TABLE OF CONTENTS

LIST OF APPENDIXES

A. SELF-STUDY STEERING COMMITTEE AND WORKGROUPS

B. ORGANIZATIONS AFFILIATED WITH UMB

C. UNIVERSITY OF MARYLAND BALTIMORE FOUNDATION TRUSTEES AND COMMITTEES

D. UNIVERSITY AND SCHOOL STRATEGIC PLANS

E. UMB AUDITED FINANCIAL STATEMENT

F. UMB SPACE INVENTORY

G. FACILITIES MASTER PLAN

H. BYLAWS OF THE UNIVERSITY SYSTEM OF MARYLAND BOARD OF REGENTS

I. BIOGRAPHICAL DATA FOR UMB SENIOR ADMINISTRATORS

J. SHARED GOVERNANCE DOCUMENTS

K. UMB ADMINISTRATIVE ORGANIZATION CHARTS

L. USM AND UMB POLICIES CITED IN SELF-STUDY

M. STUDENT ANSWER BOOK

N. MANAGING FOR RESULTS SUBMISSION FOR FY 2007

O. SURVEY OF FACULTY NON-INSTRUCTIONAL PRODUCTIVITY

P. SCHOOL APPOINTMENT, PROMOTION, AND TENURE POLICIES

Q. UMB FOUNDERS WEEK AWARD WINNERS

R. REPORT ON UMB INTERDISCIPLINARY ACTIVITIES

S. MHEC & BOR PROGRAM APPROVAL PROCESSES CHART

T. GRADUATE PROGRAM ASSESSMENT SURVEY

U. UMB WEB SITES

LIST OF FIGURES

LIST OF TABLES

*The tables have been placed at the end of the Self-Study.

EXECUTIVE SUMMARY

The University of Maryland Baltimore (UMB) is Maryland's public academic health, law, and social work university devoted to professional and graduate education, research, patient care, and public service. UMB offers 13 professional and graduate degrees through six professional schools—the University of Maryland Dental School and the Schools of Law, Medicine, Nursing, Pharmacy, and Social Work, and an interdisciplinary Graduate School—the University of Maryland Graduate School Baltimore. This constellation of schools and programs, unique among U.S. educational institutions, is located on 60+ acres on the west side of downtown Baltimore.

UMB, as a professional school campus, is characterized by a decentralized structure. The basic responsibility for setting and achieving academic priorities, designing and implementing curriculum, admission and progression of students, appointment and advancement of faculty, and research and scholarship resides with the faculty and deans of the six professional schools. The president provides overall leadership for the enterprise and for the central administration of the University. The offices of the vice presidents for academic affairs, administration and finance, external affairs, information technology, and research and development maintain central services and infrastructure and work in tailored collaboration with the schools to support accomplishment of their goals. Figure 1, at the end of the Executive Summary, displays UMB's organizational structure including the University of Maryland Medical System, the University of Maryland Baltimore Foundation, Inc, and University Physicians, Inc.

DESIGN OF THE SELF STUDY

The self-study came at an opportune time. David J. Ramsay, DM, DPhil, had been president of UMB for 10 years when planning for reaccreditation began in 2004. At his inauguration in 1994, President Ramsay challenged all of UMB's schools to achieve nationally recognized excellence. The self-study provided the opportunity to assess UMB's progress towards this goal and to identify new goals and indices of attainment of those future goals.

UMB selected the Middle States Commission on Higher Education (MSCHE) Basic Comprehensive Model to follow for its self-study. The self-study also encouraged a broad examination of the means for UMB to achieve its next-level goals. The financial, political, and cultural contexts of higher education and health care have significantly changed since 1994. Over the past decade, a cornerstone of UMB's success has been its partnership with the State of Maryland, which included increased state appropriations for operations and state support for capital construction. However, for the next several years, it is not realistic to assume state appropriations and tuition income will provide support for many initiatives beyond increased mandatory costs. Thus, for UMB to continue to make progress towards its goals, it must enhance all types of entrepreneurial income: extramural funding for research, service and training projects; patient/client care revenue; private support, particularly endowments; and corporate collaborations..

The Self-Study Steering Committee was appointed in September 2004 by President Ramsay. This committee included faculty, administrators, staff, and a student, with members from all schools, the Faculty Senate, and all UMB central administrative units. Dr. Karen Soeken, Professor, School of Nursing, served as chair of the Steering Committee. The Steering Committee organized the work of the self study into four work groups—Educational

Effectiveness, Student Support Services, Institutional Renewal, and Resource Development—which were formed and charged in November 2004. (The list of members of the Steering Committee and the work groups, together with their charges, may be found in Appendix A.) To ensure good communication and working relationships between the Steering Committee and UMB's leadership, an Executive Advisory Committee composed of the president of the University and the deans of the professional schools provided overall direction to the self-study. Primary support for the self-study, including staffing for the Steering Committee and the work groups, was provided by the UMB Office of Academic Affairs.

Work group reports were submitted in May 2005 and were reviewed by the Steering Committee. Based in large part on these reports, the self-study report was drafted during the summer of 2005 by the Steering Committee, reviewed during the fall of 2005 by representatives of the schools and administrative offices, and refined. In January 2006 the draft of the self-study report was emailed to all faculty, students, and staff at the University. During January it was available on the University's web site for comment, and it was discussed by faculty groups in the schools and at the Faculty Senate. All comments were reviewed and discussed by the Steering Committee. The self-study report was then revised and put into final form.

OUTCOMES OF THE SELF-STUDY

UMB's self-study had five goals, each of which is discussed below.

1. **Provide the Middle States Commission on Higher Education with the information and analysis necessary to make a decision about the institution's reaccreditation**.

The Steering Committee and the Work Groups believe that they have provided sufficient information and analysis for the Commission to conclude that UMB meets the MSCHE Standards for Accreditation.

- **Standard 1: Mission, Goals, and Objectives.** UMB has a clearly stated mission that defines its purpose within higher education in Maryland. UMB and its schools have goals and objectives that are consistent with that mission, relate to external as well as internal contexts and constituencies, focus on student learning, and foster institutional improvement.

- **Standard 2: Planning, Resource Allocation, and Institutional Renewal.** The University and its schools have clearly stated goals and objectives that are used for planning, resource allocation, and institutional renewal. Implementation and evaluation support the development and change necessary to improve and maintain institutional quality.

- **Standard 3: Institutional Resources.** UMB has the human, financial, technical, physical facilities, and other resources necessary to achieve its mission.

- **Standard 4: Leadership and Governance.** UMB's system of governance, within the context of USM and including the governance structures in the schools, 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 ensure institutional integrity and to fulfill its responsibilities of policy and resource development.

- **Standard 5: Administration.** UMB's administrative structure and services facilitate learning and research/scholarship, foster quality improvement, and support the institution's organization and governance. The President reports to the governing body and provides institutional vision and leadership.

- **Standard 6**: **Integrity.** UMB, because of the extent and sensitivity of its research involving human subjects, has very highly evolved ethical standards including academic and intellectual freedom.

- **Standard 7**: **Institutional Assessment.** UMB has developed and uses planning processes that assess overall effectiveness. Ongoing assessment of outcomes is accomplished through annual reviews including several state-mandated processes: Managing for Results, Performance Accountability, and Peer Assessment.

- **Standard 8**: **Student Admissions.** UMB's schools have very competitive admissions standards; the students who are admitted are highly qualified and have very appropriate backgrounds for our programs.

- **Standard 9**: **Student Support Services.** UMB and its schools provide a wide range of targeted student services intended to meet the needs of a highly diverse student body.

- **Standard 10: Faculty.** UMB has an outstanding faculty with responsibilities for instruction, research, and service. Faculty are responsible for the curricula in all UMB programs and schools.

- **Standard 11: Educational Offerings.** All of UMB's professional educational offerings are accredited by the appropriate national bodies. Learning is student-focused, and extensive resources are provided to support the curricula.

- **Standard 12: General Education.** Since UMB has no general education requirements, this standard does not apply to UMB.

- **Standard 13: Related Educational Activities.** UMB has few related educational activities other than delivery of two programs—Social Work and Nursing—at the USM Regional Education Centers at Shady Grove and Hagerstown. These programs meet all the same standards as the on-campus programs.

- **Standard 14: Assessment of Student Learning.** UMB meets this core standard since professional education accreditation requirements mandate assessment of student learning outcomes. However, the self-study did identify the need to detail how PhD programs assess student learning outcomes in their self-studies.

2. **To identify institutional strengths and weaknesses relative to each accreditation standard and to use this information to make recommendations for improvement.**

Regarding the Institutional Effectiveness Standards, the Steering Committee concluded that these processes were strong and well grounded. The objectives for improvement are clearly stated and reflect conclusions drawn from assessment results. The improvement objectives are directly linked to the mission/strategic plan of the University or of the individual school. The decision-making processes and the authorities that institute planning and renewal are clearly defined and support the principle of shared governance. All planning appears to consider the

economic, political, and social environment in which UMB operates. There is definite evidence of the changes resulting from continuous improvement efforts. Almost all planning employs an analysis of best practice models and benchmarks applied to the specific improvement effort. There is substantial evidence of quality improvement activities, and significant documentation of improvement efforts at the University and school levels. There is substantial and frequent review of resource allocation decisions; however, as might be expected, there is not consistent agreement about the wisdom of these resource allocation decisions.

In regard to the Educational Effectiveness Standards, the Steering Committee concluded that UMB should be characterized as very strong for the following reasons: the high national rankings for all UMB schools produced by our outstanding faculty and programs; the recent dramatic increase in extramural funding, which is the "report card" for research universities; the success with which all professional programs achieve professional accreditation; the rigorous monitoring of student learning outcomes established with reference to professional accreditation standards; the consistent use of information on student learning outcomes by faculty and administrators in program planning and curriculum change; and, finally, the extensive structures and personnel in all schools and programs to identify when students have academic or clinical difficulties and follow up with student support services.

