.

The University strives to be as impartial and fair as possible in its hiring, evaluation, and dismissal of employees. The University values diversity and is committed to offering equal opportunities for all persons regardless of age, color, disability, ethnicity, gender identity or expression, genetic information, marital status, military/veteran status, national origin, race, religion/creed, sex, sexual orientation or any other status protected by law. Faculty and staff are governed by Human Resources policies, which include definitions of discrimination and harassment and procedures for reporting and following up on complaints. Employee annual reviews and approaches to conflicts and grievances are thoroughly covered in Policies 106 (policy against discrimination and harassment), 154 (corrective discipline), and 160 (employee grievances), all of which are accessible online. In addition, the

University-wide Faculty Handbook outlines the policies for promotion, tenure, and grievances.

The University complies with all applicable non-discrimination laws in the administration of its policies, admissions, employment, and access to and treatment in University programs and activities. Decisions in recruitment, appointments, hiring, promotions, transfers, and opportunities for training, as well as appointments to the University's governing and advisory bodies are made without regard to the above statuses. Recruitment and personnel actions are monitored by the Affirmative Action Compliance Director to ensure consistent application of the University's General Personnel Policy Statement (Policy 100) throughout the University. The University's policy on Corrective Discipline specifies steps for notifying and acting on unacceptable behavior or performance.

Academic and Intellectual Freedom

The University seeks to support a climate of free academic inquiry by widely disseminating its policies regarding academic and intellectual freedom. The first page of the Faculty Handbook states:

> This University is committed in word and deed to the protection of unfettered inquiry and the academic freedom of its faculty. In turn, while each faculty member has the freedom to determine how to make signal contributions to his or her field, each is expected to adhere to the ethical standards and evidentiary criteria for that field and to discharge responsibly his or her obligations to the University as a teacher, scholar, and citizen.

Human Resources General Policy 106 specifies that protection against harassment should not be taken as a restriction of free speech:

> The Policy is not intended to regulate the content of speech, discussion and debate in the classroom, on Campus or in any University forum. It is not intended to regulate artistic and visual arts expression. The University will protect academic freedom and artistic expression in administering the

Policy. Using speech to discriminate against those protected by this policy or speech that creates a hostile learning, working or campus living environment for those protected by this policy is prohibited.

Free speech is protected by Human Resources General Policy 112, which protects all members of the University community who wish to express political views or engage in political activities within the limits of federal and state regulations. The rights and limits on free speech by University leaders (in contrast to students and faculty as individuals) were also noted by President Seligman in an address on academic freedom in 2008 and in other cases in which members of the University community made controversial public remarks.

The Policy on Intellectual Property states that the University strives to support its faculty and employees in securing commercial development of intellectual property resulting from their research so that society may benefit at the earliest opportunity. UR Ventures, the office charged with supporting technology transfer, is charged with administering this policy. In keeping with academic tradition, the University generally does not claim for itself copyrights in those books, articles, theses, papers, novels, poems, musical compositions, and similar works that are intended to disseminate the results of the academic research, scholarship, and artistic expression of its faculty, staff, and students. Excepted from the general rule above are works that are produced with the significant use of University resources, are institutional works, or are subject to contractual obligations, such as a sponsored research agreement. Ownership of such works rests in the University. The University of Rochester Copyright Policy serves the dual aims of stating the University of Rochester's commitment to upholding the principles of intellectual property as embodied in U.S. copyright law, and of protecting the rights of its faculty and to make appropriate and limited use of copyrighted works for legitimate educational purposes.

Communication

The University strives for honesty and accuracy in all of its communications and public relations practices. It emphasizes the core value of openness and transparency in its public statements and web presence. The University is committed to releasing news (positive or negative) that is as accurate as possible as quickly as possible, to notify both the University of Rochester community and the larger Rochester community and to be viewed as a primary source for follow-up. The role of the University of Rochester in the community is taken seriously, and communications with the local area are active and two-way.

All press releases are vetted in a chain of review from the originating individual through the department or vice presidential office and, in some cases, to the president. When the president initiates a planned communication, all facts are checked and vice presidents consulted before a public release. Examples range from the tragedy of an on-campus student death to a security alert in a nearby neighborhood, both of which were reported within hours. Reporters are on the mailing lists for all University releases and announcements.

The public relations for University achievements is handled in a similar manner, with accuracy checking by individuals written about, as well as endorsement of scientific claims by third parties. All online and print publications and paid advertisements for the University of Rochester are given the same scrutiny. Admissions materials include careful checking of data and immediate reporting of errors as needed.

Presidential messages and public addresses are posted on the President's web page. These include notices of unfolding events as well as unveiling of major plans and strategic decisions. Other major University announcements, from schools or central administration, are transmitted through email. The University is moving towards contact lists generated through its identity management system for University-wide communications and currently uses comprehensive

listservs produced by schools and administrative units for this task. There are also a variety of other vehicles for disseminating information broadly, such as

- **Presentations to the Faculty Senate:** made by the president, provost, deans, etc. Minutes of Faculty Senate proceedings are kept and available online to faculty

- *Currents*: the official newspaper for faculty/staff

- **@Rochester:** daily e-newsletter for faculty/staff

- **GRADS@Rochester:** weekly e-newsletter for graduate students

- **Weekly BUZZ:** weekly e-newsletter for undergraduates

- **UR Events Bulletin**: weekly events calendar for undergraduates

- **Parents BUZZ:** monthly e-newsletter for parents of undergraduates

- **Rochester Review**: six/year magazine for alumni (plus friends, faculty, senior staff)

- **Rochester Buzz:** monthly e-newsletter for alumni

- **In the News**: daily news clips for University leaders

- **Select Major News Coverage**: monthly compilation of news clips for trustees/faculty/staff/students/parents/alumni

- **Eastman School of Music, School of Medicine and Dentistry, Simon Business School, and Warner School of Education** produce magazines for alumni, and they, as well as Arts, Sciences & Engineering, produce regular e-newsletters for faculty, staff, and some students

- **Media relations**: University Communications and schools regularly produce news releases and refer faculty experts

- **Web**: Communications and schools maintain home pages; University and Medical Center have spacial news pages

- **Futurity**: e-news source of research news serves Rochester and 61 other universities. Edited and hosted at Rochester

In addition, there is a student-produced weekly newspaper, the *Campus Times*.

The University strives to make its policies open and readily available. The College maintains a comprehensive and well-indexed electronic Undergraduate Studies Bulletin. Archived versions of outdated bulletins back to 2003 are available electronically. Older versions are archived in the libraries. Other schools maintain a variety of program-specific informational guides in both paper and electronic formats. A University-wide Graduate Studies Bulletin is online as a linked and indexed pdf file and available in hard copy on request.

Some assessment information for prospective students is made available online. The College reports retention and graduation rates to prospective students. The School of Nursing posts graduation and retention rates in its Student Handbook, available to the public online. Admissions personnel from the undergraduate and graduate offices of the other schools consistently reported that they would gladly provide this information on an applicant's request. Several noted that they were aware of a trend to post more such data online and were discussing this in their units.

Web pages are the main mode of provision of information about the University to interested outsiders. For example, each school has a "Fast Facts" or "About Us" page with student body size and characteristics, rankings, and accreditations. Some of these sites link to videos, and this is especially prominent in undergraduate and admissions sites.

Summary and Findings

The University of Rochester's system of governance, outlined in its bylaws, balances responsibility with efficiency in the complex environment of academic and administrative affairs. The governance system promotes the rights and protection of the individual — whether

faculty, student, or staff — and ensures equitable and consistent treatment for all members of the University community.

The Board of Trustees, president, and Faculty Senate function as the main governing bodies of the University. These bodies work to maintain clear channels of communication with administration and the University community, seeking input from students, staff, and faculty through listening tours, town hall meetings, and the invitation of students to Board of Trustees meetings. Open discussions on strategic planning, intellectual freedom, communal principles, and on goals for diversity and inclusion are central to establishing the governing philosophy of the University. These discussions filter into policies establishing intellectual and personal freedom of expression, while balancing the ethical, legal, and organizational requirements of university administration.

The University strives to demonstrate and promote the highest ethical standards in its employment processes and its expectations for faculty and staff. Publicly available policies outline the University's commitment to equal opportunity, its protection of employee rights, and the process for establishing performance standards. The University also places ethical obligations on its faculty and staff, creating clear policies and reporting structures for grievances and conflicts of interest. Moreover, University policies and units — such as the Intercultural Center — promote inclusivity and diversity, while also providing resources to achieve these goals.

All University policies and procedures are assessed regularly for their effectiveness and appropriateness; all policies must be reassessed and readopted every five years. The newly updated Policy on Policy-Making codifies these requirements in the sprit of strengthening University governance structures.

The promulgation and promotion of these initiatives has been enhanced through the work of a centralized communications unit. Publications and announcements from this unit reach the entire University community — across its campuses — but also alumni, parents, prospective students, and community partners. The free flow of information across these channels promotes collective understanding of the University's commitment towards, and active engagement with, its governing principles.

The University's system of governance facilitates autonomy, both administrative and academic, throughout the University. The governance structure is sensitive to the needs of its constituents and transparent in its principles. These factors have ensured a university environment promoting the rights and responsibilities of academic and personal freedom.

Chapter 3 Links

This list provides the URLs for the hyperlinks in Chapter 3 of this report.

Bylaws
http://www.rochester.edu/provost/middlestates/report/bylaws.pdf

Board of Trustees
http://www.rochester.edu/aboutus/trustees.html

Central administrative organization
http://www.rochester.edu/provost/middlestates/report/admin.pdf

Academic leadership
http://www.rochester.edu/provost/middlestates/report/programs.pdf

Faculty Senate
https://www.rochester.edu/Faculty/senate/

Medical Faculty Council
http://www.urmc.rochester.edu/smd/academic-affairs/medical-faculty-council.cfm

Appointment of the new provost
http://www.rochester.edu/president/memos/2012/provost.html

Establish a new position of senior vice president for research
http://www.rochester.edu/president/memos/2013/clark.html

General Personnel Policy Statements
http://www.rochester.edu/provost/middlestates/report/100.pdf

Published, fair, and impartial processes
http://www.rochester.edu/working/hr/policies/

"Standards of Student Conduct: A Guide to the University of Rochester Conduct Process and Policies"
http://www.rochester.edu/provost/middlestates/report/standardsofstudentconduct20132014.pdf

Policy against discrimination and harassment
http://www.rochester.edu/provost/middlestates/report/106.pdf

Policy on Programs for Minors and Children
http://www.rochester.edu/provost/middlestates/report/programs-for-minors.html

Conflicts of interest
http://www.rochester.edu/provost/middlestates/report/113.pdf

University's Code of Conduct for Business Activities
http://www.rochester.edu/working/codeofconduct/

Complaint Form
http://www.rochester.edu/college/CCAS/AdviserHandbook/ComplaintForm.html

School of Medicine and Dentistry
http://www.rochester.edu/provost/middlestates/report/student-handbook.pdf

School of Nursing
http://www.rochester.edu/provost/middlestates/report/studenthandbook.pdf

Annual public progress reports
http://www.rochester.edu/diversity/annualreports.html

Diversity at the University
http://www.rochester.edu/diversity/

Educational Philosophy Statement
http://www.rochester.edu/diversity/philosophy.html

Affinity groups
http://www.rochester.edu/diversity/affinity/index.html

Presidential Diversity Award
http://www.rochester.edu/diversity/awardrecipients

Communal principles
http://www.rochester.edu/college/odos/
communalprinciples/index.html

Diversity Roundtable
http://www.rochester.edu/college/roundtable/

Forum for open discussion
http://www.rochester.edu/college/roundtable/
minutes.html

Summaries
http://www.rochester.edu/provost/middlestates/
report/campus_climate_survey_2010.pdf

Annual public progress reports
http://www.rochester.edu/diversity/annualreports.html

Scholarly interest
https://urresearch.rochester.edu/
institutionalPublicationPublicView.action;jsessionid=C
D5DBFFBA1E298EC7652D4E8BD527713?
institutionalItemId=21387

Undergraduate Studies Bulletin
http://www.rochester.edu/bulletin

Graduate Studies Bulletin
http://www.rochester.edu/GradBulletin/

Human Resources policies
http://www.rochester.edu/working/hr/policies/

Policy 100
http://www.rochester.edu/provost/middlestates/
report/100.pdf

Corrective Discipline
http://www.rochester.edu/provost/middlestates/
report/154.pdf

Faculty Handbook
http://www.rochester.edu/provost/middlestates/
report/Faculty_handbook.pdf

Human Resources General Policy 106
http://www.rochester.edu/provost/middlestates/
report/106.pdf

Human Resources General Policy 112
http://www.rochester.edu/provost/middlestates/
report/112.pdf

Address on academic freedom
http://www.rochester.edu/provost/middlestates/
report/2008academic_freedom.pdf

Policy on Intellectual Property
http://www.rochester.edu/ventures/for-ur-innovators/
for-inventors-university-policy-on-intellectual-property-
and-technology-transfer/

UR Ventures
http://www.rochester.edu/ventures/

University of Rochester Copyright Policy
http://www.library.rochester.edu/copyright/URpolicy

Presentations to the Faculty Senate
https://www.rochester.edu/Faculty/senate/
minutes.html

Currents
https://https://www.rochester.edu/currents/

@Rochester
http://www.rochester.edu/@rochester/about.html

GRADS@Rochester
http://www.rochester.edu/grads@rochester/

Weekly BUZZ
https://www.rochester.edu/weeklybuzz/

Parents BUZZ

http://www.rochester.edu/parentsbuzz/

Rochester Review

http://www.rochester.edu/pr/Review/

Rochester Buzz

http://www.rochester.edu/rochesterbuzz/

In the News

http://www.rochester.edu/news/

Futurity

http://www.futurity.org

Campus Times

http://www.campustimes.org

Reports retention and graduation rates

http://www.rochester.edu/provost/middlestates/
report/factsheet.pdf

Chapter 4
Institutional Assessment

Standard 7: Institutional Assessment

The institution has developed and implemented an assessment process that evaluates its overall effectiveness in achieving its mission and goals and its compliance with accreditation standards.

Introduction

The chapter describes the ways in which the University assesses its programs and operations. The Board of Trustees, the senior leadership, and numerous standing committees engage in assessment activities on a regular basis. In addition, when circumstances warrant, committees are formed to assess institutional performance in specified domains. The results of internal reviews are communicated through various committees and meetings across the University, including board meetings, senior leadership meetings, Faculty Senate and Faculty Budget Committee presentations, and student forums. This chapter examines only institutional assessment, focusing primarily on University-wide activities and programs. Assessment of academic programs and the student experience is addressed in Chapter 9.

Board of Trustee Involvement in Institutional Assessment

The University of Rochester Board of Trustees has several standing committees that oversee and assess the core operations of the institution:

- **Committee on Academic Affairs**: oversees all matters relating to the University's academic programs, including, but not limited to, its undergraduate, graduate and professional education programs, libraries, and special projects. The committee meets twice annually, in connection with full board meetings, to hear from deans, staff, faculty, and students about current academic issues. Recent meetings have addressed such topics as the introduction of a new undergraduate business program (a

collaboration between the College and the Simon School) and the implications of online learning for the University.

- **Committee on Student Affairs**: considers and advises on all matters relating to student life, including but not limited to, student organizations, housing, athletic programs, and student health. The committee also meets twice annually. Recent topics of discussion include fraternity and sorority affairs and the academic honesty system.

- **Committee on Research and Innovation**: advises the board on matters pertaining to University research, technology transfer, and entrepreneurship.

- **Committee on Audit and Risk Assessment**: oversees all internal and external audit activities. It assesses the results of such audits as indicators of the University's financial health and of the efficacy of its internal controls. The committee also reviews the University's processes for risk assessment as well as its compliance activity. The Committee on Audit and Risk Assessment reviews reports from the University's Compliance Committee on the state of its compliance with laws and regulations as well as its programs for ensuring compliance. The University is subject to approximately 100 external reviews, inspections, and audits each year; these are monitored closely and reported to the Committee on Audit and Risk Assessment.

- **Committee on Personnel**: provides guidance and perspective in matters relating to the University's faculty and staff including compensation, benefits and labor relations. The committee concerns itself with the competitiveness and costs of the University's benefits programs. The committee receives regular reports on changes in benefits and the manner in which those changes are implemented. The committee focuses regularly on faculty and staff diversity receiving regular updates from the deputy to the president and vice provost for faculty development and diversity and from the

Human Resource's director of organizational development and diversity. The committee assesses the University's progress toward meeting its diversity objectives. It also meets twice annually.

- **Committee on Health Affairs**: considers all matters relating to the University's health-related programs including the activities of the School of Medicine and Dentistry, the School of Nursing, Strong Memorial Hospital, the Eastman Institute for Oral Health, the University Medical Faculty Group, and the affiliated hospitals. The committee reviews proposed strategic plans and program changes and monitors indicators of progress. The committee reviews regularly, for example, data pertaining to quality of care and in particular, patient safety measures.

- **Financial Planning Committee**: provides oversight in all matters relating to the University's budgeting, financial planning, financial health, and strategy. In addition to its detailed review of proposed operating and capital budgets, the committee focuses on the financial performance of the individual divisions of the University as well as the rate of progress toward meeting the University's overall financial objectives. This includes the areas of endowment spending, liquidity, and debt management. The committee also reviews detailed business plans for large-scale projects including new buildings and programmatic initiatives.

- **Committee on Compliance and Compensation**: reviews compensation of the University's officers as well as review of transactions involving officers, trustees, or other persons of potentially substantial influence over such transactions that might present a conflict or the appearance of a conflict of interest. The committee is charged with the assessment of the performance of the president and University's officers and deans. The committee receives reports of the accomplishments of each of these individuals compared to the goals established for the year. The committee also receives proposed plans for the following year, which provide the

basis for that year's review. The results of these reviews and compensation decisions are reported each spring to the Board of Trustees in executive session.

- **Development Committee**: provides guidance and oversight on matters related to fundraising, programs and efforts including relations with alumni and donors. The committee was particularly active in assisting in the formulation of the goals for the capital campaign. The committee regularly assesses progress toward attaining campaign goals as well as the general goals for the advancement program by regularly reviewing relevant performance metrics.

- **Committee on Facilities**: oversees the University's master planning activities, construction projects and infrastructure as well as the adequacy, condition, and appearance of the University's facilities. The committee reviews and approves campus master plans, capital budgets, and special reports that assess the condition of the University's facilities and infrastructure such as the utility master plan. The committee reviews all capital projects in excess of $1,000,000. Its assessment activities include periodic post-completion audits of major building projects to confirm the projects were completed as authorized and achieved their intended purpose.

Board members are active and engaged stewards of the University and the standing committees meet regularly throughout the year to review analytical reports, analyze financial and endowment data, and provide feedback on key University initiatives.

Leadership Committees Charged with Institutional Assessment

The *Senior Leadership Group* (SLG), a group of 15 vice presidents and other senior leaders, meets every other week with the President, while the executive SLG meets in the alternate weeks. These meetings are to review, discuss, and advise on events and initiatives that are of University-wide significance or are of importance to an operating unit and have the potential for University-wide impact. Events may be and often are external (for example, sequestration, or impact on the University of the Affordable Care Act). The nature of the group and the scope of its discussions ensure not only that senior leaders are well informed about the state of all parts of the University, but that policy development is well informed by diverse perspectives.

The *President's Cabinet*, which includes 30 senior academic and administrative leaders from the University and Medical Center, meets regularly to review and discuss the institution's progress on strategic goals. Cabinet meetings provide a forum for open dialogue about environmental threats and conditions, financial planning, advancement, and master-planning activities.

The *Faculty Senate*, composed of elected faculty representatives from across the University, plays a pivotal role in overall governance of the University. The senate's key roles include

- considering the state of the University and making recommendations for its academic development to the appropriate persons or bodies within the University

- inquiring into any matter of an educational or administrative nature that has implications for the academic function and welfare of the University and making recommendations concerning such matters to the appropriate persons or bodies within the University

- serving as a channel of communication between and among the various faculties of the University and between the collective faculties and the president and the provost of the University

The president and provost provide formal briefings to the Faculty Senate throughout the academic year, with regular updates on the "state of the University" and strategic-planning efforts. The senate's standing committees, in particular, the Faculty Budget Committee, are heavily involved in the University's annual financial planning and budget process.

The *University Management Team* (UMT) consists of members of the President's Cabinet and about 200 senior leaders from academic and administrative areas. The team meets approximately once a month, usually for 90 minutes. Meetings typically include an opening from the president, followed by presentations on various topics of interest, including financial updates, capital-planning updates, and discussions of the University's strategic planning efforts. On occasion, meetings feature special guests from inside or outside the University, including faculty members, the chair of the board, the mayor of Rochester, and others.

University Offices Involved in Institutional Assessment

Several central offices and committees provide operational, logistical, and analytical support to the University's larger institutional assessment efforts, including

- Division of Administration and Finance: Oversees all key financial and business units of the University — including Facilities, Human Resources, Budgets, Audit, Environmental Health and Safety, Compliance, and Research and Project Administration. In particular, the Office of University Audit provides audit and advisory service to the University community by assessing risks, analyzing controls, and ensuring that business practices are effective, efficient, and compliant with University and regulatory policies.

- University Compliance Committee: Monitors the University's compliance programs. The Compliance Committee is co-chaired by the senior vice president and chief financial officer and the vice president and general counsel. Its role is to oversee and coordinate how best to fulfill the University's legal mandates and to reduce compliance risks. Membership of the committee includes managers responsible for such areas as Environmental Health and Safety, Information Technology, human subjects safety, and immigration services. Each year, the

committee issues a report covering all aspects of compliance and includes a summary of the numerous internal reviews, inspections, and audits to which the University is subjected on an annual basis. The report is reviewed by the Board of Trustees Committee on Audit and Risk Assessment as well as senior administration. This process has served as a best practice example to other institutions.

- Office of Counsel: The Office of Counsel provides in-house legal services to the University, including all its schools and divisions, the Medical Center, and University affiliates and related entities. The office oversees all aspects of the University's legal services and is responsible for ensuring that the legal rights and opportunities of the University and its employees are protected and that the University's legal obligations are met.

- Office of Institutional Research: Reporting to the provost, the Office of Institutional Research supports the University's planning and decision-making activities, requests regarding institutional data, assessment, policy analysis, and strategic planning. Institutional Research provides information to outside agencies, federal and state government, and peer institutional consortia. The office collaborates with academic reporting units (including institutional research units within Arts, Sciences & Engineering and the Medical Center) and regularly provides information to senior administrators as well as regulatory agencies. The office also produces the annual University Fact Book, as well as various other reports and analyses showing Rochester trends and peer comparisons.

Academic and student-support offices that are housed within the schools and Medical Center (e.g., Student Life, Dining Services, Center for Excellence in Teaching and Learning, etc.) also engage in regular cycles of assessment with an eye toward improving operations, generating efficiencies, and identifying new programs. Faculty satisfaction surveys and student learning assessment, both important aspects of institutional

assessment, will be discussed in Chapter 7 and Chapter 9 respectively.

Special Assessment Activities

At times, events on campus or beyond provide the basis for a careful review of University performance in particular domains. Some notable examples:

- Following the widely reported incidents of the abuse of minors at Pennsylvania State University, President Seligman appointed a University-wide committee under the leadership of the provost to identify the University's programs involving minors and to recommend policies to protect minors participating in them. The resulting reports were widely disseminated on campus. Details are available on the Programs for Minors website. The result was the creation of a Central Registry of programs involving minors and a detailed University policy specifying the standards for programs with minors or children.

- In January 2011, an altercation between two College undergraduates led to a stabbing in which one of the students died. Following this tragic incident, the president asked the University's chief counsel to lead a review of the policies relating to student conduct and the performance of University Security. The report found that "... this tragic event was not something that the University could have foreseen or prevented with the information it possessed at the time." Nevertheless, it provided 23 recommendations regarding student conduct, identifying troubled students, security procedures, alcohol use on campus, and emergency responses. The University has implemented the recommendations.

- The University long had a somewhat unusual arrangement with campus fraternities: the University owned the fraternity houses, but the fraternities were responsible for their maintenance. The growth of deferred maintenance issues in the buildings jeopardized their future. In 2011, the dean of the College

appointed a Fraternity Quad Task Force, whose members were University trustees and student and alumni representatives of the fraternities to assess the situation and provide recommendations. This process led to a revised and improved management system of the fraternities, which are now managed by the University's Residential Life system. This example illustrates an effective collaboration of trustees, alumni, students, and University leaders in assessing and solving a long-standing management problem.

- During the 2010–2011 academic year, the president charged a Security Commission with the assessment of the University's security programs and the safety of its campuses. The commission was broad based with representation from each of the University's campuses. The commission reviewed University's own data and peer data and conducted interviews with students, faculty, staff, and local enforcement officials. In April 2011, it issued a comprehensive report assessing the University's already strong program and recommending steps to make it even stronger. The commission found that while there had not been a significant increase in the number or severity of crimes on campus, there had been an increase in the number of calls for service by Security in which there has been a greater potential for confrontation. Its most notable recommendation was to take the necessary steps to establish sworn officer status for some members of the security staff. The recommendation was accepted by President Seligman and has since been implemented. The security department has been renamed the Department of Public Safety.

The Dashboard:
University Performance Measures

An important dimension of the assessment of the University's performance is found in the ongoing review of key performance metrics found in "The Dashboard" disseminated to the Board of Trustees and to the Cabinet by the president. This Dashboard covers a broad

spectrum of measures including faculty and student body size, endowment performance and use, student quality, diversity, advancement, etc. Metrics are provided in the context of performance over time and in light of strategic goals.

University Policies

The University's primary academic, financial, and human resource policies are available to the public and can be accessed through the University's website. Viewers are able to conduct targeted searches through the site by keyword, policy type, or relevant audience (faculty, students, staff, etc.).

In 2011, the Office of Counsel and the president issued a "Policy on Policies" that outlines the protocol for establishing, altering, or eliminating a key institutional policy. The document stipulates that any University policy must be reviewed and approved by the Policy Approval Committee (which consists of the provost, senior vice president for administration and finance, and vice president and general counsel), and that new policies that impact faculty must also be reviewed with the Executive Committee of the Faculty Senate. Moreover, the document states that all University policies must be reviewed by the Policy Approval Committee every five years to ensure accuracy, impact, and relevance.

Summary and Findings

The University has an active and ongoing system of institutional assessment. The Board of Trustees is deeply engaged in these activities, both in general board meetings and in the work of its numerous committees. University leadership and several standing University committees also engage in regular cycles of institutional assessment to review the efficiency and efficacy of its processes and operations.

In multiple arenas, this system has been effective in providing solutions to long-term management problems

and in responding to new challenges, whether internal to the University or common to universities in general. A key component of this flexibility is the active creation of special committees to assess University practices in the face of these challenges. These committees have provided valuable advice on such topics as security services and programs involving minors on campus.

The range of committees and administrators involved in institutional assessment helps to assure that multiple constituencies on campus have input into problem-solving activities and new policies. At the same time, the structure of these committees, including their reporting requirements, creates continuity and oversight of major policy initiatives based on these assessments. This system provides the integration needed between centrally managed processes and actions at the school or department level.

Chapter 4 Links

This list provides the URLs for the hyperlinks in Chapter 4 of this report.

Division of Administration and Finance
http://www.rochester.edu/adminfinance/

Office of University Audit
http://www.rochester.edu/adminfinance/audit/

University Compliance Committee
http://www.rochester.edu/adminfinance/compliance/

Office of Counsel
https://www.rochester.edu/counsel/

Office of Institutional Research
http://www.rochester.edu/provost/ir/index.html

Programs for Minors website
http://www.rochester.edu/provost/middlestates/
report/programs-for-minors.html

Report
http://www.rochester.edu/provost/middlestates/
report/bordeaux-report.pdf

Accepted
http://www.rochester.edu/president/memos/2011/
security.html

Department of Public Safety
http://www.publicsafety.rochester.edu/

Policy on Policies
http://www.rochester.edu/provost/middlestates/
report/PolicyonPolicies.pdf

Chapter 5
Student Enrollment

Standard 8: Student Admissions and Retention

The institution seeks to admit students whose interests, goals, and abilities are congruent with its mission and seeks to retain them through the pursuit of the students' educational goals.

Introduction

This chapter addresses the University's efforts to admit and retain students. Each of the academic units has its own admissions office and oversees its own retention efforts. Admission to each unit is highly competitive, and each unit admits students appropriate to its mission. The first few sections of this chapter focus primarily on undergraduate admissions and retention in the College and the Eastman School of Music. The final section contains information about admissions and persistence/retention in the graduate programs in Arts, Sciences & Engineering, the School of Medicine and Dentistry, the School of Nursing, the Simon Business School, and the Warner School of Education.

The College

The story of College admissions over the past 20 years reveals crucial facts about the College's recent history. By the early 1990s, the College's enrollment had grown to approximately 4,500 students, and overall quality had declined notably from previous peaks. In response, then President Thomas Jackson implemented the Rochester Renaissance Plan for the College. A central element of the plan was to reduce undergraduate enrollment from 4,500 to 3,600 over a four-year period. This was to be accomplished by reducing entering classes from 1,100 to 900. The goal of this plan was to strengthen student quality. At the same time, the College introduced significant curricular innovations and placed a greater emphasis on taking advantage of the College's residential nature. The plan had the desired effect, and over the next several years, the College developed a stronger profile

and began a period of slow growth that included improved student quality.

By 2006, the College had reached a population of approximately 4,000 students. The result of the strategic planning process undertaken at that time called for steady growth to 5,000 students by 2016. The premise of this plan was that strengthening existing programs, adding attractive new programs, and enhancing the quality of life on campus would attract additional students and the enrollment growth would provide the resources needed for faculty growth. The plan also envisioned continued improvements in student quality over time. Table 5.1 shows that the College has surpassed the goals set forth in 2006 and is likely to achieve its enrollment target of 5,000 two years ahead of the original schedule, while still achieving notable gains in diversity and in quality (as measured by SAT scores and high school GPAs).

Admissions Procedures

The Admissions Office in Arts, Sciences & Engineering manages admission of undergraduates to the College. The dean of admissions and financial aid oversees this work. Admissions staff are located in Rochester, in various regions of the United States, and increasingly, around the world. Due to the strong financial impact of undergraduate admissions on Arts, Sciences & Engineering, the dean of admissions reports to the dean

of the Faculty of Arts, Sciences & Engineering. He also regularly attends the senior staff meetings of the ean of the College and is tightly integrated into planning and operations in the College.

Enrollment planning occurs with detailed information from enrollment experience, which in turn drives the Office of Admissions' messaging activities. Admissions marketing and messaging has been consistent with the Strategic Plan, and, in turn, intelligence and experience from the field has helped to drive campus dialogue about opportunities and reforms in undergraduate education. Two recent examples have been a rapidly elevating dialogue on campus about managing an increasing number of international students, which has been driven largely by enrollment demand, and increasing focus on research/experiential/extra-classroom activities, a consistent winner in enrollment feedback.

New student admissions reviews in the College are holistic reviews of the complete application, with each applicant receiving at least two independent reads. The goal is to allow for multiple ways to consider individual student strengths. There are no minimum automatic academic standards nor a preset rubric; each file is read organically. The first reader is familiar with the applicant's school, educators, region, and country. The first reader assesses the applicant's academic and cocurricular achievements in context and makes a

Table 5.1. College Admissions Data								
	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**6-year change**
Applicants	11,678	11,593	12,111	12,711	13,678	14,788	16,202	~+4,440
Admit	40.40%	43.00%	38.30%	38.60%	36.10%	36.40%	36%	-~5%
Yield	22.20%	23.40%	23.10%	23.40%	23.30%	22.80%	23%	+1%
Enrolled (freshmen)	1,051	1,162	1,080	1,177	1,152	1,235	1332	+249
Minority (freshmen)	9.90%	12.00%	12.90%	13.00%	13.60%	14.50%	16%	+~6%
International (freshmen)	5.80%	6.50%	8.50%	12.30%	16.00%	15.80%	~20%	~+14%
High School GPA	3.64	3.7	3.72	3.79	3.81	3.81	3.82	~+.17
SAT (2-score equivalent)*	1316	1317	1330	1332	1344	1358	~1370	~+54
Total Enrollment	4191	4390	4499	4558	4599	4675	5036	+16%

*This is the average score for the entering first-year class a whole, computed using the highest reported score for students who submit either ACT only, SAT Critical Reading + Math scores only, or submit both. Highest value is determined according to the published concordance table at http://www.act.org/solutions/college-career-readiness/compare-act-sat/. In the years cited, 99% of enrolling new first-year students in each fall cohort submitted one or both exams for admissions consideration.

"student qualifications" recommendation to admit or deny admission. This assessment is made through reviewing interview notes, two personal essays, the Common Application form including an activities résumé, a transcript, letters of recommendation, and at least one national or international standard exam. The second (senior) reader makes an independent "institutional interest" recommendation (admit, deny, wait list, or referral to committee) after assessing the applicant's relative qualifications within the entire applicant pool, along with any unusual contributions the applicant might make on campus (including anticipated valuable differences in perspective, problem solving, special talents and experiences, and existing connections to the Rochester community and academic mission). More than 40 percent of the time the two readers' recommendations do not match and are resolved in a daily admissions committee meeting chaired by the dean of admissions and financial aid. The dean also directly reviews several thousand cases requiring special handling; e.g., student-athletes, legacy candidates, disciplinary and behavioral concerns, major scholarship and specialized degree candidates, and up to 5 percent of cases each year requiring "need-aware" admission review.

Applicant Pool

The College is able to attract a reasonable share of the nation's best applicants. Student retention is well-served by integrating marketing with actual student experience, by its selectivity in admissions, through the large and increasing diversity of its quality academic offerings, and through effective student services. The University struggles a little with its location outside a major urban area (including a "shadow effect" of being in the less-visible part of New York State). Its small scale, while ultimately beneficial in guiding student choices and experience, restricts the degree to which word of mouth from current students and parents can boost visibility with each rising generation of new prospective students.

Long before 2007, when declining college-age populations were predicted, the University began to focus on the anticipated "stall" and then the decade-long decline in college-age undergraduates in the Northeast

and North Central United States regions. In 2003, about 82 percent of College undergraduates came from areas that were about to experience a demographic dip in the target age group. Initially, the admissions office's efforts focused on broadened outreach and recruiting in other parts of the United States. About the time of the launch of the 2008 Strategic Plan, Admissions also began aggressive recruiting of students abroad, with the most rapid gains coming from China. These efforts have benefitted the University's long-term mission and ambition to be recognized as a national and international destination. Now, almost 50 percent of the students arrive from outside the U. S. Northeast, including 18 percent from outside the United States, 12 percent from Western states, and 20 percent from the U. S. Midwest, South, Southeast, and Mid-Atlantic (not including New York City). Simultaneously, the University has embraced the demographic shift in traditional college-age populations with deliberate outreach to national and community-based organizations in many areas. Especially fertile partnerships have been established with the National Hispanic Institute (which named Rochester its College of the Year in 2009), College Horizons (a national Native American–sponsoring organization), and the National Urban Leagues. In 2012, the University was also named the Shelby Davis/United World College's newest partner college. These relationships have helped to steadily increase the share of students enrolling at the University who are from other-than white, non-Hispanic racial and ethnic groups; the share of such students in the incoming freshman class will approach 45 percent in 2013, and the University is likely to reach a "majority-minority" enrollment status in the current decade.

The College enrolls about 9 percent of its entering class through some defined category of "risk." The most prominent and successful example of this is the 20–30 students who enroll each year through the New York State Arthur O. Eve Higher Education Opportunity Program (HEOP), which guides the University in identifying and enrolling students from families at no more than 150 percent of poverty-level income. These

students, along with others with similar backgrounds and academic achievements (chiefly from out of state), enroll in a four-week summer bridge program prior to gaining confirmed admission to enroll in the fall semester. Upon admission, the students receive ongoing attention and guidance. The program is a significant success by any measure, with many potentially at-risk students participating. Another, smaller group of students enters each year expected to enroll in classes designed for non-native English speakers. In both cases, enrolling students are identified through multiple reviews of academic credentials and other application materials, including personal interviews. The University recently reached an agreement with the Posse Foundation to admit a cohort of 10 fully supported students each year. The students have backgrounds

Table 5.2. College Retention and Graduation Data—All Students

Entry Year	Class Year	Cohort	Term 3 Retention	Term 5 Retention	Term 7 Retention	4 YR+T5 Graduation	5 YR Graduation	6 YR Graduation
1997	2001	791	93.6%	85.8%	83.4%	67.8%	75.6%	77.6%
1998	2002	938	93.7%	86.8%	83.7%	68.7%	76.9%	79.7%
1999	2003	1,079	94.7%	88.6%	84.8%	69.2%	77.1%	80.3%
2000	2004	930	93.1%	88.2%	85.5%	72.0%	79.0%	80.6%
2001	2005	996	93.0%	87.7%	84.1%	71.9%	79.0%	81.0%
2002	2006	927	93.1%	89.4%	86.8%	74.2%	82.0%	83.7%
2003	2007	958	93.2%	87.7%	84.0%	71.1%	78.5%	80.3%
2004	2008	967	95.3%	89.2%	88.4%	77.2%	83.2%	84.5%
2005	2009	992	93.0%	88.7%	85.8%	75.4%	81.4%	83.0%
2006	2010	1,100	96.1%	91.5%	88.5%	76.5%	82.7%	84.8%
2007	2011	1,051	94.7%	90.6%	88.2%	78.7%	84.5%	85.5%
2008	2012	1,158	96.0%	91.5%	88.7%	75.2%	82.0%	
2009	2013	1,079	95.1%	92.3%	89.4%	77.5%		
2010	2014	1,176	95.2%	91.7%	89.4%			
2011	2015	1,146	96.2%	92.1%				

Table 5.3 College Retention and Graduation Data—Underrepresented Minority Students

Entry Year	Class Year	Cohort	Term 3 %	Term 5 %	Term 7 %	4 YR+T5 %	5 YR %	6 YR %
1997	2001	69	94.2%	85.5%	84.1%	47.8%	68.1%	71.0%
1998	2002	75	89.3%	81.3%	78.7%	54.7%	70.7%	76.0%
1999	2003	95	88.4%	84.2%	74.7%	47.4%	62.1%	68.4%
2000	2004	93	92.5%	88.2%	84.9%	64.5%	76.3%	78.5%
2001	2005	87	92.0%	87.4%	79.3%	58.6%	71.3%	75.9%
2002	2006	75	89.3%	89.3%	84.0%	61.3%	77.3%	78.7%
2003	2007	105	95.2%	90.5%	85.7%	55.2%	68.6%	72.4%
2004	2008	83	89.2%	83.1%	83.1%	63.9%	71.1%	71.1%
2005	2009	109	90.8%	80.7%	79.8%	52.3%	67.9%	71.6%
2006	2010	108	90.7%	85.2%	78.7%	51.9%	64.8%	69.4%
2007	2011	94	91.5%	89.4%	81.9%	61.7%	74.5%	77.7%
2008	2012	97	94.8%	88.7%	83.5%	62.9%	67.0%	
2009	2013	107	89.7%	87.9%	85.0%	61.7%		
2010	2014	126	93.7%	87.3%	83.3%			
2011	2015	117	97.4%	88.0%				

Table 5.4 College Retention and Graduation Data—International Students								
Entry Year	Class Year	Cohort	Term 3 %	Term 5 %	Term 7 %	4 YR+T5 %	5 YR %	6 YR %
1997	2001	25	84.0%	64.0%	60.0%	36.0%	56.0%	56.0%
1998	2002	37	97.3%	91.9%	81.1%	54.1%	67.6%	75.7%
1999	2003	40	95.0%	80.0%	72.5%	55.0%	62.5%	67.5%
2000	2004	27	81.5%	74.1%	59.3%	48.1%	59.3%	59.3%
2001	2005	15	80.0%	80.0%	73.3%	53.3%	53.3%	60.0%
2002	2006	18	94.4%	77.8%	72.2%	55.6%	77.8%	77.8%
2003	2007	84	94.0%	85.7%	78.6%	59.5%	71.4%	75.0%
2004	2008	68	98.5%	92.6%	91.2%	66.2%	76.5%	83.8%
2005	2009	68	89.7%	86.8%	85.3%	66.2%	72.1%	77.9%
2006	2010	53	98.1%	88.7%	81.1%	62.3%	69.8%	75.5%
2007	2011	70	94.3%	87.1%	80.0%	65.7%	77.1%	80.0%
2008	2012	96	95.8%	89.6%	87.5%	64.6%	72.9%	
2009	2013	81	93.8%	86.4%	77.8%	65.4%		
2010	2014	155	94.2%	89.7%	84.5%			
2011	2015	188	95.2%	91.0%				

similar to those of students in the HEOP program. The first Posse cohort will join the College in the Fall 2014 semester.

Students who accept the College's offer of admission cite the Rochester Curriculum as a chief draw (more than 95 percent list it as a factor, and about 80 percent as a very important factor). Those students also give the institution high marks for general faculty quality, availability and quality of academic major programs, opportunities beyond the bachelor's degree, and (as a high rating among serious competitors) opportunities to engage in undergraduate research. During the period of the most recent Strategic Plan, students have been giving higher marks each year for the quality of campus and student life as well. Students who do not accept the University's offer most often cite its location as a negative feature. Students who have not visited campus give Rochester lower marks for campus environment. More than 70 percent of the students who do not enroll have heard of the Rochester Curriculum and continue to give Rochester high marks for undergraduate research

opportunities, but are less likely to describe those as important factors in their decision making. The majority of students who do not enroll cite costs or financial aid as negative factors, but an equal proportion of those who do enroll cite Rochester's package as representing one of their best options.[1]

Financial Aid

The College meets the demonstrated financial need of each entering undergraduate using data provided through the College Scholarship Service Profile, FAFSA, and student and parent tax returns. The College continues to meet full demonstrated need for the vast majority of continuing undergraduates. Need is met through a combination of University and external grant funds (the primary source of aid for almost all students on average), through low-interest-government-secured loans (no private or external lending sources are required to meet need), and campus employment expectations (chiefly Federal Work-Study awards). The continuing commitment to meet undergraduate needs contributes to improving retention and graduation rates, and

[1] *The University of Rochester's peer set in the eyes of potential undergraduates typically includes many of the most highly regarded American universities. Included among the top 10 alternative destinations for admitted students each year are the Universities of Pennsylvania and Chicago, Northwestern, Johns Hopkins, Cornell University, Brown University, Tufts, New York University, Carnegie-Mellon, MIT, and Washington University in St. Louis.*

secondarily to the diversity of the student body, with about half of the undergraduates requiring assistance. Some assistance each year (15–20 percent of total University grant and scholarship investments) also goes to providing merit scholarships for non-needy undergraduates, and enhanced aid packages for lower-need undergraduates. The recipients of these scholarships are most often students with stronger academic qualifications, or in some cases, special talents and interests (including artistic talents, leadership, and STEM fields; athletic recruiting is categorized separately).

The University's foremost commitment through financial aid is ensuring diversity and meeting financial need for a population that is more than 20 percent Pell-grant eligible; this commitment limits the amount of funds it chooses to make available for providing competitive very large merit scholarships to highest-scoring students, a practice in which some peer universities engage at much greater levels.

Retention and Graduation

By general national standards, the College has long retained and graduated its students successfully. However, at the beginning of the strategic planning process in 2006, it set the target of bringing its performance up to those of its peers. Table 5.2 presents 15 years of retention and graduation data.

As table 5.2 shows,[2] retention into the sophomore year at 96 percent is extremely strong. The six-year graduation rate has improved from approximately 81 percent for the cohorts graduating at the beginning of the 2006 strategic planning process to 85 percent or more for the most recent classes. This brings the College closer to the goal of achieving a six-year graduation rate of nearly 90 percent, which would be in better alignment with peer institutions.

The increases in retention and graduation rate are the consequence of deliberate steps the College has taken over the past several years. Among the key elements are improvements in the profile of the entering class, the addition of numerous attractive majors that appeal to students who change from their originally intended majors, improvements in the advising system, enhancements to the support programs for the most at-risk students entering the College, and a variety of enhancements to the quality of student life on campus. Additional information about some of these efforts is presented in Chapters 6, 8, and 9, in which there is a discussion of the ways in which the College has made use of assessment information to strengthen retention and graduation performance.

Retention and graduation rates for historically underrepresented minorities fall below those of the student body as a whole, but also show progress, as table 5.3 shows.[3] Retention and graduation of international students lags behind the rest of the student body, as table 5.4 shows.

Overall, retention and graduation rates in the College show notable improvement. Continued improvement remains a key goal.

Eastman School of Music

The Eastman School of Music has maintained a consistent enrollment goal of approximately 500 undergraduate students and 400 graduate students. Table 5.5 provides key admissions data for the past 7 years.

The Eastman School of Music's enrollment is driven by the performing ensembles that are at the core of the Bachelor of Music curriculum. Recruiting plans and materials are focused at the serious high school music student who plans to pursue classical or jazz

---

[2] *The four year graduation rate includes students enrolled in the Take Five and KEY programs, discussed in Chapter 8.*

[3] *Students reporting themselves as multiracial are not included in this table.*

Table 5.5 Eastman School Admissions		
	New Undergrads Enrolled	Undergrad Yield
2007	143	50.5%
2008	140	52.0%
2009	138	45.2%
2010	139	42.0%
2011	144	45.8%
2012	128	40.3%
2013	166	46.800%

Table 5.6 International Applicants to ESM			
	Applicants	Accepted	Enrolled
2006	99	35	17
2007	134	47	25
2008	162	44	20
2009	152	45	25
2010	147	48	14
2011	210	59	25
2012	225	60	27
2013	248	68	36

performance, music education, or composition as a profession. Each year admission targets are identified based on the number of openings in applied faculty studios, which in turn are driven by the needs of the major ensembles. Graduate admission is further informed by needs for teaching assistants in both applied and academic areas.

The profile of faculty at the Eastman School of Music plays a major role in its ability to attract quality applicants. A generous scholarship program is also a major factor in the school's ability to attract and retain the best students.

Since 2007, and especially since 2010, the Eastman School of Music has seen a dramatic increase in the number of applications from international students, particularly from China. See Table 5.6 for details. From 2009 to 2011, the Eastman School of Music participated in an audition tour of Asia with a group of music schools, known collectively as USA Schools of Music. Eastman withdrew from the audition tour in 2012 because it had yielded a large number of applicants who were not qualified for Eastman musically or academically

or both. Several faculty members continue to tour in Asia and throughout the world, performing master classes and playing concerts, and prominent alumni from those countries have returned to Asia to teach, so application numbers remain at healthy levels.

While the Eastman School of Music remains focused on enrolling the "best" possible class of music students, this can present challenges with diversity. A diverse student body is viewed as an essential element of an educational environment. The main challenge is reconciling the need for well-trained students with the lack of access to private lessons, instruments, and (sometimes) parental support experienced by students of lower socioeconomic status. To address this challenge, Eastman participates in the Pathways Scholarship program, in cooperation with the Eastman School of Music's Community Music School and the Rochester City School District, offering free precollege music instruction to selected students who may become eligible for collegiate scholarships at the Eastman School of Music in the future.

In spite of a very challenging admissions environment, the Eastman School of Music has enrolled extremely high-quality students.

Admissions Process
Printed materials and print ads are placed in national trade magazines (e.g., *Classical Singer*, *Strad*, *Chamber Music America*), summer festival program books (e.g., Aspen, Brevard, Interlochen), and other relevant publications. Advertising placement is often determined by enrollment needs.

Requirements and expectations for admission are highlighted primarily through the Admissions website and also through the Degrees and Programs book. The book is distributed at college fairs, school visits, and is made available to prospective students both electronically and as a hard copy. With the implementation of a new prospect management/admission system (Slate) in 2012–2013, the Eastman School of Music's admissions team is exploring electronic communications available through the system

Table 5.7 ESM Undergraduate Retention and Graduation Rates								
Entry Year	Class Year	Cohort	Term 3 %	Term 5 %	Term 7 %	4 YR+T5 %	5 YR %	6 YR %
1997	2001	101	92.1%	80.2%	77.2%	47.5%	67.3%	73.3%
1998	2002	123	94.3%	87.8%	83.7%	61.8%	78.0%	81.3%
1999	2003	132	95.5%	85.6%	79.5%	58.3%	75.0%	76.5%
2000	2004	114	91.2%	82.5%	77.2%	57.9%	71.9%	73.7%
2001	2005	101	96.0%	89.1%	81.2%	51.5%	75.2%	76.2%
2002	2006	128	96.1%	88.3%	82.8%	71.9%	81.3%	81.3%
2003	2007	131	90.8%	84.7%	80.2%	55.0%	71.8%	73.3%
2004	2008	117	94.9%	88.9%	86.3%	60.7%	77.8%	80.3%
2005	2009	115	94.8%	88.7%	87.0%	67.0%	80.9%	83.5%
2006	2010	119	98.3%	92.4%	90.8%	67.2%	85.7%	88.2%
2007	2011	131	94.7%	89.3%	86.3%	70.2%	79.4%	80.9%
2008	2012	124	92.7%	88.7%	83.1%	59.7%	77.4%	
2009	2013	121	95.0%	89.3%	84.3%	57.0%		
2010	2014	132	91.7%	86.4%	83.3%			
2011	2015	127	90.6%	82.7%				
2012	2016	115	95.7%					

to gain better control over tracking and management of prospective students throughout the application process. The new system has the potential to increase student interest and admissions yields.

Retention and Graduation Rates

Table 5.7 provides information about retention and graduate rates at the Eastman School of Music for the past 15 years. It shows a general upward trend during this time period. Since 2006, the Eastman School of Music has seen a significant improvement in its student retention due to new advising and support initiatives. The Eastman School of Music Student Support Network (SAR) group was created, consisting of the assistant deans of student life, academic affairs and residential life; the deans meet regularly to triangulate information about students at risk, which has resulted in earlier intervention. In addition, the Academic Affairs office has begun reviewing the files of incoming undergraduate students in order to identify students who will potentially struggle academically at the Eastman School of Music. These students are required to enroll in the course, Student Success Strategies, and are carefully monitored by the assistant dean of academic affairs during this period of time. Finally, the addition of

a study skills counselor on staff who is a musician (a "near-peer") allows for one-on-one weekly advising for students as needed.

All admitted students are asked to complete an enrollment form, either indicating their decision to attend the Eastman School of Music or explaining their choice of a different school. The quality of faculty at the Eastman School of Music, the strength of the curriculum, and reputation of the school are the most often cited reasons for enrolling. Other reasons for choosing the Eastman School of Music include the strength of the financial aid package, the availability of a preferred studio teacher, the facilities, and the attitude of students. Those who decline most often cite financial reasons, the reputation of the (other) school, and the location of city. Other reasons for not enrolling may include availability of a particular studio teacher, the type of campus, or the distance from home.

Graduate Admissions and Retention

Introduction

All schools of the University offer graduate programs, and three (Warner School of Education, Simon Business School, School of Medicine and Dentistry) currently offer post baccalaureate programs exclusively. Graduate admissions at the University of Rochester are managed at the school level. Applications are received at relevant offices at the schools and are reviewed by faculty in the master or doctoral program to which the applicant has applied. Offers are specific to the program to which an applicant has applied and are not transferable.

All schools report that their faculties are their main attraction for applicants and their main recruiting tool. Curriculum features described in other sections of this report, such as the biopsychosocial model in the medical school, are a draw in a number of areas. Recruitment activities are staffed with full-time specialists in Arts, Sciences & Engineering and in the Simon Business School.

Diversity is a particularly strong emphasis in graduate admissions. This is particularly the case within the sciences and engineering in Arts, Sciences & Engineering. Simon Business School is active in

Table 5.8 Master's Applications, Selectivity, and Yield 2013						
School	Applications	Offers		Entered		
	Total	Total	Selectivity	Total	Full/Part-Time	Yield
Arts/Sciences	124	71	57.00%	38	38/0	54.00%
Engineering	1172	531	45.00%	213	20/10	40.00%
SMD	169	78	46.00%	47	34/13	60.00%
ESM	813	170	21.00%	107	107/0	63.00%
SON	163	115	71.00%	96	3/93	83.00%
Simon MS	3039	635	21.00%	362	263/99	57.00%
Simon MBA	944	469	50.00%	241	135/106	51.00%
Warner	430	369	86.00%	245	152/93	66.00%
Total	6854	2438	36.00%	1349	935/414	55.00%

Table 5.9 PhD Applications, Selectivity, and Yield 2013						
School	Applications	Offers		Entered		
	Total	Total	Selectivity	Total	Full/Part-Time	Yield
Arts/Sciences	1896	299	16.00%	113	113/0	38.00%
Engineering	727	119	16.00%	70	69/1	59.00%
SMD	597	124	21.00%	61	61/0	49.00%
ESM	90	15	17.00%	7	7/0	47.00%
Simon	305	27	9.00%	4	4/0	15.00%
SON	4	3	75.00%	3	2/1	100.00%
Warner	47	39	83.00%	29	21/8	74.00%
Total	3666	626	17.00%	287	277/10	46.00%

Table 5.10 Professional Doctorate Applications, Selectivity, and Yield 2013						
School	Applications	Offers		Entered		
	Total	Total	Selectivity	Total	Full/Part-Time	Yield
DMA	193	36	19.00%	27	27/0	75.00%
EdD	75	72	96.00%	63	21/42	88.00%
DNP	10	10	100.00%	8	0/8	80.00%
Total	278	118	42.00%	98	48/50	83.00%

consortia focused on recruiting women and minorities into business fields and reaches out to rising stars from Europe, Latin America, and Asia. A transition program for international students aids in acculturation in the summer prior to matriculation. Eastman School of Music advertises in a range of trade publications and festival programs, and widely known faculty performers and alumni help maintain high visibility. The School of Nursing and the Warner School of Education rely on web-based program information as the chief source used by their target groups, and both have agreements with community colleges and other regional institutions. In the School of Medicine and Dentistry, individual MS and PhD programs recruit from universities with top science programs. The MD program participates in national fairs, with a strong focus on diverse applicants.

Financial Support for Graduate Study

Tuition remission and stipends for graduate students are determined and provided by the department or school, with the exception of a few University PhD fellowships described below. Master's applicants and professional doctorate (DMA, EdD, DNP) applicants are not universally offered tuition or stipend support. Some merit-based and need-based aid is provided by Arts, Sciences & Engineering and by Simon Business School, which has partnership arrangements with corporations and local small businesses. MD students receive aid from a range of sources, including sources specifically for disadvantaged and underrepresented groups. The School of Medicine and Dentistry also offers a grant-supported, highly selective MD-PhD degree for which tuition is covered for all years.

Full-time PhD students typically receive tuition remission and stipend support from the school or department. In the Eastman School of Music and the Warner School of Education, tuition waivers and stipend support for full-time PhD students are common but may not cover all costs. In the biomedical sciences and engineering, PhD stipend support after the first 1–2 years is expected to come from faculty research or training grants. Students are typically supported for five years.

To attract the best and brightest PhD applicants, two types of University-wide fellowships are available to enhance departments' ability to make competitive offers: Sproull Fellowships, to enable programs to attract applicants with the strongest academic profiles, and Provost Fellowships, to enable programs to attract strong applicants with potential to diversify the student body. These awards are supported by central operating funds and managed by the central office of University Graduate Studies. Programs nominate applicants for these fellowships, and successful applicants are selected by review panels of faculty. Fewer than 20 of these University fellows enter each year, so the great majority of PhD student support is borne by the units offering PhD programs.

Selectivity and Yield

Criteria for judging graduate applications vary greatly by discipline, so indicators such as GPA or GRE scores are of limited use in judging stringency of admissions. Instead, selectivity and yield are valuable indicators. Selectivity varies markedly from one program to the next, with some programs (e.g., those in the School of Nursing and Warner School of Education) serving a

regional market and aiming for accessibility to a wide range of applicants, and others making offers to only a very small portion of an international applicant pool. Strategic goals influence admission decisions, as will be shown.

The status, uniqueness, and renown of master programs affect selectivity and yield. The Simon Business School MS program and Eastman School of Music master's programs are highly selective; they attract applicants from around the globe. The education and nursing master programs compete with local universities to attract a regional pool of learners. Part-time master's options are popular in nursing, education, and the MBA.

Doctor of Philosophy (PhD) program selectivity and yield also varies. In Arts and Sciences and in the Simon Business School, programs are highly selective and have relatively small yields. Engineering and music PhD programs are similarly highly selective but achieve a higher yield due to unique attractiveness of those programs. Nursing and education serve mainly a local group, although the Warner School of Education is increasingly attracting international applicants. Part-time matriculation is of most interest to students in education.

Rochester's three professional doctorates differ in draw and competitiveness. The Eastman School of Music

Doctor of Musical Arts program is a performance degree for which admission is extremely competitive. The Doctor of Education and Doctor of Nursing Practice programs are offered to meet the needs of local working professionals, who often enroll part time.

Recent Changes in Size of Entering Cohorts

Entering cohorts of master's programs have more than doubled in size overall in the past 10 years, from a cohort of 593 in 2005 to 1,349 in 2013, in response to national trends toward professional master's degrees and in support of strategic goals. The greatest increases in the past five years occurred in engineering (from 68 to 213), business (from 386 to 603), and nursing (from 68 to 96), with a gradual increase in the School of Medicine and Dentistry (from 29 to 47), and a return to past cohort sizes in education (around 230). The Hajim School of Engineering & Applied Sciences is actively developing new professional master's programs, and Arts, Sciences & Engineering views this as a valuable area of growth. In the Simon Business School, although strategic plans included growing the full-time MBA program size, interest has been strong in the MS in finance and the part-time MBA. This shift in emphasis has led to strategic planning to reconfigure the MBA program over the next several years.

Approximately 290 new PhD students enter each year, and this has remained fairly level over time. In 2013, the largest entering cohorts in arts and sciences were in chemistry (27) and in engineering were optics (16) and

Table 5.11 PhD Entering Cohorts 2009 – 2013					
School	2009	2010	2011	2012	2013
A&S (15 programs)	133	107	95	121	113
Hajim (7 programs)	60	53	57	61	70
SMD (15 programs)	66	81	64	60	61
Warner (1 program)	21	26	20	21	29
Simon (1 program)	11	9	19	12	4
ESM (4 programs)	7	11	8	13	7
SON (1 program)	6	7	8	4	3
Total	304	294	271	292	287

electrical and computer engineering (16). In the School of Medicine and Dentistry, 50 students entered in the 13 basic science fields in 2013, a decrease over time reflecting a goal to improve selectivity and accommodate challenges in funding. School totals for the past five years are in Table 5.11.

Professional doctorates are important and longstanding offerings in the Eastman School of Music and the Warner School of Education and are areas of strategic growth for the Warner School and the School of Nursing. The DMA entering cohort is about 28 students per year, and the EdD entering cohort has increased from 45 to 63 over five years. The DNP program is the newest professional doctorate on campus, launched in 2007 as part of a national initiative to prepare clinically influential advanced practice nurses at the doctoral level. About eight students start each year, and program restructuring is expected to increase that number. The professional doctorates require clinical or performance elements and produce a performance or project rather than a research dissertation.

MD admissions have been kept stable at 104 for a number of years to maintain alignment with strategic goals and faculty and clinical resources.

Time to Graduate Degree
A widely used metric for the efficiency and quality of graduate programs is time to completion of the degree. This metric reflects a number of factors, including the academic strength of the student, the amount of academic and financial support provided, and the curriculum of the program.

Master's degree completion times are not commonly examined, given that these degree programs are dominated by structured coursework and do not always include a student-driven thesis phase. Nonetheless, because time to master's degree reflects consumption of university resources and faculty time as well as student effort, it is valuable to observe that Rochester's master's degrees are completed on average in less than two years, with the shortest averages (close to one year) found in

arts and sciences, and the business MS, and the longest averages (two and one-half to three years) found in the professional schools (MBA, Music MA and MM, Education MS, Medicine MPH and MS, and Nursing MS) where part-time study is more common.

MD time to completion averages four years, but roughly 30 percent of students take longer to complete than four years, primarily because these students are pursuing research or other fellowship opportunities to augment and enrich their programs of study.

Time to degree is of particular interest for the PhD degree, which can occupy 10 years or more of a young scholar's life before the student is ready to assume a starting professional position. Time to degree is a widely cited measure of PhD program quality. In general, programs that overuse PhD students as TAs or RAs or that provide inadequate financial support have longer times to completion. The average time to completion of the PhD degree at the University is 6.38 years, and this figure has been stable over time. Biomedical and natural sciences have completion times below this average (5–6 years), while the social sciences, arts, and humanities generally have average completion times above the University mean, with the longest at about eight and one-half years for philosophy and music education PhDs.

The University's times to PhD are quite a bit stronger than national averages. Our 2012 PhD graduates, in comparison to thousands across the United States who completed the 2012 Survey of Earned Doctorates (SED), had median times to PhD (from program entry to date of degree) that were notably shorter than those reported by the SED ("since starting graduate school") across all reported disciplines. A small advantage was seen in engineering (9 percent shorter than national medians) and physical sciences (13 percent shorter), but our greatest strength was in the fields most notorious for long times to degree, including humanities (21 percent shorter), social sciences (22 percent shorter), and education (47 percent shorter, at just over six years for the University of Rochester compared to a national

median of almost 12 years). The University participates in the AAU Data Exchange on PhD program outcomes and has submitted its data. When a critical mass of AAU institutions has done the same, comparison to more similar peers will be possible.

Graduate Degree Completion Rates

Completion rates reflect students' persistence in the research career path, admission selectivity, and program custom. Particularly for students fully supported by the University, each student who does not complete a degree represents many thousands of dollars and hundreds of hours of faculty effort. For this reason, given increasingly constrained resources both nationally and at the University, graduate degree completion rates are of particular interest.

Master's degree completion rates are quite strong, with 80 percent of all students entering master's programs completing by five years from entry. By the five-year point, about 95 percent of students in engineering, business, and music, about 90 percent in education, and about 85 percent in nursing and humanities have completed their degrees. The percentage is about 80 percent in the biomedical fields. This reflects the fact that the MPH degree is usually pursued simultaneously with a doctoral program in another field and this degree is not awarded until completion of the program.

MD completion rates are 98–99 percent. Voluntary attrition is rare; dismissal, while rare, is typically related to academic or professional performance. PhD completion rates reflect students' persistence in the research career path, admission selectivity, and program custom. At the University, the average rate of completion of PhD within 12 years of matriculation is about 66 percent across all programs and years. There is noteworthy variation by program, in part due to structural and financing differences and in part due to differences in expectations of completion. The Simon Business School, for example, with completion rates around 40 percent, expects a fair number of enrollees to withdraw in the early years for failure to meet targeted performance goals and anticipates that some advanced

students will drop out after securing lucrative positions. About 50 percent of humanities and education students complete their PhDs, and 55–65 percent of social and natural science, engineering, music, and nursing PhDs complete degrees. In the large area of biomedical sciences, completion rates are very strong at about 75 percent.

According the national data available, only about 57 percent of those who enter a PhD program complete it by 10 years from entry (Council on Graduate Schools [CGS], 2008). In this CGS study, across 30 public and private U. S. universities, rates by discipline ranged from 50 percent to 65, with engineering and life sciences at 63–64 percent, physical and social sciences at 55–56 percent, and humanities at 49 percent (CGS, 2008). These data suggest that Rochester is at or above the national averages for completion of PhD degrees.

As part of the University's effort to maximize completion rates, there are a variety of resources available to graduate students who may be or who are found to be at risk. Arts, Sciences & Engineering offers a writing center and bridge courses for students needing to strengthen their readiness for graduate study, and the School of Medicine and Dentistry has a prematriculation human biology course to aid educationally disadvantaged students. The School of Nursing (SON) developed the CAPS center for academic support and tutoring.

Overall, in comparison to the University's strong performance on average time to completion of the degree, PhD degree completion rates at Rochester are similar to national comparison data but not markedly stronger. Graduate deans at Rochester have taken up this issue in the current academic year. It is important to determine an acceptable attrition rate for each program, taking into consideration that many students who leave do so not because of problems with academics or University support, but due to changes in career goals or opportunities. As more national data become available, discussion of completion rates in comparison to other universities will engage program directors to think about

their own practices at the admissions stage, evaluate resources for students at risk, and determine the points in the program when students are most vulnerable to attrition.

Summary and Findings

The University of Rochester's enrollment programs are managed at the school level. The schools recruit and admit students whose interests, goals, and abilities are congruent with their mission. The student body includes individuals from a wide variety of backgrounds, and with an increasingly international flavor. Special efforts have been made to recruit students who will make unusual contributions to the student body, particularly in the College.

Recognizing trends in college-age populations, the University has expanded and diversified the geographical range of its recruitment efforts. Similarly, the admission offices have several long-standing programs to recruit students from underrepresented groups. The Eastman School of Music, in particular, has worked diligently to recruit students of high potential from environments in which access to music lessons and instruments has been limited. These efforts have promoted diversity in the student body while also solidifying the admissions base for the University. Diversity within the student body generates some challenges for University units. Lower graduation rates for international students and those from underrepresented domestic groups reflect national trends, although the College still exceeds the national average due to its attention to this issue. The College should continue to focus on improvement in graduation rates, in an effort to meet its target of a six-year graduation rate approaching 90 percent.

The Eastman School of Music's admission program remains strong in an increasingly competitive market, and strong financial aid offers and outreach programs will continue to be necessary to maintain this success. International admissions have stabilized at an acceptance level for the school, although having a diverse student population (especially among domestic applicants) remains a challenge.

The College has seen significant growth in its applicant pool in recent years. This has provided the basis for its successes in increasing the size and quality of the student body. The University has been proactive in diversifying the student body along multiple dimensions, while mitigating retention issues posed by students from very different backgrounds. This proactive approach has allowed the University to enjoy the fruits of a diverse student body, while managing its challenges.

Graduate admissions and retention are robust at Rochester and reflect responsiveness to a continuously changing environment with regard to career paths, funding sources, and scholarly advances. The main areas of growth are master's programs and some professional doctorates. PhD enrollment, while highly competitive in the majority of programs, has intentionally been kept level over the past decade. Reputation of the faculty is the main driver of recruitment success, and in-person outreach efforts are targeted particularly at minority and disadvantaged applicants.

The University is continually improving its support for academically and socially at-risk students, as described elsewhere in this report. Attention in future years can be focused on identification and retention of at-risk students in PhD programs, which require the largest investments of students' time and (in some cases) money as well as faculty time and energy. This is an area of recommended attention over the next few years.

Chapter 5 Links

This list provides the URLs for the hyperlinks in Chapter 5 of this report.

Rochester Renaissance Plan
http://www.rochester.edu/news/show.php?id=1838

Admissions Office in Arts, Sciences & Engineering
http://enrollment.rochester.edu

Admissions website
http://www.esm.rochester.edu/admissions/

Eastman School of Music Student Support Network
http://www.esm.rochester.edu/academic-affairs/
student-support-services/eastman-student-support-
network/

Chapter 6
Student Support

The institution provides student support services reasonably necessary to enable each student to achieve the institution's goals for students.

Introduction

The University of Rochester has a robust and effective student support system. To a greater extent than at most universities, student support services are provided at the school level, although some are managed centrally. In recent years, student services have expanded significantly and there have been enhancements to key areas of student life and student support.

This chapter describes separately the student support services available for three student groups: undergraduates in the College; undergraduates at the Eastman School of Music and students in graduate and professional programs of the University. The final portion of the chapter describes services available to all student populations through centralized offices.

The undergraduate divisions of the University provide student support across a wide variety of areas including academic advising, career counseling, and mental health counseling. There are numerous offices serving students on matters such as financial aid, disabilities services, and residential life. In the College, the Office of Minority Student Affairs and the David T. Kearns Center for Leadership and Diversity in Arts, Sciences and Engineering provide extensive support to underrepresented minority, low income, and first-generation college students. With more than 80 percent of College students and 70 percent of Eastman School of Music undergraduates living on campus, student life beyond the classroom plays a vital role in the education of undergraduates. There is widespread support for student clubs and organizations and for an active student government. Extensive athletic facilities provide opportunities for recreation.

Student Support Services in the College

Student support offices in the College report to the dean of the College. These include both those offices whose focus is primarily curricular as well as those whose mission is cocurricular. Each office is led by professionals in the appropriate aspect of student life and staffed by experts prepared to advise and support students in their domain.

Academic Advising

The College Center for Advising Services provides guidance on a regular basis to all students and specialized attention to those students who are struggling. It also offers advising services for students with particular interests, such as students planning to attend medical school. In collaboration with the Registrar's office, it monitors student progress. The Center for Excellence in Teaching and Learning provides services to all students and guidance to faculty about effective teaching strategies. In addition, every department and program has advisors available to majors or potential majors, and, as a result of a proposal from student government, there is a newly implemented system of peer advising in some departments. Other offices provide academic advice within specific domains, such as undergraduate research and study abroad. The Gwen M. Greene Career and Internship Center serves students from the freshman year onward, providing guidance on academic paths and career choices.

At-Risk Students and Students with Special Needs

In fall of 2010, the College implemented a comprehensive system to identify students "at risk" known as the CARE Network. Any faculty, staff member, student, or parent can submit a "CARE report" about a student of concern; a staff member in the Office of the Dean of Students handles each report individually. Information about the CARE website for submitting reports is distributed widely to the campus community. Through the CARE Network and its corresponding Student Support Network, offices throughout the University work together to address the myriad and complex needs of students. When appropriate, University Health Services and the University Counseling Center are engaged. Additionally, a fund is available through the Office of the Dean of Students for students with acute financial needs, both in the form of small emergency loans and small emergency grants.

In Arts, Sciences & Engineering, the Center for Excellence in Teaching and Learning addresses the needs of students with special needs through its test accommodation system, note-taking system, workshops, and resources for teaching assistants. Residential Life staff work very closely with the University Intercessor when a student's needs affect their housing situation. Security is informed of any mobility-impaired students who live on campus, and this unit makes arrangements to ensure that these students have safe exit from their residence halls in the event of an emergency. The Parking Office is also involved whenever accommodations are necessary.

The Office of Minority Student Affairs provides academic and social guidance to students from historically underrepresented populations and to students who are part of the Higher Education Opportunity Program. It sponsors a highly effective four-week summer Early Connection Opportunity program for incoming freshmen. Elements of advising support in this program are now being extended into the academic year. David T. Kearns Center for Leadership and Diversity in Arts, Science and Humanities focuses on expanding the educational pipeline through to the doctoral degree for low-income, first-generation college, and underrepresented minority students. Students in its programs have near 100 percent graduation rates. Additional information about these offices is provided in Chapter 9.

The College:
Student Activities and Student Life

Even with its recent growth, the College remains relatively small in comparison to the undergraduate divisions of many other prominent research universities. Freshmen and sophomores are required to live on campus, and a large majority of juniors and seniors live in campus housing. Overall, about 84 percent of College undergraduates live in campus housing, and most of those who live off campus reside in neighborhoods adjacent to campus.

The Office of the Dean of Students and the Office of Residential Life and Housing Services, as well as other members of the College staff, are dedicated to maintaining a welcoming and inclusive campus community. In light of the widespread recent public debate about the value of higher education, the College has devoted a great deal of time to reflecting on ways to maximize the value of the residential experience. Some of the outcomes of these efforts are reflected in the discussion in Chapter 8 of new educational initiatives. At the same time, the College has continued to examine the ways in which the student experience outside the classroom can contribute to the value of the education it offers.

A key part of the campus experience derives from what students learn through their interactions with one another. Student clubs and organizations contribute enormously to the vibrancy of life on campus, and participation often provides students with opportunities enabling them to develop leadership skills. The College has approximately 240 clubs, groups, and organizations available to students. More than 20 academic undergraduate councils, four class councils, the Graduate Organizing Group, seven knowledge and skill-based intercollegiate competitive groups, and 13 preprofessional groups demonstrate an intimate connection among students, faculty, and staff members. Large numbers of students hold positions on the governing bodies of these organizations and, in these roles, acquire leadership skills as they learn to interact

with one another and with faculty and staff. They are often led to situations in which they must negotiate with others, advocate on behalf of their organizations, formulate budgets, and plan events. At the same time, these organizations contribute a great deal to the vibrancy of campus life through performances, competitions, and social events.