An area identified for improvement is the review of the PhD programs. While all PhD programs are reviewed by an external site team on the basis of an internal self-study, at present the requirements of the self-study do not place sufficient emphasis on assessment of student learning outcomes. The Graduate School is establishing a committee to consider how to strengthen the graduate program review process.

3.   To identify how UMB's accredited academic programs assess student learning outcomes and the results of these assessment activities.

We discovered that although there is no single approach to assessing student learning outcomes, each school has a clear, well-publicized assessment plan that is applied consistently. In all of the professional programs, students must demonstrate mastery of skills in addition to mastery of knowledge. The outcomes of these assessments are consistent across the schools. No significant deficits were identified after all programs were reviewed. However, the standards by which PhD programs conduct their reviews will be strengthened.

4.   To understand the impact of UMB's centralization/decentralization of services on student support services, advancement and development, support for research, and achievement of institutional goals.

The basic conclusion of the self-study was that UMB's hybrid or centralized/ decentralized services to students, research, and development is functional for the campus and its schools. The balance between centrally provided and school-provided services is continuously reviewed to ascertain what changes might increase effectiveness. The balance is also affected by the resources and unique environments within which schools operate. For example, the School of Social Work relies more on central development services than does the School of Law, which has a different development program. Similarly, the Dental School has decided it would be more effective to delegate most of the responsibility for information technology services to the central technology office. In contrast, the School of Nursing is focusing on developing in-house

information technology services unique to its programs. Both approaches are effective and easily implemented within the existing structure. It was also the conclusion of the Steering Committee and the Work Group that the balance between school and central student support services worked well to meet student needs. Central student support services are responsive when school student service personnel request assistance and do not duplicate the services provided by the schools.

5.   **To identify institutional activities that can increase entrepreneurial income such as private philanthropy, external support for research, commercialization of technology, and new partnerships.**

Over the past ten years, UMB has been successful in managing a large, complex organization with multiple private partners and various funding streams. However, the future consequences for UMB are heavily dependent on such factors as the adequacy of state funding; limited revenues from tuition and fees; major cutbacks in patient care reimbursements; growth in the state Medical Assistance Program; potential size of the uninsured patient population; and proposed capping of the NIH budget. These factors require a funding model focused on the challenges that face any major university with an academic health center.

To enhance private philanthropy, the chief development officer at each of the professional schools has requested significantly increased support at the campus level, especially in the areas of annual giving, planned giving, and gift processing. At the time of writing, the directors of these areas are conducting a needs audit to develop measurable program goals for accountability to the units. Following this process, they will present the staffing and budgeting recommendations required to implement enhanced central functions.

UMB has experienced significant growth in entrepreneurial income from extramural funding sources and through increased efforts in the commercialization and protection of intellectual property. The development of the UMB BioPark represents a new partnership that is expected to boost the robust research capacity at UMB, with increased collaborations and enhanced reputation as expected outcomes.

In summary, the self-study proved a highly valuable experience for the University community to review its existing structures, the attainment of strategic goals and objectives to date, and its assessment processes. The conclusions of the self-study are documented in greater detail in the report that follows. Chapter 1 presents an overview of the University and major changes and accomplishments since the last accreditation visit; Chapter 2, "Institutional Context" discusses Standards 1-7; Chapter 3, "Educational Effectiveness," discusses Standards 8-14; and Chapter 4, "Outcomes of the Self-Study," assesses how the five goals of the self study were met.

University of Maryland
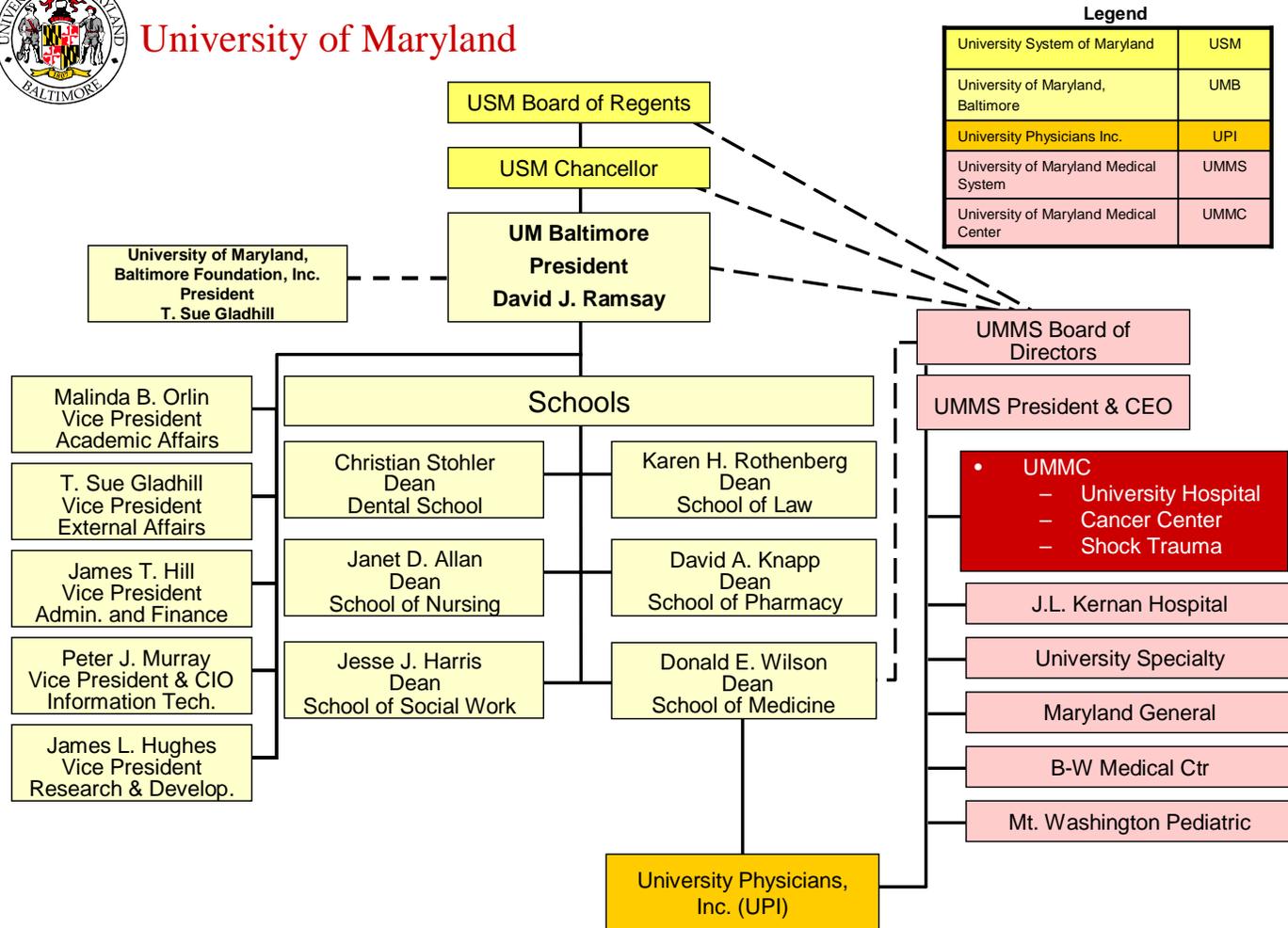
Legend	
University System of Maryland	USM
University of Maryland, Baltimore	UMB
University Physicians Inc.	UPI
University of Maryland Medical System	UMMS
University of Maryland Medical Center	UMMC

USM Board of Regents

USM Chancellor

University of Maryland, Baltimore Foundation, Inc. President T. Sue Gladhill

UM Baltimore President David J. Ramsay

UMMS Board of Directors

UMMS President & CEO

- UMMC
  - University Hospital
  - Cancer Center
  - Shock Trauma

Malinda B. Orlin Vice President Academic Affairs

T. Sue Gladhill Vice President External Affairs

James T. Hill Vice President Admin. and Finance

Peter J. Murray Vice President & CIO Information Tech.

James L. Hughes Vice President Research & Develop.

Schools

Christian Stohler Dean Dental School

Karen H. Rothenberg Dean School of Law

Janet D. Allan Dean School of Nursing

David A. Knapp Dean School of Pharmacy

Jesse J. Harris Dean School of Social Work

Donald E. Wilson Dean School of Medicine

J.L. Kernan Hospital

University Specialty

Maryland General

B-W Medical Ctr

Mt. Washington Pediatric

University Physicians, Inc. (UPI)

Figure 1. UMB Organization Chart

1. INTRODUCTION

1.1 OVERVIEW OF UMB

The University of Maryland Baltimore (UMB) is Maryland's public academic health, law, and social work university devoted to professional and graduate education, research, patient care, and public service. UMB is authorized to offer 13 degrees[1] through six professional schools—the University of Maryland Dental School, the Schools of Law, Medicine, Nursing, Pharmacy, and Social Work, and an interdisciplinary Graduate School—the University of Maryland Graduate School Baltimore. This constellation of schools and programs is unique among U.S. educational institutions. UMB is located on 60+ acres on the west side of downtown Baltimore and has almost five million gross square feet of space in 58 buildings.

Current enrollment at UMB (fall 2005) is 5,510 (Table 1).[2] Of this total, 16% are undergraduates; 84% are enrolled in post-baccalaureate professional and graduate programs. Nearly three-quarters are women (72%) (Table 2). Four-fifths (80%) of UMB's students are full-time. (Table 3). Minority students as a whole account for one-third (34%) of total enrollment; African American students constitute 18%. (Table 4). Maryland residents account for nearly three-quarters (74%) of the student population. Outside of Maryland, the top six states represented are Pennsylvania, Virginia, New York, California, New Jersey, and Florida. International students make up 5% of overall enrollment; more than half are enrolled in the Graduate School. The four countries contributing the largest number of students are the People's Republic of China, India, Canada, and South Korea.

In FY 2005, $95,979,633 in financial aid was put to use by UMB students. This amount of funding was an 11% increase over FY 2004, corresponding to a 10% increase in awards (Table 5).

The total number of degrees awarded in FY 2005 was 1,769, to 1760 graduates (some graduates received more than one degree). There were 444 baccalaureate degrees awarded, 547 master's degrees, 83 PhDs, and 75 other doctorates. There were 592 graduates of first professional programs, and 28 students received dental post graduate certificates (Table 6).