A second key part of the campus experience derives from the diversity of the campus community. The College is richly diverse, with students from every state and nearly 100 countries. As noted in Chapter 5, the percentage of College students who come from other-than-white, non-Hispanic racial and ethnic groups is growing. This diversity is widely viewed as one of the College's great strengths, and the College is committed to maximizing the value students gain from it.

In an effort to understand the impact of the diversity of the undergraduate population, the College uses the results of COFHE surveys and "climate surveys" periodically conducted by groups like the College Diversity Roundtable. These surveys reveal improvements in the percentage of undergraduates reporting that their experiences on campus have helped them to challenge their biases. Similar improvements have been noted in Black and Hispanic students' perceptions of equal treatment and resulted in a decreased number of students having ever felt harassed.

Specific results from a 2010 climate survey (responses from 22 percent of Arts, Sciences & Engineering and Eastman School of Music undergraduates) include:

- 96 percent say the University has developed their understanding of the world and its people

- 88–95 percent feel accepted and valued by fellow students

- 90+ percent feel contributions in class are not at all devalued based on their demographic characteristics

- 90+ percent feel diversity experiences on campus have enhanced their ability to work with and value those different from themselves

- 97 percent feel the University environment permits free and open expression of ideas and beliefs, and this improves the quality of their education.

In the 2010 COFHE Senior Survey, 74 percent of participants were satisfied with the racial and ethnic diversity on campus, 51 percent were satisfied with the climate for minority students, and 73 percent were satisfied with the sense of community. In PhD graduate exit surveys from 2012, 88 percent of participants report that students are treated with respect by faculty, and 88 percent report that the intellectual climate is positive.

To capitalize on the benefits of its diversity, the College has recently taken several key steps:

- In fall 2012, the College established a new Intercultural Center and appointed a director. The director's first job was to engage in a "listening tour" to discover faculty, staff, and student opinions on the role of an Intercultural Center. The College also engaged the services of the Advisory Board Company to benchmark other institutions for best practices. During the 2013–2014 academic year, the Intercultural Center initiated several new programs and activities on campus that celebrate diversity and promote intercultural exchange.

- Due to steady increases in the percentage of international students in the freshman class (almost 20 percent in 2013), the College appointed an advisor to focus on international student success. This advisor has led a distinctive effort to welcome international students and to encourage their engagement with the College community. During the past year, the College introduced a course, U. S. Life: Customs and Practices, through which students explore the campus and the community, enhance their intercultural competence, and build academic skills needed for success in American classrooms.

- The University's Interfaith Chapel, which houses numerous religious organizations and emphasizes interfaith activities, is located on the River

Campus and also contributes to the character of campus life. In recent years, its director has increasingly focused on providing support for the smaller religious groups on campus and on encouraging interfaith and multifaith activities.

A third key element contributing to the vibrancy of the student experience derives from opportunities to engage with the Rochester community. The Rochester Center for Community Leadership, housed within the Office of the Dean of Students, oversees numerous programs enabling students to learn and benefit from the campus' location in the city of Rochester. Examples include

- Wilson Day: an annual day of service for incoming students, which celebrated its 25th anniversary in 2013

- Urban Fellows: a 10-week summer program integrating faculty, staff, students, and community leaders into a rich and unique learning experience in which students serve as interns in community organizations and learn about the city

- opportunities for students to provide service to their community and to enrich their own lives in the process

- a new effort, in collaboration with the recently appointed faculty director of the Center for Excellence in Teaching and Learning (CETL), to embed community engagement activities in classes

Athletics
Undergraduates in the College participate in 23 varsity athletic sports, 39 club sports, and numerous recreational activities. All student-athletes must conform to the same academic standards and policies as other students on campus. Athletic programs follow the same administrative policies and procedures as other campus programs.

Assessment of Student Services
Students are routinely surveyed on numerous topics related to student life and student services. Survey results, as well as regular consultation with students, provide the basis for modifications of practices and

programs. COFHE surveys indicate that student satisfaction has improved in several areas, most significantly in students' social experiences and in leadership. It is reasonable to attribute these changes to a focus on integrating the College's curricular principles into the cocurricular experience, on establishing renewed emphasis on "community weekends," and to the development of the Rochester Center for Community Leadership. One example of change is Dandelion Day, a long-standing tradition at the University, formerly marked by excessive drinking and other inappropriate behaviors. Over several years, student organizers and staff members worked together to develop a list of metrics with the goal of decreasing the harmful behaviors and retaining students' enjoyment of the day. Through the use of satisfaction surveys throughout the day and the careful measurement of these metrics, the celebration has become safer and more enjoyable.

Student Involvement in Decision Making

Students are involved in decision-making, planning, and governance in many different areas at the University. Several notable examples are the Standing Committee for Alcohol Policy and Education, the All-Campus Judicial Council (which adjudicates disciplinary cases for non-academic misconduct and participates in the adjudication of academic misconduct cases), the Transportation Advisory Committee, and the Fraternity and Sorority Management Committee. Students send a representative to the College Curriculum Committee, the Board on Academic Honesty, and to the Arts, Sciences & Engineering Faculty Council.

Representatives of the Students' Association are regularly consulted on important policy and program matters, and have standing meetings with both the dean of the College and the dean of Students. Students have served on committees and task forces regarding the building of new structures on campus, the development of additional housing on and off campus, and changes to food service. Students are heavily involved in making presentations about academic and cocurricular activities to various committees of the Board of Trustees and Parents' Council. This involvement also serves to

reinforce that the students are a valued and essential constituency of the University community.

President Seligman conducts annual town hall meetings with students in each of the schools. He meets regularly with various student groups, both in social settings and in meetings on arranged topics. In addition, the president hosts and speaks at a myriad of campus and community events. All of these events are part of President Seligman's ongoing efforts to foster a greater sense of community at the University, and to highlight the University's role in the larger Rochester community.

Disciplinary Process

Students are expected to abide by the rules and guidelines set forth in Standards of Student Conduct. A faculty/staff/student committee reviewed and updated this code during the 2012–2013 academic year. The Center for Student Conflict Management holds students personally accountable to the community through the conduct system. Staff members in the Center for Student Conflict Management meet with students to address issues of student conduct. Depending upon the circumstances of the incident, the issue may be resolved in that initial meeting or it may require an additional one-to-one meeting, a hearing with either an administrative panel or the student-run All Campus Judicial Council, or participation in an alternative dispute resolution process. The specific disciplinary policies and procedures are covered in Standards of Student Conduct.

During Orientation, the dean of freshmen introduces students to the policies regarding academic honesty in the College. Premajor advisers give their advisees a written version of the policy and a form acknowledging that they have received information about academic honesty. Advisors collect signed acknowledgement forms and these forms are filed in the students' official files. Transfer students receive their briefing on academic honesty from Advising Services. These Orientation procedures are designed to reinforce the importance of academic honesty. All students (matriculated and nonmatriculated) enrolled in the College or in College

courses must adhere to the academic honesty policy, even if they do not attend Orientation or sign the acknowledgement form. All cases of suspected dishonesty must be reported to the Board on Academic Honesty, either through a short-form resolution or by forwarding a case to the Board for a hearing. The Board is comprised of faculty members appointed by the dean of the College and a student representative from the All Campus Judicial Council.

During the 2013–2014 academic year, the College is conducting a comprehensive self-study of its academic honesty policies using the guidelines set forth by the Center for Academic Integrity.

Complaints

Students in the College wishing to file a complaint may complete a Complaint Form. This may be used by any student who believes that he or she has been improperly placed on or left off probation, on or off the Dean's List, enrolled in the wrong class, given the wrong grade, assigned a poor advisor, or in any way believes that some action taken or not taken by the College or the University concerning the student has been unjustified.

The Complaint Form is available online and at the College Center for Advising Services. Students who desire anonymity when filing a complaint may submit an anonymous "comment form." The College follows up on all such complaints, generally by consulting with the person or office that is the subject of the complaint. Information about the complaint process is readily available at the College's Center for Advising Services website.

Eastman School of Music Student Services

The Eastman School's Office of Student Life is dedicated to promoting a strong musical community that is rich with cultural, social, and intellectual diversity. It seeks to encourage the intellectual, emotional, and ethical development of Eastman students. The office (and school) have embarked on a broad set of strategies that

have resulted in dramatic improvements in and expansion of almost all areas of student services. Some examples include the creation of a new assistant director of student activities position in 2010, better utilization of technology for ticket sales and other student activities, and the implementation of a new Welcome Weekend that received both University and regional awards for collaborative programming.

Academic Advising

All the Eastman School of Music undergraduates are assigned an academic advisor when they arrive. Students have been admitted directly into their major, and this advisor will be a faculty member in their department or their performing discipline, often their studio teacher. All full-time faculty at the Eastman School of Music serve as academic advisors. Students who choose a dual degree with the College also are advised by the Assistant Dean of Academic Affairs. The Dean assists students with managing degree requirements and class schedules across two campuses.

The Eastman School of Music provides study skills support, theory tutoring, writing assistance, and other forms of academic assistance. In 2010, the Office of Academic Affairs created a more defined and comprehensive program of study skills support. Data indicates that students who went through the program had higher retention rates. Students identified as at-risk in the entering 2008 cohort had a retention rate of 77.8%, while at-risk students entering in the 2010 cohort had a retention rate of 100%.

At-Risk Students and Students with Special Needs

The Eastman School of Music Student Support Network operates similarly to the College's Student Support Network in identifying students in need. Student Life, Academic Affairs, and Residential Life staff meet weekly to identify troubled students and follow up until their "at-risk" status is removed.

The school's assistant dean for student life serves as the local disability resource coordinator. This dean works

closely with students, faculty, and parents (when necessary) to put in place reasonable academic accommodations to help meet each student's unique needs.

Students with disabilities are eligible for subsidized music theory tutoring through the music theory department. In spring 2012, the assistant dean for student life created a guide for faculty and TA's working with students with disabilities. Information about disabilities is available on the Eastman Student Life website.

Student Life
Students in the Eastman School of Music work closely with the staff in the Office of Student Life to plan programs and events for students throughout the year. All programs sponsored by student organizations are reviewed after the event. Students fill out an evaluation to determine the overall success of the event. All aspects of the event are reviewed—costs, number of participants, vendors used, quality of food, time involved in planning and running the program, effectiveness of publicity, etc. These evaluations are used the following year by new student leaders when making programmatic decisions.

The Wellness Initiative for Students at Eastman (WISE) program works closely with faculty to determine student needs and to implement wellness-oriented programs in specific studios. The ESM Boxing for Musicians program was a collaboration with faculty, staff, and students to address a specific need— building upper-body strength for students to be more successful bass players. The success of the program sparked a front-page story in the December 3, 2011, edition of the *Wall Street Journal*, and then garnered attention around the world from MSN Sports, Fox affiliates, and national public radio station WNYC, to the *Toronto Globe and Mail*, the *Times of India* (Mumbai), a music magazine published in Mandarin in Taiwan, and the UK's *International Arts Manager* magazine.

Student Involvement in Decision Making
Each semester the Eastman School of Music hosts a Dean's Town Hall for all students. This is an opportunity for students to voice opinions on issues and areas of importance and concern. It is also an opportunity for students to provide feedback on current initiatives and to submit ideas for future initiatives. The Students' Association is often consulted on decisions affecting student life on campus. Student input is taken very seriously and can often move a project or initiative in a distinct direction. Students are selected by the assistant and associate deans to serve on the Academic Integrity Committee, Undergraduate Curriculum Committee, Dining Committee, and Safety and Security Committee.

Disciplinary Process
Students at the Eastman School of Music abide by the same standards of academic and personal conduct as students in the College. Staff members in the Office of Student Life meet with students who stand accused of violating the Standards of Student Conduct and mete out sanctions for inappropriate behavior.

All incoming Eastman School of Music students receive and sign a copy of the school's Academic Integrity Policy, which closely resembles the College's Academic Honesty policy and contains examples tailored specifically toward music students. Plagiarism: Grounds for Dismissal, a classroom handout also available on the Internet as part of the Eastman School of Music Academic Policy Handbook, demonstrates acceptable and unacceptable ways to cite a source. When students are suspected of academic dishonesty, the faculty instructor must consult with the department chair to discuss appropriate sanctions and the assistant dean of Academic Affairs to see whether the student in question has been guilty of a previous violation of academic integrity at the Eastman School of Music. If the student has been previously found guilty of dishonesty, the current case will be forwarded immediately to the Academic Integrity Committee for review and sanction. However, if this is the first suspected case of dishonesty, the faculty instructor meets with the student to discuss

the alleged infraction and then submits an Academic Integrity Incident Report. The assistant dean of Academic Affairs receives this report and is tasked with informing the student of the charges against him or her. Uncontested cases are resolved in a meeting with the assistant dean of Academic Affairs; contested cases move on to a hearing before the Academic Integrity Committee.

Student Support in Graduate and Professional Programs

Each of the schools has a graduate student organization that serves as an advocate for graduate students and provides support for interaction among students. Many of the support services for graduate students are organized within the departments, although the Office of the Dean of Students in the College can be engaged in rare emergency situations requiring University support. Each of the graduate and professional schools provides advising, career development, and other services to its students.

All the schools routinely survey their students and make use of the information obtained. Below are some notable examples of the ways in which graduate student surveys have led to changed policies.

The School of Medicine and Dentistry conducts an annual student satisfaction survey. Compared to the other schools that participate in the survey, University of Rochester students show a strong rate of satisfaction with their programs and are above the "all schools" mean in every category. These scores have resulted from positive changes in the quality of student life over the past five years. New activities include increased career and professional development opportunities made available to the School of Medicine and Dentistry graduate students; development of a formalized parental

leave policy for PhD students; regular increases in the PhD stipend to ensure that students maintain a reasonable cost of living; and the implementation of increased incentives for PhD students being awarded individual fellowships.

The Simon Business School conducts part-time student surveys each year. Based on feedback asking for additional student support, the Simon Business School has added a full-time advisor for part-time students, and has formalized PTAC, a part-time advisory council of approximately eight part-time students. For its Executive MBA program, annual student surveys are conducted via an outside firm that provides data for our students, but also industry comparisons nationally, regionally, and internationally. This content is reviewed with a faculty committee on an annual basis and changes are made at the beginning of each program year to address any concerns.

Student study space and lounges have been added to both the School of Nursing and the Warner School of Education, largely based upon student input.

In addition to school-level resources, University Graduate Studies also provides support. More information can be found at stress management resources, and career planning resources.

Central Support and Policies

Student Information
The University complies with applicable laws on the protection of student data, including the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Privacy and Accountability Act (HIPAA). The College and the Eastman School of Music both have clear policies for release of information in a student's file. These protections are balanced by

efforts to provide the information exchanges necessary to assist and support students.[4]

As one example of balance, Arts, Sciences & Engineering has addressed a specific issue on the disclosure of student information in its policies regarding disclosure to parents. This policy is based on FERPA regulations and addresses transmission of information on grades, other academic information, nonacademic conduct, and health issues. The policy clearly explains the rationale behind limits to parental access to these sets of information.

The University's Information Technology office also has several precautions in place to protect against unauthorized electronic transmission of student records:

- Student Information System (SIS) servers are located behind a perimeter firewall with a default deny configuration
- The University maintains an Intrusion Detection System to reduce risk of an outside cyber attack
- SIS system software is updated on a regular basis
- SIS servers are subject to regular network security scans, and
- The University maintains on-site and off-site backup of our student data.

The University no longer collects social security numbers for incoming students in the student identification system. "Identity finder" software is run regularly on computers to search for residual personally identifiable information, such as social security numbers and account numbers.

The software used for student academic records, the Integrated Student Information System (ISIS), is several decades old. A committee appointed by the provost has reviewed options for replacing it. The committee recommended that the University partner with Workday, along with several other Universities, to design a new student information system for the higher education market. That partnership was recently approved.

Disability Support

Students with disabilities have an easily accessible, identified person to assist with their needs through the Local Disabilities Resource Coordinator housed within each academic unit. The coordinators follow University procedures for providing disability services, derived from policies produced by the Equal Opportunity Compliance office. Additionally, the University created and filled a new position of director of equal opportunity compliance to ensure that all units were following laws, regulations, and directives in this area.

The University Intercessor will occasionally assume the role of assisting students with disabilities, ensuring that their needs are met and that the University complies with applicable laws and regulations. A University-wide team, consisting of the local disability coordinators, risk management officers, and the Intercessor meets each semester to discuss and manage new and existing issues related to disabilities.

Support for Veterans

Since the Fall of 2009, the University of Rochester has participated in the Yellow Ribbon Program, promising all qualified, admissible, post–9/11 veterans of the United States Armed Forces a scholarship (combination of G.I. Bill funding and additional monies from the University) that covers the full cost of tuition for veterans with at least 36 months of service who are pursuing their first bachelor's degree. For veterans with less than 36 months of service, the scholarship amount is pro-rated based on length of service. Resources for veterans have also recently been expanded through the creation of a University affinity group, the Veteran's Alliance, which provides networking opportunities and

---

[4] *The University considers the following to be directory information, and as such responds to requests and/or publicizes such at its discretion: Name, Campus Address, Email Address, Home Address, Telephone Number, Date and Place of Birth, Academic Fields of Study, Current Enrollment (full or part time), Dates of Attendance, Photographs, Participation in Recognized Activities and Sports, Degrees and Awards, Weight and Height of Athletic Team Members, Previous Educational Agencies or Institutions Attended.*

mentoring for veterans and active military members across campus. The University of Rochester was named a Top Military-Friendly University in Military Advanced Education's 2014 Guide to Military-Friendly Colleges and Universities.

While the Yellow Ribbon Program and the Veteran's Alliance clearly offer an invaluable service to our veterans, and the staff and faculty of the University in all schools work diligently to address the needs of this special population, this is an area for improvement.

Other Centralized Student Support Services

- University Health Service, with offices on the River Campus, Eastman School of Music Campus, and the Medical Center campus. The University Health Service provides primary care to students, faculty, staff, and other members of the University community. The University Health Service offers a full range of personal health care services, including the evaluation and treatment of medical conditions, the management of ongoing medical problems, women's health care, treatment for illnesses and injuries, allergy injections, immunizations, first aid care, and blood pressure checks. The University Health Service is also able to provide professional advice on any health concern.

- The University Counseling Center provides individual, couples, and group therapy to University students. Therapists are licensed professionals and professionals-in-training. The University Counseling Center also provides medication management, and offers educational presentations to faculty and staff.

- The University Intercessors work with students, staff, and faculty to resolve interpersonal and departmental conflicts at the University in order to foster a harmonious and respectful community. Situations of any nature can be brought to the intercessor. Individuals who feel that they have been treated unfairly, inequitably, improperly, or in a biased manner may seek their help. Intercessors employ an informal process aimed at restoring the relationship among the

individuals, mediating differences, resolving problems, and rebuilding trust. All interactions are confidential.

- Members of the Department of Public Safety patrol the University's campuses, respond to emergencies, provide a network of more than 185 direct-dial Blue Light Emergency Phones, and maintain (with Information Technology) the AlertUR notification system. On March 28, 2013, 25 members of this department were sworn in as the first group of peace officers, resulting in the unit's first mixed force of sworn peace officers and regular security officers. On University property, peace officers are able to make arrests due to the commission of a felony, misdemeanor, or other breach of peace based on probable cause, and can make mental health arrests. They have access to the government criminal information systems in conducting their investigations. They are also able to conduct proper warrantless searches and have the power to take safe custody of firearms. The College recently strengthened its policy on prohibiting student possession of firearms in residence halls in response to the department's new authorities.

- Information Technology Services provide a wide range of services to the University community, including offering classroom support services, Blackboard, HRMS (the online human resources management system), providing email and wireless services, and maintaining the student and faculty portals.

- Parking and Transportation manages parking on the various campuses, offers free shuttle buses, and offers a Zipcar service.

- Dining Services maintains all dining areas on campus, including dining halls, coffee shops, catering, and the Meliora Restaurant. The University of Rochester was the first college in New York to join the Pride of New York Program, which promotes the use of locally grown agricultural products and locally processed food products. Dining Services has championed the cause of environmental sustainability, and

offers events to educate students on sustainable eating. Dining Services also offers biodegradable packaging and arranges reusable mug and eco-clamshell programs.

Summary and Findings

The University of Rochester has a vibrant and cohesive campus culture. This reflects the modest size and close connections between the University campuses, as well as the large number of student groups and support services found on each of these campuses. Student leadership in campus groups has enhanced the sense of the campus community.

The University of Rochester's student support services are administered both centrally and by the individual schools. The services offered centrally include the student information system, elements of information technology, support for veterans, parking and transportation, public safety, health and counseling services. Advising, support for at-risk students, and disciplinary processes are handled in the individual schools. The CARE Network stands out for its success in supporting students in the College and the Eastman School of Music.

One major area of improvement is the development of a new student information service. A modern, efficient system would benefit central administration in handling student records and privacy issues, while benefitting the schools on academic matters and student support. The recent agreement to partner with Workday on the design of a new information system is a welcome development.

The University benefits from the strong voice of the students in decision making and community activities. The Students' Association and other groups' incorporation into University governance helps disseminate University values throughout the student body. These values are then extended into the Rochester community through the service activities of these campus groups. Notable examples include the

Intercultural Center and the Rochester Center for Community Leadership.

In the future, the University will continue to expand its efforts to promote the interaction of international and domestic students as a means of stimulating and advancing student appreciation for the world at large. This initiative will amplify the range of voices in University community life and continue to deepen student engagement with the University's mission both on campus and in the community.

Chapter 6 Links

This list provides the URLs for the hyperlinks in Chapter 6 of this report.

Student support offices in the College
http://www.rochester.edu/college/students

College Center for Advising Services
https://www.rochester.edu/college/ccas

Center for Excellence in Teaching and Learning
https://www.rochester.edu/college/cetl

Career and Internship Center
http://www.rochester.edu/careercenter/students/

CARE website
http://www.rochester.edu/care/

Office of Minority Student Affairs
http://www.rochester.edu/college/OMSA/

David T. Kearns Center for Leadership and Diversity in Arts, Science and Humanities
http://www.rochester.edu/college/kearnscenter/

Office of the Dean of Students
http://www.rochester.edu/college/odos/

Office of Residential Life and Housing Services
http://www.rochester.edu/reslife/

Climate surveys
http://www.rochester.edu/provost/middlestates/report/2010_climate-survey-summary.pdf

U. S. Life: Customs and Practices
http://www.rochester.edu/college/CCAS/students/opportunities/us-life/

Rochester Center for Community Leadership
http://www.rochester.edu/college/rccl/

Wilson Day
http://http://www.rochester.edu/college/rccl/service/wilsonday.html

Urban Fellows
http://http://www.rochester.edu/college/rccl/civic/urbanfellows/

Standards of Student Conduct
http://www.rochester.edu/provost/middlestates/report/Standards_of_Student_Conduct_2012_Update.pdf

Academic Honesty
http://www.rochester.edu/college/ccas/AdviserHandbook/AcadHonesty.html

Complaint Form
http://www.rochester.edu/college/CCAS/AdviserHandbook/ComplaintForm.html

Online Complaint Form
https://secure1.rochester.edu/ccas/CommentPraiseComplaintForm.php

Office of Student Life
http://www.esm.rochester.edu/studentlife/

Student Support Network
http://www.esm.rochester.edu/studentlife/distress/

Information about disabilities
http://www.esm.rochester.edu/studentlife/disabilities/

Wellness Initiative for Students at Eastman
http://www.esm.rochester.edu/studentlife/wise/

Academic Integrity Policty
http://www.rochester.edu/provost/middlestates/report/AcademicHonesty.pdf

Plagarism: Grounds for Dismissal
http://www.rochester.edu/provost/middlestates/report/plagiarism_examples.pdf

Academic Policy Handbook
http://www.esm.rochester.edu/registrar/policy/

Graduate student organization
http://www.rochester.edu/gradstudies/resources.html

Stress management resources
http://www.rochester.edu/gradstudies/stress.html

Career planning resources
http://www.rochester.edu/gradstudies/
careerresources.html

Policies for release of information
http://www.rochester.edu/college/ccas/
AdviserHandbook/Confidential.html

Policies regarding disclosure to parents
http://www.rochester.edu/parents/policy

Disability services
http://www.rochester.edu/eoc/resources/
forStudents.html

Equal Opportunity Compliance Office
http://www.rochester.edu/eoc/

University Health Service
http://www.rochester.edu/uhs/index.html

University Counseling Center
http://www.rochester.edu/ucc/

University Intercessors
http://www.rochester.edu/intercessor/

Department of Public Safety
http://www.publicsafety.rochester.edu/

Prohibiting student possession of firearms in residence
halls
http://www.rochester.edu/reslife/freshmen/behavioral-
rules.html

Information Technology Services
http://www.rochester.edu/IT/

Parking and Transportation
http://www.rochester.edu/parking/

Dining Services
http://www.campusdish.com/en-US/CSNE/
ROCHESTER

Chapter 7
The Faculty

Standard 10: Faculty

The institution's instruction, research, and service programs are devised, developed, monitored, and supported by qualified professionals.

Introduction

This chapter provides information on the faculty, beginning with a brief profile and description of faculty roles and responsibilities. Discussion of the recent emphasis on diversity is followed by explanations of appointment, promotion, and tenure procedures, along with examples of faculty involvement in academic programs and their productivity and recognition. Sections on University support for faculty research and current programs for faculty development are followed by descriptions of faculty workload and recent surveys of satisfaction. The final portion of the chapter identifies a topic of interest related to faculty age trends.

Faculty Profile

Historical information on the number of tenure track faculty in each school is included in the Fact Book—and specific information on the number of faculty in each academic unit can be found in the Faculty Report from

Table 7.1 Full-Time Tenure-Track Faculty				
	2010–11	2011–12	2012–13	2013–14
AS&E	331	342	344	345
Arts & Sciences	254	258	262	261
Hajim	77	84	82	84
Simon	41	43	43	44
Warner	23	23	24	23
Eastman	86	88	86	88
Medicine & Dentistry	830	832	808	813
Nursing	18	19	19	16
Total	1329	1347	1324	1329

the Office of Institutional Research. Table 7.1 displays the number of tenure-track faculty in each of the schools during the past four years. The number of faculty has remained stable around 1,300 from 2010–2013, with increases in the number of faculty in Arts, Sciences & Engineering offset by decreases in the School of Medicine and Dentistry. Table 7.2 provides information on the diversity of the faculty. As the table shows, there has been slow growth in the representation of women and minorities.

Faculty Roles and Responsibilities

The University of Rochester has a distinguished and eminently qualified faculty—and includes Grammy winners; MacArthur award recipients; Guggenheim, Sloan, and Packard Fellows; National Medal of Science honorees; and members of the National Academies. The faculty drives the University's extensive research agenda and (as outlined in Article VII of the University of Rochester Bylaws) is entrusted with the work of instruction and the administration of the curriculum.

Faculty participation in governance—primarily through the Faculty Senate—promotes diversity of ideas, shared responsibility, collaboration, collegiality, and institutional excellence. The senate acts as a forum in which matters of importance to the University community can be discussed by members of all of its faculties. The core functions of the senate include

- Considering the state of the University and making recommendations for its academic development to the appropriate persons or bodies within the University

- Inquiring into any matter of an educational or administrative nature that has implications for the academic function and welfare of the University and making recommendations concerning such matters to the appropriate persons or bodies within the University

- Serving as a channel of communication between and among the various faculties of the University and between the collective faculties and the president and the provost of the University.

The senate ordinarily meets nine times during the academic year. Topics of discussion include reports from the president on the state of the University in September and April or May, a report from the provost on the state of the faculty in January or February, occasional reports from deans on the states of the various schools, reports from standing and *ad hoc* Senate committees on their activities, and presentations on the state of the University budget. Vice presidents regularly report to the Faculty Senate, including discussions on the state of the endowment and the status of the capital campaign.

Every academic unit is also required to have a set of written rules and procedures for its governance, with copies available to each faculty member. The governing faculty of each academic unit establishes the operating procedures of its specific governance body including, but not limited to, procedures of agenda setting, establishment of a quorum, determination of membership and voting rights, qualification of attendance by persons other than members, appointment of a faculty secretary, distribution of minutes, and the retention/filing of minutes.

Faculty Appointment, Promotion, and Tenure

University policies for faculty appointment, tenure, and promotion are described in the Faculty Handbook. Grievance policies and procedures are also provided in the handbook, and these apply to all faculty members regardless of school.

Table 7.2: Faculty Diversity (%)		
	Women	Underrepresented Minorities
2006	28.6	2.6
2007	29.5	2.8
2008	31.0	3.2
2009	30.4	2.9
2010	31.2	3.3
2011	32.2	3.5
2012	32.6	3.5

Membership in the faculties of the University carries both rights and responsibilities. Faculty members must be free to pursue knowledge and teach according to their convictions but must also conduct research and teaching with integrity and competence. The University has the responsibility to cultivate and provide a climate of intellectual inquiry that promotes the free exchange of ideas. The tenure process secures these rights and responsibilities for all parties.

The primary titles for tenure-track faculty are assistant professor, associate professor, and professor. Tenure-track faculty without tenure have fixed appointments and receive periodic performance reviews. The University sets a standard length of service for tenure-track faculty without tenure, at which point promotion and tenure can be considered. For assistant professors, the review for promotion and tenure is initiated at the end of the fifth year in rank, with notification of the decision at the end of the sixth year. Some flexibility in this timeline exists, however, and variations in the timing of review are decided by the individual schools. Service at the level of associate and full professor without tenure are for a maximum of five years before tenure review processes must be initiated. It should be noted, however, that an individual may be recommended for promotion and tenure at any time that the chair and the dean of the school are persuaded that it is in the University's interest to do so.

Time on academic leave counts toward a faculty member's time in rank. A request in writing to the dean/director is required from a faculty member who wants to postpone promotion or tenure review due to a non-academic leave. The latter may occur in conjunction with use of the family-friendly policies offered by the University to its employees.

Tenure decisions are based on three thresholds: excellence in teaching, achievement of intellectual distinction in scholarly pursuit, and demonstrated service. In addition to reviewing documentation of past performance, the tenure review committee also considers the future productivity of the candidate. The

evaluation process for tenure first takes place among the tenured faculty within the candidate's department. If support exists at the department level, the candidate's materials are forwarded to an ad hoc committee composed of tenured faculty with knowledge of the candidate's field but residing outside the candidate's home department. Positive recommendations from the ad hoc committee are sent to the provost and president for approval and then must receive approval from the Board of Trustees for tenure to be conferred. Once conferred, tenure resides in the school, as this is the University unit responsible for financially supporting faculty members.

Appointments made from outside the University to tenured positions require review by an ad hoc committee and require precisely the same supporting information as promotions within the University. Appointments made from outside the University to ranks that do not carry tenure do not require review by a committee but require approval by the provost, president and, in some cases, the Board of Trustees.

Joint appointments are possible with approval of the relevant chairs and dean of the school. The school and department produce an appointment letter outlining the conditions of the appointment, including teaching and committee responsibilities, role in departmental meetings and decision making, and the duration of the appointment. For appointments spanning schools, information on funding sources and distribution of responsibilities across the schools may be added.

Tenure may be revoked by the Board of Trustees only for cause, academic cause, or bona fide financial exigency of the University. Reasons for tenure revocation can include physical or mental incompetence, moral conduct unbefitting the position, or failure to discharge fundamental obligations as a teacher, colleague, and member of the wider community of scholars. Evidence related to tenure revocation must be presented to the the University Committee on Tenure and Privileges, which reports with recommendations on the proper disposition of the case. The Board of Trustees has

responsibility for the final decision on tenure revocation and consults with the president and provost on these cases.

In any decision on the employment status of faculty, several general personnel policies protecting against discrimination apply: the policy against discrimination and harassment, the affirmative action policy, the policy to protect individuals with disabilities, and the policy regarding employment of veterans.[5]

Faculty Outside the Tenure Track

The educational and research missions of the University benefit from the skills and experience of faculty outside the tenure track. Lecturers, clinical faculty, and adjunct faculty contribute knowledge and practical experience in classroom instruction, while externally funded research faculty bring specific skills and talents to laboratories, research centers, and academic departments throughout the University. Typically, these faculty receive contracts and payments based on a specific period of time or set of deliverables. Rules governing special faculty titles can be found in the Faculty Handbook.

Some teaching within each of the schools within the University is done by non-tenure-track faculty. In some cases, adjunct faculty are appointed on a temporary basis to meet a specific teaching need within a department or program. Other non-tenure-track faculty members make important, ongoing contributions to the reach mission of the University. These faculty receive multiyear, renewable contracts to teach specific courses and engage in other education activities (e.g., advising). Renewal is based upon the school's need and the performance of the faculty member.

Research faculty are appointed in specific departments, typically to work on research projects funded through outside agencies. The duties and term of service of research faculty are specific to the needs of the project and the continued availability of funding. Research

faculty are not required to contribute to the educational mission administrative affairs of their department or school, although this may occur on a voluntary or ad hoc basis.

Faculty outside the tenure track experience significant difference in their ability to make decisions on academic activities and workplace conditions. This will vary considerably by their title and their department. Adjunct faculty have a status as contractors that leaves them little voice in departmental affairs; at the same time, their level of involvement with their department or the University may be minimal. Clinical and research faculty have a stronger standing in departments due to their status as full-time employees and colleagues. Clinical faculty members, in particular, will often serve on departmental committees and may have an official vote on departmental policies. However, clinical and research faculty are not allowed to serve in the Faculty Senate, limiting their influence over University-wide policies.

Faculty Involvement in Academic Programs

In all schools, faculty are involved in the development, assessment, and improvement of academic programs. Programs across the University have often started because of the strong interest of the faculty in developing a major, suggestions from the administration of new majors that would be attractive to prospective students, and/or research-focused programs that might include master's or PhD degrees.

For more information on the specific faculty committees that oversee the curriculum, please see Chapter 9.

---

[5] *Please see the policies web page. The specific policies mentioned above are policies 106, 102, 103, and 104.*

Faculty Productivity and Recognition

The collection of data about faculty publication, scholarship, teaching, and service is vital to decisions about promotion and resource allocation. Department chairs and deans use information on the productivity of individual faculty members to evaluate readiness for promotion and to allocate resources (such as space or support staff). The information is also used to provide feedback to the faculty member with respect to areas in need of improvement. In some instances, changes in the nature and focus of faculty activity reports have helped the institution move toward the establishment of new programs or initiatives. Examples include new areas of interdisciplinary scholarship in Arts, Sciences & Engineering, support for online learning, and establishment of a new "institutional scholar" activity option for promotion in the School of Medicine and Dentistry. Information on faculty productivity is also used for University reporting and presentations by the provost and the president.

University Support for Faculty Research

The University's mission statement ("Learn, Discover, Heal, Create—and make the world ever better") reflects the centrality of research to the University of Rochester's identity. While research is conducted across the institution, two key units—the Medical Center and Arts, Sciences & Engineering—are responsible for the bulk of the research conducted at the University (roughly 80 percent).

During the past five years, there have been significant changes to the University's research infrastructure. To build upon past success in research and expand into new areas, there have been efforts to provide a more coherent structure for administering grants and faculty awards as outlined above. These include improvements to various central offices and committees (described below). There have also been 18 new facilities projects that include research space across the University.

Research Infrastructure

The University's commitment to research excellence is evidenced by the establishment and ongoing maintenance of administrative support, technical expertise, pilot funding opportunities, support for protected time, ongoing research training, and space improvements. As a Carnegie-designated research-intensive university, the University of Rochester has well-established central offices for administrative support of faculty and others seeking to initiate new research projects. The president appointed a senior vice president for research who oversees research initiatives, including the Laboratory for Laser Energetics; sponsored research, including the Sponsored University Research Group; the Office of Research Projects Administration; the Health Sciences Center for Computational Innovation; the Center for Entrepreneurship; the Office of Research Alliances; the Office of Human Subjects Protection/Research Subjects Review Board; UR Ventures (formerly, the Office of Technology Transfer); and online learning initiatives. Information about research at Rochester and links to the research website for each of the schools and Medical Center may be found at the Research at Rochester web page.

The Office of Research and Project Administration (ORPA) facilitates faculty access to external funding opportunities by maintaining centralized databases and offering membership in listservs for new opportunities. It also provides research policies, regulations, compliance training, and other vital support. The University's Research Subjects Review Board—housed in the Office for Human Subject Protection—was expanded in 2010 in response to the increased volume of research applications. The Animal Research Facility assures the humane care and well-being of animals used in research through (a) the Division of Laboratory Animal Medicine, (b) academic programs on comparative medicine, and (c) a *vivarium,* as well as (d) the University Committee on Animal Resources, a

group that oversees policies, training on ethics, and review of proposals to work with lab animals.

In recent years, the University has established offices to support greater alliances between researchers and industry. The Office of Research Alliances facilitates links to the private sector. Facilitated partnerships can include joint research projects, sponsored research, technology development, educational partnerships, or related activities. The Office of Research Alliances tracks the latest University research developments and trends and works closely with UR Ventures, formerly known as the Office of Technology Transfer. UR Ventures proposes specific research transfer opportunities and fields external inquiries to identify likely connections between corporate and other institutions' needs and the University's research capabilities.

Through funding from the New York State Department of Economic Development, the University established a Center for Emerging and Innovative Sciences (CEIS). It is one of 15 Centers for Advanced Technology funded under this program. CEIS promotes economic development through industry-university collaboration and technology transfer. In particular, it conducts outreach efforts that help bring researchers together with companies and also provides matching funding to leverage corporate-sponsored research. Start-up funding is also available through the Technology Development Fund, which started in 2011. Its purpose is to provide a philanthropic source of strategic funding to bridge the critical gap between laboratory discovery and commercialization. The fund supports development of promising research technologies at their most vulnerable stage, helping them mature within the University environment to a stage where they are appealing to private venture capital.

Finally, a new office, UR Ventures, was formed from the merger of the Offices of Technology Transfer in the School of Medicine and Dentistry and the School of Arts, Sciences & Engineering. Through the ITEC Office, the University brings together and unifies the professional teams dedicated to the commercialization

and licensing of intellectual property from the University's research with the professionals who serve to build productive relationships with industry partners. The ITEC office serves as the primary technology transfer point of contact for the research entities within the University and engages with potential corporate partners who want to learn more about the University's research, inventions, and commercial potential. Through a partnership with IBM and New York State, the University established the Center for Integrated Research Computing (CIRC) to provide researchers with hardware, training, software, and other support to use computational science and technology in their academic scholarship. CIRC, which started in 2008 with a group of 17 researchers, has grown to include more than 550 users from 35 departments and centers in URMC; Arts, Sciences & Engineering; and the Simon Business School. With the 2012 acquisition of an IBM Blue Gene/Q supercomputer, the University became one of the first academic centers in the nation to receive the newest generation of supercomputers.

Many of the recent and ongoing improvements will impact how faculty and others conduct research. Trends in external funding of research are difficult to interpret because of temporary measures such as the American Recovery and Reinvestment Act stimulus funds and overall fluctuations in budgetary policy (see ORPA Annual Report). Nonetheless, the University remains in a relatively strong national position with respect to research funds and the investments in multidisciplinary collaborations.

Multidisciplinary Research
Multidisciplinary research has been a priority area of central research support in recent years. In 2009, the Sponsored University Research Group was established through the provost's office and is now organized by the senior vice president for research. This group of senior leaders serves as a sounding board across all schools and colleges for research policy, process, and complaints related to the conduct of research at the University. The goal of the Sponsored University Research Group is to provide a forum to align research services, to coordinate

activities toward greater efficiency, to promote communication, and to inform the institution's research enterprise on policies that will improve faculty research activities.

Other supports for multidisciplinary research include

- URnano (the Integrated Nanosystems Center), which opened in 2011, includes a 1,000-square-foot measurement facility and 2,000-square-foot cleanroom fabrication facility, supporting faculty research efforts.

- The Center for Medical Technology Innovation —launched jointly by the Hajim School of Engineering & Applied Sciences and the School of Medicine and Dentistry—helps coordinate activities that develop technical solutions to clinical problems.

- The University also offers several internal funding programs that are intended to facilitate multidisciplinary research—including University Research Awards (formerly the Provost's Multidisciplinary Awards) and the University Committee for Interdisciplinary Studies.

- URMC's Clinical and Translational Science Institute provides for pilot projects that are often multidisciplinary. The Clinical and Translational Science Institute also provides consultations, training, and regulatory support to help accelerate the application of basic science findings to human health problems, developing clinical solutions, testing efficacy, and implementing interventions in the community. Larger superpilot awards are provided through the office each year for the most promising proposals judged to have the potential for breakthrough treatments, diagnostic techniques, or community health impacts. The institute has received more than $50 million in funding in support of its activities during the past seven years, and its research and infrastructure has had significant secondary impacts.

- A Research Navigator Program includes a help desk, monthly consultation clinics, and access to a core expert team and customized action plans

for faculty looking to initiate a new research project.

Diversity

The Faculty Handbook, Board of Trustees publications, and University president's statements affirm the importance of diversity among the faculty of the University: "The University of Rochester envisions itself as a community that welcomes, encourages, and supports individuals who desire to contribute to and benefit from the institution's missions. In a pluralistic culture, that community includes faculty, students, and staff who represent important differences" [Faculty Handbook]. In 2005, the University created (and Board of Trustees formally approved) an educational philosophy statement that describes the need for diversity among faculty, students, and staff: "Pursuing excellence in learning and teaching in the framework of our distinctive heritage demands the inclusion of those who will collectively and individually enhance our diversity."

In 2006, the president appointed the Task Force on Faculty Diversity and Inclusiveness. Recommendations from the Task Force Report included University-wide programs and infrastructure to increase diversity, a special opportunities fund to help support recruitment and retention of a more diverse faculty, more support for faculty development in general, and establishing more "family-friendly" policies for faculty. The president accepted these recommendations, and the programmatic outcomes are described later in this chapter.

The 2006 Task Force Report also led to the creation of a University-wide Office for Faculty Development and Diversity and a committee composed of faculty diversity officers appointed from each of the six schools of the University. Annual reports on the status of faculty diversity are made to the Faculty Senate, deans of the schools, and the Board of Trustees. Annual diversity reports are also shared with the campus community.

The University of Rochester's Faculty Diversity Initiative took its next steps in January 2007, when charged with implementing recommendations made by the 2006 Task Force on Faculty Diversity and Inclusiveness. One year later, in fall 2008, the Office for Faculty Development and Diversity launched an evaluation process aimed at gathering feedback on the state of the initiative and suggestions for next steps.

Fourteen separate recommendations emerged from these activities. These recommendations were clustered beneath four broad "constants" found in any organization: professional development, leadership effects, personal needs, and organizational culture. A significant number of the recommendations reflected issues facing all faculty and will be discussed in the section on Faculty Workload and Satisfaction. The recommendations specific to diversity issues are

1. Establish a pool of funds for supporting diversity research

2. Build diversity subject material into leadership seminars for department chairs and deans

3. Include senior leadership support for diversity in new faculty welcome materials and events

4. Institute an all–University conference on diversity and inclusiveness

5. Support programs that build a more inclusive environment.

The University has implemented policies and programs related to each of these recommendations. In addition, the vice provost for faculty development and diversity plans to convene a group of faculty diversity officers and faculty from the relevant schools to examine the report more fully and come up with an additional plan of action. As part of this effort, the faculty diversity officers and deans of each school have been asked to complete an additional data-collection activity on diversity and inclusivity issues.

Resources are available from the Office for Faculty Development and Diversity to support faculty search committees, including databases to help find faculty candidates from a diverse pool, search committee

training on bias, and resources on multiculturalism for visiting candidates. A fund was established to help with financial support for schools that need assistance with diversity hiring. The University faculty currently includes more women (32.6 percent) and racial and ethnic minority group members (3.5 percent) than in 2006 when data on this topic were first compiled and reviewed by senior leadership.

Faculty Development

The University has invested centrally and through the individual schools in various programs for faculty development. Centrally provided programming and coordination is offered through the provost's office and is intended to (a) complement school and discipline-specific activity and (b) provide faculty with a broad understanding of resources and services across the University. The efficacy of mentor training is currently the subject of an NIH-funded study being conducted by the Office for Faculty Development and Diversity.

The University began an institution-wide professional development program for new and early career faculty in fall 2007. Entitled "UR Year One," the program is designed to reinforce and supplement individual support received at the department level and create opportunities to meet colleagues University-wide (academically and socially). The program comprises two workshop series Rochester Resources, which introduces faculty to library, grant-writing, and mentoring services; and Conversations in Teaching Excellence, a series of workshops on innovative teaching and learning methods. In addition, planned social events engage new and early career faculty and their families with each other and with the University's cultural attractions. Over its six-year history, more than 160 faculty, administrators, and academic leaders have played a role in the program.

In 2007, the University's career development program for new department chairs, center directors, and associate deans was expanded and renamed Conversations in Academic Leadership. The program's

structure changed from a half-day, presentation-based format to one collaboratively designed by participants, centered on case-based conversations that extend throughout the academic year. Over the past five years, participation in the conversation series has averaged 75 percent of the University's new academic leaders.

Teaching excellence is a specific focus of faculty development in several of the schools. In Arts, Sciences & Engineering, the Center for Excellence in Teaching and Learning includes a range of programs to promote teaching excellence, including workshops, a consulting service, a mini grant program, and a resource repository. (Additional information may be found in Chapter 8.) In the School of Medicine and Dentistry, the Office of Faculty Development provides a similar range of programming for faculty members, clinicians, and graduate students.

The Provost's Bridging Fellowships Program allows for faculty members to spend a small period of time, usually a semester, in a department other than their own. The other department is often in another school but is always part of the University of Rochester. The distinctive feature of a Bridging Fellowship is that it allows study in an area that is peripheral to the fellow's central professional concern and thereby facilitates the acquisition of knowledge and methods in a different field. These fellowships are therefore distinct from academic leaves, and holding a Bridging Fellowship does not affect subsequent consideration for such leaves. Bridging Fellowships require a formal written proposal outlining the proposed research or creative project and a letter of support from the host department.

Faculty Workload and Satisfaction

The University undertakes formal assessments as well as input from deans, chairs, and institutional research to assess faculty satisfaction with teaching loads, research support, collegial interaction, work/life balance, and salaries and benefits. Groups such as the Faculty Senate, the Arts, Sciences & Engineering Faculty Council, and the Medical Faculty Council provide ongoing feedback

to the administration about faculty satisfaction through their elected representatives. Department chairs may also raise faculty-related issues with their deans through regularly scheduled group meetings (e.g., the Medical School Advisory Council in the School of Medicine and Dentistry and the Chairs, Cabinet of Department Chairs in Arts, Sciences & Engineering). Finally, the University's central administration has used both qualitative and quantitative methods to assess faculty satisfaction.

The study conducted by the Office for Faculty Development and Diversity in 2008 (discussed previously) revealed several major themes and recommendations for faculty workload and satisfaction. These included the following University-wide issues

1. Ensure consistency of expectations regarding promotion and tenure

2. Provide University support for a visiting faculty/ postdoctoral fellow program

3. Institutionalize active listening

4. Prepare graduate students, postdoctoral fellows, and residents to be faculty members

5. Extend family-friendly policies to graduate students, postdoctoral fellows, and residents

6. Ensure mentoring for faculty University-wide

7. Develop faculty leadership potential

8. Attend to the needs of dual career couples

9. Address faculty and staff childcare needs

Programs have been implemented in a number of these areas, with programs in discussion or development for the remaining items. The University has been especially proactive in creating opportunities to develop family-friendly policies, to support dual career couples, and to address childcare needs. The family-friendly policies now include benefits and leave for all women after giving birth, modified duties for all new parents, and the possibility of a part-time appointment in the year following birth or adoption. These policies were adopted to provide additional flexibility for birth mothers and for all other parents, including parents of newly adopted

children. In addition, faculty may take unpaid personal leave under the Family Medical Leave Act. The University also has a policy of automatic postponement of the tenure clock or tenure review for any full-time tenure-track faculty member who adds a new child to the family.

During the 2012–2013 academic year, the University participated in the Collaborative on Academic Careers in Higher Education (COACHE) survey of faculty satisfaction. All tenured and tenure-track faculty from each school except the School of Medicine and Dentistry were invited to participate; the response rate across the institution was 54 percent. The high-level analysis provided to the provost by COACHE indicates that faculty members in the University are happy with many aspects of their academic careers, including their understanding of the clarity and reasonableness of the tenure process, the clarity of expectations placed on them by the department chairs and deans, the freedom to teach courses in which they are interested, and the quality of undergraduate and graduate students.

Areas of concern raised by the survey include the quality of classroom spaces, the availability of phased retirement benefits, and issues around the clarity of the process of promotion to full professor. These areas partially overlap with results from the Office for Faculty Development and Diversity study and will be the focus of new programming in the future.

Community Engagement

The University has remained consistent in its support and recognition of University, professional, and community service over the past five years. Faculty described as "good citizens" of the University typically engage actively in service activities. All faculty members are asked to describe University, professional, and community service on annual activity reports.

Within Arts, Sciences & Engineering, examples of community engagement vary by department. In the English department, for example, faculty have

volunteered for the Landmark Society, given a talk at Writers & Books, volunteered for Protestant ministries, served on a committee to adjudicate literary prizes for young writers through the Brighton Memorial Library, and led a Tour de Cure bike team for diabetes fundraising. Faculty in the natural sciences often volunteer to help with local science fairs or give talks to the lay public about an area of their expertise.

Service to the community is one of the four main missions of the Medical Center. Activities in partnership with the community span the provision of clinical and other professional services, educational efforts, and research, and are thus explicitly recognized in faculty's curriculum vitae, in annual reviews, and in consideration for promotion and tenure. Community activities are part of each department's strategic plan as well as visible in the planning for the schools and Medical Center as a whole. Service to the schools, University, and profession at local, regional, national, and international levels is explicitly expected of academic faculty members.

Faculty at the Eastman School of Music offer public recitals at the school and contribute in various ways to the concert life of the city of Rochester. A recent series of performances at a local church by faculty and students, called "If Music Be the Food . . ." connected with Foodlink of Rochester to raise awareness of hunger issues through donations of money and food.

Special Topic: Analysis of Faculty Age Trends

The age of the tenure-track faculty was examined by the Self-Study Working Group to determine if there were any statistically significant trends over the past 10 years. In 2012, the average age of all tenure-track faculty at the University was 59.7 years. Analysis of data collected for years 2002, 2007, and 2009 indicated that there was no significant change in the age of assistant professors and a small but significant 1.9-year increase in the age of associate professors over this time period. More significant was the 3.3-year increase in the age of full professors across the University.

Table 7.3: Percentage of Faculty Aged 66 or Older by School	
School	
Arts & Sciences	15.6
Hajim	13.3
Eastman	19.0
Simon	4.8
Nursing	13.3
Medicine and Dentistry	5.8
Warner	0.0

With the exception of the Warner School of Education and the School of Nursing, all academic units experienced increases in the age of their professors. Professor age appears to be a future concern for four schools in particular: the School of Arts & Sciences, where in the last 10 years the mean age increased 4.4 years (55.6 to 60.0); Hajim School of Engineering & Applied Sciences, where the mean age increased 5.1 years (55.5 to 60.6); Simon Business School, where the mean age increased 5.0 years (54.9 to 59.9); and the Eastman School of Music, where the mean age increased 4.9 years (57.8 to 62.9). Table 7.3 identifies the percentage of faculty who were age 66 or more years in the fall of 2012.

The University will need to further analyze the implications of these figures on faculty composition and faculty recruitment. Future analysis will assess the costs of replacing retiring faculty (especially in the sciences), as well as the impact of retirements on diversity, mentoring, and leadership.

Summary and Findings

The University of Rochester has moved forward on various fronts to cultivate an inclusive environment for faculty while enhancing faculty engagement with the University's mission. The allocation of significant organizational resources to faculty diversity, mentoring, and family-friendly policies highlights the importance of these issues to the University. Some of the success in faculty recruitment and retention can be attributed to

these policies and initiatives. Nevertheless, there are persistent challenges in the areas of diversity and expectations for promotion to full professor.

The Office for Faculty Development and Diversity and the Office of Research and Project Administration have enhanced support services for faculty research and teaching activities. In particular, the faculty development activities of the Office for Faculty Development and Diversity have strong potential to enhance mentoring capabilities and build skills among junior faculty.

Faculty play key roles in all of these activities, as well as in University governance in general. The Faculty Senate plays a key role in reviewing academic policy, and individual academic units have clearly articulated policies for promotion and tenure of faculty.

The University is considering new initiatives to further clarify professional expectations for faculty in different phases of their careers. As one example, the production of this self-study brought to light the projected aging of the faculty over the next 10 years. The significant number of potential retirements over the next five years will be a challenge to the University as it seeks to effectively monitor and efficiently replace retiring faculty. Concerns about faculty diversity, mentoring, and resource allocation will figure prominently in these recruitment efforts. In some areas, the start-up costs for recruitment will involve a considerable investment by the relevant schools. These issues will necessitate the maintenance and perhaps enhancement of existing programs to cultivate faculty inclusivity.

Chapter 7 Links

This list provides the URLs for the hyperlinks in Chapter 7 of this report.

Fact Book
http://www.rochester.edu/provost/middlestates/report/Faculty_School_30yr.pdf

Faculty Report
http://www.rochester.edu/provost/middlestates/report/Faculty_Dept_3yr.pdf

Research agenda
http://www.rochester.edu/research/

University of Rochester Bylaws
http://www.rochester.edu/provost/middlestates/report/bylaws.pdf

Faculty Senate
https://www.rochester.edu/Faculty/senate/

Faculty Handbook
http://www.rochester.edu/provost/middlestates/report/Faculty_handbook.pdf

Policies web page
http://www.rochester.edu/working/hr/policies

Research at Rochester
http://www.rochester.edu/research/

Office of Research and Project Administration
http://www.rochester.edu/ORPA/

Research Subjects Review Board
http://www.rochester.edu/ohsp/rsrb/

Office for Human Subject Protection
http://www.rochester.edu/ohsp

University Committee on Animal Resources
http://www.urmc.rochester.edu/ucar/index.cfm

Office of Research Alliances
http://www.urmc.rochester.edu/ora/

UR Ventures
http://www.rochester.edu/ventures/

Center for Emerging and Innovative Sciences (CEIS)
http://www.ceis.rochester.edu/

Technology Development Fund
https://www.rochester.edu/TechnologyDevelopment/index.html

Center for Integrated Research Computing (CIRC)
http://www.circ.rochester.edu/

ORPA Annual Report
http://www.rochester.edu/orpa/orpa/annual-report/

Sponsored University Research Group
http://www.rochester.edu/provost/about/surg.html

University Research Awards
http://www.rochester.edu/research/university-research-awards.html

University Committee for Interdisciplinary Studies
http://www.rochester.edu/ucis/

Clinical and Translational Science Institute
http://www.urmc.rochester.edu/ctsi/

Office for Faculty Development and Diversity
http://www.rochester.edu/diversity/faculty/

Annual reports on the status of faculty diversity
http://www.rochester.edu/diversity/annualreports.html

UR Year One
http://www.rochester.edu/diversity/faculty/uryearone/

Rochester Resources
http://www.rochester.edu/provost/middlestates/report/URYearOne_PostcardFall2011.pdf

Conversations in Teaching Excellence

http://www.rochester.edu/provost/middlestates/
report/URYearOnePostcard_Spring2012.pdf

Center for Excellence in Teaching and Learning

http://www.rochester.edu/college/cetl/

Office for Faculty Development

http://www.urmc.rochester.edu/education/faculty-
development/

Bridging Fellowships

http://www.provost/facultyresources/bridging-fellows/

Chapter 8
Educational Programs and Resources

Standard 11: Educational Offerings

The institution's educational offerings display academic content, rigor, and coherence appropriate to its higher education mission. The institution identifies student learning goals and objectives, including knowledge and skills, for its educational offerings.

Standard 12: General Education

The institution's curricula are designed so that students acquire and demonstrate college-level proficiency in general education and essential skills, including at least oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, and technological competency.

Standard 13: Related Educational Activities

The institution's programs or activities that are characterized by particular content, focus, location, mode of delivery, or sponsorship meet appropriate standards.

Introduction

This chapter provides comprehensive descriptions of the educational offerings at the University of Rochester. The University offers undergraduate degrees in arts and sciences, engineering, music, and nursing—and graduate degrees in those areas as well as education, medicine, and business. This chapter discusses separately the ways undergraduate education is approached in the College through what is known as "the Rochester Curriculum" and in the Eastman School of Music. It also describes graduate degree programs. These sections include discussion of the broad range of student-support programs available in the various schools. Detailed information about assessment of all programs appears in Chapter 9.

The University appreciates deeply the value of interdisciplinary programs, and every academic unit

participates in some form of interdisciplinary education. Many of these programs are described here. The chapter also reviews ways each of the academic units manages its curricula, and it provides information about transfer polices, learning resources, summer programs, certificate programs, noncredit courses, and some small programs the University offers at off-site locations. It also describes the University's emerging online presence.

Educational Programs in the College

Undergraduate students can select from more than 60 majors spanning engineering, the natural sciences, the social sciences, and the humanities. In recent years, approximately 15 percent of its students graduate with majors in engineering, 34 percent in the natural sciences, 34 percent in the social sciences, and 11 percent in the humanities, with the remainder in multidisciplinary majors. Approximately 20 percent of students complete more than one major. The curriculum attracts self-motivated students who appreciate the opportunity to explore options and pursue their passions.

The Rochester Curriculum

The Rochester Curriculum, a cornerstone of the educational experience for undergraduates in the College, began with the premise that students learn best when they can study the subjects that interest them most. Faculty leaders became convinced that eager students arrived at college and too often had their curiosity dampened when confronted by the standard distribution requirements that used to be in place. This conventional structure of skills (English composition, both elementary and advanced; foreign language; and formal reasoning) and distribution requirements (two discrete courses each in humanities, social sciences, and natural sciences) continued students along a pathway that was mandated by others. Their own interests were not given time to develop, and they too often focused on getting these requirements "out of the way."

The Rochester Curriculum takes the special character of college education seriously and attempts to craft a structure of learning that both respects the students as individual learners and takes full advantage of Rochester's character as a research university. University researchers/teachers are self-motivated learners, people who every day work to sharpen understanding and create new knowledge. More than any other group in society, a university research faculty knows how to make learning the habit of a lifetime. The basic aim of the Rochester Curriculum is to break down the barriers between the way the faculty learn and the way the students learn so that students can make not just the content but also the practice of disciplined learning their own.

Beginning in their freshman year, students are encouraged to explore courses that represent their own interests. Ultimately, they will need to complete a major containing at least 10 semester-long courses, including an upper-level writing requirement, in either the humanities, social sciences, or natural sciences (including mathematics and engineering). They also must complete, with an average grade of C or better, an authorized cluster—three related full-semester courses in each of the other two main divisions of the liberal arts noted above. (Most students who major in an engineering discipline complete only one cluster but may have further distributional requirements.) Students may, and often do, substitute a minor or a second major for one or both clusters. There are more than 250 authorized clusters, and students can, with faculty approval, design their own. Numerous clusters are offered by every department and program in the College, enabling students to pursue interests in virtually any area within the curriculum. Additional information about clusters and a complete list of authorized clusters is available at the cluster web page.

When students are encouraged to take responsibility for creating their own pathways, they are energized by the fact that they can follow their curiosity wherever it leads. Curiosity and passion motivate learning. By completing a major and at least two clusters, students achieve some measure of competence in at least three distinct major realms of thought and analysis. The College found that

for most students, rather than getting these requirements "out of the way," they are proud of their learning and even include their clusters along with their majors on their résumés.

Assessment of the Rochester Curriculum will be discussed in Chapter 9. But it is well worth noting here that the Rochester Curriculum has had a positive effect on the decision admitted students make to accept the College's offer of admission. By the summer of 2011, when the Class of 2015 began their studies, fully 96.1 percent of these students were aware of the Rochester Curriculum. Of those, 87.0 percent said this had a strong positive effect (52.7 percent) or slightly strong positive effect (30.9 percent) on their decision to enroll. Most students said it was the most influential factor in making their enrollment decision.

Interdisciplinary Programs

The University has a long history of interdisciplinary cooperation and prides itself on its ability to foster programs that span departments and schools. The relatively compact campus and the proximity of the Medical Center to the River Campus make collaboration and cooperation comparatively easy. Although the Eastman School of Music campus is several miles from the rest of the campus, regular bus service enables students to move between campuses.

In most cases, the impetus for interdisciplinary programs in the College arises from individual or small groups of faculty. At times, it derives from task forces created to encourage new ideas, or it is encouraged directly by the dean.

Multidisciplinary programs for undergraduates in the College have grown notably in recent years. The College has created several new programs with the School of Medicine and Dentistry in areas related to public health, an undergraduate business major in collaboration with the Simon Business School, and new majors in archaeology, technology, and historical structures; digital media studies; American studies; East Asian studies; and audio and music engineering. Several of

these programs combine the humanities and the sciences or engineering in novel ways. To provide administrative support for these kinds of programs, the College created a Multidisciplinary Studies Center in 2010.

Students in the College may propose individualized interdepartmental majors, minors, and clusters. On several occasions, individualized majors eventually transformed into established programs (e.g., neuroscience and American studies).

The Writing Requirement

The College Writing, Speaking, and Argument Program (CWSAP) administers the College's Primary Writing Requirement. College faculty agree that all students must master the skills of written argument. The primary writing requirement, typically completed during the freshman year, provides the foundation for this work. Students must earn a grade of C or better. Instructors include a core of permanent staff and a team of advanced graduate students who have completed a training program. Most undergraduates complete the standard WRT 105 course. These are small courses using a wide variety of themes as the focus for an intensive study of written argument. Students in need of additional support take WRT 105E, and some students with weaker English language skills complete the requirement through participation in our English for Academic Purposes Program (EAPP), formerly English for Speakers of Other Languages.

The primary writing requirement is regularly assessed to improve placement, classroom instruction, tutoring, and workshop activities. This involves varying types of assessment, including course evaluations, formative and summative assessments in a teaching practicum required for all first-year instructors, and assessment of the performance of EAPP students in the College.

In addition to the primary writing requirement, the College requires of every major that it include an upper-level writing component. This typically involves two courses with significant writing instruction. Assessment of seniors' basic skills (communication, information

literacy, critical thinking) occurs during individual meetings as well as through systematic investigation that includes meetings with faculty in the majors, particularly the sciences and engineering. The CWSAP also reviews writing samples submitted from faculty in the majors**.**

Recommendations from undergraduates also play a role in development of upper-level writing requirement practices. For example, in the biology department the assessment indicated that students wanted faculty to articulate expectations more clearly. Since this survey, CWSAP has worked closely with biology to develop clearer outcomes, to provide instruction that will help students meet these outcomes, and to train faculty to integrate writing into their courses and provide students with feedback that supports learning outcomes.

Center for Excellence in Teaching and Learning

In 2011, the office that had been known as Learning Assistance Services became the Center for Excellence in Teaching and Learning (CETL). Although many of the Center's services remained the same (such as coordinating the College's workshop program, offering support to students with disabilities, and teaching study skills to students), the name change reflects the center's increased emphasis on teaching skills. CETL works both indirectly and directly to support teaching across campus. One example of indirect support is organization of the teaching assistant (TA) training session—a full-day workshop to orient both new and more experienced TAs to good teaching practice. Monthly meetings of graduate student TAs and postdoctoral fellows cover teaching and learning topics directly relevant to classroom practice. Direct services offered by CETL include individual consultations and extended classroom observations. The latter involves a member of CETL staff attending a number of class sessions in a particular course at the invitation of the instructor. Classroom observations are designed to be supportive and constructive for the instructor. All information gathered during these visits is kept confidential.

CETL also recently began a new Teaching Roundtable series. Topics have included backward design, universal design principles, and, at the request of the Writing Program, a session on graphical representations. In response to faculty comments on surveys and in meetings, CETL is developing its next series of Teaching Roundtable workshops. Titles under consideration include "Getting Started: From Objectives to Assessment" (for those teaching a new course), "The Role of New Technology in Engaging Students," "Large Class Teaching," "Small Class Teaching," and "Implementing Formative Assessment to Maximize Learning."

Finally, CETL hires and trains graduate students as study skills counselors. These counselors offer the Methods of Inquiry course (which teaches study skills) each semester. Study skills appointments are also available to medical students, residents, and fellows, who make heavy use of this service. These students are often referred to CETL by their advisory deans for help in mastering their course material and in preparing for various board examinations. CETL also arranges study skills group workshops upon request for students in the College and at the Medical Center.

Additional Educational Opportunities

The College offers an extensive range of educational opportunities that augment its regular courses and programs. This section describes several of them.

Study Abroad: Study Abroad is an integral part of the undergraduate curriculum in the College, and about one third of current University of Rochester students take coursework overseas. Each student has different reasons for studying abroad: encountering new academic challenges and different styles of learning, gaining global competency, developing fluency in another language, and engaging in career-enhancing international experiences. Interest in study abroad has grown dramatically over the past 20 years.

The counselors in the Center for Study Abroad aim to advise "the whole student," taking into consideration individual strengths and weaknesses, extracurricular activities, and personal considerations. The goal is to

match the student as closely as possible with the program that best meets his or her needs. In addition to program selection, counselors will provide information on costs, financial aid, special scholarships, accommodations for learning disabilities, coping with physical and mental health challenges while overseas, and arranging for credit in the student's major or minor.

Students may take advantage of summer semester and academic year programs in 41 countries and 75 cities. Programs range in length from a one-week Spring Break course on Latin epigraphy in Rome to traditional full-year direct enrollments. More than a hundred different scenarios are available through a combination of University of Rochester–operated short-term faculty-led programs (primarily summer and winter break); semester and year long programs through third-party providers such as IES Abroad, CIEE, Danish Institute for Study Abroad, and Advanced Studies in England; and semester or full-year exchanges. Since 1993, the College has owned and operated one proprietary semester program in Arezzo, Italy, which engages faculty in a variety of disciplines (language, culture, history, art history, and archaeology).

The College's exchange programs are growing. The newest exchanges are in the United Kingdom and Hong Kong, and the College is focusing on expansion to geographic areas of interest to students and faculty and to institutions in the Worldwide Universities Network, which the University joined in 2012. The Center for Study Abroad has collaborated since 1993 with the Office of Admissions and with the International Services Office to work closely with exchange students, and one academic counselor is also an instructor of the US culture course designed for international and exchange students (US Life, Customs, and Practices).

Undergraduate Research: The Office of Undergraduate Research (UGR) provides opportunities for undergraduates to engage in research. It seeks to lower barriers to undergraduate research and to promote the recognition of quality undergraduate research and undergraduate research mentoring. UGR seeks to

effectively track undergraduate participation in research; bring in greater funding for undergraduate research; help faculty find students and students find faculty for research; administer undergraduate research grants for increasing numbers of students; and organize and maintain lists of both University and external opportunities.

Major events such as the National Conference on Undergraduate Research and the College's Undergraduate Research Exposition are documented in the Undergraduate Research Report. The UGR provides information about research opportunities throughout the University. The Office of Admissions encourages applicants with a passion for doing research to apply for Research and Innovation Grants. Awards of $3,000 are granted at the time of enrollment at the University. Numbers have grown from 29 when the program began in 2008, to more than 100 in 2012. Implementation of this thriving program is managed in the Office of Undergraduate Research. A new Discover Grants program, providing similar grants to continuing students, was initiated in the Fall 2013 semester.

Undergraduate research opportunities for all students has long been a prominent feature of academic life at the University of Rochester. Qualified students are encouraged to arrange independent study courses on topics of interest that are not included or are not treated in sufficient depth in regularly offered courses. In the fall of 2007, for instance, 295 individual courses were established with full-time members of the teaching faculty in Arts, Sciences & Engineering. An additional 134 courses were supervised by faculty in the other schools at the University. That spring, a total of 480 courses were established by Arts, Sciences & Engineering undergraduates with faculty from all parts of the University. The tracking of these activities (under the director of undergraduate research) will be expanded in the future to assess all kinds of undergraduate research undertaken by students in the College: for credit, for pay, and for experience.

Internships: Internships are increasingly prominent components of the undergraduate experience. The College provides students with opportunities for credit-bearing internships, typically sponsored by one of the academic departments. The Gwen M. Greene Career and Internship Center offers students ample assistance in obtaining internships and provides financial support for summer internships through the REACH program.

Take Five Scholars Program: The Take Five Scholars Program, unique to the University of Rochester, provides an additional semester or year, tuition-free. It offers the chance to pursue a demanding major and still enjoy the opportunity to pursue the broad-based, intellectual enrichment of a liberal arts education. Since its inception in 1986, more than 1,100 students have become Take Five Scholars. The number of students enrolled in the program varies each year, with new scholars accepted each semester. Students complete an application that includes a proposal for a sustained and coherent interdisciplinary program of study.

The Take Five Scholars Program is designed to enrich a student's curriculum by affording students the opportunity to indulge in studying a topic of interest and to learn for the sake of learning. The Take Five Scholars are among the most interesting students on campus—they have diverse and varied interests and are intellectually curious. Take Five Scholars are multi-dimensional people who generally go on to great things after college. All graduating Take Five Scholars are required to submit an abstract describing their program.

Kauffman Entrepreneurial Year Program: In December 2003, the Ewing Marion Kauffman Foundation selected the University of Rochester as one of eight institutions nationwide to receive a major, multiyear grant to make entrepreneurship education an integral ingredient of academic activity. This initiative included the creation of the Kauffman Entrepreneurial Year (KEY) Program that provides selected students with the opportunity to devote one or two semesters, tuition-free, to the study and/or practice of entrepreneurship. While funding from the Kauffman

Foundation has now ceased, the College continues to administer this successful program. The program defines entrepreneurship as "transforming an idea into an enterprise that generates value," implying that the enterprise outlives the creator and that it positively affects others. Qualified students may propose to devote as much as an entire academic year to internships, special projects, business plan development, research into various facets of entrepreneurship, or analysis of how culture and public policy influence entrepreneurial activity. Through spring 2012, there were 157 proposals, with 99 (63 percent) accepted. Many of these accepted proposals emphasize social entrepreneurship and community outreach, both on campus and in the greater Rochester community.

Fellowships: The Fellowships Office coordinates the program for selected national fellowship and scholarship competitions. The office maintains information on and assists students in applying for many awards, including the Beinecke, Boren, Churchill, Jack Kent Cooke, Davis, Fulbright, Gates Cambridge, Goldwater, Marshall, NSF, Rhodes, Saint Andrew's, Soros, Truman, and Udall. Some awards support undergraduate study, but most are for graduate study in the United States or abroad. Fellowships programs are described on the College website under Special Programs and Opportunities, which is accessible at the fellowships website.

The fellowships director invites outstanding students to apply for appropriate fellowships and scholarships; students interested in learning more about these awards and the application process may attend one of the many information sessions held each semester or may schedule an appointment with the fellowships director.

The Fellowships Office regularly reports on the success of University of Rochester students in these competitions. Notably, in 2013, 15 of 32 University applicants were awarded Fulbright Scholarships. This places the University within the top 20 doctoral/research institutions receiving Fulbright awards.

The Center for Entrepreneurship: The Center for Entrepreneurship, founded in 2003, serves students and faculty in every school within the University. The center creates new partnerships among students, faculty, alumni, local businesses, and nonprofit organizations. It offers programs such as the Mark Ain Business Model Workshop Series and Competition, the Eastman New Venture Challenge, and the Summer Entrepreneurship Internship Program. It hosts a lecture series that features leading entrepreneurs as guest speakers and hosts faculty seminars. The center also administers grants to students and faculty and offers advising and consulting services to the greater Rochester community, as well as to members of the campus community.

Academic Support Programs

In addition to the advising and support programs described in Chapter 5, the College has numerous programs to provide support to particular populations of students.