UMB's education, research, and clinical activities are conducted by 2,197 faculty (including librarians). Of this total, 1,562 (71%) are full-time and 635 (29%) are part-time

---

[1] UMB awards 13 degrees: Bachelor of Science in Nursing (BSN); two Bachelor of Science degrees (BS): Dental Hygiene and Medical and Research Technology; three professional master's degree programs: the Master of Social Work (MSW), the Master of Public Health (MPH), and the Master of Genetic Counseling; the Master of Science degree (MS) in several programs, including Nursing; the professional degrees of Doctor of Dental Surgery (DDS), Doctor of Medicine (MD), Doctor of Nursing Practice (DNP), Doctor of Pharmacy (PharmD), Doctor of Physical Therapy (DPT), Doctor of Science in Physical Therapy (DScPT), and Juris Doctor (JD); and the Doctor of Philosophy (PhD). UMB currently has 21 PhD programs: Anatomy and Neurobiology, Biochemistry, Biomedical Sciences, Epidemiology and Preventive Medicine, Gerontology, Human Genetics, Marine Estuarine Environmental Science, Microbiology and Immunology, Molecular and Cell Biology, Molecular Medicine, Neuroscience, Nursing, Oral and Experimental Pathology, Pathology, Pharmaceutical Health Services Research, Pharmaceutical Sciences, Pharmacology and Experimental Therapeutics, Physiology, Physical Rehabilitation Science, Social Work, and Toxicology.

[2] Tables are printed at the end of the report.

(primarily clinical faculty). In addition, UMB has 4,313 administrative, professional, and support staff (Table 7).

Campus revenues totaled $673 million in FY 2005. The largest portion of UMB's revenues is derived from faculty-generated research and clinical (patient) revenue, which in FY 2005 accounted for 66% of the total University budget ($446 million) (see Figure 2 below).

UMB FY 2005 Sources and Uses of Funds
Total Dollars: $673 Million

Sources of Funds
- Grants & Contracts 44.4%
- Auxiliary Services 4.2%
- Tuition & Fees 9.8%
- State Appropriation 19.8%
- Clinical 21.8%

Uses of Funds
- Auxiliary Enterprises, 2.7%
- Research /Service Grants & Contracts, 45.9%
- Admin. / Plant Operations, 14.9%
- Instruction & Academic Support, 36.5%
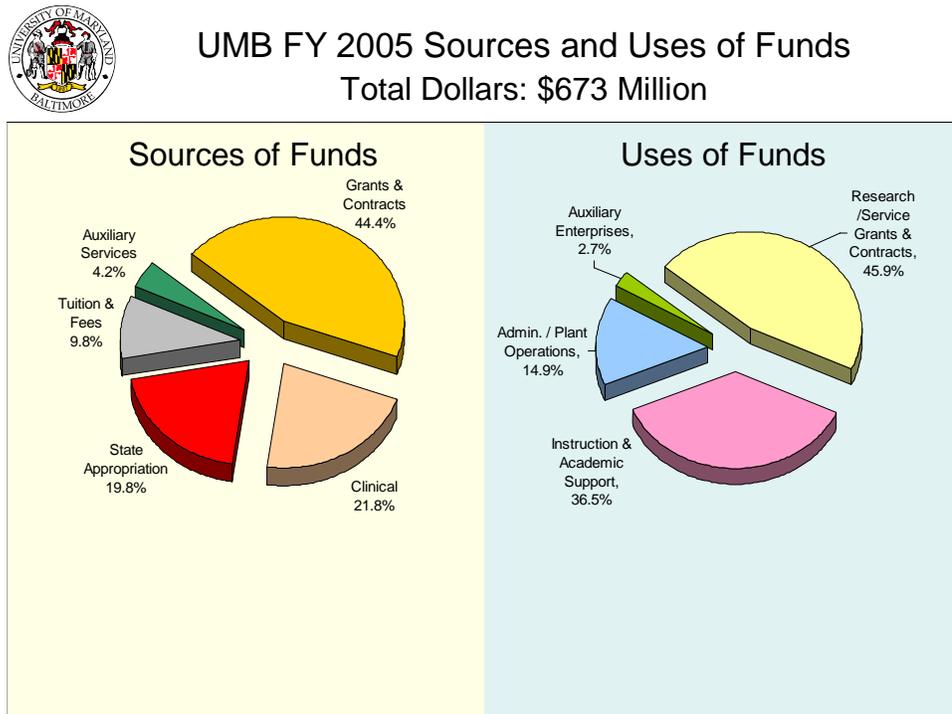
Figure 2. Sources and Uses of Funds, FY 2005

FY 2005-state appropriated funds were $133 million, or 19.8%. Tuition and fees revenue constitutes 9.8% of the budget, with auxiliary enterprises making up the remaining 4.2%. UMB invests 36.5% of its income in instruction and academic support ($245 million). It should be noted that the amount spent on instruction and academic support is more than the combined total of the state appropriation and tuition and fees ($199 million), 29.6%. Thus, clinical and research revenues help fund instructional costs.

There are three important organizations affiliated with UMB: the University of Maryland Medical System (UMMS), University Physicians, Inc (UPI), and the University of Maryland Faculty Dental Service Plan (UMFDSP). The structure of these organizations and the relationship with UMB are shown in Figure 1 at the end of the Executive Summary and are described in Appendix B.

UMB, as a professional school campus, is characterized by a decentralized academic structure. The basic responsibility for setting and achieving academic priorities, designing and implementing curriculum, admission and progression of students, appointment and advancement of faculty, and research and scholarship resides with the faculty and deans of the professional schools. UMB's academic programs in dentistry, law, medicine, nursing, pharmacy, and social work are responsive to profession-specific mandates such as accreditation, national trends, and

state workforce needs. (See Table 8 for a list of the professional accrediting bodies and the dates of the most recent accreditations.)

The president provides overall leadership for the enterprise and for the central administration of the University. The offices of the vice presidents of academic affairs, administration and finance, external affairs, the Center for Information Technology Services, and research and development maintain central services and infrastructure and work in tailored collaboration with the schools to support accomplishment of their goals. Thus, decentralized academic planning, appropriately, is a defining feature of UMB and explains many of our structures, procedures, and traditions and how we comply with the Middle States Commission on Higher Education (MSCHE) Standards of Excellence. It is also key to understanding how we approached this self-study for reaccreditation. In this report, as we examine UMB's performance and accomplishments against each of the MSCHE Standards of Excellence, we present a University section that explains the overall vision, and a school section that provides detail, unless the standard is addressed at the institutional level.

A comprehensive list of web sites for the programs and facilities referenced in the self-study may be found in the final appendix to the self-study, Appendix U.

1.2 CHANGES SINCE REACCREDITATION IN 1996

1.2.1 The University

During the past 10 years UMB has experienced enormous physical growth—more than $600 million in completed construction projects. Current construction projects total nearly $200 million, including a new facility for the Dental School (opening in 2006) and a new Campus Center to open in 2008. UMB has brought on-line new academic buildings for the Schools of Law, Medicine, Nursing, and Pharmacy, a new Health Sciences and Human Services Library building, student buildings, and new administrative space. Over the same 10-year period, the campus has grown from 32 acres to more than 60 acres, and comprehensive street-scaping and landscaping improvements have been implemented. With UMB serving as a catalyst, the neighborhoods surrounding the campus have been undergoing major revitalization as well. For example, the eastern edge of the campus has seen a focused effort to improve adjoining neighborhoods with the construction of new housing, the opening of the Hippodrome Performing Arts Center, and the development of several other commercial projects.

Research

One of UMB's proudest accomplishments is its impressive growth in external research funding with an overall sponsored research attainment in FY 2005 of over $410 million (Table 9). This more than doubles the $203 million achieved in FY 2000. External research funding is accepted as a key indicator of the quality of an institution's faculty. Consequently, this is one of the best indicators of how UMB faculty are advancing the frontiers of science through research and enhancing Maryland's reputation nationally. While the School of Medicine continues to be the principal generator of sponsored research activity, all of the schools experienced dramatic growth in the dollar value of grants and contracts. Chief sponsors include the National Institutes of Health (NIH) and the Maryland Department of Health and Mental Hygiene as well as foundations and pharmaceutical companies.

Over the past decade, UMB has continuously adapted its research to correspond to national trends in scientific research such as the NIH Roadmap for medical research. Congruent with the Roadmap, UMB has invested significantly in faculty and infrastructure for multidisciplinary research, including the clinical research enterprise. One manifestation of this investment is the fall 2005 opening of two new centers which join a number of existing multidisciplinary centers at UMB.

- The Center for Vascular and Inflammatory Diseases conducts research on conditions such as heart disease, rheumatoid arthritis, and autoimmune diseases, provides advanced clinical services for patients, and offers an education program for medical students, graduate students, and postdoctoral fellows. It acts as a catalyst for enhanced interaction among basic researchers and physician scientists at UMB who are involved in fields related to cardiovascular biology. The Center will facilitate the translation of laboratory research into clinical applications for more effective patient care.

- The Center for Nanomedicine and Cellular Delivery, with laboratories in the Dental School and the Schools of Pharmacy and Medicine, the Cancer Center, and the Colleges of Life Science and Engineering at the University of Maryland, College Park, is a scientific collaborative dedicated to exploring and advancing the use of nanosystems in the delivery of bioactive agents for diagnosis and therapy. The Center will provide training for faculty, students, and postdoctoral fellows in the emerging multidisciplinary field of nanomedicine.

Private Fundraising

Annual fundraising has increased by 250% over the past ten years, reaching nearly $53 million in FY 2005. The UMB campaign "Invest in Excellence" raised nearly $270 million over seven years, or approximately 156% of the original goal. As a direct result of this campaign, in 2000 the University of Maryland Baltimore Foundation, Inc. (UMBF) was reestablished. A knowledgeable and influential foundation board of trustees was recruited that is committed to the University's goals and is actively working on its behalf. The UMBF Board of Trustees advises the president on matters affecting UMB's campus, programs, students, faculty, employees and the community it serves. It promotes UMB through advocacy and the enlisting of financial support and manages and invests gifts and property for the benefit of UMB. (See Appendix C for a list of UMBF trustees and the UMBF committee structure.)