Kearns Center: The mission of the David T. Kearns Center for Leadership and Diversity in Arts, Sciences & Engineering is to expand the educational pipeline through the doctoral degree for low-income, first-generation college, and underrepresented minority students. The Kearns Center focuses on the creation of replicable and scalable educational models that will increase the number of low-income and historically underrepresented students pursuing undergraduate, graduate, and professional education. The Kearns Center partners with the National Science Foundation, the U.S. Department of Education, the Xerox Corporation, the Ford Foundation, and a host of private donors to promote the successful engagement of a diverse student body in higher education. To this end, the Kearns Center not only concerns itself with the campus community, but it also engages with the Rochester community to provide pipeline programs for local high school students.

The Kearns Center houses the following programs:
Pre-College Programs
- Upward Bound

- College Prep Center at East High School
- College Prep Center at Franklin Campus

College Programs
- Ronald E. McNair Post-baccalaureate Achievement Program
- Kearns Center Scholars
- Xerox Engineering Research Fellows

Graduate Programs
- National Consortium for Graduate Degrees for Minorities in Engineering and Science (GEM) Fellowships
- Graduate School Visitation Program

The Kearns Center also offers a variety of initiatives and ongoing support to retain first- and second-year STEM students. These include study groups, summer support programs, intensive advising, and tutoring. The programs have had a significant impact, with students served by the Kearns Center and McNair Program graduating in higher percentages (97 percent) than the institutional average (84 percent).

The Office of Minority Student Affairs: The Office of Minority Student Affairs (OMSA) provides counseling, disseminates information, initiates programs, and serves as a liaison with other departments and schools of the University to enhance the environment in which students live and learn. OMSA provides these support services as a means of advancing the academic, co-curricular, and preprofessional lives of our students. The staff is committed to fostering a social, cultural, and intellectual campus environment that will empower students to achieve their educational and personal goals. OMSA offers a plethora of programs and services designed to meet the needs of these students individually and collectively. Furthermore, OMSA supports the College's efforts to build an inclusive community for students, faculty, and staff by raising awareness about topics that include race, ethnicity, culture, and class.

OMSA manages two signature programs for the College: the Higher Education Opportunity Program (HEOP) and the Early Connection Opportunity Program (ECO). The Higher Education Opportunity

Program (HEOP) provides supportive services and financial aid to New York State residents attending independent colleges and universities in New York State. Jointly sponsored by the University of Rochester and the New York State Education Department (since its inception in 1969), HEOP provides eligible students with a strong support network that includes a summer enrichment program, academic advising, personal counseling, and substantial need-based financial assistance. The program attracts students from diverse racial, ethnic, and cultural backgrounds and is especially attractive for those students and families who, because of their economic and educational backgrounds, may not have considered attending the University of Rochester.

HEOP serves disadvantaged populations from urban, rural, and suburban regions of the state and from all racial/ethnic groups. For the 2011–2012 academic year, the ethnic/racial diversity of the 100 students in the program was 41 percent African American, 33 percent Hispanic, 13 percent Asian, 9 percent Caucasian, and 4 percent Other; 35 percent male and 65 percent female. Eighty-two percent of graduates go on to graduate/professional studies or are employed upon graduation.

HEOP continues to be the most successful opportunity program for disadvantaged students in New York. The most recent cohort graduation rate for University of Rochester HEOP students is 88 percent, a rate superior to that of students both statewide and nationwide.

The Early Connection Opportunity Program (ECO) is a prefreshman, credit-bearing program administered by OMSA and the College. This four-week summer program is mandatory for all HEOP freshmen and strongly encouraged for others identified as high risk and/or academically marginal in certain areas, but who do not qualify for HEOP because of income or New York State residency requirements. The primary goal of ECO is to help students acquire the attitudes, skills, and social connections that characterize successful University of Rochester students.

There are three components of the ECO program: an academic and resource component, a counseling component (students are required to meet with an academic counselor every week), and a residential and social component (students live on campus, with access to planned social events).

Upon successful completion of the four-week program, students earn 4 credits towards graduation. The academic program focuses on a set of skills that are vital to new students. Course leaders and instructors are strongly encouraged to design their teaching so as to emphasize the core abilities of resource skills, study skills, academic skills, and self-management skills.

The Emerging Leaders Program: Leadership in Transition was created to help existing and future minority student leaders build a solid base of leadership skills that will enable them to better lead their respective organizations, navigate the University's departments and resources effectively, and engage both their immediate and neighboring communities in a constructive and lasting way. The goals for the Emerging Leaders Program are:

- To develop students' confidence in their oral and written communication skills

- To help students become effective facilitators by teaching the nuts and bolts of running a successful meeting

- To encourage students to learn how to maximize their resources by efficiently navigating the University's departments and protocols

- To explore the dynamics of motivation, organizational development, teamwork, and strategic vision

- To network with resources from the College such as faculty, staff, and alumni as well as external community resources like community leaders and successful professionals through organized dialogues and mentorship programs

- To implement learned skills in day-to-day leadership experiences.

The College Diversity Roundtable: The College Diversity Roundtable (CDR) is a committee of students, faculty, and staff that was established by the dean of the College in the 1999–2000 academic year. The CDR is facilitated by the director of the Intercultural Center and is designed as an educational forum to support and affirm diversity in the College. Moreover, the work of the CDR serves to proactively address campus climate and quality of life issues for our community, particularly those issues impacting students of color on the River Campus. The CDR continues to serve as the focal point for diversity matters, initiatives, and best practices within the College.

College Tutoring Program: To support the learning experience for all students, including underprepared students, the College Tutoring Program, operated by the College Center for Advising Services, has tutoring available to all undergraduates. The College offers financial assistance for the paid one-on-one program offered through the College Center for Advising Services as well as free alternatives like the Tau Beta Pi Honor Society for STEM coursework. The College has free study groups through the Center for Excellence in Teaching and Learning (see below) and individual departments such as math, physics, and computer science, which have their own free tutoring programs as well. The Tutoring Program continues to expand its options and inform students of its services and to increase the services available to students. The College Center for Advising Services started a summer tutoring program for the first time this past summer and has plans to provide seminars for tutors and tutees regarding learning and study skills. Advising Services is currently working with departments and CETL to disseminate more information on tutoring activities available to students. The College is currently exploring ways to strengthen its tutoring programs and is considering housing them in the Center for Excellence in Teaching and Learning.

English for Academic Purposes Program: The EAPP (formerly English for Speakers of Other Languages) supports learning activities in speakers of languages outside of English. Students in the College who are admitted into the EAPP enroll in coursework specifically designed to help facilitate written and spoken communication. Completion of the specified writing course with a C or better fulfills the College's primary writing requirement. The program teaches EAPP students to use English more effectively and provides support to enhance academic and social interactions. EAPP courses are taught with a focus on speaking, listening, critical reading, and writing. Students are admitted into the EAPP through the College's admissions process. There is no separate application for the EAPP. The EAPP hosts social and cultural events and provides a multimedia language lab along with other resources for English language study. The goals of the EAPP support the College's core objectives to enhance all students' abilities to explore the curriculum, to pursue their interests, and to make the most of their Rochester experience. Active assessment of EAPP-student performance within the College led to modifications of the program over time.

EAPP courses are provided for international graduate students who require additional instruction to improve their English abilities. Arts, Sciences & Engineering provides both an intensive summer class (four weeks, five days a week, four hours a day) as well as a class during the fall semester (evening class that meets two times a week for one and one-half hours each session for the semester). The student feedback for both the summer intensive language program and the fall semester course is extremely positive. The instructor is rated highly as is the course itself, and students report that the course provides the tools necessary to be comfortable participating in conversation with the academic community.

Undergraduate Education in the Eastman School of Music

The Eastman School of Music has five Bachelor of Music programs that emphasize musical performance and literacy, and the school has a strong commitment to music leadership and to community engagement.

Eastman School students have the opportunity to enroll in a dual degree program through which they can earn a degree from the College as well.

The Eastman School's curriculum emphasizes a solid foundation in music, which is understood to be a central part of the school's approach to a liberal arts education. Students complete a rigorous academic music component consisting of five semesters of written music theory, five semesters of aural musicianship, three semesters of music history, and one upper-division music academic elective.

Like the College, the Eastman School also expects its undergraduate students to explore a diverse range of academic disciplines, develop strong intellectual perspectives, and be able to voice these convincingly. The humanities/science elective component of the curriculum enables students to reflect intelligently on their place in contemporary culture and prepares them to assume roles of principled cultural leadership. To meet these goals, students must complete 21 additional credits of humanities and/or science elective credits. These courses must be nonmusical in content and disciplinary orientation and have a substantial academic requirement. In addition, students are required to complete the Freshman Writing Seminar, an introduction to college-level inquiry and analysis focused on critical thinking and academic writing.

In addition to study with the resident humanities faculty at the Eastman School, many Eastman students take advantage of humanities and science courses offered in the College. On average, one third of Eastman School undergraduates are enrolled in courses offered by another unit of the University in any given semester.

Oral and written communication skills, information literacy, and critical analysis and reasoning skills are emphasized in all of the academic coursework at the Eastman School. In the Freshman Writing Seminar, for example, students are required to complete several papers on a variety of topics and receive a thorough introduction to the resources available in the Sibley

Music Library. In the Music for All chamber music program, required of all performance major undergraduates, students are asked to engage in public speaking to general audiences about the music prior to all of their public performances. In addition to the many papers and presentations prepared throughout their coursework, theory and musical arts majors must also complete a thesis, prepared under the guidance of a faculty advisor, as one of their final degree requirements.

Students engage in quantitative reasoning in the music theory core courses, addressing issues of symmetry, balance, and form in musical contexts and using numerical representations of chord types in musical analysis. In the final semester of music theory, they are introduced to mathematical and set-theoretical concepts as they study 20th- and 21st-century music. Students are also asked to write a major research paper, combining written communication skills, information literacy, and critical analysis with music-analytical skills.

Technological capability is addressed through music theory coursework, where students are required to learn music notation software, and through the Catherine Filene Shouse Arts Leadership Program, an innovative certificate program whose mission is to help prepare students for life as a professional musician by teaching entrepreneurship, communication skills, and fluency with technology. While music theory courses are required of all students, the Arts Leadership Program courses are taken as electives. On average, approximately 30 percent of undergraduate students take an arts leadership course during their time at the Eastman School.

Interdisciplinary Programs
At the Eastman School of Music, many majors, including accompanying and chamber music, conducting, early music, and ethnomusicology, naturally bridge departmental divides. In addition, a large number of faculty hold an affiliate appointment with a second department. Also, three faculty at the Eastman School have recently held co-appointments with departments in Arts, Sciences & Engineering, with brain and cognitive

sciences, and electrical and computer engineering. The results of this collaboration include several new courses, including offerings in music cognition, acoustics, and signal processing.

Student Support Programs

The Eastman School of Music has several programs and services to assist underprepared students. In 2010, the Office of Academic Affairs created a more defined and comprehensive program of study skills support for undergraduate students. A part-time staff member now serves in the capacity of study skills advisor and meets with identified at-risk students on a weekly basis. In addition, tutoring in music theory is provided by the Music Theory Department and is available to undergraduate students in need of the service based on their grades in their music theory coursework. Data indicate that participation in the undergraduate study skills program has resulted in an increased retention rate. (Students identified as at risk in the entering 2008 cohort had a retention rate of 77.8 percent, while at-risk students entering in the 2010 cohort had a retention rate of 100 percent. This increase in at-risk student retention can be attributed to the early intervention strategies developed in 2009–2010 and implemented in the Fall 2010 semester.)

A part-time academic advisor position was created five years ago to assist graduate students with academic advising and questions related to coursework. In 2011, the Eastman School created a full-time position of director of graduate advising and services. The director provides academic advising and support for graduate students and serves as the academic liaison to international students. Furthermore, by adding an additional staff member to the Graduate Studies Office, the school is able to provide additional support to all graduate students and especially to those identified as at risk.

The English as a Second Language (ESL) program is designed to aid students' acquisition of American academic English at the collegiate level. Each ESL course focuses on the integration of the core language skill areas

of reading, writing, listening, and speaking. Course sequences begin with a focus on the receptive skills of reading and listening, including a strong vocabulary component and then move to the productive skills of speaking and writing. All courses place emphasis on sustained speech in English through critiqued oral presentations. In written work, students learn to incorporate evidence in support of a thesis along with the conventions of citation. While the courses address the various contexts for English language use, the primary goal of ESL instruction at the Eastman School of Music is to help students be full and confident participants in the Eastman School community.

Finally, the Eastman Writing Center is available to all students and offers individual consultation and workshops to help students improve their writing skills. Experienced writing consultants are available to help students with writing concerns and writing assignments, as well as graduate school applications, résumés and cover letters, biographies, proposals, and personal statements. The Eastman Writing Center performs an internal assessment each year, and staff members keep a written summary of each student visit. When a student is considered at risk, the Writing Center staff encourages multiple visits. On occasion, when intervention is needed, regular standing appointments are scheduled.

Eastman School of Music Programs for High-Achieving Students

The Eastman School provides many programs and services to support high-achieving students. There are a variety of performance opportunities that recognize top students, including concerto competitions, which offer students a chance to perform as a soloist with ensembles, and the Performer's and Artist's Certificates, which recognize students who demonstrate the highest level of performing ability. In addition, faculty regularly invite high-achieving students to participate in special events, including master classes and honors recitals, and feature them in prominent roles in many large ensembles, opera productions, and chamber groups.

Academically, the Eastman School's top students are encouraged by the faculty to pursue independent study projects on advanced topics that are not addressed through the standard curriculum. At the undergraduate level, there is a special "honors" track for the written theory/aural musicianship portion of the core curriculum. In addition, there is a musical arts major, an honors curriculum that enables students to craft an individualized program of study that leads to a major senior project. Programs of study in this major may be wide ranging and possibly cross disciplinary and are generally not possible within the structured requirements of other majors at the Eastman School. This major is intended for exceptional students who possess not only strong musical and intellectual abilities but also the motivation and self-direction to succeed in the senior project.

Some additional opportunities available to the Eastman students include the Kauffman Entrepreneurial Year program and the Take Five Scholars program (both of which were discussed earlier), and the Conservatory Exchange Program. The Conservatory Exchange program expands opportunities for the Eastman School of Music students by creating student exchanges with leading European and Chinese conservatories. A semester or year abroad offers the chance to improve language skills, appreciate a different culture, find a unique educational experience, learn about national performing styles, complete important research, or seek career opportunities.

Undergraduate Education in the School of Nursing

The School of Nursing offers a BS Completion Program, enabling students who have earned an RN to complete a BS degree. Its pioneering Unification Model blends both clinical practice and research in nursing education. Students learn not only about patient care but also about the clinical research process and how to translate research results into the most effective patient care practices.

Students earn a bachelor's degree upon completion of 128 nursing credits, with 64 credits completed in nursing and the remainder in arts and sciences coursework. A total of 32 credits in nursing may be transferred into the program upon admission. Students receive instruction in a hybrid online format for the remaining 32 nursing credits. Required courses include leadership and ethics, population health, principles of evidence-based practice, and biopsychosocial health assessment.

Graduate Programs

Arts, Sciences & Engineering's 22 PhD programs and 16 master's programs enable students to pursue research at the highest level with distinguished faculty throughout its disciplines. The Eastman School of Music offers MA, MM, DMA, and PhD programs integrating performance, music scholarship, pedagogy, and professionalism. The School of Medicine and Dentistry, known for its "Double Helix Curriculum," which combines science with clinical work throughout the four years of its MD program, also offers 12 PhD and 11 master's programs. The School of Nursing, known for its groundbreaking programs in nursing entrepreneurship, its Center for Research and Evidence-Based Practice, and its early promotion of the Nurse Practitioner and Doctor of Nursing Practice movement, offers a DNP, PhD, eight master's programs, and six accelerated combined MS/PhD programs. The Simon Business School, noted for its analytical, economics-based approach to business education, offers an MBA, MS, and PhD. The Warner School of Education offers master's and doctoral programs (PhD and six EdD) in teaching and curriculum, counseling and human development, and education leadership and policy.

Interdisciplinary Work at the Graduate Level
Arts, Sciences & Engineering has interdisciplinary graduate degree programs in materials science and visual and cultural studies. There are also programs in neuroscience and translational biomedical science. Graduate students may create interdisciplinary degrees by combining two existing degree programs (for

example, recently two students completed history-physics PhDs). Interdisciplinary PhD programs are guided by a committee of at least three faculty members from at least two departments appointed by the University dean of graduate studies.

The School of Medicine and Dentistry is well known for its interdisciplinary Double Helix curriculum, which has been in existence since 1999. Examples of interdisciplinary courses include Human Structure and Function, which teaches anatomy, physiology, embryology, and histology; and Molecules to Cells, which teaches biochemistry, genetics, nutrition, and cell biology. Each of these courses brings together faculty from various disciplines working in conjunction with each other to design and carry out the courses. The school has also created initiatives to expand the number of interdisciplinary clinical electives. For example, the school's elective in Comprehensive Breast Cancer Care allows students to work with medical oncologists, breast surgeons, radiation oncologists, and pathologists.

The medical school has several long-standing joint degree programs. These include the MD-PhD degrees, the MD-MBA, and the MD-MS. The school also provides alternative MS, MEd and MPH options. The research areas of the Medical Center foster interdisciplinary opportunities for students to do research for elective credit and to participate in year-out experiences and summer research.

Solving complex health challenges requires a cross-disciplinary research environment, which is embraced in the School of Medicine and Dentistry. The school's tradition of collaboration among labs provides master's and doctoral students access to expertise and techniques, as well as training, beyond those available in their home research labs. In addition, academic programs rely on faculty expertise spanning the Medical Center to offer a core curriculum covering key chemical, biological, and genetic principles using molecular, cellular, and physiological approaches. Faculty collaborate to develop course content, to identify the tools and resources needed by students to be successful in those courses, and to team teach.

The School of Nursing fosters interdisciplinary collaboration through its Institute for Innovative Education, courses co-taught between the School of Medicine and Dentistry and the School of Nursing, and the Accelerated Nursing Program. The school included this focus on interdisciplinary partnership in its strategic plan and is currently organizing new programs to be inclusive of nursing and medical students working together.

The Simon Business School has long offered a dual degree MD/MBA program; more recently, Simon Business School has partnered with the Hajim School of Engineering & Applied Sciences to develop a specialized master's program in technical entrepreneurship and management.

The Warner School of Education has several degree programs that are interdisciplinary by design. For example, PhD programs require students to take at least two courses in other schools. Accordingly, Warner PhD candidates have taken courses from a broad range of departments across the University. The school also has a number of master's programs with an interdisciplinary perspective. The Master of Science in education policy, for example, includes courses taught by professors who take varied disciplinary perspectives, including economic, legal, philosophical, and sociological. Warner recently developed a Master of Science in health professions education with the School of Nursing and the School of Medicine and Dentistry.

Student Support in Graduate Programs

Arts, Sciences & Engineering offers a range of programs to support the academic and professional development of its graduate students. When students arrive, there is a one-half day orientation that informs students of available support services for academics and student life, including two ombudspersons in Arts, Sciences & Engineering.

For students who need additional background in specific areas in order to be successful in the graduate program, the school offers the opportunity to take "bridging" courses. These are undergraduate-level courses that do not count towards graduate study but provide students with necessary background to succeed in graduate-level courses in their discipline. Oftentimes, students who change fields from their undergraduate degree to their graduate degree will need one or more bridging courses to ensure success in their new field.

Strong English language skills are vital to a student's success in a graduate program and future career. The school offers an English as a Second Language course for nonnative speakers that emphasizes the acquisition of English cultural and linguistic skills needed for clear communication in university and career environments. Primary areas covered are accent reduction, pragmatics (culture's role in language), nonverbal communication, public speaking, and academic and business writing. This course is held in the summer prior to matriculation in a graduate program as well as as during the fall semester.

There are also a range of programs designed for graduate-student writers. The Graduate Writing Project supports graduate students in Arts, Sciences & Engineering at any stage in their graduate program. The program organizes various activities, including writing workshops, writing groups, and dissertation boot camps. It supports students working on any kind of academic writing and research, from abstracts and article submissions to theses and dissertations.

Other graduate student support services include conflict resolution workshops and workshops on conducting responsible research. The conflict resolution workshops explore different perspectives on conflict, including understanding different conflict styles and techniques for engaging all parties in a dispute. These workshops have been developed for students who are dealing with conflict in their professional or personal lives.

All graduate students must learn to conduct research responsibly. To assist with this, there is an annual workshop that covers writing for publication, responsible authorship, peer review, research misconduct and plagiarism, human subjects research, IP, patenting, data ownership, conflict of interest, and copyright.

School of Medicine and Dentistry: The School of Medicine and Dentistry is strongly committed to providing student support services for graduate and medical students. In addition to academic program planning and counseling, school support services include tutoring, essential skills development (study skills, communication skills, quantitative skills, problem solving, information literacy, and time management), personal advising, and career counseling. Support service programs are routinely evaluated to ensure that the needs of the learning community are met. As needs change, resources are identified and allocated to maintain a high level of service and assistance to our students.

The MD program conducts a holistic evaluation of the complete file of all applicants. Those who matriculate have a wide range of strengths and talents. Some students have identified challenges with specific areas of science. All students are offered the opportunity to participate in a prematriculation course that provides some background on physiology, anatomy, and biostatistics. Students with identified challenges are strongly encouraged to participate.

The MD program has an "advisory status" system that reports on students who perform at the bottom 20 percent of the class on two consecutive examinations. This system is used to alert the advisory dean that selected students may benefit from some additional assistance. The advisory dean is charged with determining a student's specific needs and then directs him or her to resources that include tutors, use of the University's Learning Center, and other interventions to ensure academic success. Students involved with this advisory status system report greater comfort with

course materials. The school plans to more rigorously evaluate performance on examinations as a result of this program.

The school also provides targeted advice on academic resources for students whom the school believes may have difficulty passing the National Bureau of Medical Examiners' licensing examinations. Students who listen and follow this advice are uniformly successful in passing the exams. The school has recently expanded this service to include an all-class meeting with a learning specialist. Results from assessment activies have suggested that these programs are very successful.

First year PhD and MS students in all programs are immediately assigned an interim advisor, who closely monitors their progress in courses and research rotations. Graduate course directors report low exam scores to these advisors, who then consult with the student and offer tutoring or other needed services. Each laboratory rotation is evaluated by both the student and the faculty mentor, and any concerns are addressed by the senior associate dean for graduate education. At the end of the first year, each student is evaluated using a newly developed numerical rubric, and any concerns identified are addressed. In subsequent years, students meet annually with their graduate thesis committee to obtain a formal assessment of their progress, which is also reported to the dean. If concerns are identified, appropriate support is provided.

School of Medicine and Dentistry Programs for High Achieving Students: The MD curriculum includes electives that allow students who are achieving at a high academic level to choose more challenging courses with greater patient responsibility. The School of Medicine and Dentistry also has joint degree programs (MD-PhD, MD-MBA, MD-MS) available to students desiring to challenge themselves in these areas. The school also offers structured "year-out" experiences. These allow students to focus on a specific area of inquiry, whether it be basic science, clinical or translational research, medical humanities, international health, or community service. There also is a robust international health

program, and 40 percent of the School of Medicine and Dentistry students have an international experience through this program prior to graduating. Participating students can select elective pathways in the following areas: medical education, Latino health, deaf health, global health, and ethics and medical humanities.

School of Nursing: The School of Nursing houses a program called the Center for Academic and Professional Success (CAPS) that arranges for any necessary tutoring or study skills development, assists students in developing critical thinking skills, and promotes professional growth. CAPS instructors offer one-on-one work with students as well as offer review classes that are convenient for the students, including on weekends and evenings. The School of Nursing mentors students very closely when needed or requested. The school has had very positive feedback about CAPS and individual mentoring programs. All students who avail themselves of the service are given a survey, and the responses have been overwhelmingly positive.

William E. Simon Business School: The Simon Business School offers two math refresher courses to assist new students entering the MBA and EMBA programs. Mathematics Review (MSM 400) is a non-credit course that reviews mathematical concepts prerequisite to the MBA program, including vectors and matrices, functions and relations, linear equations, laws of exponents, limits and continuity, differentiation, maxima-minima, partial derivatives, and simple integration. Math for Management (MSM 491) is a master's level math class that is more intensive than MSM 400. Analysis and concepts in modern business analysis rely heavily on quantitative methods. The objective of this course is to bring incoming MBA or MS students "up to speed" with respect to the mathematical and statistical knowledge expected of them. The complexity of the course is on a par with freshman-year calculus, algebra, and introduction to probability and statistics, with the focus on applications in business, economics, and related areas. This course is only offered during the summer quarter. Although the course is not

required for credit, course grades give students an assessment of their mathematical skills.

Simon Business School's English Language and US Culture Program is intended for international students who require additional English skills. The program also introduces students to American culture to make their transition to the United States easier. Students receive an introduction to business courses and are provided with study strategies.

Margaret Warner Graduate School of Education and Human Development: The Warner School provides academic skills support through two formal programs. The Writing Support Services Program provides consultants and workshops to assist students with multiple aspects of academic writing. The Quantitative Consulting Services program provides consultants and workshops to assist students with multiple aspects of quantitative research.

Teaching by Graduate Students at the University

Many graduate students in Arts, Sciences & Engineering and the Eastman School of Music have the opportunity to teach. The types of assignments vary across the units. All foreign students are tested to determine if they need additional training —including taking the course English as a Second Language—before they serve any role in teaching.

In January 2010, graduate deans and senior faculty from each of the University's seven schools collaborated to pilot an initiative aimed at preparing doctoral candidates and postdoctoral scholars for the teaching and service dimensions of faculty careers. The Faculty Role and Teaching Innovations workshops were introduced that spring. In fall 2010, the Office of the Provost assumed responsibility for the initiative, taking over its promotion, registration, workshop logistics, and evaluation. The provost's office went on to implement two additional sessions: Finding the Opportunity in Diversity and Mentoring. In 2011 an alumni panel

reflecting the range of types and sizes of academic institutions in which academic careers might be pursued was added to the Faculty Role workshop, and in spring 2012, a fifth workshop, Assessing Learning in the Classroom, became part of the series. In spring 2013, Technology and Teaching: Online and Face-to-Face, was offered in response to recent University initiatives in online learning.

Additionally, the University is part of the Center for the Integration of Research, Teaching and Learning (CIRTL), a national consortium of 22 universities that aims to train our future faculty to become outstanding teachers. Through CIRTL, our students have numerous opportunities, both online and in person, to learn about different teaching methods and develop their teaching skills.

Management of the Curriculum

Each of the University's schools and units is responsible for management of its own curriculum. This responsibility includes assuring that the school's educational offerings are appropriately rigorous for their degree level and that curricular changes are made in response to changes in their fields or to findings from assessment. For the professional schools these processes have been further developed by the requirements of relevant accrediting bodies, and this assures effective stewardship of changes to the academic programs. The following sections offer an overview of the procedures in place within each academic unit for establishing and modifying programs.

The College

Management of the College curriculum is in the hands of departments, the College Curriculum Committee (CCC), and the Faculty Council. Most decisions regarding the academic content and rigor of majors are made initially at the departmental level, typically by the department's curriculum committee (which may be a committee of the whole). Departments occasionally call upon outside experts to evaluate or advise on curricular matters. In addition, the College Curriculum

Committee and the dean's office periodically evaluate departmental academic offerings, sometimes with the assistance of committees of experts drawn from outside of the University of Rochester community.

Any departmental decision about requirements for a major, minor, or cluster is subject to review by the College Curriculum Committee, a committee of eight faculty members (two from each of the main divisions). Committee members are appointed by the dean of the College, who attends Committee meetings with the associate dean of the College. If a departmental recommendation is approved, it is forwarded to the Faculty Council. The council is the faculty governing body in Arts, Sciences & Engineering and is composed of one representative from each department. The Faculty Council elects its six-person steering committee. Small changes are typically reviewed by the Steering Committee and reported to the entire Faculty Council. The Faculty Council discusses and votes on substantive changes.

The development of new majors, minors, or clusters follows a similar path: departments, programs, or groups of faculty wanting to create new majors propose them to the College Curriculum Committee. After thorough review, they are forwarded to the Steering Committee of the Faculty Council. Approved proposals then move on to the Faculty Council with a recommendation on appropriate action. Upon approval, the University submits a formal request, through the provost's office, to the New York State Education Department for permission to offer this major. Proposals for new minors go through the same process except that New York State approval is not required.

Departments regularly prepare strategic plans reflecting curricular and program needs, changing trends in the field, and student interests. At times, this may result in new courses (such as Religion and Violence), new clusters (American religion is one example), new minors (such as Arabic), new majors (such as the four public health–related majors), and new programs (archaeology, technology, and historical structures is one example).

Undergraduate programs in the Hajim School of Engineering & Applied Sciences are subject to review by ABET, the Accreditation Board for Engineering and Technology. It assumes a proactive role in ensuring academic rigor for four of the six departments in the Hajim School of Engineering & Applied Sciences; regular curriculum review and feedback are built into the ABET process.

Graduate Programs in Arts, Sciences & Engineering

Departmental committees oversee course and examination requirements for their PhD and master's programs. Assurance that students have mastered the material appropriate to their program comes from their performance on the qualifying exams required of all students and from their dissertation defense. These are monitored by faculty both in the student's department and external to the student's department/program. This helps ensure academic rigor for the PhD programs. The final PhD defense also requires a "chair" appointed by the University dean of graduate studies. This person's role is to ensure a quality defense and consistency across schools and departments. Following the defense, the dean of graduate studies sends a questionnaire to all faculty on the committee to assess the quality of the examination.

New graduate programs in Arts, Sciences & Engineering may be proposed by any department or program, and are reviewed by the dean of graduate studies and University Council on Graduate Studies for approval. If approved, the program is forwarded to the provost's office for approval and submission to the New York State Educational Department.

Eastman School of Music

The Eastman School of Music mission statement states that the school will strive to "develop an informed and inquiring mind that enables each graduate to engage the fundamental issues of his or her art and to become an effective cultural leader in society," and to "prepare each student with a solid foundation in music and an expansive education in the liberal arts." The levels of

competency required by the undergraduate core curriculum are driven by this mission. The Eastman School of Music's curricular offerings have been approved by the National Association of Schools of Music (NASM), which ensures that there is a proper balance between all of the various components of our curriculum. In addition, the Undergraduate Curriculum Committee (UCC) is responsible for overseeing the various Bachelor of Music programs and relies on the guidance of our faculty, most of whom are active in their respective fields, to shape a curriculum that ensures mastery in their students' major academic fields.

At the Eastman School of Music, curricular changes may be initiated by the faculty or the administration. Any individual or department who proposes a curricular change, policy change, new course, or new program must submit a proposal to the Undergraduate Curriculum Committee, Graduate Research Committee (for MA/PhD), or Graduate Professional Committee (for MM/DMA). All three committees have a broad membership from across the entire school.

The Eastman School of Music recently put in place an assessment program that takes a critical look at each degree program once every three years. The Bachelor of Music degree was reviewed in 2011, the Master of Music and Doctor of Musical Arts programs were reviewed in 2012, and the Master of Arts and Doctor of Philosophy programs were reviewed in 2013. In the spring semester, qualitative and quantitative data are collected for the degree program(s) under review. In the following fall semester, departmental forums are organized by the director of assessment for each department offering the degree(s) under review. In the forum, each faculty member is asked to answer three questions:

- What does this department do well?
- What, if any, surprises did you see in the data?
- What is one item you see as an opportunity to increase student learning?

Based on the answers to these questions and the ensuing discussion, the director of assessment and the department chairperson determine appropriate action items and assign them to various faculty members for follow up. All of the information collected is submitted to the provost's office in December, with a follow up report on any outstanding action items submitted the following April. This comprehensive review process ensures that the administration and faculty consider the academic content and rigor of their programs on a regular basis.

The School of Medicine and Dentistry

The academic program for medical students at the School of Medicine and Dentistry is controlled by the Curriculum Steering Committee. This committee has responsibility for overseeing and monitoring the outcomes of the curriculum.[6] All changes to courses and graduation requirements must be approved by the Curriculum Steering Committee.[7]

The School of Medicine and Dentistry monitors the rigor of its programs through several means. One primary mechanism is through the overall curriculum review, which takes place every five years. In addition, all required courses and clerkships include a mandatory anonymous student evaluation of the educational experience. The Curriculum Steering Committee receives reports annually from the Office of Curriculum and Assessment (OCA) about each required course and clerkship. OCA conducts annual reviews and subjects

---

[6] *Two Instruction Committees provide input and suggestions to the Curriculum Steering Committee. The chairs and vice chairs of the ICs sit on the CSC. The CSC is obligated to conduct a review of the entire curriculum at a minimum of every five years.*

[7] *The composition of the CSC, its obligations, and responsibilities are outlined in the CSC bylaws. Course and clerkship directors are aware of the structure and responsibility of the CSC, and the bylaws are available to them to review.*

each course and clerkship to an even more rigorous review every three years. Course and clerkship directors must submit syllabi and other course materials and information; OCA also considers the evaluation data from medical students about course content and instruction.[8] OCA provides a report for each course director, outlining the course or clerkship's strengths and weaknesses.

The curriculum for graduate education at the School of Medicine and Dentistry is reviewed regularly. At the present time, the major interdisciplinary courses taken by all graduate students are being reviewed by an internal committee with the goal of incorporating new information on genomics and bioinformatics. At the same time, all graduate programs are in the process of reviewing their program-specific courses and proposing new courses when appropriate. The senior associate dean for graduate education works in close consultation with the provost's office to guide graduate faculty who wish to create, terminate, or make changes to an existing program. To ensure clarity and effectiveness, the dean defines each part of the process in the initial meeting with faculty who wish to create, terminate, or make changes to an academic program. New programs require the submission of a formal proposal with supporting data to the dean, who reviews the materials and either rejects the proposal or makes recommendations for the proposed new degree program prior to submission for review by the school's Committee on Graduate Studies. If committee approval is granted to go forward with the new program proposal, it is submitted to the provost's office for review, revision, and submission to the New York State Education Department. Program changes and termination are reviewed and approved by the dean prior to submission to the provost's office for reporting to the state department of education.

The School of Nursing

The School of Nursing regularly assesses the rigor of its courses. The various academic program subcommittees review student evaluations and course materials to review content and make judgments about academic rigor. The School of Nursing closely monitors the pass rates of certification exams, comprehensive exams, qualifying exams, defenses, and capstone projects in order to assess the performance of its students.

To make changes to the curriculum of a program at the School of Nursing, proposals are discussed in the program's subcommittee, forwarded for consideration by the school's Curriculum Committee, and then reviewed by the full faculty. Proposals are then approved by the provost's office and the state department of education.[9] This set of procedures is clearly articulated in the Faculty Handbook, by-laws of committees, faculty meetings, and subcommittee meetings.

The William E. Simon Business School

Any faculty member in the Simon Business School may generate a proposal for curricular change. The Faculty Committee on Curriculum reviews proposals for new courses. Courses may be approved on an experimental basis by using a "special topics" course designation. After two offerings, the course must be reviewed in order to add it permanently to the curriculum. Proposals for creating or changing a whole program are reviewed by a relevant faculty committee, such as the Faculty Committee on Executive Programs, and frequently discussed by the Faculty Policy Committee. Ultimately, they must be approved by the Simon Business School faculty.

The Simon Business School Faculty Handbook addresses this process, but it also is part of the general oral tradition. Faculty who have an interest in creating a

---

[8] *Additional information reviewed by the CSC includes: survey results from residency program directors about the performance of our graduates, results of an annual survey of graduates done by the Association of American Medical Colleges (AAMC) that compares our students' responses to those of all graduating medical students, results of our students' performances on the USMLE licensing examinations.*

[9] *Specific forms developed for each proposed change are online. Any ideas generated by a student are brought to a faculty member, who will bring it forward to the Curriculum Committee.*

new course or program are able to enlist the support of colleagues, the chair of the Faculty Curriculum Committee or relevant program committee, and/or one of the associate deans. Proposals for program changes are widely discussed, often informally, before following the more structured process.

The Simon School's Committee on Teaching Excellence occasionally benchmarks Simon Business School courses with those at peer institutions. The school also monitors the placement of its PhD students and the results of licensure examinations in order to assess its academic rigor.

The Margaret Warner Graduate School of Education and Human Development

The two accrediting agencies that monitor the Warner School of Education, the National Council for the Accreditation of Teacher Education (NCATE) and the Council for the Accreditation of Counseling and Related Education Programs (CACREP), both annually review program content and student outcomes. In addition, content and rigor are monitored by the Academic Policy Committee, a standing faculty committee. If an unprecedented action regarding programming arises, the full faculty can review the Academic Policy Committee's methods of inquiry.

The Warner School of Education's Academic Policy Committee stewards the process for creating, terminating, and changing academic programs. The Academic Policy Committee is composed of representatives from the Warner School of Education's three academic program areas: teaching and curriculum, counseling and human development, and leadership. The process is well articulated in formal policy.

Statements of Expectations

The University strives to communicate clearly the statements of expected student learning outcomes at the course, program, and institutional level.

Arts, Sciences & Engineering

The College's requirements are clearly spelled out in various communications provided to applicants, to students as they matriculate, and to students in meetings with advisors. Statements of requirements are readily available on the web, at the College Center for Advising Services web page, and elsewhere.

In Arts, Sciences & Engineering, each undergraduate and graduate degree program posts learning objectives for student review on the Arts, Sciences & Engineering student learning assessment web page.

All College academic policies are readily available on College websites, including those of the College Center for Advising Services and the registrar. The dean of the College sends a memo every semester to every faculty member describing general class expectations: the need to be clear about the nature of the course and assignments, attendance policy, prerequisites, the academic honesty policy, basis for grading, etc. Syllabi published or distributed by instructors must make clear the academic goals of the course, rules of engagement, criteria for grading, and the academic honesty policy.

Faculty policy mandates midterm reporting of grades for students performing below the C- level. Notices of these reports are sent to students (with copies to advisors), informing them of available academic support services.

The College Writing, Speaking, and Argument Program details expected student learning outcomes and placement procedures on its web page. The Guide for Instructors (handed out on the first day of the Pedagogy course for new writing instructors) covers this same material. Writing instructors receive a checklist of items to include in syllabi and an expanded set of these guidelines. The expected learning outcomes are also the basis of a three-part self-placement survey available to students through Blackboard.

The Graduate Studies Bulletin covers some but not all expectations for student learning outcomes. In addition, the Arts, Sciences & Engineering website has documents

on [master's/PhD student expectations and responsibilities](#) (these are also handed out at the Arts, Sciences & Engineering graduate student orientation).

Eastman School of Music

The Eastman School of Music's mission statement articulates its institutional-level expectations for learning outcomes. The Eastman School of Music has adopted the NASM student learner competencies as program-level learning outcomes for all of its degree programs. Where no specific competencies existed, these were developed in consultation with the departmental faculty. The Eastman School of Music does not officially publish program-level learning outcomes.

Course-level learning outcomes for the core curriculum have been developed across the school. Learning outcomes for the undergraduate core curriculum courses taught by the music theory department are published on their [website](#).

Individual instructors and their departments create course-level learning outcomes for non-core undergraduate and graduate-level courses. Some departments incorporate specific student learning outcomes in their syllabi (for example, the music education department); instructors for practicum courses (for example, applied music lessons and ensembles) design learning outcomes individually based on student needs.

Professional Schools

The School of Medicine and Dentistry provides a document to master's and doctoral students, outlining 14 key expectations for the school's graduate students. The dean introduces this document and the expectations for graduate student learning at Orientation. Through this document and discussion, students become aware of what they are expected to learn, how they are expected to perform, and how they will be assessed during their

years of graduate study. These expectations are reiterated for students in meetings with the dean in the first and second years of study. Some of the information covered is available to students on the school's web pages. Graduate program descriptions in the School of Medicine and Dentistry outline what students should be able to demonstrate when completing the program in terms of knowledge, skills, and values. These descriptions also include how students will be assessed. This information is available to current and prospective students through the programs' websites and handbooks. Program directors actively monitor student performance in the classroom and in the laboratory.

Expectations for student learning at the School of Nursing are communicated through the Student Handbook, individual course syllabi, and by faculty and advisors.

The Simon Business School publishes an [student handbook](#) with information on academic standards, integrity, and academic performance issues. This is printed annually and updated on the web as needed.

At the Warner School of Education, expected student learning outcomes are easily accessed by students, faculty, and external audiences. NCATE- and CACREP-related curriculum require continual assessment of student progress in reference to comprehensive and rigorous sets of professional standards, using multiple evaluation tools. Standards-based learning goals are communicated by faculty to students through syllabi and assignment rubrics, and performance outcomes are monitored continuously by the dean, program area chairs, and faculty.

Transfer Students

Transfer students have similar expectations and outcomes to students who have completed all of their

courses at the University of Rochester. Approximately 120 transfer students enter the College each year. Most enter as sophomores or juniors, although some enter as second semester freshmen. Transfer students arrive from all types of institutions: small and large, public and private, liberal arts and research. As a result, no overall generalization is possible.[10] Policies regarding transfer credit are published in the Adviser's Handbook. Those with appropriate course backgrounds entering at the sophomore or junior level are not required to complete two clusters in the College. Transfer students have the option of using an equivalent course from another institution to fulfill the Primary Writing Requirement. In these respects, their learning experience can differ slightly from "native" students. Since departments have limits on the number of courses that students may transfer into the major, both transfer students' and "native" students' experience in the major is mostly similar. The upper-level writing requirement found in each major assumes completion of the primary writing requirement.

The College has significantly enhanced Transfer Orientation over the past several years in an effort to reduce the problems that sometimes arise during a transfer student's first semester in a different environment. Connections between transfer students and their new advisors begin immediately, with advisors assisting students in the online registration process during Orientation. Transfer students have recently been given priority over freshmen in online registration, thus minimizing the number of closed courses that cause potentially critical problems for these new upperclassmen. The Center for Excellence in Teaching and Learning and the Center for Advising Services are two important resources for all students but especially for freshmen and transfer students, since both offices offer resources and strategies for student learning and success in the classroom.

Eastman School of Music

At the Eastman School of Music, transfer students have largely the same learning experience as "native" students. Policies governing transfer credit for undergraduates and graduates may be found on the website of the Registrar. The Office of Academic Affairs reviews the transcripts of all incoming students and assigns them an appropriate class status (typically either freshman or sophomore). In addition, in the first year, transfer students take a placement test in music theory and music history and a performance jury to determine their placement. Requirements for lessons and ensembles are equivalent to the students' class status (e.g., a transfer student entering as a sophomore will be required to take three years of lessons and ensembles). Once a transfer student's class status has been determined, the student completes an identical curriculum with identical expectations. Transfer students typically enter in their sophomore year and have three full years of the Eastman School of Music experience. All transfer students are required to attend new student orientation, held the week before classes start. During this week, the students are given placement tests and attend a variety of sessions to acclimate them to life at the Eastman School of Music.

For graduate students, a maximum of six transfer credits is allowed (17 percent of the typical master's degree and 10 percent of the typical doctoral degree), and these credits are usually used to fulfill elective credits. In rare cases where a student would like transfer credit for a core graduate-level course, he or she must receive permission from the chair of the appropriate department as well as the associate dean for graduate studies. The Eastman School of Music does not accept transfer credit for music performance courses (lessons, ensembles, chamber music, etc.) that were taken at another institution.

Graduate and Professional Schools

Because of the individualized nature of its curriculum, the School of Medicine and Dentistry rarely accepts

---

[10] *More students transfer to the College from Monroe Community College than from any other single institution. A formal dual-admission degree program has existed for many years. Advising from counselors at MCC based upon this agreement and on the master list of transferable courses assures prospective students of a fluid transfer experience.*

medical students in transfer. In those rare instances (two students in ten years), students are given advanced standing based on their previous medical school curriculum, and individualized requirements are outlined to close any gaps in their year-specific knowledge and skills. The school would not accept a student in transfer unless there were available clinical experiences. This prevents compromising any other student's educational experience.

For graduate students at the School of Medicine and Dentistry, transferring into a program has minimal impact on the coherence of academic programs. While transfer students take some time to acclimate to their new programs, the strong sense of community that exists amongst students helps transfer students feel immediately welcomed.

The School of Nursing allows transfer students to petition to use appropriate courses; course descriptions of these classes are carefully examined. The experience for transfer students does not differ significantly from those of students who have completed all coursework at the School of Nursing, and transferring generally has minimal impact on the coherence of a student's academic program.

The Simon Business School allows its students to petition to receive transfer credit for graduate courses taken at other universities. These courses must have been taken within five years of the student's matriculation to the Simon Business School.

The Warner School of Education on occasion enrolls candidates who have begun their graduate coursework elsewhere. University policy governs the maximum number of credits that graduate students can transfer into degree programs (e.g., 10 credits for a master's degree). Since the number of permissible transfer credits makes up only a small portion of a candidate's program, and the school does not award transfer credits for required courses, these students are not "transfer students" in the conventional sense.

Learning Resources

Libraries

The University's libraries have an extremely close working relationship with the academic programs in every unit of the University. Nearly all undergraduates engage with a subject librarian early on in their academic careers. According to the 2011–2012 Association of Research Libraries (ARL) statistics, the River Campus Libraries offered reference service 119 hours/week and answered more than 42,000 reference questions. Subject librarians made close to 400 presentations reaching 7,000 participants.

According to the 2010–2011 ARL statistics, the River Campus Libraries hold 3,259,159 volumes and added 29,273 titles that fiscal year. The total materials budget for 2010–2011 was $6,526,642 with $1,111,859 spent on monographs and $5,414,783 on current serials. The University of Rochester Libraries are ranked 83 out of the 115 member libraries of the Association of Research Libraries on the Library Investment Index (ARL Statistics 2010–2011).

The River Campus Libraries have a rich rare books and special collections department, which supports experiential learning. The Seward Project, to cite only one example, is a collaboration between the River Campus Libraries and the history department in which graduate and undergraduate students use the Seward Family Papers to learn digital media skills.

The River Campus Libraries have been an active partner in the implementation of new information technologies and resources. These include a mobile version of the library website, a web-based discovery product that enables users to search licensed content from a variety of providers using a single search box, and a system to embed library course resources pages in Blackboard. The latter is useful in providing resources specifically relevant to the course and in connecting students with course librarians.

Arts, Sciences & Engineering: Every department in Arts & Sciences is assigned a subject librarian from the Rush Rhees Library who works closely with faculty, graduate students, and undergraduates to support both teaching and research. Subject librarians have either academic degrees in their assigned subject or experience in the discipline. They work closely with faculty to support classroom instruction and assignments in a variety of ways by making classroom presentations on library resources, holding office hours in some departments, serving as advisors and tutors, and working with faculty on special projects.

A **Digital Humanities Center** (**DHC**) was created in the River Campus Libraries in 2010 to facilitate digital access to library materials for classroom use, curricular support and scholarship. The DHC promotes digital humanities by serving as a clearinghouse for information and a partner for other University of Rochester groups engaged in interdisciplinary scholarship.

Specialized Libraries: There are several specialized libraries serving the needs of the arts and social sciences, including the Art and Music Library, the Rosseell Hope Robbins Library (medieval studies), Business and Government Information Library, Rare Books, Special Collections, and Preservation, and the Visual Resources Library operated by the Department of Art and Art History and housed within the Art and Music Library.

The Sciences and the Hajim School of Engineering & Applied Sciences are supported by the Carlson Science and Engineering Library, as well as the Physics, Optics and Astronomy Library, the Laboratory for Laser Energetics Library, and the Edward G. Miner Library in the medical school. Each provides specialized collections and services in support of learning and scholarship.

Eastman School of Music: The effective working relationship between the Eastman School of Music's academic programs and the Sibley Music Library manifests itself in three ways. First, the public services staff continually seeks opportunities to teach the Eastman School of Music students about library resources and academic research and assists the Eastman School of Music faculty in providing digital content through Blackboard. Second, the staff has implemented new ways for the Eastman School of Music faculty to request the purchase of new scores, recordings, books, and primary source documents in support of their research, performance, and teaching. Third, library staff have integrated the library's vast and rich Special Collections materials into teaching and learning at the Eastman School of Music, not only through course-related instruction but also through an active program of exhibits.

The School of Medicine and Dentistry and the School of Nursing: The academic programs of the School of Medicine and Dentistry and the School of Nursing and the Miner Library have a collegial working relationship. Miner Library staff sit in on all large group Instruction Committee meetings. They work with faculty to provide assistance with course materials and new initiatives. Miner Library provides "personal librarians" to each medical student, and they conduct educational programs for medical students that are a required component of the curriculum. Students meet during orientation week in groups of 10–12 with their personal librarian who educates them on how to use an iPad (given to all entering students) and the school-designated applications and how to access information on Blackboard through the iPad. The personal librarian is also a resource for students if they have challenges conducting literature searches, identifying appropriate resources, or accessing local and remote information. Professional librarians are available to work with the faculty to provide information management and information literacy education as well as to provide information and updates regarding technology and software use. The librarians also collaborate with graduate student groups to provide educational sessions that will meet their self-identified needs. In addition, the library has assigned professional liaisons to various departments to provide personalized services to faculty, graduate students, postdoctoral scholars, and staff. Nursing students are encouraged to meet individually with the librarians for answers to their questions.

Librarians are often invited to guest lecture during School of Nursing classes, and there are also specific scheduled times every Tuesday afternoon that the librarians spend at the School of Nursing.

The Simon Business School and the Warner School of Education: Both schools have an assigned reference librarian who works directly with faculty and students. These librarians acquire books, journals, and other resources for Rush Rhees Library, as well as providing research assistance to students and faculty.

Other Learning Resources

The University and the various units provide robust technological support for faculty, staff, and students. Wireless communication is available throughout the campus, and the College is embarking on the installation of additional power receptacles and charging stations to address the growing number of devices, specifically in informal study areas. Many classrooms have sophisticated technological capacity, including audio/video and lighting control systems and network access. Teaching spaces are continuously updated to enable video capture, flipped classrooms, individual study, and collaborative learning. Faculty have access to Blackboard as well as on-site technical staff to support their lectures, laboratories, and teaching.

An increasing number of state-of-the-art teaching spaces, including a newly renovated laboratory in the chemistry department and numerous classrooms in LeChase, Rettner, and Meliora Halls, support current academic programs as well as new initiatives in digital media studies. As noted in Chapter 2, the College recently completed an analysis of classroom space that indicated 1) a shortage of rooms for classes of 75–100, 2) poor utilization rates of some classrooms, and 3) a need to include more teaching spaces in the classroom management system. To address these needs, Arts, Sciences & Engineering plans to 1) create another large classroom within existing space, 2) challenge departments to schedule courses during less congested time periods, and 3) add some departmentally controlled teaching spaces to the classroom management

system, thereby expanding their use for both academic and student life activities.

Continued growth in the student population has put pressure on classroom space in some areas, and there is a growing need for renovation of teaching labs.

Summer Programs

Summer courses make up an important part of the University's educational offerings. The College's summer program offers nearly 100 undergraduate courses for credit (as well as a few courses at the graduate level) during its five summer sessions, which run for 4, 6, or 12 weeks and begin in May, June, and July. Virtually all Arts, Sciences & Engineering departments and programs participate. Many courses are at the introductory (freshman and sophomore) level, permitting students to try out new fields, catch up if they have fallen behind, or get a step ahead. The College recently modified summer programs in an effort to provide greater stability of offerings. Class times are now more regularized, and no courses are canceled if any students are enrolled. This enables students to plan more effectively. The great majority of registrants are matriculated undergraduates at the University. All courses go through the same administrative approval process as they do during the academic year. Students complete surveys at the beginning and course evaluations at the end of every session, and these results are transmitted to department chairs and reviewed in the Office of the Dean of the College. Arts, Sciences & Engineering also offers a Summer Intensive English as a Second Language program, designed especially for incoming graduate teaching assistants.

The Eastman School of Music also offers courses during the summer. The Eastman School of Music offers a summers-only MM/MA degree in music education, which can be completed over four summers of study. In addition to the courses required in the music education degree program, there are also several graduate-level music theory and history courses offered each summer. There is no set schedule of summer course offerings, but

rather, each department chair works with the director of Summer Sessions to determine course offerings based on student needs and faculty availability over the summer. During the summer session there are also precollege programs for high school students and several institutes and workshops open to college students, teachers, and professionals. All of the institutes and workshops may be taken for credit or no credit and provide professional development hours towards New York State teaching certification requirements.

The School of Medicine and Dentistry does not offer special courses for medical students during the summer, but some of the regular curriculum runs during the summer months. The graduate program at the School of Medicine and Dentistry offers a very small number of upper-level graduate and specialty courses during the summer terms. The focus in the school during summer months is research.

The School of Nursing offers summer courses in all of its programs. The Accelerated Programs for Non-Nurses, for those with a prior BA or BS in another field, operate at full capacity, with three cohorts simultaneously taking courses throughout the summer. This program has full classes, labs, and clinical rotations. The RN-BS Program, master's, and DNP courses all offer summer coursework, though more limited than the fall and spring semesters. These programs offer core courses, clinical rotations, and electives. The same content is offered as in fall or spring, although the length of the semester is slightly shorter. There are no PhD courses offered in the summers.

The Simon Business School uses a quarter system and has part-time students who take courses in the evening every quarter. A cohort of full-time students starts in January, and most take courses in the summertime in the evening. Other full-time MBA or MS students who are in Rochester for the summer occasionally take these courses as well. These courses are the same as those offered during the fall, winter, and spring quarters, though the total number of courses offered are fewer due to the lower demand during the summer. Simon

Business School offers a six-week summer program for students in the Rochester-Bern Executive MBA program and a five-week English Language and US Culture (ELUSC) program for international students who will enroll in the MBA or MS programs and require improved language skills.

The Warner School of Education offers a comprehensive set of summer courses, allocated between two consecutive six-week sessions. The broad range of courses offered enables master's and doctoral candidates to continue their studies throughout the summer months. Warner School of Education creates and evaluates summer courses in the same manner in which it evaluates and creates fall and spring courses.

Certificate Programs

Certificate Programs in the College

The processes for offering and evaluating certificate programs fall within the purview of the individual Schools, and thus certificate programs differ widely across the University as a whole. Certificate programs in the College are taken in conjunction with, not in place of, majors. Interdisciplinary in structure, each certificate program has been authorized by the Curriculum Committee and the Faculty Council. These programs are meant to supplement a student's chosen area of study and to formalize into a coherent whole those courses taken outside of a major. Specific requirements for each program are listed in the Undergraduate Studies Bulletin. Certificate programs include:

- Actuarial Studies
- Asian Studies
- Biophysics
- Biotechnology
- Literary Translation Studies
- Mathematical Modeling in Political Science and Economics
- Medphysics
- Polish and Central European Studies
- Stage Management

These certificates do not formally relate to majors or degree programs. While there is a faculty-imposed limit to the number of courses that may overlap between individual students' clusters, minors, and majors, courses taken for certificates are exempt from this policy.

For graduate students in Arts, Sciences & Engineering, the certificate programs are developed by a particular discipline.[11] Examples include literary translation, women's studies, and African and African-American studies. The written proposal is submitted to the dean and then presented to the Arts, Sciences & Engineering Graduate Committee. If approved, the proposal is submitted to the University dean for approval. The certificates are open to all graduate students but tend to lend themselves to certain curricula (e.g., women's study certificates tend to draw students from the humanities). The names of students awarded the certificates are sent to the dean's office at the end of each academic year, and this information is entered as a formal comment on the transcript.

Certificate Programs in Eastman School of Music

Certificate and diploma programs at the Eastman School of Music are overseen by the same curriculum committees that oversee its degree programs. Changes to existing certificate programs or proposed new programs go through the same vetting process as all of its degree programs. Certificate and diploma programs at the Eastman School of Music have been evaluated by its accrediting body, the National Association for Schools of Music. Certificate and diploma programs are optional "add-on" programs, and students may choose to add one or more of them to their program of study. Most diploma and certificate courses are open to the general student body, with the exception of internships and practica, so students may benefit from the coursework without officially joining the program. All certificate and diploma programs are overseen by the Office of Academic Affairs and are not directly affiliated with a particular academic department.

At the current time, the Eastman School of Music's formal assessment program does not review certificate and diploma programs. The school plans to add them to the assessment cycle at a later date. However, the curriculum committees continually review the coursework offered through these programs, and there is a tremendous amount of faculty involvement and oversight of all offerings. A complete list of diplomas and certificates offered by the Eastman School of Music is available online. Our robust offerings of certificate and diploma programs add significant value to an Eastman School of Music degree. These programs provide students with a great deal of practical experience and better equip our students with the skills needed to find jobs in the ever-changing musical landscape. In general, the administration and faculty are very supportive of these programs.

Certificate Programs in the School of Medicine and Dentistry and the School of Nursing

The School of Medicine and Dentistry does not have any certificate programs; the School of Nursing has only a few. The latter are offered as post-master's degree nurse practitioner certificates within the graduate nursing program. They are also offered through the Center for Lifelong Learning.

Certificate Programs in the Simon Business School

Certificate programs in the Simon School are developed in conjunction with a company's specific goals, and this process occurs through the Simon Business School's Executive MBA office. The material in the company-specific certificate programs is drawn from existing courses and modified to meet the objectives of the sponsoring companies. The Simon Business School does not have any open-enrollment certificate programs.

---

[11] *Graduate certificates tend to relate to programs rather than to departments.*

**Certificate Programs
in the Warner School of Education**

The Warner School currently offers four certificate programs: urban teaching and leadership (UTL), applied behavioral analysis (offered jointly with Strong Center for Developmental Disabilities), program evaluation, and online teaching.

Non-Credit Course Offerings

Non-credit offerings appear across the University, but there are significant differences in how the schools handle their administration. Non-credit courses in the College carry course numbers beginning with 0 (e.g., CAS 089). These courses appear in the registrar's schedule, complete with a description, and appear on the transcript. Some carry an extra fee, and some are included with flat rate tuition charges. Grades are awarded but are not included in students' grade point averages.

Non-credit activity for graduate students in Arts, Sciences & Engineering is recorded on the transcript. Examples include non-credit courses (such as the ESL course) and continuation of dissertation research (897, 899, 997, 999). The courses have online registration and appear on the student's transcript. Additionally, participation in professional development training activities (e.g., TA training, responsible conduct of research training, conflict management training) is entered manually into the student information system.

In the Eastman School of Music, all non-credit activity is recorded on the student's transcript, and all non-credit-bearing courses are graded on a pass/fail basis. At the Eastman School of Music, there are very few non-credit-bearing courses, with the exception of discussion sections attached to the core music history courses and lab sections attached to skill-based courses like conducting and piano skills (and offerings in the Eastman Community Music School). In addition, final projects for various degrees, including recitals, oral exams, and comprehensive exams, are non-credit-bearing and reported as pass/fail on the student's transcript.

The School of Medicine and Dentistry offers only a few non-credit courses for professionals who already have an advanced degree (MS, MD, or PhD) and are interested in specialty training in family therapy theory and clinical practice. These courses are recorded within the University's student information system and are reported for the student through the University's transcript system. The training program maintains extensive records of the activities of those who seek advanced training and provides documentation for the renewal of professional licenses. Non-credit activity enhances initial training and prepares the professional for future needs within the field. Non-credit offerings provide the opportunity for continued learning, exposure to other professionals within the field, and to fulfill continuing education requirements without the high cost of credit-bearing education.

The Simon Business School's "Experience Simon" modules offer approximately nine contact hours on special topics of interest that are not covered in standard courses. Students register, and a pass/fail grade is issued based on their participation. For the ELUSC program noted above, students must register, and the course appears as part of their University record. However, the program does not provide credit toward their degree requirements.

The Warner School of Education has a number of non-credit-bearing courses, which include cohort seminars for accelerated EdD programs and course numbers created to keep track of milestones such as comprehensive exams, doctoral portfolios, research apprenticeships, or master's theses.

Online Education

The University's focus on online education has grown significantly in recent years. In every school, faculty members are using online learning resources and methods to complement their traditional classroom-based courses. To help coordinate activities throughout the University, in spring 2013, a new senior position, associate vice president for online learning, was created

with the goal of providing leadership for the exploration of online learning initiatives across the University. The ROC Online website provides extensive information about online learning at the University.

In addition, a Committee on Online Learning (COOL) was established. It is chaired by the senior vice president for research and has faculty representatives from every school. The committee is charged with sharing information and activities from the individual schools and coordinating efforts and resources to support online learning initiatives at the University. This commitment has already yielded benefits to the institution through the initiation of select online courses in several schools, promotion of an engaging dialogue across the University community, and the launch of a partnership with the educational technology company Coursera.

The new partnership with Coursera includes the successful design, development, and offering of five massive open online courses, with two more under development for the Spring 2014 semester. These courses will not be offered for credit at the University. The intent is to share more broadly faculty expertise in these areas, to increase visibility for the University and the programs offered, and to provide important data as the University explores this new arena.

Arts, Sciences & Engineering is currently involved in a detailed and major evaluation of the ways in which the University should participate in online learning programs. Until recently, the College did not offer any online courses of its own and limited its undergraduates to transferring no more than two online courses from other institutions toward the degree here.

The Music Theory department in the Eastman School of Music has created an online music theory fundamentals course to prepare entering freshmen for their placement exams. Students do not receive credit for this course, nor is it a required part of the curriculum. The success of the course has provided enough experience and encouragement for the school to consider expanding its online offerings in the future.

The School of Medicine and Dentistry uses online learning tools and methods to enhance traditional face-to-face classroom education for medical students. These tools include online tutorials and quizzes, online polling for real-time assessment and interaction, and digital pathology slides. In addition, iPads are used extensively to deliver interactive e-books, digital study cards, and 3-D images that help prepare students for rich in-class discussion.

The Medical Center has an extensive online learning program in support of employee education that makes required education easily accessible to employees whenever they need it and enables the institution to track completion for regulatory and accreditation agencies.

The School of Nursing has substantial online learning activities and offers many online learning courses. During the process of developing the school's first hybrid-online programs, including the RN-BS and psychiatric nurse practitioner programs, the school developed online learning quality principles. These principles directed the creation of an online course template that provides faculty guidelines for creating courses with a consistent look and feel and a content and organization consistent with best practices. With an emphasis on quality and a requirement for significant faculty-student interaction, the growth of the online activity is notable; the RN to BS hybrid online program has experienced a 51 percent increase in enrollment over the past four years, 38 percent of all School of Nursing program courses are hybrid online, and 42 percent of student registrations are in online courses. The School of Nursing expects this growth will continue and plans on adding new online programs in the future.

Distance learning courses are assessed using the same processes as are used with face-to-face courses. Assessment measures include evaluation of learning effectiveness, student satisfaction, and faculty satisfaction. Learning effectiveness measures include quizzes, tests, writing assignments, online discussions, and performance measures. Assessment of student

satisfaction is evaluated using standardized course evaluation and teacher evaluation forms in every course. Assessment of faculty satisfaction is evaluated through the completion of a narrative course summary at the conclusion of a course. These assessment measures are compiled and reviewed on a yearly basis, and recommendations for improvements are made within program subcommittees. The assessment measures used to evaluate learning effectiveness are the same or equivalent in online, hybrid-online, and face-to-face courses. Assessments in online and hybrid-online courses have consistently demonstrated an equivalent level of learning effectiveness when compared to face-to-face courses. Additional evidence is a consistently high level of student satisfaction in online and hybrid courses.

In the executive programs at the Simon Business School there has been some experimenting with online learning. One company-specific program is being offered in a distance-learning format as are some non-credit refresher courses for entering students. The Simon Business School plans an expansion of online learning opportunities in the executive education area, specifically in the Executive MBA program. In addition, Simon has successfully developed and offered a MOOC (the Power of Markets) through Coursera.

The Warner School of Education has made online learning a vital component of its strategic plan and now offers some complete online courses and some hybrid online courses. The growth in the number of online offerings in the Warner School of Education is extraordinary, from zero online courses last academic year to 17 courses in 2013–2014. The school, in partnership with the School of Medicine and Dentistry and the School of Nursing, is offering a hybrid online program in health professions education. The Warner School has also developed a graduate certificate in online teaching and learning and is planning and designing a new MS program in online teaching and learning. Notable growth and expansion in online offerings will continue in the coming years.

Branch Campuses and Other Instructional Sites

Recognizing the opportunities for sharing resources and experience, in 1986 the Simon Business School became the first accredited U.S. business school to establish a European Executive MBA program.

The Simon Business School's Executive MBA Program in Bern, Switzerland, is offered in collaboration with the Institut für Finanzmanagement at the Universität Bern. The partnership adds a global perspective to both the Rochester and European programs.

The Bern program is equivalent to the Rochester program and is taught by Simon Business School faculty and European scholars. Managers are sponsored by their organizations and earn a University of Rochester degree. Like Rochester's Executive MBA students, the Bern students come from a wide variety of countries and cultures.

Bern students spend their six-week summer term in Rochester. During their Rochester stay, European students study with Rochester students on teams, giving students from both programs the chance to experience cultural differences in business perspectives. In addition, students from both sides of the ocean widen their business network to include colleagues from around the world.

The Simon Business School also offers part of its MS in Finance program at the American Management Association (AMA) Offices in New York City. The location was recently reclassified from an "extension site" to an "extension center," which will offer greater flexibility for expansion.

The University is currently working on an application for a formal branch campus in New York City – with the goal of expanding its New York City offerings in AY 2014–2015.

Summary and Findings

The University of Rochester's undergraduate and graduate programs combine academic rigor with flexibility, allowing students to fully engage with and succeed in their education experience. The College is known for its innovative "Rochester Curriculum" and its attempt to create life-long, self-motivated learners. Undergraduate programs at the Eastman School of Music and at the graduate level throughout the University are structured differently from this model but maintain the same focus on generating intellectual curiosity and passion within students. The range of multidisciplinary programs, student abroad opportunities, and faculty-student research collaborations instills these values in all of the University's educational activities.

The College's approach to general education, through its distinctive Rochester Curriculum, has been embraced by students. It enables students to pursue their interests and assures that they are exposed to learning in each of its main divisions of learning. The Eastman School of Music has developed a strong collegial environment within the school, centered on education in music and the liberal arts. This environment fosters collaborative performances, the development of cultural leadership skills, and technological proficiencies throughout the student body.

Collaboration between students and faculty is a hallmark of education at the University. This extends beyond graduate education to embrace undergraduates interested in cutting-edge research questions. The College has committed substantial financial resources to undergraduate research activities, including the Research and Innovation Grant program. In the other schools, opportunities for collaborative research with faculty have also been institutionalized and are strongly supported.

The University's innovative education initiatives extend beyond the campus environment. Centers and programs devoted to study abroad and entrepreneurship enhance the student learning experience, creating future leaders comfortable with sharing their ideas in multiple cultural contexts. The Kearns Center, the Higher Education Opportunity Program, and other associated programs provide a framework for academic success by bridging the campus and home environments of students from disadvantaged or nontraditional backgrounds. In this way, the University facilitates positive interactions with the outside world through the course of a student's academic career.

The university's management of its academic programs and initiatives has been systematic and evidence-based. The schools and departments have constructed clear learning goals for all programs, and the faculty conduct regular reviews of curriculum issues. This information is widely available to the student body, and systems are in place to collect student feedback. In addition, graduate programs and a number of undergraduate programs have their separate accreditation bodies and have extensive evaluation programs as part of periodic reviews.

Accreditation reviews have focused attention on some challenges faced by specific programs. Many of these have been effectively dealt with, such as student service programs at the Eastman School of Music. Responding to student concerns, the school has developed a study skills support program, a new writing program, and a tutoring program. The school's recent improvement in retention rates has been associated with the success of these initiatives. The College has had similar successes in responding to student needs with increased attention to pedagogy through the newly renamed and re-envisioned Center for Excellence in Teaching and Learning.

Some challenges still remain, especially given the changing environment in higher education. The College should work to develop a common framework for modifying and creating new programs and must also manage increased demand for classroom space. Both of these problems reflect recent successes in recruitment and retention within the College, yet require concerted effort to overcome. More generally, the University must continue to find ways to coordinate online education across the schools, creating a common framework for this new technology.

Chapter 8 Links

This list provides the URLs for the hyperlinks in Chapter 8 of this report.

60 Majors
http://www.rochester.edu/college/academics/majors.html

Authorized clusters
http://www.rochester.edu/college/CCAS/students/curriculum/clusters.html

Multidisciplinary Studies Center
https://www.rochester.edu/college/msc/

College Writing, Speaking, and Argument Program
http://writing.rochester.edu

Center for Excellence in Teaching and Learning
www.rochester.edu/college/cetl

Study Abroad
http://www.rochester.edu/College/abroad/

Programs
http://www.rochester.edu/College/abroad/programs/index.html

IES
http://www.iesabroad.org/

CIEE
http://www.ciee.org

Danish Institute for Study Abroad
http://www.dis.dk/

Advanced Studies in England
http://www.studyabroadbath.org/

Arezzo
http://www.rochester.edu/College/mlc/arezzo/

Worldwide Universities Network
http://www.wun.ac.uk/

Office of Undergraduate Research
http://www.rochester.edu/College/ugresearch/

Gwen M. Greene Career & Internship Center
www.rochester.edu/careercenter/students/

Internships
www.rochester.edu/careercenter/students/internship/

Take Five Scholars Program
http://www.rochester.edu/college/CCAS/students/opportunities/takefive/

Describing their program
http://www.rochester.edu/provost/middlestates/report/T5Abstracts12.pdf

Kauffman Entrepreneurial Year (KEY) Program
http://www.rochester.edu/college/ccas/AdviserHandbook/KEY.html

Fellowships Office
http://www.rochester.edu/college/studentfellowships/

Reports
http://www.rochester.edu/college/studentfellowships/winners.html

Top 20 doctoral/research institutions receiving Fulbright awards
http://www.rochester.edu/provost/middlestates/report/doctoral.pdf

Center for Entrepreneurship
http://www.rochester.edu/entrepreneurship/

David T. Kearns Center for Leadership and Diversity in Arts, Sciences & Engineering
http://www.rochester.edu/college/kearnscenter/index.html

Upward Bound
http://www.rochester.edu/college/kearnscenter/PreCollege/upwardboundmain.html

College Prep Center at East High School
http://www.rochester.edu/college/kearnscenter/PreCollege/EastCPC.html

College Prep Center at Franklin Campus
http://www.rochester.edu/college/kearnscenter/PreCollege/FranklinCPC.html

Ronald E. McNair Post-Baccalaureate Achievement Program
http://www.rochester.edu/college/kearnscenter/mcnairmain.html

Kearns Center Scholars
http://www.rochester.edu/college/kearnscenter/kearnsscholars.html

Xerox Engineering Research Fellows
http://www.rochester.edu/college/kearnscenter/Xerox/xeroxfellowsmain.html

National Consortium for Graduate Degrees for Minorities in Engineering and Science (GEM) Fellowships
http://www.rochester.edu/college/kearnscenter/GraduatePrograms/gemfellows.html

Graduate School Visitation Program
http://www.rochester.edu/college/kearnscenter/GraduatePrograms/GVP.html

Office of Minority Student Affairs
http://www.rochester.edu/college/OMSA/

Higher Education Opportunity Program
http://www.rochester.edu/college/OMSA/HEOP.html

Early Connection Opportunity Program
https://www.rochester.edu/college/OMSA/ECO.html

Emerging Leaders Program: Leadership in Transition
http://www.rochester.edu/college/OMSA/emergingleaders.html

College Diversity Roundtable
http://www.rochester.edu/College/roundtable/index.html

College Tutoring Program
https://www.rochester.edu/college/CCAS/AdviserHandbook/Tutoring.html

EAPP
http://writing.rochester.edu/EAPP/index.html

Catherine Filene Shouse Arts Leadership Program
http://www.esm.rochester.edu/iml/alp/overview.php

English as a Second Language
http://www.esm.rochester.edu/humanities/es/

Performer's and Artist's Certificates
http://www.esm.rochester.edu/programs/pc-ad/

Conservatory Exchange Program
http://www.esm.rochester.edu/facultystaff/handbook/conservatory-program/

Unification Model
http://www.son.rochester.edu/welcome/unification-model.html

Double Helix Curriculum
http://www.urmc.rochester.edu/education/md/prospective-students/curriculum/

Center for Research and Evidence-Based Practice
https://www.son.rochester.edu/research/research-evidence-based-practice.html

University Dean of Graduate Studies
https://www.rochester.edu/gradstudies/index.html

Institute for Innovative Education
https://www.urmc.rochester.edu/institute-innovative-education.aspx

Accelerated Nursing Program
http://son.rochester.edu/programs/apnn/index.html

Graduate Writing Project
http://writing.rochester.edu/services/GraduateStudentServices.html

Center for Academic and Professional Success
https://www.son.rochester.edu/CAPS

English Language and US Culture Program
http://www.simon.rochester.edu/programs/elusc/index.aspx

Writing Support Services Program
https://www.warner.rochester.edu/students/academics/writing/

Quantitative Consulting Services
https://www.warner.rochester.edu/students/academics/quantconsulting/

Center for the Integration of Research, Teaching and Learning
http://www.cirtl.net

Office of Curriculum and Assessment
http://www.urmc.rochester.edu/smd/curriculum-assessment/index.cfm

Arts, Sciences & Engineering student learning assessment webpage
www.rochester.edu/college/assessment/plans/index.html

College Center for Advising Services
http://www.rochester.edu/college/CCAS/

Registrar
http://www.rochester.edu/registrar/

Expected Student Learning
http://writing.rochester.edu/courses/alternativecriteria.html

Graduate Studies Bulletin
http://www.rochester.edu/GradBulletin/

Master's
www.rochester.edu/college/gradstudies/policies/masters.html

PhD Student Expectations and Responsibilities
http://www.rochester.edu/college/gradstudies/policies/phd.html

Website
http://www.esm.rochester.edu/theory/courses/

Student handbook
http://www.rochester.edu/provost/middlestates/report/2012-2013-Simon-School-Handbook-FINAL-COPY-as-of-6-29.pdf

Adviser's Handbook
http://www.rochester.edu/college/CCAS/AdviserHandbook/TransferCrdt.html

Primary Writing Requirement
http://writing.rochester.edu/requirements/SatisfyingPWR.html#Transfer.