Economic Development and Public Service

UMB is an economic engine for Baltimore and the region. A 2005 study indicated that the campus generated $16.54 in economic activity for every general fund dollar of state investment. That study also showed that UMB is a job creation engine: for each state-supported budget position, nine positions were generated.

Public service is a hallmark of UMB because of the clinical activities of the schools, which serve thousands of low income Marylanders annually. Faculty, staff, and students contribute their time and talent to providing professional and public service, particularly to some

of Maryland's neediest and underserved citizens. This effort has increased by 20% in FY 2005 over FY 2001 according to the Faculty Non-Instructional Productivity Report.

- The Dental School provides free or low-cost dental care to patients from across the state. It is the largest provider of dental services to Medicaid patients, psychiatric patients, and others with complex dental problems.

- School of Medicine faculty physicians provide state-of-the-art patient care and accommodate more than 600,000 patient visits per year in Maryland alone. In the fight against infectious diseases such as HIV/AIDS and typhoid, the School of Medicine has established treatment facilities in South America, Africa and in developing countries around the world. It operates programs across the state through its Area Health Education Centers, its numerous clinics and its Health Network, which links, electronically, physicians and other health providers in remote areas of the state to specialists on the UMB campus.

- The School of Nursing maintains a wide array of clinical operations to provide needed community services to the Baltimore region and across the State of Maryland. These operations provide clinical training opportunities for students, who practice under faculty supervision. The School's clinical operations include 13 school-based wellness centers; the Governor's Wellmobiles, mobile health units which provide primary and preventive services to children, their families and the homeless across the state; and the Pediatric Ambulatory Center, an interdisciplinary collaboration between the School of Nursing and the Schools of Medicine, Pharmacy and Social Work.

Funding Trends

Of great significance for this self-study and for planning for future excellence is UMB's funding trends, displayed in Figure 3. The most important fact to note is the growth of entrepreneurial revenues both in absolute dollars and as a percentage of University revenues. In fact, the FY 2005 entrepreneurial income from faculty-generated research and clinical (patient) revenue accounted for over 66% of the total University budget. As will be mentioned in several places in this self-study, state appropriations have not materially increased, nor has tuition increased as a proportion of UMB budget despite significant increases in tuition rates. It is clear from Figure 3 that entrepreneurial income is the lifeblood of UMB's continued growth.
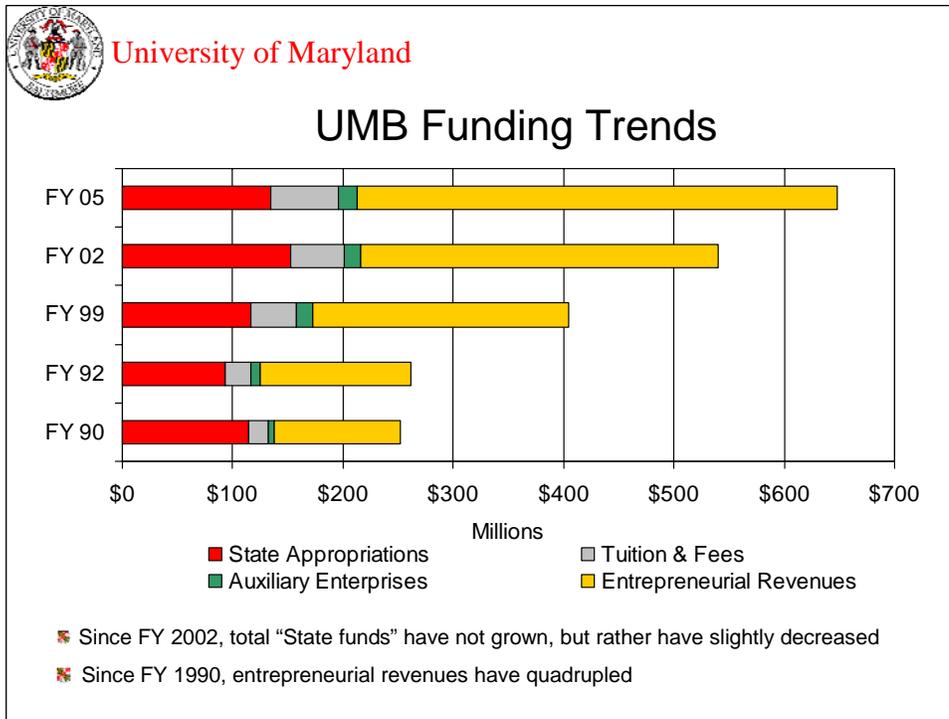
Figure 3. UMB Funding Trends, FY 1990-2005

Academic Programs

Significant changes in academic programs since the last accreditation include the authorization for UMB to offer the Master of Public Health (MPH) degree, which was approved by the Maryland Higher Education Commission and the USM Board of Regents in 2004, and the Doctor of Nursing Practice (DNP), which was approved in 2006. In addition, the School of Pharmacy completed transition to the all Doctor of Pharmacy program; in physical therapy, consistent with national mandates, the basic professional degree is now the Doctor of Physical Therapy.

The excellence of UMB's educational programs has been recognized nationally. According to the Association of American Medical Colleges (AAMC), the University of Maryland School of Medicine currently ranks 9th among public medical schools in total sponsored research and 20th for all medical schools. The Dental School currently ranks 3rd in NIH funding among dental schools nationally. Three of the School of Law's specialty programs—environmental law, health law, and clinical law—are rated in the top 10 by *U.S. News & World Report*; the School of Law itself is ranked in the top tier. By the same source, the School of Pharmacy is ranked 8th; the School of Nursing's master's program is ranked 10th, with four specialties ranked in the top 10; and the School of Social Work 19th.

1.2.2 The Schools

The following is a brief overview of UMB's schools, highlighting changes and accomplishments since the last accreditation.

Dental School

The Baltimore College of Dental Surgery, Dental School, University of Maryland continues to be a predominant provider of comprehensive and emergency dental services for individuals of all ages, including the underserved and disadvantaged, in Baltimore and throughout Maryland. The Dental School is home to an interdisciplinary Organized Research Center (ORC) on Persistent Pain. In addition, the Dental School is at the forefront in the development of oral health policies in the State of Maryland.

The accomplishments listed below illustrate the recent achievements of the School.

- The Dental School ranks third in the nation among all dental schools in total funding by the NIH.

- The Dental School provides free or low-cost dental care to patients from across the state; it is the largest provider of dental services to Medicaid patients, patients with HIV, psychiatric patients, and others with complex dental problems. The School serves 35,000 patients and completes 122,000 patient visits per year in its teaching clinics. The number of emergency patients has increased by 30% in the past year. Uncompensated care provided by Dental School faculty and students amounts to more than $2.5 million per year.

- The new Dental School building is nearing completion. This is the first comprehensive facility for dental education to be constructed in the United States in the last 30 years. The State provided $120.2 million, its largest ever commitment to an academic building. Four floors of the 10-story building are dedicated to clinics for patient care.

School of Law

The University of Maryland School of Law is one of two law schools in Maryland. An important mission of the School of Law is enhancing the legal system's ability to pursue justice. The Cardin Requirement is the School's most concrete expression of this commitment. Maryland is one of only two law schools in the country to require students, as a core part of their academic program, to provide legal services to people who lack access to such services. Students learn how the law operates in practice by providing legal services to people who are poor, socially disadvantaged, or otherwise lack access to the justice system.

The School of Law's commitment to and support of the pursuit of justice extends beyond this core curricular requirement. Four academic specialty centers in intellectual property, mediation, health and homeland security, and tobacco control have a public service mission, operating as a resource to national and local communities on these issues. Public conferences for the academic community, bench, and bar address critical issues facing the legal system. A variety of student organizations support public service projects. The student-run Maryland Public Interest Law Project provides summer grants for students to work in public interest organizations.

The following accomplishments reflect recent achievements of the School of Law:

- In 2005 the School of Law placed 41st among 177 law schools in *U.S. News & World Report*; its highest ranking ever. Three specialty programs ranked in the top ten in the country; the Law and Health Care Program ranked third, the Environmental Law

Program sixth, and the Clinical Law Program seventh. The law school is ranked 18th among all public law schools in the country.

- The School of Law publishes four student-edited journals: *Journal of Business and Technology Law, Journal of Health Care Law and Policy, Maryland Law Review*, and *University of Maryland Law Journal of Race, Religion, Gender and Class*.

- Through its affiliated programs, including Community Law in Action (CLIA) and Civil Justice, Inc., the School of Law's clinical program supports community-based efforts to improve the delivery of legal resources to underserved populations.

- The School of Law established the Maryland Intellectual Property Legal Resource Center, which provides legal services through a student-staffed legal clinic under the supervision of a licensed patent attorney and affiliated faculty. The Center operates in technology incubators throughout the state and provides forums for discussion of the ethical and public policies relating to the biotechnology industry.

- Recognizing the rapid increase in legal challenges related to international business transactions, intergovernmental cooperation, and human rights, the School of Law has established collaborations and externship programs with a variety of foreign schools and organizations including Bucerius Law School, University of Chile, the World Health Organization, and the Inter-American Court of Human Rights.

School of Medicine

The School of Medicine was established in 1807 and was the founding school of the University of Maryland. The School educates and trains more one-half of Maryland's practicing physicians.

The School of Medicine provides students with a broad exposure to clinical medicine and utilizes a problem-based approach to learning, including an emphasis on small group sessions. It was the first U.S. medical school to make computer informatics training an essential part of the curriculum. The School is also a national leader in increasing diversity in its student population; for the past several years, underrepresented minority students have constituted approximately 15% of the entering class. The program in medical and research technology offers both a baccalaureate degree—students may specialize either in medical technology (also called clinical laboratory science) or biomedical science research—and a master's degree. The Department of Physical Therapy and Rehabilitation Science, in 2002, instituted the entry-level Doctor of Physical Therapy (DPT) program, the new national standard in entry-level professional qualifications. It also offers the Doctor of Science in Physical Therapy.