Transfer Orientation
http://www.rochester.edu/college/orientation/transfer.html

Undergraduates
http://www.esm.rochester.edu/registrar/?id=04.08.03

Graduates
http://www.esm.rochester.edu/registrar/?id=05.04

River Campus Libraries
http://www.library.rochester.edu

Digital Humanities Center
http://humanities.lib.rochester.edu

Carlson Science and Engineering Library
http://www.library.rochester.edu/carlson/home

Physics, Optics and Astronomy Library
http://www.library.rochester.edu/poalibrary/home

Edward G. Miner Library
http://www.urmc.rochester.edu/libraries/miner/

Sibley Music Library
http://www.esm.rochester.edu/sibley/

Rush Rhees Library
http://www.library.rochester.edu/rhees/home

Summer Programs
http://www.rochester.edu/college/osp/summer/

Courses during the summer
http://summer.esm.rochester.edu/courses/age/collegiate/

Pre-college programs
http://summer.esm.rochester.edu/courses/age/high-school/

Institutes and workshops
http://summer.esm.rochester.edu/new-this-year/new-institutes/

Undergraduate Studies Bulletin
http://www.rochester.edu/bulletin/academics/departments/

Certification and diploma programs
http://www.esm.rochester.edu/academic-affairs/programs/certificates/

Center for Lifelong Learning
http://www.son.rochester.edu/cll/index.html

ROC Online
http://www.rochester.edu/online-learning/

Online music theory fundamentals course
http://www.esm.rochester.edu/iml/entrepreneurship/eTheory/

Online learning courses
http://www.son.rochester.edu/cll/index.html

Executive MBA Program in Bern, Switzerland
http://www.executive-mba.ch/

Chapter 9
Assessment

GEORGE EASTMA[N]

Standard 14: Assessment

Assessment of student learning demonstrates that, at graduation, or other appropriate points, the institution's students have knowledge, skills and competencies consistent with institutional and appropriate higher education goals.

Introduction

This chapter provides detailed information on the University of Rochester's initiatives to assess student learning throughout the entire university. It begins with background information on assessment activities at the University and describes of the formation of the University Assessment Liaison group, with membership from within each unit, to coordinate assessment activities. The chapter then turns to assessment programs in each of the undergraduate and graduate divisions.

Background

As a result of the 2004 Middle States reaccreditation review and the rigorous formalized strategic planning process initiated with the arrival of President Seligman, each academic unit of the University has established formal mechanisms for monitoring and improving the assessment of student learning. In addition, the provost established a standing committee composed of leadership-level professionals from each school and the associate provost to unify and provide oversight of assessment programs. The University Assessment Liaison group meets regularly. Initially, it produced the major foundational reports on the status of assessment in each school. The group now produces regularly scheduled updates, shares best-practice ideas, and serves as an information channel to the provost for items related to student learning assessment. The group is chaired by one of the liaisons, on a rotating basis. Each school has tailored assessment processes to fit its range of undergraduate, graduate and professional degree programs. The assessment liaison in each of the divisions oversees and coordinates its assessment process. Many professional and some undergraduate degree programs

receive accreditation from external professional accreditation organizations and thus follow the assessment guidelines provided by those organizations. For others, Assessment Liaisons in each school, in consultation with school deans and program faculty, have implemented assessment processes. The result is a process that fits each school's needs and interests, but also provides each school and program with rigorous, rich, and timely student learning data for continuous improvement. Information about the assessment liaisons, and links to the the individual schools' assessment websites, is available on the provost's Student Learning Assessment web page.

The College

Assessment in the College: Background

Before 2008, the College did not have a well-developed, formalized assessment process. It began a systematic process at that time. The first step was to require each department to develop clear learning objectives for its programs and to articulate more clearly than it had previously the learning objectives associated with its majors. The College created a new position of director of assessment and filled that position in 2010. Upon arrival early in 2011, the College's director of assessment, in consultation with the College dean, the College Curriculum Committee (CCC), and program faculty developed and implemented a comprehensive student learning assessment program. This new model of assessment built on the variety of College-wide and program-level assessment activities already in place. As a result of these efforts, as well as organizational changes

to support faculty efforts in teaching and learning, the College has made rapid progress in formalized, documented student learning assessment using both direct and indirect measures.

The new assessment program addresses the overall undergraduate educational experience, including academic and cocurricular experiences, general education, and individual degree programs. The College and the various programs have clarified learning goals and objectives, developed assessment tools, and implemented them to ensure precise measurement. Moreover, implementation plans ensure that assessment data fit with College and program education review processes.

The Rochester Curriculum

To describe the College's assessment program effectively, it will be useful to summarize the Rochester Curriculum, which was discussed in detail in Chapter 8. To summarize, the College requires students to complete a major and to complete a three-course cluster of related courses in each of the two divisions outside that major. (Students in most engineering majors are required to take only one cluster.) Thus, students will get significant training in each of the three main divisions: Humanities, Social Sciences, and Natural Sciences and Engineering. As shown by Table 9.1, the clusters effectively address the essential learning objectives required by Middle States Standard 11, including scientific and quantitative reasoning, critical analysis and reasoning, and technological competence.

Table 9.1 Alignment of Rochester Curriculum with Middle States Education Learning Objectives				
General Education Requirement	Writing Requirement, WRT 105	Engineering and Natural Sciences Cluster	Social Sciences Cluster	Arts and Humanities Cluster
Learning Outcome: Oral and written communication	X			
Learning Outcome: Scientific and quantitative reasoning		X		
Learning Outcome: Critical analysis and reasoning	X	X	X	X
Learning Outcome: Technological competence	X	X	X	X

In addition to the cluster requirement, all students must complete the Primary Writing Requirement, typically in the freshman year. The College writing requirement supports the development of students' writing, helping them learn critical reasoning, gain a facility with research, and further their technological competence. Each major includes an upper-level writing component.

By encouraging students to think deeply about their curricular choices and by requiring significant engagement with multiple disciplines, the Rochester Curriculum is designed to reflect hallmarks of intellectual activity: curiosity, competence, and community. Students are able to make conscious, considered choices in areas of academic, personal, or career interest beyond their choice of major. Through completion of related courses in their clusters, they will achieve basic competence in the concepts and methods of multiple disciplines, and they will be in a position to forge intellectual connections across fields and disciplines, including the discipline of their major. As a result, the Rochester Curriculum supports

- **Broad knowledge of a disciplinary division:** By completing clusters, students gain an appreciation of concepts and frameworks in disciplines outside the division of their major.
- **Development of interests generated by clusters:** Students are able to develop and articulate interests that are distinct from their disciplinary division. As a result, they become more broadly educated citizens.
- **Active pursuit of interests generated by clusters:** Students will be motivated to pursue interests developed by a cluster through concrete, independent activities such as research or internships.

Notably, students often identify themselves not just as majoring in one discipline but rather as majoring in one discipline and clustering in two others. Many students expand their clusters to minors or second or even third majors, thereby deepening their engagement in multiple areas.

The Rochester Curriculum structure addresses Middle States accreditation standards for all areas of skill development as a result of general education. Table 9.1 highlights the primary skills addressed by each divisional cluster.

Assessment of the Rochester Curriculum

The College's assessment program for the cluster system encompasses a five-year plan for investigation of learning objective achievement using both direct and indirect measures.

The five year plan includes

- **2010–2011**: "First-cut" exhaustive review of indirect assessment data from COFHE and Arts, Sciences & Engineering senior surveys and CIRP Enrolled Student Survey in which students self-assessed learning. This step allowed the College team to gain a student-centered sense of areas of strength and weakness in learning.

- **2011–2012**: Direct assessment method of senior exit interviews with more than 90 seniors in which seniors were questioned on specific learning tasks and concrete related educational pursuits that were the result of cluster education. In addition, an indirect method, a specially designed senior survey of cluster education was implemented to gather self-assessment data and additional data on concrete, active pursuits that were the result of cluster education.

- **2012–2013**: COFHE Alumni Survey 2013, an indirect measure, was implemented and distributed to Class 2007–2009 alumni in order to gather additional self-assessment data.

- **2013–2014**: In fall 2013, direct measures in cluster courses from the natural sciences division clusters commenced. Faculty teaching cluster courses were asked to choose final exam questions that represent student achievement of three of the primary Rochester Curriculum learning objectives including quantitative reasoning, scientific thinking, and critical thinking. Faculty completed Faculty Course Reflective Memos to document direct assessment data and findings. In spring 2014, direct assessment measures will be

expanded using the expanded Rochester Curriculum learning objectives that are currently under development by the College Curriculum Committee (CCC). Direct measures will focus on gathering cluster course-level assessment data again, but the activity will be expanded to all disciplinary divisions. The committee will also begin review of the fall 2013 direct assessment data as part of its spring 2014 deliberations and incorporate it into its plan for Rochester Curriculum revisions.

- **2014–2015**: The College faculty will review any changes in the Rochester Curriculum learning objectives and cluster system that the Curriculum Committee recommends as a result of its 2013–2014 review. Direct assessment of the cluster system will continue and will include collection of course-level assessment data in a manner similar to the 2013–2014 plan.

The Class of 2012 senior exit interviews and special senior survey that explored cluster education found that the majority of students are using clusters to achieve three of the primary learning objectives of the Rochester Curriculum: broad knowledge of a disciplinary division, development of interests generated by cluster, and active pursuit of interests generated by clusters. The review of senior and alumni data did suggest one potential area of concern regarding the development of quantitative reasoning and scientific thinking skills for students majoring in the humanities. These preliminary findings have been incorporated into the 2013–2014 direct assessment of science, math, and engineering clusters and into College Curriculum Committee deliberations for Rochester Curriculum revisions.

Assessment of the Writing Requirement

In addition to assessment of the cluster program, College-wide assessment includes assessment of the writing requirement. The College Writing, Speaking, and Argument Program employs an incoming student placement process as well as an intensive formative assessment process as part of essay and research paper grading. In this manner, students and course instructors can use feedback from revisions of written essays and research papers to improve skills during the course. An end-of-term student survey asks students to reflect on learning. The survey results are consistently quite high for all learning goals. Table 9.2 presents a sample of student survey feedback on learning for fall 2012.

Table 9.2. Student Perceptions of WRT 105 Strongly Supporting Their Practice and Learning in Curricular Areas (Fall 2012 sample, N-213)	
Area of Ability	WRT 105 strongly supports
Communication--Writing	
Writing to explore ideas	89%
Developing an interesting and debatable question	86%
Organizing ideas	83%
Writing to different audiences	63%
Drafting and revising	85%
Editing	80%
Critical Reasoning and Analysis	
Reading/viewing critically	83%
Formulating a thesis argument	83%
Using evidence and logical reasoning to support thesis argument	91%
Engaging counterarguments	82%
Technological Competence	
Locating sources	85%
Integrating sources (e.g., direct quote or summary)	78%

Program-level Assessment in Arts & Sciences

In collaboration with the director of assessment, each academic program in the College is engaged in an active program of assessment. The key goal of this effort is the development of assessment measures that are aligned with each program's learning objectives. Typically, the director first meets with program faculty to develop degree program learning objectives and to align them with required courses and course learning objectives. Together they create an assessment plan that includes both direct and indirect measures and an implementation plan to measure the achievement of program learning objectives. They design or choose existing assessment tools, with possibilities including senior exit interviews, a senior capstone project scoring rubric, external standardized exams, or scoring rubrics for specific program learning objectives. The director has also guided faculty in use of the Course Reflective Memo, a highly effective direct measure in which faculty review specific student coursework that pertains to course learning objectives. These course objectives, when aligned with program learning objectives, provide a rich, data-driven portrait of student learning as students move through their degree program. As a supplement, indirect measures, such as the senior, graduate student, and alumni surveys, are gathered and analyzed annually and sent to departments for review. Departmental assessment plans are available on the Arts, Sciences & Engineering Assessment website. In addition, the Arts, Sciences & Engineering assessment website contains useful assessment guidelines, tools, and templates that programs can use for student learning assessment. Table 9.3 presents the variety of direct and indirect School of Arts & Sciences undergraduate programs.

In consultation with undergraduate program faculty, the director prepares an annual assessment report reviewing and analyzing all assessment data against program learning objectives. The reports identify areas for improvement, which are then presented to the undergraduate curriculum committee. The curriculum committee reviews the previous year's findings and recommendations for change and considers whether the actions taken were sufficient to achieve program learning

objectives. Once the data are reviewed with faculty, the assessment director consults with faculty in developing pilot education innovation projects that address areas of need and assesses impact. Several examples of curricular changes resulting from this process are presented in the next section.

Another aspect of program assessment derives from the senior exit interview protocol, which asks students to reflect on their overall learning experience as well as specific learning achieved as part of general education and in-major learning. In the interviews, students are taken through a series of semistructured questions that explore the depth of learning in program core courses and senior projects. Written reports are presented to program undergraduate committees for review and action. An implementation plan for the exit interviews permits the director to review up to six programs annually:

- **Academic Year 2011–2012:** All BA and BS biology, brain and cognitive sciences, psychology, economics/financial economics, political science, international relations (about half of all undergraduates receive degrees from these six programs)

- **Academic Year 2012–2013:** math, applied math, english, chemistry, public health, history

- **Academic Year 2013–2014:** All engineering programs (this coincides with year before ABET accreditation review in 2014–2015)

- **Academic Year 2014–15:** All other arts ands ciences undergraduate degree programs

The assessment director disseminates information derived from these interviews to deans, the Curriculum Committee, and other College staff. Reports about specific programs are provided to undergraduate program officers.

Examples of the Impact of Assessment in the College

All School of Arts & Sciences undergraduate programs have developed an assessment plan with direct and indirect measures, completed at least one round of

Table 9.3. Summary of Assessment Method Implementation Status for Arts and Sciences Undergraduate Majors, Spring 2013												
Assessment Method	Develop assessment plan†	Senior and alumni survey data review, 2002–2010	Senior exit interview/focus group	Senior survey 2012, 2013	Senior capstone course/seminar/thesis review	STEM gateway course review (bio, physics, chemistry, calculus)	Core course review using faculty reflective memo or team review	Upper-level writing work-shop-review	Alumni survey 2013	External standard exam	Academic awards	Postgrad careers & graduate school admits
Direct (D) or Indirect (I) Measure		I	D	I	D	D	D	I/D	I	D	D	D
Anthropology	X	X		X	X				X		X	X
Biology*	X	X	X	X	Honors only	X	X	X	X		X	X
Brain and Cognitive Sci.	X		X	X	X	X			X		X	X
Chemistry	X	X	X	X	X	X	X	X	X		X	X
English	X	X			X		X		X		X	X
Economics*	X	X	X	X	Honors only		X		X		X	X
History	X	X		X	Honors only		X		X		X	X
Linguistics	X			X	X		X		X		X	X
Modern Languages and Cultures	X	X		X	X		X		X	X	X	X
Math*	X	X		X	Honors only		X		X		X	X
Music	X			X	Honors only		X		X		X	X
Political Science*	X	X	X	X	Honors only		X	X	X		X	X
Public Health	X	New		X	Honors only		X		New		X	X
Philosophy	X			X	Honors only		X		X		X	X
Physics*	X			X		X			X	X	X	
Psychology	X	X	X	X	Honors only		X	X	X		X	X
Religion and Classics				X			X		X		X	X
American Studies	X	New major										
Business		New major										
Digital Media	X	New major										
East Asian Studies	X	New major										

* All Majors
† learning objectives, methods, implementation plan

implementation, identified areas for specific improvements, and written at least one annual assessment progress report (though many programs have written two or more annual progress reports). The annual program reports document cycles of continuous improvement where assessment data are reviewed, areas of concern identified, curricular improvements identified, and a plan for implementing them generated. The assessment process has

led several departments to modify their programs. For example:

- The Department of Biology determined that students needed stronger competence in statistics and computation. In spring 2012, it developed a new course, BIO 214, to address this deficiency. In 2012–2013, core faculty reviewed the achievement of program learning objectives by gathering and reviewing representative student exam questions from core courses. That review led to the development a new course in computation for 2013–2014.

- The modern languages and culture programs implemented a new direct assessment method, the Brigham Young CAPE language exam, that all students complete at placement in the program and at program exit. This is used for assessment of student language requirements and to ensure that student language proficiency is to departmental standards.

- The history department developed a rubric for scoring student skills for all of the program's learning objectives, including framing questions, writing, research, knowledge of historical events, critical thinking, and analytical reasoning. Faculty were asked to apply the rubric to student work in upper-level history courses. A comprehensive review of faculty input found that students' skills were of concern in all areas except framing questions. In AY 2013–2014, the faculty will meet to develop a plan for curricular improvement that each faculty can implement in his or her course.

- The anthropology department has implemented a senior project scoring rubric for each program learning objective. Faculty rate senior presentations and written reports by rubric item. For the past two years, faculty have found that students have met or exceeded expectations in the program.

- Chemistry faculty have developed a detailed scoring rubric for scoring student lab reports in the senior lab course. Since students must complete several reports, the rubric has been

valuable in helping faculty and students identify key areas for improvement. The faculty have found that students have improved performance considerably since implementation of the rubric, especially in science writing and presentation of quantitative results.

In addition to these modifications of specific programs, assessment-related activities in the College in recent years have led to several broader educational initiatives. Some prominent examples include

- A review of factors associated with students failing to graduate within six years led to numerous modifications of College policies and support programs, including expansion of sophomore-level advising, revision of policies related to withdrawing from courses, and stronger enforcement of the requirement that students declare their major by the end of the sophomore year.

- Although the College has considerable success with retention in STEM disciplines, retention of underrepresented minority students in STEM lagged behind. In response, the College expanded its prefreshman year Early Connection Opportunities program and expanded the services of its Kearns Center for Leadership in Arts, Sciences & Engineering. The Hajim School of Engineering & Applied Sciences expanded intensive faculty and dean's team advising, peer mentoring, and STEM gateway math and calculus tutoring support. In the most recent AY 2012–2013, the school was able to increase its underrepresented minority student first year retention rate from roughly 50 percent in previous years to 95 percent this year.

- In the spring of 2012, the College began a review of STEM gateway courses shared by all engineering, science, and economics majors. The review's results impact student learning in all of these majors, particularly in students' first two years of study. These courses include introductory courses in biology, chemistry, physics, and calculus, which are taken by 60 percent of freshmen. The first-cut review revealed

statistically different levels of test performance for particular student groups. The faculty have begun to work with University IT and the director of education innovation and assessment in developing pilot innovations in CHM 131, PHY 113, PHY 114, and BIO 110. These changes are due for implementation in the 2013–2014 academic year. Innovations include clarification of learning objectives and adoption of active teaching and learning methods to engage students in learning. A Hajim School of Engineering & Applied Sciences faculty team has also begun to work closely with physics faculty to revamp the required gateway physics courses (PHY 121, 122) so that they are more closely connected to upper-level engineering courses for AY 2013 and 2014 roll-out. Direct assessment tests will be designed to evaluate the impact of these changes.

- In 2011–2012, in response to faculty requests to support the improvement of students' writing skills, Writing, Speaking, and Argument Program staff began to coteach writing modules in several upper-level undergraduate degree program courses. The writing program staff implemented the same intensive formative assessment process used by the staff in the primary writing requirement course, WRT 105. In addition, the writing staff worked with program course faculty in developing a grading rubric to provide guidance to students.

- A Portfolio Education Experience and Digital Portfolio team of faculty and students, formed in 2013, has developed concrete programs to implement experiential learning–oriented programs and the use of digital portfolios to apply theory and analytical skills in real world-oriented practice. The use of digital portfolios has been focused on improving students' professional communication skills. Several degree programs will pilot experiential learning activities to enhance hands-on learning, including the new audio music engineering program, the digital media program, and various public health majors. The Hajim School of Engineering & Applied Sciences is planning to require that students use digital portfolios to improve professional communication. Direct assessment methods will be implemented to assess impact on learning.

Hajim School of Engineering & Applied Sciences

Most of the undergraduate degree programs in the Hajim School of Engineering & Applied Sciences are accredited by the Accreditation Board for Engineering and Technology (ABET). The most recent reaccreditation process took place in 2009. Each program complies with ABET criteria for the assessment of student learning using direct and indirect measures, annual assessment data review, and documentation of continuous improvement. The College's assessment director works with the Hajim School's assistant dean for education and program faculty officers to ensure that assessment processes continue and data are reviewed for program improvement. Program learning objectives and course learning objectives are published for student review at the Arts, Sciences & Engineering Assessment website.

Assessment of Cocurricular Programs

The Office of the Dean of Students regularly uses surveys and focus groups to assess its programs. The Rochester Urban Fellows program, administered by the Rochester Center for Community Leadership, identifies eight discrete learning outcomes for students who participate in the program, and has devised pre- and post-tests to assess the extent to which students progress toward these outcomes during the program. One question, for example, seeks to measure students' level of competence in navigating the greater Rochester community. These data are complemented by qualitative feedback from the students as well as their project supervisors. Rochester Youth Year, an Americorps*VISTA program coordinated by the center, has taken a leadership role among Americorps programs nationally in devising learning outcomes for participants, and the center is partnering with a doctoral student to conduct in-depth research about the extent to which past participants achieved (or failed to achieve) those outcomes. More broadly, the center participates in the Multi-Institutional Study of Leadership on a

triennial schedule, which provides quantitative data on learning outcomes related to student leadership development, organized according to the social change model of leadership. The University was one of the participants in the inaugural implementation of this study in 2006 and has enjoyed robust response rates from students in the two implementations since then. Data from the study informed staff of key indicators that cocurricular programs impact, including community service participation and quality of collaboration with students of diverse backgrounds.

Data from both the conduct system and the CARE network is regularly collected and analyzed in order to recognize and respond to trends in student behavior. All fraternities and sororities must participate in a program called "Expectations for Excellence," through which they are assessed based upon their own goals from the previous year and during which they establish goals for the following year. The Students' Association, with guidance from the Wilson Commons Student Activities staff, oversees a similar assessment process with each of its student organizations and mandates this assessment by tying it to funding. Through the use of the Campus Club Connection system, the Student Activities staff collects and regularly reviews data regarding the level of student involvement in student activities.

Eastman School of Music

The Eastman School of Music's process of student learning assessment seeks to demonstrate that students have acquired knowledge, skills, and competencies consistent with institutional and National Association of Schools of Music (NASM) educational goals. Clearly articulated statements of expected student learning outcomes for all levels were developed in 2010. These outcomes appropriately integrate with each another, are consonant with the mission of the University and the Eastman School of Music, and are aligned with the NASM Student Learner Competencies.

Evidence is collected yearly and examined on a three-year cycle. Representative types of evidence include

- **Direct Evidence:** Admissions data over a five-year period (application numbers, offers, enrollment), total degree enrollment over a five-year period, time to degree, student jury data, general education data (written and oral communication), music academic core course data (Music Theory and Music History), yearly reports from department chairs

- **Indirect Evidence:** A program-specific Student Exit Survey given to all students completing their course of study in a given calendar year. This survey asks questions about the student's specific program level learner goals and the specific music academic core goals (Music Theory and Music History).

A two-hour meeting is scheduled with each department during the fall semester to discuss direct and indirect data, including what the students in the department report they learned, and to identify action items that will improve teaching and learning. Responsibility for follow-up is assigned to individual faculty members. The data collected and each department's final report are shared with the appropriate senior-level institutional administration. Follow-up on the action items occurs in the spring semester and is documented in the spring semester report to the provost's office. Over the course of the year, the Assessment Liaison Committee discusses these reports, assessment data, and the action items. The Eastman School of Music assessment reports will be found in the exhibit room.

The Eastman School of Music has its own humanities department, and the specific general education requirements have been approved by the National Association of Schools of Music. In sum, students take one common freshman writing course in the fall of their freshman year (FWS 121), in which, as part of the course, department faculty assess written and oral communication skills. The assessments have been conducted since 2010, and the department faculty continue to refine the assessment tool used yearly.

Overwhelmingly, the freshman writing faculty have found that the Eastman School of Music students have outstanding written and oral communication skills (only 2.4 percent of 120+ students failed to meet the established benchmark), however, they sometimes struggle with the finer points of writing such as thesis development, citation skills, etc. To address this concern, data from the freshman writing seminars have been triangulated with data from the Eastman Writing Center, where students work with writing counselors on a more individual basis. This information has been used to identify the need for and implement greater numbers of workshops in thesis development, citation, building a persuasive argument, etc.

The NASM stipulates that 25–35 percent of the undergraduate coursework in music should be general studies. The Eastman School of Music recently completed the self-study process for reaccreditation and anticipates full reaccreditation in summer of 2014. As a result, the programs are in line with the balance of coursework required by the school's accreditor.

The Eastman School of Music's assistant dean of academic affairs and director of assessment is responsible for ensuring that a process of continuous improvement takes place across the school and that each program measures student learning goals. Data collection occurs in the spring and is archived in the Office of Academic Affairs. In addition, data from Admissions and the Registrar's Office are requested as needed. Faculty for the Music Academic Core (Music Theory and Music History) are in the process of developing systematic methodologies for ensuring data collection at the course level. Undergraduate jury results are reported to the Office of Academic Affairs by each department's administrative assistants.

All programs at the Eastman School of Music have adopted the NASM Student Learner Competencies for program-level student learning assessment. In addition, all data are collected in the Office of Academic Affairs, and faculty review the data for specific programs on a rotating basis.

Institutional research data are reviewed over a five-year period, while specific student learning outcomes assessment data has been available since 2010. Reports encompassing all data are produced by the director of assessment on a three-year rotating cycle based on the degree level. Faculty whose programs are being evaluated attend a departmental forum in order to review and discuss the data and decide on any action items they deem appropriate. Those action items that improve current academic programs and lifelong learning opportunities for students are assigned to a faculty member or the department chair to investigate or implement, and the director of assessment documents the outcome of the action items in a subsequent report.

The Eastman School of Music continues to seek opportunities to communicate learning objectives to students (both program level and course level). The director of assessment recently consulted with the Department of Musicology to ensure that all courses have program- and course-level learning goals available to students on the course syllabi. The Departments of Music Education and Music Theory have developed learning goals that are readily available to students on the course syllabi. The music performance areas of the school recently added learning goals to all faculty syllabi.

All programs at the Eastman School of Music have implemented a continuous process of student learning outcomes assessment since 2010 and have assessments in place in order to collect and monitor the data. Units are regularly reviewing their assessments to ensure that student learning is being evaluated properly.

The School of Nursing

The Commission on Collegiate Nursing Education accredits the University of Rochester School of Nursing bachelor's degree nursing programs. The most recent accreditation round was completed in March 2013, and all the BS, MS, and DNP programs were reaccredited through 2023.

The National Council Licensure Examination for Registered Nurses Test Plan (NCLEX-RN) and American Association of Colleges of Nursing (AACN) *Essentials of Baccalaureate Education* provide a framework for curriculum objectives, content, learning activities, and student outcomes. To assure curriculum integrity, course objectives and learning activities are mapped to the School of Nursing Bachelor of Science Objectives and to the two national publications. The Dean of the School of Nursing oversees student assessment. Program learning outcomes and assessment processes for students in the BS degrees for RN and APNN (Accelerated Program for Non-Nurses) follow the standards of the Commission on Collegiate Nursing Education.

Four learning assessment outcomes are measured throughout the APNN program of study:

- Comprehensive Predictor: The purpose of the Assessment Technologies Institute (ATI) RN Comprehensive Predictor® 2010 is twofold. The first purpose is to provide students and educators with a numeric indication of the likelihood of passing the NCLEX-RN at the student's current level of readiness. The second purpose is to guide remediation efforts based on the exam content missed. This is achieved by providing a listing of topics related to missed items in the individual and group score reports. To provide the numeric indication of NCLEX-RN readiness, ATI engages in an extensive validation process involving a statistical comparison of student performance on the RN Comprehensive Predictor® 2010 and actual NCLEX-RN first attempt pass/fail status. The threshold for this outcome is that the school's average meets or exceeds the national average.

- Community Health Nursing Assignment: This allows students to analyze a community health issue relevant to the greater Rochester area. This experience involves providing care and/or education as a team in a designated community setting. The assignment occurs in NUR 377: Adult and Home Nursing, which is offered during the third semester of the APNN program.

Based on the course and clinical experience relative to community health, the student synthesizes learning in the program to address a community health issue with a focus on health literacy, health promotion, cultural and/or linguistic appropriateness, use of research/evidence to inform practice, and collaborative teamwork. A grading rubric developed by course faculty is used to measure student learning outcomes. The threshold for this learning outcome is that the class's average meets or exceeds a score of 90 percent.

- NUR 379 (Nursing Integration and Transition to Professional Practice) Capstone Clinical Evaluation Tool (CCE): The final clinical course in the APNN program is a mastery clinical experience. At the completion of this course, a final clinical evaluation is conducted using identified clinical competencies. A review of these final evaluations is conducted by course faculty to determine if the student has successfully completed the course. The threshold for this learning outcome is that at least 95 percent of the student group will successfully achieve these competencies.

- NCLEX-RN: Entry into the practice of nursing in the United States and its territories is regulated by the licensing authorities within each jurisdiction. To ensure public protection, each jurisdiction requires a candidate for licensure to pass an examination that measures the competencies needed to perform safely and effectively as a newly licensed, entry-level nurse. The National Council of State Boards of Nursing develops the licensure examination for registered professional nursing, the NCLEX-RN, that is used by state and territorial boards of nursing to assist in making licensure decisions. The threshold for this learning outcome is that the school's average meets or exceeds the national average.

Registered nurses who have graduated from hospital diploma programs or associate degree programs apply for admission directly to the RN completion baccalaureate program (RN to BS). The school also has

an RN to BS to MS program. Registered nurses admitted to this program earn both the BS and MS degrees. There are three learning assessment outcomes that are measured throughout the RN to BS program of study:

- **Capstone Project:** For the Capstone Project, students have the option to complete either a Performance Improvement project focusing on a practice-based quality or safety issue identified by students in their leadership course (NUR 354: Concepts of Leadership and Management), or a Health Promotion/Disease Prevention Project, which is conceptualized as part of their Population Health course (NUR 356: Population Health). In either case, the project is planned in a prior course, feedback from faculty is incorporated, and the project is subsequently implemented and evaluated in NUR 357: RN to BS Capstone Course, the final course in the RN to BS program. Evaluation rubrics for the projects are comparable. The threshold for this learning outcome is that 95 percent of the student group will successfully complete this project.

- **Community Health Nursing Project Plan:** The Community Health Nursing project allows students to analyze a community health issue relevant to the greater Rochester area. This experience involves identifying a population at risk, exploration of the determinants of health, and working with leaders at a designated community agency to plan a health promotion or disease prevention intervention. This assignment occurs in NUR 356: Population Health, which is offered during the final semester of the RN to BS program. The student synthesizes learning in the program to address a community health issue with a focus on health literacy, health promotion, cultural and linguistic appropriateness, use of research/evidence to inform practice, and collaborative teamwork. The threshold for this learning outcome is that 95 percent of the student group will successfully complete this project plan. Students may subsequently choose to implement and evaluate the project in their

capstone course, which immediately follows the Population Health course.

- **Professional Portfolio:** The professional portfolio is an authentic assessment tool to measure prior learning through formal education and experience. The portfolio is compiled during NUR 350 RN to BS Transition to Professional Nursing Practice. The threshold for this learning outcome is that 95 percent of the student group will successfully complete this project.

Syllabi for all courses clearly and consistently state requirements to be completed by the student and how students' course grades will be determined, accompanied by depiction of the grading scale appropriate to the program. Varied avenues for demonstration of achievement of course objectives are used, such as papers, projects, presentations, and examinations.

Students receive faculty feedback on their performances via written comments on their assignments, individual meetings/dialogues, use of rubrics and email correspondence. At any time in a semester, faculty may issue academic alerts to students who are in jeopardy of failing a course. Faculty members are encouraged to indicate specific behaviors that the student can perform to be successful in the course. Copies of academic alerts are forwarded to the School of Nursing Registrar, the associate dean for education and student affairs, the appropriate program director, advisor, course coordinator, cohort coordinator, and the student file. It is the student's responsibility to initiate a meeting with his or her academic advisor and to work collaboratively with that advisor and course faculty to develop a plan for successful course completion. Outside resources (such as test taking workshops or a writing tutor) will be identified and offered to the student as needed.

There are several committees that review student learning data and ensure that the data are used in program improvement. The Curriculum Committee is specifically charged with overseeing consistent incorporation of the School of Nursing mission and goals across programs. It reviews and recommends action to faculty on guiding documents and program/

course offerings, working in collaboration with an undergraduate program subcommittee. The program subcommittee recommends to the Curriculum Committee new course offerings and revisions of existing course and clinical objectives, course descriptions and titles; provides ongoing evaluations of the overall curriculum for the programs; recommends benchmark criteria to the Curriculum Committee for program evaluations and to the Student Affairs Committee for student outcomes; and recommends policy regarding student admissions, progression, and graduation to the Student Affairs Committee.

The Curriculum Committee requires that for each new course and ongoing course evaluation, the course description, course objectives and/or clinical objectives must explicitly address (at least some of) the terminal objectives/goals of the program. Ongoing and formal evaluations (conducted every five years) include ensuring that content of the collectivity of courses in a program fully addresses the program goals and expected student learning outcomes, as mapped to the American Association of Colleges of Nursing *Essentials of Baccalaureate Education for Professional Nursing Practice*.

The Commission on Collegiate Nursing Education re-evaluates programs on a periodic basis. Programs are required to conduct a self-study of their quality and effectiveness. The self-study document must include data and other information about the program and must demonstrate that this information is analyzed and used in program improvement efforts. In the self-study document, programs identify strengths, areas for improvement, and plans to address continuous improvement.

A comprehensive on-site evaluation is conducted by the Commission on Collegiate Nursing Education (CCNE) to (a) validate the findings, conclusions, and information contained in the self-study document; (b) to collect information to be used by the Accreditation Review Committee and the CCNE Board to assess compliance with accreditation standards; and (c) to review the processes that program officials and faculty have

established to ensure continued self-improvement for the programs.

In addition, each dean of programs that hold CCNE accreditation is required to submit regular reports to CCNE, providing statistical data and other information about the parent institution, programs, faculty, and students. These Continuous Improvement Progress Reports must demonstrate continued compliance with the accreditation standards as well as ongoing program improvement.