In addition to the School's instructional functions, faculty in the School of Medicine staff the University of Maryland Medical Center (UMMC) and contribute staff to many other hospitals including the Veterans Affairs Medical Center in Baltimore. Faculty and students in the School are very active in research in medicine and the biosciences.

The following are a few of the School's recent accomplishments:

- According to the Association for American Medical Colleges, the School of Medicine ranks 20th among all 126 medical schools, and 9th among 75 public medical schools in research funding. It ranks 6th in clinical research funding per faculty member for all medical schools.

- In 2004, the School established the Center for Health Disparities to help identify and eliminate ethnic, racial, geographic, and socioeconomic differences in the diagnosis and treatment of illness, and to promote equal access to health care. The NIH-funded center coordinates patient care, research, education, and outreach initiatives.
- The School was awarded a $64 million 5-year grant, the largest in its history, which will be used by the Institute of Human Virology (IHV) to provide care, treatment and counseling to people living with AIDS in Africa and other developing countries.
- The School's Academy Award-winning film makers, Video Press, received a $1.9 million contract from the Discovery Health Channel to produce a 12-episode program titled "The Critical Hour." Filmed in part at the University of Maryland Shock Trauma Center, School of Medicine faculty are featured in each episode.

School of Nursing

The University of Maryland School of Nursing has pioneered a variety of innovative educational programs including the first nursing informatics program in the world and the nation's first nursing health policy program. It recently established the first nurse anesthetist and clinical research management programs in Maryland and provides the only nurse midwifery program in the state.

In fulfilling its service mission, the School maintains a wide array of clinical operations to provide needed community services to the Baltimore region and across the State of Maryland. Since the last self-study, a major addition to the School of Nursing Building was completed. The addition provides state-of-the-art classrooms and clinical simulation laboratories as well as enlarging the research space available to the School. The School utilizes a variety of asynchronous learning technologies to deliver an ever-expanding array of courses and programs to students throughout the country.

The following accomplishments further highlight the School of Nursing's achievements.

- Four graduate nursing specialty areas are ranked in the top 10 by *US News & World Report.*
- In 2004, the School established its first Center for Research Excellence—the Center for Occupational/Environmental Health and Justice, which focuses on occupational health, workplace violence, work environment/organization and health, and patient safety. In addition, the center has the goal of promoting social justice related to occupational and community health and reducing health disparities.
- The School of Nursing was designated a Pan American Health Organization/World Health Organization Collaborating Center for Mental Health Nursing in 2002.
- Total grant funding exceeds $7 million per year, including a $2.5 million grant from the Agency for Health Research Quality to study home care outcomes of expanded home health aide roles.
- The School of Nursing is one of eight national sites selected by the National League for Nursing to document the importance of simulation learning in nursing education.

School of Pharmacy

The University of Maryland School of Pharmacy is the only pharmacy school in the state. It offers the Doctor of Pharmacy degree (PharmD) and two PhD programs. The PharmD

curriculum innovations initiated by the School were incorporated into the new "Standards 2000" of the American Council on Pharmaceutical Education.

The School has addressed the shortage of practicing pharmacists in Maryland by increasing the size of its incoming PharmD class beginning in 2000. The School's PharmD program enrolls and graduates the largest proportion of African-American students of any non-Historically Black school of pharmacy in the country. The non-traditional PharmD pathway currently enrolls pharmacists who are employed full-time and hold the baccalaureate degree.

Selected recent accomplishments for the School of Pharmacy are given below:

- The School of Pharmacy was ranked 8th in the nation by *US News & World Report* in 2005 for the quality of its PharmD program, maintaining its ranking as one of the best schools in the country.

- The Drug Information Center, the world's first interactive, unrestricted, university-based drug information service, serves as a conduit through which health care professionals and consumers can obtain individualized responses to questions concerning pharmaceuticals and health-related topics.

- The Maryland Poison Center is staffed 24-hours a day by specialists who handled 60,213 poisoning or overdose calls last year.

- The School's "Enable Project," which has been partially funded by AmeriCorps, takes community volunteers and trains them as health workers who provide information and assistance to elderly residents with diabetes and a variety of cardiovascular diseases.

School of Social Work

The School of Social Work offers a continuum of accredited social work degree programs: the baccalaureate program at the University of Maryland Baltimore County, and the Master of Social Work and PhD programs at UMB.

The School's Social Work Community Outreach Service (SWCOS) is a vehicle by which faculty and students provide services to the community. Its mission is to create innovative models of social work education and services that strengthen underserved individuals, families, and communities in Baltimore and Maryland.

The Office of Continuing Professional Education has as its goal expanding and strengthening knowledge and skills at the post-master's level. Continuing professional education programs are offered at four sites across Maryland.

The School's accomplishments are reflected in the following examples:

- The School of Social Work is ranked 7th in the nation in faculty scholarship by the *Journal of the Council on Social Work Education*, and 19th among all schools of social work in the nation by *US News & World Report*.

- Students in the School of Social Work, through internships, provide over 500,000 hours of social work services to the region each year.

- The School's Institute for Human Services Policy (IHSP) conducted a review of Maryland State policies and procedures to establish community-based child protection systems on behalf of the Maryland State Council on Child Abuse and

Neglect. Another study reviewed investigations of suspected child abuse and neglect in out-of-home care settings in New Jersey.

- The School of Social Work expanded a partnership with the School of Medicine and the Department of Pediatrics to form the new Center for Families. This interdisciplinary center promotes safety, health, and well being for children, families, and communities through clinical and community services, research and evaluation, education and training, and advocacy.

- The Family Welfare Research and Training Group has multiple projects underway, including "Life After Welfare," a longitudinal, nationally acclaimed study of welfare leavers; and "Life on Welfare," a series of studies focusing on special populations in the current welfare caseload. The Group also provides training for state and local staff involved with welfare reform.

The University of Maryland Graduate School Baltimore

In collaboration with five of UMB's professional schools—The Dental School and The Schools of Medicine, Nursing, Pharmacy, and Social Work—the Graduate School offers MS and PhD degree programs in the health, life, medical, biomedical, and social sciences. Currently, about 1,000 students are enrolled in these programs. Doctoral students conduct research under the supervision of faculty, publish and present results of their studies, and apply for external grants. The Graduate School facilitates joint degrees with the University's professional schools including MD/PhD, PharmD/PhD, and DDS/PhD programs.

The most significant change in graduate education in the decade since the last accreditation was the consolidation, in 2005, of 13 medical and dental doctoral programs into the five-track Graduate Program in Life Sciences (GPILS). The creation of GPILS, responding directly to NIH Roadmap imperatives to encourage interdisciplinary research, ended departmentally-based doctoral programs and replaced them with interdisciplinary programs in Biochemistry, Microbiology and Immunology, Molecular Medicine, Neuroscience, and Public Health.

As can be seen, UMB has advanced significantly in quality over the past decade. It has also evolved to align more closely with national changes in the health, legal, and social work professions; academia, particularly academic health centers; and biomedical research. That advance has been both a University achievement and an achievement of each of the individual schools.

2.   INSTITUTIONAL CONTEXT

2.1 STANDARD 1: MISSION, GOALS AND OBJECTIVES

MSCHE Definition of Standard 1:

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

UMB's mission, goals, and objectives are developed through a strategic planning process that takes into account the plans of the University System of Maryland (USM), the State Plan for Higher Education in Maryland, and the results of planning processes in UMB's schools and major administrative units. UMB's mission statement is reviewed and approved by the USM Board of Regents and the Maryland Higher Education Commission (MHEC). The mission statement was revised in 2005 and approved by both bodies.

2.1.1 UMB Mission

UMB's mission statement emphasizes the preparation of highly qualified professionals and researchers in the health professions, law, and social work; the conduct of research and other scholarly activities in these fields; and a commitment of service to the community through the provision of patient care and social and legal services. The University's mission statement governs the University's overall activities and provides the context for the mission statements of the schools. The goals and objectives supporting the University's mission are defined by each school in accordance with its professional goals, objectives, and codes of ethics. These goals and objectives address student learning, professional training, research, provision of clinical services in accordance with ethical norms, and service to the University, the professions, and the broader community including patients, community organizations, and governments at various levels.

The text of UMB's approved Mission Statement reads as follows:

The University of Maryland, Baltimore (UMB) is the State's public academic health center and law and social work university devoted to excellence in professional and graduate education, research, patient care, and public service. Our mission is to provide outstanding and innovative education in health care, biomedical science, social services, and the law; to attract and admit diverse students of exceptional character and accomplishment; to carry out internationally recognized research to cure disease and to improve the health, social functioning and treatment of people; to translate discoveries into public benefit; and to ensure that the knowledge we generate provides maximum benefit to society.

The following are the mission statements of the six professional schools, which are consistent with the overall University mission.

2.1.2 School Mission Statements

Each school has a strategic planning process that includes development of a mission statement. The president approves each school's mission statement.

Dental School

The Baltimore College of Dental Surgery, Dental School, seeks to graduate exceptional oral health care professionals, contribute to the scientific basis of treatments for diseases of the oro-facial complex, and deliver comprehensive dental care. These accomplishments will promote, maintain, and improve the overall health of the people within Maryland and have a national and international impact.

School of Law

The fundamental mission of the University of Maryland School of Law is to contribute to the achievement of a more just society by educating outstanding lawyers, by advancing understanding of law and legal institutions, and by enhancing access to justice. Through excellence in teaching, we seek to prepare students for productive leadership and professional success in a wide range of careers and to promote in both students and faculty the highest standards of public and professional service. In our capacity as scholars, we seek to contribute to the development of legal knowledge and to enhance understanding of the role of law and justice in society. We underscore our public responsibilities as lawyers and our connection to the broader community by providing *pro bono* legal services and by serving as a resource for the profession, for the state and for community organizations and endeavors.

School of Medicine

The University of Maryland School of Medicine is dedicated to providing excellence in biomedical education, basic and clinical research, quality patient care and service to improve the health of the citizens of Maryland and beyond. The School is committed to the education and training of medical, MD/PhD, graduate, physical therapy and medical and research technology students. We will recruit and develop faculty to serve as exemplary role models for our students.

School of Nursing

The mission of the University of Maryland School of Nursing is to shape the profession of nursing by developing nursing leaders in education, research and practice. This is accomplished through outstanding baccalaureate, graduate and continuing education programs; cutting-edge science and research; and the School's innovative clinical enterprise.

School of Pharmacy

The mission of the University of Maryland School of Pharmacy is to enhance health through innovative pharmaceutical education, research, practice and public service. The School has also developed a vision statement for 2010: We lead the way in advancing the profession of pharmacy. In our innovative educational, research and practice settings, students gain the knowledge and skill to excel in a variety of pharmaceutical careers. Employing a spirit of discovery fostered during the course of their studies, our graduates are leaders wherever they practice, conduct research, or teach. They are essential contributors in the dynamic health care arena meeting the need for pharmacists within the State of Maryland and beyond. As a top-five

research school, we apply an integrative understanding of drug discovery, development and utilization in conducting groundbreaking and translational research. The outcomes from this research make a major impact on improving the quality of people's lives. We are a formidable influence in shaping drug policy and pharmaceutical practice. Our community service programs bring education and care to people in Baltimore City and throughout the State. These endeavors, coupled with our national and international collaborations, improve the effectiveness of pharmaceutical care throughout the world. Our faculty, staff and students create and sustain a welcoming and supportive environment where people develop professionally and use their knowledge and talents to realize this vision.

School of Social Work

The mission of the University of Maryland School of Social Work is to provide leadership to the profession by conducting educational programs, research, scholarship, service innovation, consultation and advocacy. In all of its programs, the School promotes social and economic justice and emphasizes advancement of the well-being of populations at risk. The primary way it meets its mission is through a continuum of programs of social work education—baccalaureate, master's, doctoral and continuing education—that produces competent and ethical social workers whose practice advances the well-being of all the people served.

The discussion of the strategic planning processes, goals and objectives of the University and the schools is continued in section 2.2, "Planning, Resource Allocation, and Institutional Planning."

2.2 STANDARD 2: PLANNING, RESOURCE ALLOCATION, AND INSTITUTIONAL RENEWAL

MSCHE Definition of Standard 2:

> ***An institution conducts ongoing planning and resource allocation based on its mission 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.***

UMB and its schools engage continuously in strategic planning. Implementation and subsequent evaluation of the 2000-2005 UMB Strategic Plan underpinned the development and change needed to support the University's achievement of institutional excellence outlined in Chapter 1, "Changes Since Reaccreditation in 1996." In 2005, the University developed a revised strategic plan for 2006-2011. The planning process and the updated goals and strategic initiatives are described below, followed by a description of the strategic planning processes in the schools. Copies of the University and school strategic plans may be found in Appendix D.

2.2.1 Planning

Strategic planning at the campus level takes into account two different contexts. First, UMB develops its strategic plan within the framework of the USM strategic plan, which is the overarching plan for all the institutions in the USM system, and of the State Plan for Higher Education in Maryland. Second, because of UMB's highly decentralized structure, the University's strategic planning process is a grass roots undertaking that builds upon the mission and goals of the professional schools, which, in turn, are based on many factors including trends in the profession and professional accreditation criteria. This kind of decentralized planning process is typical of academic health centers. Thus, planning at UMB is both a top-down and a bottom-up process.

University Planning

The USM Board of Regents adopted the update of its strategic plan, *The USM in 2010: An Update of the USM Strategic Plan*, on February 13, 2004. In response to this updated plan, President Ramsay appointed a UMB Strategic Planning Committee, which was chaired by Dr. Mary Leach, senior advisor to the president. The committee consisted of faculty and staff who had been significantly involved in recent strategic planning in UMB's schools. The new UMB Strategic Plan FY 2006-2010 was completed in June 2005.

UMB has adopted six key goals that form the basis of the strategic plan for FY 2006-2010. Accompanying each goal is a set of initiatives and performance measures. While the plan was developed to focus on the next five years, and the initiatives and performance accountability measures described reflect that timeframe, the goals are long-term. The UMB Strategic Plan has the following goals:

1. Evolve and maintain competitive edge as a center of excellence in the life and health sciences, law and social work and as a campus of professions committed to addressing complex social issues at local, state, and international levels.

2. Conduct recognized research and scholarship in the life and health sciences, law and social work that fosters economic and social development.

3. Recruit outstanding students, increase access for disadvantaged students, provide excellent graduate and professional education, and graduate well-trained professionals who will be leaders in their fields and in the development of public policy.

4. Encourage, support and reward entrepreneurship; increase fundraising and philanthropic support.

5. Provide public service to citizens in all sectors and geographic regions of Maryland; provide outstanding clinical care appropriate to mission.

6. Increase efficiency, effectiveness and accountability, and respond to fiscal pressures, both those that are unique to academic health centers and those affecting higher education generally.

2.2.2 School Planning Processes

All of the professional schools at UMB engage in planning on an ongoing basis. Resource allocation within UMB is based on an assessment of the results of that planning. Planning also is required by the professional accrediting agency for each of the schools. The plans for each school were developed by broad-based committees composed of faculty, staff, and administrators. Drafts were distributed widely for comment and approved by the faculty governance organization in each school before being submitted to the UMB president for approval. Each school's planning process and examples of the results of plan implementation are described below.

Dental School

In 2003, a new strategic planning effort was undertaken. The goals endorsed in April 2004 provided the framework for a completely new organizational plan. Committees were reorganized to encourage members of the Dental School community to share resources and respond to strategic opportunities. Committee membership now reflects the entirety of the Dental School, with staff, students, and other constituents joining faculty in an active role in committee work. In addition, the committee reporting structure was realigned to focus organizational efforts on goal realization. This major organizational shift has integrated the planning process, making it truly broad-based rather than the task of a single committee.

As a result of School-wide involvement, innovative approaches have been developed in response to needs identified at the grass-roots level. Emblematic of this shift is a streamlined approach to treating patients in pain, which is consistent with one of the Dental School's goals: "Our academic oral health center will become a trusted source of care for the most complex problems." The Urgent Care Clinic provides walk-in emergency care to individuals (not patients of record) who are in distress from oral disease. The clinical experience in which dental students respond to such issues under faculty supervision now begins earlier in the school day. This innovative schedule was put into place in 2004 to more effectively meet the needs of patients. The change has been well received by patients, students, and faculty.

School of Law

The School of Law does not currently have a written strategic plan, although an extensive self-study was conducted in 2002/2003 in preparation for the American Bar Association/ American Association of Law Schools site evaluation. That self-study serves as a guide for the School's mission and values. Planning on specific issues takes place within the context of the mission and values statements. The self-study process included a survey that asked faculty to identify and rank priorities for the School's educational program, faculty development, and governance. Several faculty meetings were held to discuss the survey and the draft document prior to final approval by the Faculty Council.

A case study example of a successful planning process by the School of Law can be given. In July 2000, the Montgomery County Department of Economic Development approached the School to discuss the establishment, in the county, of an Intellectual Property Legal Resource Center for high-tech start-up companies. Although the stimulus was an external request, the concept fit naturally with the School's strong business and intellectual property curriculum and with its nationally recognized Clinical Law and Law and Health Care programs. The School's initial steps included a needs assessment conducted by a team of faculty and students, which involved structured interviews with area business owners, researchers, service providers, venture capitalists, and representatives of law firms. Based on a detailed analysis of the interviews, a proposal for an Intellectual Property Legal Resource Center in Montgomery County was funded as a joint effort of UMB and the Montgomery County Department of Economic Development. Now in its third year, the Legal Resource Center provides services from its location at the Maryland Technology Development Center. Based upon follow-up assessments, the Center has expanded its staff and is moving to a statewide approach and a broadening of its focus to business law in addition to intellectual property.

School of Medicine

The University's vision and the six key goals articulated in the University's 2006-2010 Strategic Plan are directly connected to the supporting planning efforts in the School of Medicine. The University's statement embraces world-class status and service at home in Maryland; the School of Medicine fits squarely into those concepts.

More than 90% of the School's resource base comes from peer-reviewed and/or market-driven competitive activity in research, clinical service, education, and community service. Consequently, there is instant feedback about the quality and responsiveness of the School's programs, and continuous attention to planning and to an ongoing sense of entrepreneurship.

The School has completed and surpassed the goals of two successive five-year plans. Because the health care environment is changing so rapidly, the strategic plan is a dynamic work in progress and is reviewed on an ongoing basis. In addition, three School of Medicine committees, composed of faculty and staff, have been established to work on planning issues in several areas and also to provide regular updates to the School's Executive Committee and Council. The Fiscal Affairs Advisory Committee (FAAC), established in 1998, is responsible for the review of the consolidated mission-based budget and the monitoring of the fiscal performance of each department. The Clinical Affairs Advisory Committee (CAAC), established in 1998, was created to provide direction and oversight to the clinical operations of the School of Medicine. This committee is responsible for ensuring that the practices that constitute the faculty practice plan function at the optimum level. The Research Affairs Advisory Committee (RAAC),

established in 1999 is responsible for advising the dean on all matters affecting the School of Medicine's research mission and how to enhance it.

A unique aspect of the School's planning environment is its constant and significant engagement with strategic clinical partners that provide clinical education settings, clinical service venues for clinical faculty, and research opportunities. This element requires the mastery of additional sets of competition-driven organizational, market, program, and resource-planning cycles. A critical example is the present joint effort with UMMS to develop a new ambulatory care facility at UMB.