Graduate and Professional School Assessment

Learning assessment at the graduate and professional school level at the University of Rochester has traditionally been driven by accreditation processes associated with the school or subdiscipline. The learning assessment processes for graduate programs not covered by accreditation processes have or are being developed through University initiatives accelerated since 2009. One of the key components of this process was the creation of the Assessment Liaison group, supported by the provost's office. Liaisons are specifically designated and charged representatives of each graduate and professional school; they meet regularly, are linked to the assessment processes in their schools, and formally report on the status of their programs to the provost. This has provided important continuity in such a highly decentralized university.

Assessment at the graduate level traditionally has been perceived as something that cannot be mass produced, with success reduced to explication of a few numbers. Through persistent effort, however, the school has introduced the the idea of formal assessment as specifically tailored to specific tasks and disciplines. The success of this effort is illustrated by a quote from one of the professional school's assessment summaries:

> The faculty at large has become aware of [assessment of learning], and they seem to have adopted a reasonable level of acceptance. There is a growing

awareness that this is not an exercise but a new part of the way we do business.

Arts, Sciences & Engineering

Assessment of graduate student learning in Arts, Sciences & Engineering is by far the most complicated area of assessment by virtue of wide-ranging areas of study and the number of graduate students in different programs. The School of Arts and Sciences and the Hajim School of Engineering offer 23 doctor of philosophy and 15 master's degree programs. Of these programs, only one is accredited by a professional accreditation organization; the PhD in clinical and social psychology is accredited by the American Psychology Association. That said, a broad array of professional organizations set expectations for program graduates. Full-time students are the norm in these programs, with 91 percent of the approximately 1300 graduate student in full-time status.

Current Arts, Sciences & Engineering graduate program assessment processes have built upon traditionally strong assessment practices in the graduate programs. These integrate new institutional processes for linking graduate student and alumni survey data with specific program assessment plans. In this manner, faculty interest in and commitment to the program assessment process and results have been strengthened as well.

A new process for graduate program assessment began in spring 2011 involving the dean of graduate studies, graduate program officers, and the director of assessment. The first step involved setting goals for overall graduate program assessment, identifying areas of concern, and developing an action plan. The director of assessment initiated an educational campaign about assessment strategies and resources, including the introduction of an online graduate program assessment guidebook and resource materials. Each program's assessment plan includes program learning objectives and outcomes that fit the program's goals and curriculum and integrates the program's traditional student learning assessment processes (general exams, grade standards in core requirement coursework, faculty

advisor evaluations, research project evaluation, and evaluation of theses and oral exams) with new methods. Existing end-of-year graduate student focus groups to gather student input on program academic processes and the annual graduate program review committee meeting were integrated into new processes. These new assessment measures included an annual graduate student survey in 2012 and an alumni survey beginning in 2013 and every three years thereafter.

The assessment process for Arts, Sciences & Engineering graduate programs is led by the director of assessment, working closely with the dean of graduate studies, and all individual graduate programs to ensure strong and continuing implementation of assessment processes that address key concerns for the graduate school overall as well as for each degree program. The assessment of graduate student learning is solidly established and expanding on a planned schedule. As of the end of the 2012–2013 academic year, nearly all graduate programs have implemented at least one cycle of program assessment data review and improvement. 60 percent of programs had developed a formal program assessment plan by fall 2012. By the spring of 2013, 90 percent had prepared plans and completed at least one round of assessment plans. The target goal is for all programs to have developed assessment plans and completed at least one round of assessment plan implementation by the spring of 2014.

Eastman School of Music

The Eastman School of Music is recognized as one of the premier music schools in the country. At the graduate level the Eastman School of Music offers master of arts, master of music, doctor of musical arts, and doctor of philosophy degrees. The school has a current enrollment of approximately 400 graduate students.

The Eastman School of Music utilizes a process of student learning assessment that demonstrates at appropriate points that the students have acquired knowledge, skills, and competencies consistent with institutional and NASM educational goals. Clearly articulated statements of expected student learning

outcomes for all levels were developed that appropriately integrate with one another, are consonant with the mission of the University and the Eastman School of Music, and are aligned with the NASM Student Learner Competencies. The Eastman School of Music completed the self-study process for NASM reaccreditation in 2012 and anticipates full reaccreditation in 2013. K–12 music teacher preparation programs at the Eastman School of Music are assessed via the National Council for the Accreditation of Teacher Education (NCATE) in conjunction with the Warner School of Education and were reaccredited in 2009.

All graduate programs at the Eastman School of Music implemented a continuous process of student learning outcomes assessment in 2010 and have assessments in place in order to collect and monitor the data. Departments are constantly reviewing their assessments to ensure that student learning is being evaluated properly. Objective assessment is a challenge in a setting in which individual and subjective assessment is predominant within the culture. The assessment procedures begun in 2010 serve as the baseline direct and indirect evidence moving forward. Assessment data are formally collected and reviewed annually at the departmental level, with major reviews of the five year data patterns scheduled every third year.

The assistant dean of academic affairs and director of assessment oversees the learning assessment programs at the Eastman School of Music. Department chairs provide direct data on an annual basis, and data collection occurs in consultation with them. Biannual reports on the learning assessment processes at the Eastman School of Music are submitted to the provost's office.

Assessment at the Eastman School of Music is systematic and cyclical. All MM and DMA programs were assessed during 2012, and MA/PhD programs will be assessed during 2013. Data collection is ongoing and longitudinal. Student learning outcomes for all programs have been developed and are consonant with both the University and the School's missions. Specific

places in the curriculum where the outcomes have been taught and evaluated were identified, and the faculty meet every three years to review the findings for the individual programs of study. Faculty are assigned any action items, and the director of assessment ensures that the process of "closing the loop" takes place with administrative assistance as needed.

School of Medicine and Dentistry

The Medical Education program at the School of Medicine and Dentistry leads to the doctor of medicine (MD) degree. The program admits 104 students each year for the four year academic program.

Medical students are rigorously assessed on both their factual knowledge and on their behaviors, habits, and attitudes. Factual knowledge is assessed via the multistep, multiyear National Board of Medical Examiners processes. Students are referred to their respective advisory deans, who work with the students individually to develop a tailored learning plan to address deficiencies.

Accreditation by the Liaison Committee on Medical Education requires medical schools to collect and use a variety of outcome and evaluation data to assess program quality, as well as to monitor and confirm that the educational objectives for the MD degree are being met by the overall curriculum. To this end, the Curriculum Steering Committee has required that a periodic comprehensive review of each individual course and clerkship be done at an interval not to exceed three years, with annual review by the Office of Curriculum and Assessment. In addition to meeting accreditation requirements, this process is also intended to provide feedback to course and clerkship faculty by outlining strengths and areas for improvement. Reviewing one-third of programs each year, the School of Medicine and Dentistry completed a full review cycle for the 27 courses and clerkships from 2007–2011 and is now well into the second continuous review cycle.

Oversight of learning assessment resides in multiple locations. The Office of Curriculum and Assessment

continues to refine current methods to assess student learning, as well as the quality of the curriculum, as does the Curriculum Steering Committee, the Instructional Committee, the senior associate dean for medical education, Faculty, fellow, and clerkship directors and student representatives are involved in these processes. Institutionally, the School of Medicine and Dentistry representative submits biannual reports on the learning assessment processes to the provost's office.

The student learning assessment systems in place at the School of Medicine and Dentistry are working effectively, driven by strong internal and external processes. The assessment results of the first and now ongoing comprehensive evaluation process have led to clear improvements in the program and promise more as the process becomes even more a part of the culture.

The scientifically focused graduate programs at the School of Medicine and Dentistry are divided into health sciences programs and biomedical sciences programs. These research-based offerings include one master of arts program, one master of public health program, nine master of science programs, twelve doctor of philosophy programs, and the MD/PhD program. MD/PhD students pursue the PhD portion of their training within one of these twelve programs. In the fall of 2012, School of Medicine and Dentistry graduate programs had more than 200 primary training faculty, 379 PhD students, 138 master's students, and more than 200 postdoctoral appointees. Training faculty are in a mixture of basic science and clinical departments, with many graduate programs supported by federal (e.g., NIH, NSF) training grants.

Learning assessment at the graduate level is embedded in many aspects of training students to become future scientists, practitioners, and professionals. Some graduate programs are accredited by organizations other than Middle States, including the American Academy of Microbiology, the American Association for Marriage and Family Therapy, and the Council on Education for Public Health. Additionally, all programs undergo continuous and rigorous internal and external review of

their structure, content, and assessment of student learning. For example, full circle assessment of student success is a necessary aspect of obtaining and sustaining federally funded graduate- and postgraduate-level training grants for 34 programs.

Oversight of assessment is on three levels: at the program level, each program performs annual reviews of individual students and of the program as a whole; at the school level, the Office for Graduate Education and Postdoctoral Affairs; and at the University level, where biannual reports on the learning assessment processes for the graduate programs are submitted to the provost's office.

All graduate programs at the School of Medicine and Dentistry appear to be running smoothly. Each program has an assessment plan in place, and they are all being actively evaluated. Assessment plans are fluid; programs seek constant improvement and use information garnered from regularly meeting and from annual evaluations to implement changes to student learning. While assessment for master's students is primarily managed at the program level, the Office for Graduate Education and Postdoctoral Affairs (GEPA) evaluates PhD students at the school-wide level via multiple mechanisms. GEPA recently implemented a process requiring programs to complete a rubric for first-year students to more objectively assess their progress and performance. GEPA also recently initiated a full evaluation process of the core courses taken by the majority of PhD students. This process is not yet completed, but the committee is already planning improvements related to communication of student expectations and instructor/course evaluation. Thus, the graduate programs have several well-functioning mechanisms in place related to assessment and continue to develop additional means to accurately assess student learning, particularly at an aggregate level.

School of Nursing
The School of Nursing offers nurse practitioner master's level preparation in a variety of specialty areas; a leadership in health care systems master's degree

program; a combined MS/PhD program that offers nurse practitioner preparation and an accelerated path to the research-focused doctor of philosophy in health practice research; and the practice-focused doctor of nursing practice degree program. Graduate enrollment in the school averages 200–250 students across the various programs.

Assessment of student learning and the nursing curriculum is an ingrained part of the culture at the school. School of Nursing programs are registered with the New York State Education Department Office of the Professions. The registration of a program means that it has met the state standards for accreditation as provided for in the *Rules of the Board of Regents* and the *Regulations of the Commissioner of Education.* The School of Nursing is accredited by the Commission on Collegiate Nursing Education, an educational accrediting agency that formulates and adopts accreditation standards for baccalaureate, master's, and doctor of nursing practice programs. The school is accredited currently from 2013–2023.

General oversight of the learning assessment system at the School of Nursing is by the senior leadership of the school, program leaders, and the faculty as a strong academic community. The Curriculum Committee is specifically charged with overseeing consistent incorporation of the school's mission and goals across programs. It reviews and recommends action to faculty on guiding documents and program/course offerings, working in collaboration with program subcommittees on new course offerings and revisions of existing course and clinical objectives, course descriptions and titles; provides ongoing evaluation of the overall curriculum for the program; recommends benchmark criteria to the Curriculum Committee for program evaluation and to the Student Affairs Committee for student outcomes. The Curriculum Committee requires that for each new course and ongoing course evaluation, the course description, course objectives and/or clinical objectives must explicitly address applicable terminal objectives/goals of the program. Ongoing and formal evaluations (conducted every five years) include ensuring that

content of the collectivity of courses in a program fully addresses the program goals and expected student learning outcomes, mapped to professional nursing standards and guidelines. Biannual reports on the learning assessment processes at the School of Nursing are submitted to the provost's office.

Overall, with the heavy accreditor expectations and state requirements, there are no programs that lack sufficient assessments of their key student learning outcomes. However, in demonstrating continuous quality improvement, faculty members developing and using grading rubrics have been sharing their experiences with others, and it is anticipated that the use of different types of grading rubrics will increase across the School of Nursing programs.

The William E. Simon Business School

The Simon Business School offers four master of science degrees, which are a master of business administration degree, a master of science in business administration degree, a master of science in accountancy, and a master of science in accountancy, as well as a doctor of philosophy in business degree. In addition, the Simon Business School offers the master of science in technical entrepreneurship and management degree, which it offers jointly with the Hajim School of Engineering & Applied Sciences. Simon Business School has an Executive MBA program in Bern, Switzerland, and a full-time master of finance program in New York City. The Simon Business School also provides the business courses for an undergraduate major in business. There are a total of 569 full time graduate students, including 297 MBA students, 226 master's program students, and 46 PhD students. The school is the smallest of the top-ranked business schools.

The Simon Business School has been accredited by the Association to Advance Collegiate Schools of Business-International (ASCSB) since 1996. Coinciding with a significant revamping of the MBA program in 2010 in response to market and student feedback, the school overlaid the five-step ASCSB Assurance of Learning Standards process for the core MBA courses. This has

provided the foundation for a five-year strategy moving to the new Assurance of Learning Standards implementation for MBA electives in 2012–2013, and then to several other master's programs and the Executive MBA program and, ultimately to the PhD program in 2015. In addition to a variety of annual reviews of assessment data collected through this process at appropriate departmental levels, major Assurance of Learning Standards process reviews will be conducted every three years once established in a program.

Oversight of the learning assessment programs at the Simon Business School is led by the senior associate dean for faculty and research. In addition to providing oversight, the senior associate dean for faculty and research takes an active role in setting the direction and priorities for the learning assessment effort and chairs two curriculum committees that formulate and monitor both short-term and long-term curriculum direction. A full-time faculty member is responsible for organizing, coordinating, and documenting the school's learning assessment activities. This faculty member also acts as the Simon Business School assessment liaison to the provost's office. Bi-annual reports on the learning assessment processes at the Simon Business School are submitted to the provost's office.

The Simon Business School learning assessment process has completed the initial core assessments. The MBA core course learning assessments have been largely completed, and the process is being extended to the MBA electives. The faculty members involved in the initial assessments were interested and engaged. The assessment process has functioned well and will continue to be used in ongoing assessments of all degree programs.

The Margaret Warner Graduate School of Education and Human Development

The Warner School offers a wide variety of education-related certifications, master's degrees, doctor of philosophy, and doctor of education degrees. In 2012–2013 the school has approximately 650 students, with 43 percent attending full time. About 20% are enrolled

in certification programs, and the remaining students are enrolled nearly equally in master's and doctoral programs.

Learning assessment is an ingrained part of the culture of the school because 90 percent of all degree or certificate offerings have formal assessment systems required by professional accreditation organizations or other outside regulations (such as the New York State Department of Education). Currently there are a total of 247 programs of study available to Warner School of Education students. Of these programs, 206 are assessed through NCATE guidelines; eight through the Council on Accreditation of Counseling and Related Educational Programs (CACREP) guidelines; six jointly via NCATE and CACREP, and 24 via a formal Warner School of Education assessment system utilizing a common format that is patterned after the accredited program assessment systems. All systems are designed for the full circle of assessment.

The Warner School of Education's most recent NCATE accreditation was in 2009, resulting in reaccreditation with only minor notations. These have since been addressed by the school. The CACREP program reaccreditation was conducted in 2011–2012, again resulting in full accreditation. This was a particularly rigorous process because CACREP has made significant changes in the standards required for counseling programs. Concrete plans are in place that have or are addressing notations from the review process.

Oversight of assessment programs at the Warner School of Education is on two levels. A formal Assessment Committee, composed of the dean, associate dean, the three program-area chairs, and the Warner School of Education assessment liaison to the provost's office addresses the global processes related to assessment. The day-to-day working tier of the assessment process is led by each program-area chair. The chairs are responsible for ensuring assessment processes are established and operated successfully. Biannual reports on the learning assessment processes at Warner School of Education are submitted to the Provost's Office.

The global assessment systems at the Warmer School are currently operating as intended. With this in place, the focus of future efforts is on the remaining Warner School of Education–assessed degree areas where the assessment systems are not formally implemented to ensure that their level of learning assessment meets the school's assessments expectations.

Summary and Findings

The University has significantly enhanced its assessment activities in recent years. This effort focused on allowing the individual schools the autonomy to manage assessment as deemed appropriate. The approach reflected a philosophy that assessment is best structured and managed as close to the academic programs and student as possible. Schools and departments have the unique perspective that allows them to best assess the quality of their academic programs.

Limited, University-wide coordination of assessment activities nonetheless can also provide some benefits. This resulted in the formation of the Assessment Liaison Group, in which all academic units could share information about assessment activities and resources. This group discusses best practices and determines future challenges in assessment activities, reporting through its chair to the provost. This system has the benefits of a more centralized approach while still empowering individual assessment liaisons.

The College and the Eastman School of Music have successfully implemented major changes to curriculum and student services as a result of assessment activities. This action of "closing the loop" from data gathering to assessment to process improvements is a major achievement for the assessment activities in undergraduate programs. It suggests that a culture of assessment has taken hold in these schools and programs.

All the professional schools and the undergraduate programs in the Hajim School of Engineering & Applied Sciences and in the Eastman School of Music are regularly accredited by disciplinary agencies. A variety of tools and systems have been in place for many years to help these program assess the quality of their academic offerings and to provide insight into potentially new educational activities. These tools make use of a variety of direct and indirect assessment methods.

Future assessment activities will build upon this strong foundation, with emphasis on "closing the loop" in the analysis of the quality of academic programs. In particular, the culture of assessment recently instilled in the College promises to yield continued improvements in academic quality and student satisfaction.

Chapter 9 Links

This list provides the URLs for the hyperlinks in Chapter 9 of this report.

University Assessment Liaison group
http://www.rochester.edu/provost/assessment/index.html

Arts, Sciences & Engineering Assessment website
http://rochester.edu/college/assessment/

Accreditation
http://www.rochester.edu/provost/middlestates/report/2013_CCNE_SelfStudy_FINAL_2_8_13.pdf

Conclusion

The University of Rochester is characterized by innovative academic programs, cutting-edge research activities, a strong sense of community, and an inclusive and welcoming spirit. The engagement of students, faculty, and staff in the institution is apparent in the wealth of academic centers, student groups, multidisciplinary programs, and learning opportunities across the University's campuses. The pride of alumni in their alma mater is reflected in their involvement in university initiatives, most especially in the successes of *The Meliora challenge*. The University benefits from this strong foundation moving forward.

The University's current success is built upon the successful strategies of the past. The Renaissance Plan improved the quality of the undergraduate academic programs, inaugurating the innovative Rochester Curriculum. Under President Seligman's leadership, the University's recent strategic plans have ushered in a period of substantial growth. Achievements include the growth of the student body from 8,300 to more than 10,500, the development of new academic programs throughout the University, and the creation of a number of new centers in computing, medical technology, and entrepreneurship. These activities have benefitted from an aggressive campaign to improve physical space in which the University has completed 24 major facilities projects, including new research space, new teaching space, and new residential space.

Over this period, the University has become the region's leading employer and has become much more deeply engaged with the Rochester community. The president's leadership of the Finger Lakes Regional Economic Development Council and chairmanship of the local United Way Campaign have served as strong examples of community involvement. Other activities within the University range from the development of Brook's Crossing and College Town to student leadership activities in local community affairs to innovative programs to recruit and prepare students from local underrepresented groups. The University is poised to continue building these relationships with the Rochester community as part of its strategic plan.

Financial stewardship of the University has been sound. The University has substantially reduced its endowment draw, and it is now engaged in a $1.2 billion capital campaign, its first comprehensive campaign in more than 90 years.

Governance and Planning

The University's recent success has stimulated planning on a wide variety of fronts. The University's Board of Trustees has recently approved a new set of ambitious strategic plans that call for faculty growth, continued strengthening of academic programs, continued enhancement of community connections, and further strengthening of the University's financial position. This call comes in the context of increased globalization, transformations in health care, declining national support for sponsored research, increased public focus on the costs and value of higher education, and the digital revolution. The success of the campaign, and the strength of University leadership, however, leaves the University with a strong base to succeed in this challenging environment.

This selfstudy opens with the University's mission statement. The University functioned without a formal mission statement until 2011, when it adopted this succinct statement of its essential goals:

> LEARN, DISCOVER, HEAL, CREATE—
> AND MAKE THE WORLD EVER BETTER

This statement, along with the Vision Statement and Statement of Educational Philosophy, establish the framework for University planning and governance. It is also in relation to this vision that the University actively assesses all of its programs and initiatives. This evaluative process is iterative and involves all key stakeholders in the campus community.

The budget and strategic planning processes for the University calibrate the needs of the individual schools, as represented by their deans, with the overarching vision and goals of the president and the Board of Trustees. The University has an effective and well-designed planning and budget process that utilizes its diverse resource base with sensitivity to school priorities. This sensitivity is most clearly observed in relation to the increasing financial role of the Medical Center, the management of the University endowment, and with the active renewal and replacement program for University buildings.

The success of the capital campaign, with $1.050 billion of the $1.2 billion campaign goal raised, will be a powerful generator of new initiatives in the future. These initiatives will proceed under the governance of an active and engaged president and Senior Leadership Group, Board of Trustees, and Faculty Senate. The strength of communications between these groups, as well as the leadership teams for the schools, has promoted a collaborative approach to the implementation of new programs and activities. The University's past successes in publicizing these initiatives and in obtaining campus community feedback will be continued through regular newsletters, town hall meetings, and special communications.

The information flow generated by these activities is an important part of institutional assessment. It is supplemented by various active assessment committees within the Board of Trustees and University leadership. Not only do these committees evaluate University processes and programs, but they also actively identify prominent local and national issues that require clear and effective institutional policies and activities. In the past few years, there have been reviews of such matters as campus security and of campus programs involving minors. In each case, these reviews led to refinements of University policies and practices.

Faculty and Staff

The University faculty is a distinguished group of researchers and educators, and their success is central to the university mission. To that end, the University has allocated significant organizational resources to ensuring that faculty receive the mentoring and resources necessary for successful careers. The creation a few years ago of a centralized Office for Faculty Development and Diversity has provided increased support to faculty throughout the University and has worked to establish programs helpful in attracting and retaining faculty. The University also provides extensive support for faculty research and encourages interdisciplinary collaboration. Recent successes in faculty recruitment and retention reflect the importance of these policies and initiatives.

In its dealings with faculty and staff, the University has well-publicized programs and policies for workplace safety, health and well-being, performance evaluation and improvement, and for the adjudication of grievances and personnel matters. It has a strong commitment to academic freedom and promotes a tolerant and open campus environment. The University has developed extensive initiatives to increase diversity and works actively to encourage an inclusive campus community. The University motto of "ever better" is most effectively realized through a staff and faculty contingent that feels respected, supported, and connected to campus life.

In the future, these activities will be continued and strengthened, with particular attention to faculty development. The University will also need to continue to analyze the age of the faculty and the possible impact of retirements. These developments may lead to new strategies around faculty recruitment.

Academic Programs and Assessment

The Rochester Curriculum distinguishes the College's educational system from that of peer institutions. The core of this system is the replacement of traditional

distribution requirements with a "cluster system." The cluster system separates offerings into three divisions (humanities, social sciences, natural sciences and engineering) and requires students to complete a major in one division and a cluster of three related courses in each of the other two. This curriculum has become a highly valued aspect of the undergraduate experience in the College and clearly has contributed to the enrollment success the College has seen in recent years.

The Eastman School of Music structures its curriculum differently than the College and has built a strong program around education in music and the liberal arts. In pursuing their liberal arts education, many students take advantage of College courses and programs, and an increasing number obtain joint degrees across the schools. More generally, the Eastman School of Music has developed a strong collegial environment that fosters collaborative performances, the development of cultural leadership skills, and technological proficiencies throughout the student body.

All undergraduates at the University benefit from a broad and diverse range of academic opportunities. These include programs commonly available at peer institutions, such as study abroad, undergraduate research, and internships, as well as distinctive Rochester programs such as the Take Five program that provides students with a tuition-free additional semester or year to pursue academic enrichment outside their majors. It is important that the College continue its efforts to demonstrate the value of the residential experience it provides.

Three areas of improvement involve the administration of academic programs:

- The University student information system is outdated and should be replaced to streamline administration, provide better tracking of student progress, and improve communications among departments, faculty, and students. Planning for this is under way.

- The University should accelerate its efforts to develop a framework for online learning, especially at the graduate level. Work toward this end is also ongoing.

- The University should continue to explore options for enhancing the quality and quantity of teaching spaces, particularly the issue of "having the right spaces in the right places."

In addition to exploring administrative improvements, the University has continued to expand and deepen its processes for student learning assessment. The professional schools, including the Hajim School of Engineering & Applied Sciences, have long histories of assessment through their accreditation agencies. Thus, the major improvements in assessment activities have derived from activities within the School of Arts & Sciences, particularly the College. Several years ago, the College created the position of director of assessment, with direct reporting requirements to the dean of the College. The director coordinates and oversees all College assessment activities at the department level. The effects have been dramatic. Every department has clearly identified learning goals and has implemented assessment programs, while the College has developed a program to assess its cluster system. These programs have yielded concrete results in modifying existing programs, and information about these activities is collected on the College's assessment website.

In the other schools, assessment liaisons have also been appointed, and these individuals have furthered student learning improvements already under way. These liaisons meet as part of the Assessment Liaison Group to discuss and coordinate assessment activities, with the chair reporting to the provost. Future activities for this group may include efforts to better understand the University's alumni, particularly modifications of alumni surveys to better understand their academic experience and value of their education on their subsequent career.

Student Life and Student Support

The increasing quality and engagement of the student body in campus life has been a central achievement of the University from the time of the Renaissance Plan. The individual schools have taken the lead in assuring a diverse and talented student body. Programs aimed at first-generation students and underrepresented minorities have been successful in smoothing the transition to campus life while enriching the student population. The high graduation rates for undergraduates—with six-year graduate rates at 85 percent—attests to the quality of these initiatives.

Another key element of this success is the vibrancy of student life in the University's campuses. The University has devoted considerable attention to creating a cohesive campus community. The increasing percentage of international students within the student population provides opportunities for intercultural engagement, and this is something that the University should actively encourage. There are more than 240 student organizations in the College, with students being given a strong voice in College governance. These combine with the many enhancements to student support services, including academic advising, career counseling, mental health counseling, leadership development, and support for at-risk students. The CARE Network, an online system for notifying staff of students who are struggling, deserves particular note, given its national recognition. In combination, this network of programs and initiatives helps ensure the safety and quality of campus life.

Final Thoughts

The University will continue its successes well into the future. It has strong foundations and a common purpose in education, research, clinical care, and administration and finance. The strength of the University community and its increasing ties to the Rochester community underscore its commitment to becoming "ever better" for years to come.

Appendix 1.1

Membership in the Working Groups

The Steering Committee cochairs recommended members for the six working groups to develop the self-study and assigned one or more of the MSCHE Standards to each group:

Working Group 1: Standards 1, 2, 3
Mission and Goals
Planning, Resource Allocation, and Institutional Renewal
Institutional Resources

Working Group 2: Standards 4, 5, 6, 7
Leadership and Governance
Administration
Integrity
Institutional Assessment

Working Group 3: Standards 8, 9
Student Admissions and Retention
Student Support Services

Working Group 4: Standard 10
Faculty

Working Group 5: Standards 11, 12, 13
Educational Programs
General Education
Related Educational Activities

Working Group 6: Standard 14
Assessment of Student Learning Outcomes

The six self-study working groups completed the following activities in order to accomplish their specific charges and to contribute to the broader institutional goals for the self-study:

1. Reviewed the document *Self-Study: Creating a Useful Process and Report* in order to gain a thorough understanding of MSCHE's expectations for the self-study process.

2. Reviewed the document *Characteristics of Excellence in Higher Education* in order to gain a thorough understanding of the particular accreditation standards and related evidence for which the group is responsible.

3. Reviewed, discussed, and addressed the research questions relevant to their specific charge.

4. Conducted a comprehensive review of reports, documents, institutional data, and other appropriate evidence related to the accreditation standards.

5. Conducted additional information gathering, as needed, in order to address the research questions and to prepare a suitable report for incorporation into the self-study.

6. Provided timely progress reports to the Steering Committee regarding the status of the working group's activities.

7. Provided advice and assistance in engaging the campus with the self-study process and communicating updates on the reaccreditation to the University community.

8. Provided a written report addressing the research questions for their group and demonstrating compliance with Middle States accreditation standards as embodied in the characteristics of excellence. Working group reports included suggestions to further refine institutional assessment practices and address institutional weaknesses.

The members of the working groups are listed below.

Working Group 1

Brent, Brian (cochair)
Warner School of Education
Earl B. Taylor Professor of Educational Leadership; Associate Dean for Graduate Studies; Chair, Educational Leadership Program

Bushinsky, David (cochair)
School of Medicine and Dentistry

John J. Kuiper Distinguished Professor of Medicine;
Chief, Nephrology Division; Associate Chair for
Academic Affairs in Medicine

Buehler, Julie
Office of the Vice President for Information Technology
and Chief Information Officer, Deputy Chief
Information Officer

Crawford, Holly
Office of Budgets and Planning
Associate Vice President for Budgets and Planning;
Deputy to the Senior Vice President and CFO

Gillooly, Jeff
Advancement
Executive Director, Presidential Advancement Services

Hansen, Ronald
Simon Business School
William H. Meckling Professor of Business
Administration; Senior Associate Dean for Program
Development; Director of the Bradley Policy Research
Center

Lord, Edith
School of Medicine and Dentistry
Professor, Department of Microbiology and
Immunology; Senior Associate Dean, Graduate
Education

Mavrinac, Mary Ann
River Campus Libraries
Vice Provost; Andrew H. and Janet Dayton Neilly Dean
of River Campus Libraries

Murphy, Charles
Office of Human Resources
Associate Vice President for Human Resources

Singh, Renu
School of Nursing
Associate Dean for Finance and Administration

Working Group 2

Groenevelt, Harry (cochair)
Simon Business School
Associate Professor of Operations Management;
Member, Faculty Senate

Kearney, Margaret (cochair)
Professor, School of Nursing; Vice Provost and
University Dean of Graduate Studies

Alani, Salim
Office of University Audit
Director, University Audit

Bell, Michael
River Campus Libraries
Assistant Dean for Information Technology and Finance

Crawford, Holly
Office of Budgets and Planning
Associate Vice President for Budgets and Planning;
Deputy to the Senior Vice President and CFO

Crummins, Richard
Office of Counsel
Senior Counsel for River Campus Legal Issues

Falciano, Vincenzo
Office of the Provost
University Director of Institutional Research

Fredericksen, Eric
Office of the Vice President for Information Technology
and Chief Information Officer
Associate Vice Provost, Academic and Research

Ravenel, Douglas
Arts, Sciences & Engineering
Professor of Mathematics

Working Group 3

Burns, Matthew (cochair)
Arts, Sciences & Engineering
College Dean of Students

Specht, Nancy (cochair)
Arts, Sciences & Engineering
Assistant Dean for Institutional Research and University
Registrar

Andolina, Elaine
School of Nursing
Director of Admissions

Ardizzone, Matthew
Eastman School of Music
Associate Dean of Admissions

Black-Colton, Pamela
Warner School of Education
Executive Director of Marketing and Recruitment,
Admissions

Burdick, Jonathan
Arts, Sciences & Engineering
Dean of Undergraduate Admissions and Financial Aid

Cerosaletti, Glenn
Arts, Sciences & Engineering
Director, Rochester Center for Community Leadership

Lee, Brenda
School of Medicine and Dentistry
Assistant Professor, Department of Medical
Humanities; Assistant Dean for Medicine Education
and Student Affairs

Lewin, Rebekah
Simon Business School
Executive Director of Admissions and Administration

McCullough, Sharon
School of Medicine and Dentistry
Director of Finance and Administration

Schmidt, Melissia
Eastman School of Music
Assistant Dean for Student Life

Veltre, Carol
School of Medicine and Dentistry
Medical School Registrar and Director

Working Group 4

Eickbush, Thomas (cochair)
Arts, Sciences & Engineering
Professor of Biology

Lewis, Vivian (cochair)
School of Medicine and Dentistry; Office of Faculty
Development and Diversity
Professor, Department of Obstetrics and Gynecology;
Vice Provost for Faculty Development and Diversity;
Deputy to the President

Baldo, Jonathan
Eastman School of Music
Professor of English

Dewan, Rajiv
Simon Business School
Professor of Computers and Information Systems;
Senior Associate Dean, Faculty and Research

Funkenbusch, Paul
Hajim School of Engineering & Applied Sciences
Professor of Mechanical Engineering; Professor of
Materials Science

Gamm, Gerald
Arts, Sciences & Engineering
Associate Professor of Political Science and History

Garzione, Carmala
Arts, Sciences & Engineering
Associate Professor of Earth and Environmental
Sciences; Chair, Department of Earth and
Environmental Sciences

Lyness, Jeffrey
School of Medicine and Dentistry
Professor, Department of Psychiatry; Senior Associate
Dean, Academic Affairs

Shuherk, Carol
Office of the Provost
Senior Associate Provost

Working Group 5

Marvin, Elizabeth (cochair)
Eastman School of Music
Professor of Music Theory

O'Brien, Suzanne (cochair)
Arts, Sciences & Engineering
Associate Dean

Brent, Brian
Warner School of Education
Earl B. Taylor Professor of Educational Leadership;
Associate Dean for Graduate Studies; Chair,
Educational Leadership Program

Hain, John
Eastman School of Music
Graduate Advisor and Director of Graduate Services,

Heinzelman, Wendi
Arts, Sciences & Engineering
Dean of Graduate Studies

Herendeen, Pamela
School of Nursing
Associate Professor of Clinical Nursing; Program
Director, Doctor of Nursing Practice (DNP) Program;
Senior Nurse Practitioner, Pediatric Practice, Golisano
Children's Hospital/Reach Program

Homerin, Th. Emil
Arts, Sciences & Engineering
Professor of Religion and Classics

Lambert, David R.
School of Medicine and Dentistry
Professor, Department of Medicine; Senior Associate
Dean, Medical Student Education

Rossen-Knill, Deborah
Arts, Sciences & Engineering
Associate Professor and Director, Writing, Speaking,
and Argument Program

Working Group 6

Hazen, Logan (cochair)
Warner School of Education
Assistant Professor of Educational Leadership

Masi, Barbara (cochair)
Arts, Sciences & Engineering
Director of Educational Initiatives and Assessment

Bush, Abra
Eastman School of Music
Assistant Dean of Academic Affairs and Director of
Assessment

Lawrence, B. Paige
School of Medicine and Dentistry
Professor of Environmental Medicine and Microbiology
and Immunology

Lurie, Stephen
School of Medicine and Dentistry
Associate Professor, Family Medicine; Director of
Assessment

Matteson, Lawrence
Simon Business School
Executive Professor of Business Administration

Powers, Bethel
School of Nursing
Professor of Nursing; Director, Evaluation Office;
PhD Programs Director

Appendix 1.2

Steering Committee Timeline

The steering committee members developed the following timeline for the self-study:

Semester	Tasks/Events
Summer 2012	Working Group Tasks: • Identify members for each working group • Review self-study research questions for each chapter • Develop initial list of documentation/evidence/data necessary to answer self-study research questions
Fall 2012	Preliminary Site Visit from Middle States Staff Liaison Working Group Tasks: • Review relevant documentation/evidence/data for each self-study chapter • Develop initial narrative responses to research questions
Spring 2013	Working Group Tasks: • Build initial draft of self-study chapters using the narrative responses to research questions • Submit draft chapters for review and circulation
Summer 2013	Compilation of penultimate self-study Review of self-study by key University stakeholders (e.g., Faculty Senate, Board of Trustees, president, provost, deans) and external audiences Prepare final self-study—editing and final layout
Fall 2013	Prepare to submit self-study for MSCHE site team chair Plan for MSCHE site team chair – initial visit to the University Revise self-study report as recommended
Spring 2014	Submit revised self-study Plan for MSCHE site team visit

Appendix 1.3

Administrative and Staff Support for Steering Committee and Working Groups

Alan Czaplicki
Deputy to the Provost
(effective November 2013)

Karen Johnson
Special Projects Associate

Sarah Kirchoff
Project Manager in University Communications

Juliet D. Sullivan
Academic Counselor and Writer

Sasha Tulgan
Deputy to the President

Jason Adsit
Associate Provost for Academic Administration
(through August 2013)

Appendix 1.4

Campus Map