School of Nursing

The School of Nursing (SON) has engaged in strategic planning since the early 1990s. In December 2002, under the leadership of the dean, the SON embarked upon an effort to create a new strategic plan for the following three years. A Steering Committee of 11 faculty members and administrators was appointed by the dean. The committee gathered information as input to the strategic plan and then communicated the draft plan to obtain reactions from faculty, administrators, staff, students, and external stakeholders and partners. These communication venues included focus group discussions with faculty and staff, town meetings with students, an all-school retreat, electronic feedback, faculty tactics committees, and numerous stakeholder interviews. At a meeting of the SON Faculty Assembly, the faculty voted to endorse the plan. Planning and resource allocation for the SON are based on the strategic plan.

The resulting 2003-2006 Strategic Plan included a confirmation of the SON mission; a revised vision statement, and three strategic initiatives, each with three main goals. A "champion" has been appointed for each goal. The champion works with a faculty group to determine the tactics and deliverables for each of the three years of the plan. Progress towards achievement of the goals is evaluated annually, and new objectives and deliverables are developed as needed. When indicated, ad hoc committees have been formed to implement the tactics outlined in the plan.

One of the strategic goals is to "Prepare nurse leaders to shape and influence the profession and the health care environment." To meet this goal, the SON established the Institute for Nursing and Health Professionals Education to help address the severe shortage of faculty in U.S. schools of nursing. The Institute offers an online post-master's certificate in education. Currently enrolled master's and doctoral students also are eligible to take the sequence of courses offered by the Institute. The School of Nursing also established a research-based honors program to recruit outstanding students capable of clinical leadership and to provide a direct route to graduate study leading to the MS and the PhD. The program provides special opportunities to prepare these students as nursing leaders able to utilize research and to practice collaboratively in an interdisciplinary health care environment. The new clinical practice doctorate—the DNP degree—which has been discussed elsewhere in this report, also is an outcome of this goal.

Another strategic initiative is to "Establish Centers of Excellence that build on current strengths and market needs." To achieve this initiative, the SON has established its first center, the Center for Occupational and Environmental Health and Justice. The center consists of a core group of funded researchers who focus on such issues as violence prevention and musculoskeletal disorders in health care workers, the greening of health care, and social justice issues in health care. The School is developing two centers, Gerontology, and Disorders in Neuroregulatory Dysfunction.

School of Pharmacy

In May 2005 the Faculty Assembly of the School of Pharmacy adopted a strategic plan for 2005-2008. This plan incorporates a mission statement, a vision statement, and strategic initiatives and goals for the next three years. The 2005-2008 Strategic Plan was the product of a year-long effort by the Task Force on the Future of the School of Pharmacy, appointed by the dean in the spring of 2004. The task force included faculty members and selected staff and was facilitated by two outside consultants. The process included an all-School retreat as well as surveys and interviews with faculty members, staff, external stakeholders, and the School's Board of Visitors. Progress reports were discussed widely within the School.

The recently adopted plan takes into consideration the well-documented shortage of pharmacists in Maryland as well as the dramatic changes in the roles of pharmacists in the evolving health care system. Underfunding of the School's core Doctor of Pharmacy program, together with inadequate space, severely limits the School's ability to expand enrollment and achieve its full teaching and research potential in all areas. A national shortage of pharmacy faculty exacerbates the challenge. A proposal for an addition to Pharmacy Hall is supported by the USM Board of Regents and is in the governor's five-year Capital Improvement Plan.

A rigorous self-study of the PharmD program was undertaken as part of its reaccreditation by the Accreditation Council for Pharmacy Education, whose site visit took place in March 2006. The simultaneous work of the faculty committees established to prepare the self-study and the Task Force on the Future of the School of Pharmacy, which prepared the Strategic Plan, demonstrate the significant role of the faculty in determining the direction of the School and its many programs.

School of Social Work

The School of Social Work functions under a strategic plan that is reviewed, revised, and updated every five years. The School reviewed the implementation of the 2000-2005 Strategic Plan and undertook the process of creating a new strategic plan. A Strategic Planning Committee was appointed by the School's Faculty Executive Committee to work with the dean, faculty, and a range of key stakeholders (internal and external) in developing the new strategic plan. The dean charged the Strategic Planning Committee to modify and/or retire current strategic initiatives and goals as necessary, to develop new initiatives and goals as appropriate, and to develop recommendations for evaluating and tracking the progress of the strategic plan. The committee reviewed and revised the School's existing strategic plan to set the direction for the School for its next five-year cycle (fall 2005 through spring 2010). Nine work groups were established to identify the strengths, weaknesses, opportunities, and challenges associated with the nine strategic initiatives/goals and to develop indicators for evaluation. Work group reports were reviewed by the Strategic Planning Committee, clarified as needed, and used as input to develop the revised plan. The strategic plan was reviewed by the dean and is nearing completion by the faculty. An example of an achievement towards the goals of the 2000–2005 plan can be provided. As a strategic tactic under the initiative "Develop mechanisms through which the School systematically influences social policy," the School established the Institute for Human Services Policy in September 2002 as a vehicle for the dissemination of research-based faculty policy analysis.

2.2.3 Resource Allocation

Resource allocation at UMB is based on four core principles.

Achieve Mission-Driven Goals

Decisions on resource allocation fundamentally follow mission and strategic planning goals and objectives at the University and school levels. At UMB, most goals focus on excellence—in academic programs, research, faculty, and students. As described in Chapter 1, all of UMB's programs are nationally rated and therefore merit continued support and enhancement. Another strategic goal is contributing to meet state and national health workforce shortages. The deans, working with their faculty, are responsible for resource allocation within their schools according to their strategic plans, which are congruent with overall school and University goals.

Enhance Effectiveness and Efficiency

In balancing resource allocation between the schools and central administrative units, President Ramsay has chosen to maintain a frugal central administration, acknowledging that a university *is* its academic programs. However, in an institution such as UMB, centrally provided services must evolve to meet new administrative/managerial challenges and to become more professional, effective, and efficient and better able to support academic programs in a competitive environment.

Develop New Resources

Little of UMB's revenue is discretionary. Direct support for external research must be spent as contracted. State appropriations and tuition support existing academic programs. Mandatory increases in expenditures such as health care costs are usually not funded in the state appropriation. Environment influences, for example, the skyrocketing costs of electronic journal and database resources in libraries, place new demands on core areas. Therefore, resources must be invested in areas that will develop new resources

Flexibility to Respond

Given the highly volatile geographic, political, academic, service, and technological environments within which UMB and its schools work, the University needs to be able to respond expeditiously when new, unanticipated opportunities arise.

2.2.4 Institutional Renewal

Examples that are illustrative, but not exhaustive, of how UMB's principles of resource allocation contribute to institutional renewal follow.

Achieve Mission-Driven Goals

The primary goal of UMB is excellence in academic programs. In FY 2002 the state experienced the first of two years of budget shortfall, necessitating a sharp, unpredicted reduction of state support. State support (general funds) was reduced for two years in succession, from a high of $153.1 million in FY 2002 to $132.2 million in FY 2004. This was a $21 million (13.7%) reduction over the two years. President Ramsay, because of his conviction that the academic programs were least able to survive cuts, requested and received permission for substantial tuition increases. Moreover, he permitted the deans of the professional schools to keep all of the nearly $14.2 million increase in tuition and fee revenues, largely negating any

adverse impact upon the academic programs. Central administrative services at UMB thus absorbed the almost 14% reduction.

Enhance Effectiveness and Efficiency

A substantial administrative change was the establishment of the Center for Information Technology Services (CITS) in 2002, which resulted in improved University-wide information technology planning, greater coordination between centrally supported information technology activities and those in the schools, more automated and efficient campus operations and services through the use of state-of-the-art technologies, and the availability of additional information via newly implemented administrative and academic systems. CITS is now headed by a vice president and CIO in recognition of the importance of information technology to all UMB activities.

Also in 2005, the University created two new academic support offices. The Office of International Services was established to provide a focal point for services to international students, faculty, and staff. Because of the large number of postdoctoral scholars (400+) and their importance to UMB as well as the national movement to institutionalize their role in universities, the University Office of Postdoctoral Affairs was established to coordinate services, policies, and procedures for postdoctoral scholars and their mentors.

Develop New Resources

As noted in Figure 3 (see below), "UMB Funding Trends," most of UMB's funds come from what we describe as "entrepreneurial" faculty activity—research and clinical service. It illustrates that most of UMB's funding growth in the past 15 years has resulted from a quadrupling of entrepreneurial revenues. State appropriations have not materially increased, nor have tuition dollars, even though tuition rates have increased significantly and are approaching their de facto ceiling in most programs. It is clear from this figure that entrepreneurial income is the lifeblood of UMB.

The growing importance of entrepreneurial activity, both absolutely and relatively, has necessitated investment in programs, services, and approaches to management that support such activity. As the University's research and clinical programs have grown, new services have been created and others have been expanded.

In 2001 the Office of Research and Development (ORD) was separated from the Office of Academic Affairs. A new vice president, who has a commercial and development background, was appointed and given a mandate to expand support for faculty research and the commercialization of technology. The new research and development structure, which involved the commitment of substantial new resources, has provided the enhanced infrastructure needed to support the intensified focus on entrepreneurship. For example, the University seeks to capitalize on the intellectual property produced by its faculty. Since 1995, UMB faculty members have filed 780 patent applications; 130 have been issued thus far, and 45 licensing agreements with companies to commercialize technology are active. UMB has expanded its technology transfer operations to increase the number of patents and commercialization activity.
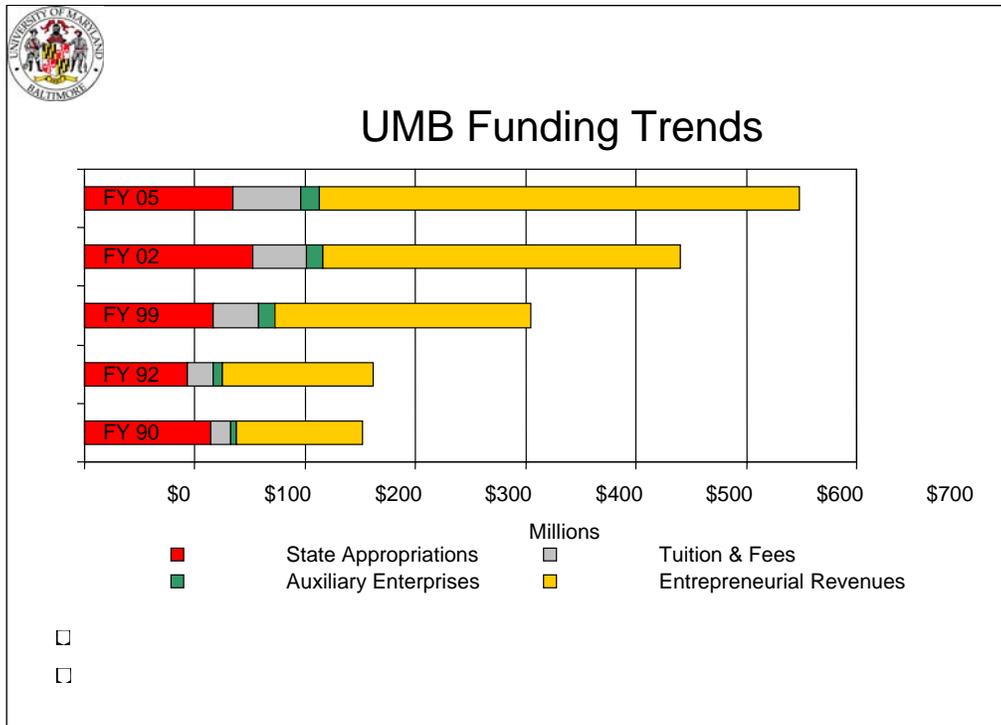
Figure 3. UMB Funding Trends

In addition, ORD was the key mover in the creation of the UMB BioPark, which connects private bioscience companies with UMB's research faculty and biomedical facilities and services in an environment of collaborative and commercial opportunities. In 2003 the UMB Health Sciences Research Park Corporation (RPC) was incorporated to oversee the development of the UMB BioPark. The RPC by-laws require RPC to support the UMB mission. In April 2005, RPC received a not-for-profit designation from the Internal Revenue Service. RPC is led by a private Board of Directors consisting of ten members. Directors serve staggered three-year terms. The Board is self-perpetuating, but the vice president of research and development at UMB must approve new members. The BioPark is a model of economic development well suited to UMB. It enhances research capacity, serves as a draw for entrepreneurial faculty, improves the community surrounding the University, and facilitates commercial opportunities by promoting translational programs that link basic research and clinical care competencies.

In 2005 the University created the new Office of Cost Studies and Analysis to provide the costing methodologies and practices used to support the development of the University's Facilities and Administration (F&A) proposal, and to perform cost analyses and studies as appropriate. This office also will be responsible for ensuring financial compliance with all federal, state, and local laws and regulations regarding grants and contracts and sponsored and non-sponsored projects.

Flexibility to Respond

An example of a response to a volatile environment is the creation by President Ramsay, shortly after the September 11th terrorist attacks, of the University of Maryland Center for Health and Homeland Security (CHHS). The Center was established to coordinate and expand on

the extensive scientific research, health programs, policy development, training, legal analysis, and government consulting related to homeland security that are conducted at the University. All UMB's schools and the Health Sciences and Human Services Library HSL participate in CHHS and have been called upon repeatedly by entities within the federal government, the state, Baltimore City, and surrounding localities to address a broad range of problems and policies pertaining to the war on terrorism. CHHS serves as a clearinghouse and focuses the extensive expertise and resources of the University on the important homeland security work carried out in the public and private sectors.

2.3 STANDARD 3: INSTITUTIONAL RESOURCES

MSCHE Definition of Standard 3:

> ***The human, financial, technical, physical 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.***

UMB has the human, financial, and technical resources and physical facilities to operate an academic health center, law, and social work university. However, UMB faces challenges to maintain its excellence. Resource planning is an essential element of ensuring that the new initiatives identified in the 2006-2010 strategic plan will be accomplished.

Over the past ten years, UMB has been successful in managing a large, complex organization with multiple private partners and various funding streams. However, the future consequences for UMB are heavily dependent on such factors as the adequacy of state funding; limited revenues from tuition and fees; major cutbacks in patient care reimbursements; growth in the state Medical Assistance Program and the potential size of the uninsured patient population; and the proposed capping of the National Institutes of Health (NIH) budget.

2.3.1 Sources of Support for UMB

Research

As was noted earlier, the faculty generated $410 million in external grants and contracts in FY 2005. These are valuable funds because they represent the primary mechanism by which new knowledge is generated. However, grants and contracts revenues are restricted in nature and cannot be used to address the basic funding needs of the campus.

State-Appropriated Funds

State-appropriated funds, or general funds, are important not only to UMB's continued growth and development, but also to the continuation of programs vitally important to the state's economic and social health and development. In FY 2005 UMB's appropriation provided 20% of its financial support (see Figure 2 in Chapter 1). Total campus revenues increased from $376 million in FY 1997 to $673 million in FY 2005, an average of 7.0% per year. However, the average increase in state general funds over the same period was only 2.9%. In fact, because of a substantial decline (13.7%) from FY 2002 to FY 2004, resulting from a recession in Maryland, state general funds were 12.8% ($19.6 million) less than the highest level received in FY 2002.

Tuition and Fees

It should be noted that UMB has a relatively small student body and therefore cannot meet its increasing fiscal obligations by increasing tuition rates. As a result of substantial increases in tuition during the FY 2002-2004 recession, the de facto ceiling on tuition has probably been reached in most UMB programs.

FY 2007 Budget Request

The FY 2007 Budget Request (the most recent budget information available) includes an average increase of 5.4%. These increases will provide for a 2.5% merit increase for faculty and staff, mandatory fringe benefits, funds to operate the new Dental School Building, a 10% increase in state-supported need-based financial aid, and the increased costs of fuel and utilities. In addition the request includes enhancement funds of $1.7 million for facilities renewal, $1.5 million for the Center of Regenerative Research, and $0.8 million to support the Capital Campaign, which will allow the University of Maryland Baltimore Foundation to grow and sustain a mature development program. Funds for the interdisciplinary Center for Regenerative Research, building on the core faculty already in place, will be used to recruit and retain some of the nation's best researchers.

Private Fundraising

The tradition of philanthropy in public higher education is relatively recent. With the exception of several large universities in the West and Midwest, very few public universities had substantial development operations until approximately 20 years ago. A national survey of private giving to higher education and independent schools reported the following comparative data for 2004:[3]

- 70 private research/doctoral institutions raised a total of $46.7 billion in 2004, an average of $97 million per institution, compared with 136 public institutions that raised $7.5 billion, or $56 million per institution. UMB raised $41.3 million during this period.

- Private institutions raise, on average, 16.3% of their total budget through private funds compared with 9.9% among public institutions. UMB comes close to the public average at 7.0%

- The endowment at private research/doctoral institutions averages $166,112 per student compared with only $18,391 at public institutions. At UMB, the endowment per student is $29,423 compared with peer institutions that have undergraduate colleges, such as the University of Virginia at $104,000 per student and the University of Michigan at $78,000.

The development enterprise at UMB mirrors the organization of the campus as a whole. The university is composed of professional schools and a Graduate School with an active alumni base of 54,593, and the development function is structured to serve their specific priorities and needs. The growth in philanthropy over the last 14 years, from $21.6 million in FY 1997 to almost $53 million in FY 2005, demonstrates three intersecting realities: an increased appreciation within UMB of the public university imperative to develop entrepreneurial private sources of funding; an increased commitment by University leaders to integrate private sector fundraising into their strategic planning and budgeting processes; and a realization by the wider community of alumni, friends, corporations, and foundations that philanthropic support for UMB is a mutually beneficial investment in health and human services for their own future. The ultimate UMB development goal is to create a new model in which the income stream from the

---

[3] Source: *2004 Voluntary Support of Education*, Council for Aid to Education. The numbers quoted reflect the number of institutions reporting to CAE.

University's permanent endowment provides stability for its growth and excellence, independent of the economic cycle in the State.

At present the organizational model for development at UMB is a hybrid of centralized/centralized relationships with accountability ranging along a continuum. Three schools—the Dental School and the Schools of Pharmacy, and Social Work—have their development staff report directly to the associate vice president of development and alumni relations in the central Office of External Affairs. On the other hand, development staff in the Schools of Law, Medicine, and Nursing report directly to their deans. Additionally, core functions and services reside at the central campus level that serve all components of UMB.

The purpose of placing the Development Office within the Office of External Affairs was to create and implement a comprehensive and integrated model for development and alumni relations for the campus. In consultation with school development staffs and within the context of the annual campus fundraising goal, this division sets expectations for performance and productivity outcomes. Funded through the Office of the President, the UMB Foundation, and allocations from the schools, OEA Development provides an efficient, state-of-the-art infrastructure that supports the activities of the school-based development staffs.

Core leadership and support services are provided in five general areas: Strategic Planning (Capital Campaign); Annual Fund;[4] Planned Giving, Corporate and Foundation Relations;[5] and Prospect Research. The Office of Resource Management within OEA also provides core services to individual units in gift administration and in donor database support, which is managed using BSR Advance software.

Campus philanthropic goals are derived primarily from the academic priorities and strategic plans of the schools and units. For every successive Capital Campaign, each component of the University drafts its case statement, thus ensuring that gifts support stated goals and objectives designed to advance each school. Revenue from private sources also seeds special programs and initiatives as they gain momentum for extramural grant support. Additionally, philanthropy has increased endowment for essential priorities such as professorships and scholarships.

By design, major gift activity is the primary focus of school-based staff. Major gift officers manage portfolios ranging from 100 to150 qualified prospects. Each development officer is responsible for customized cultivation, solicitation, and stewardship strategies for each major prospect. Collegiality and transparent communication are the norm for coordinating activity throughout this process.

OEA conducts program evaluations with each school that has entered into a direct OEA management relationship within the past two years. Outcomes will determine the success and therefore the continuation of this new campus model. OEA senior development directors design measurable outcomes within their program areas for each of the schools. The resulting data will provide benchmarking information to evaluate the efficiency and impact of additional campus staffing and budgeting.

The ultimate measure is the growth in philanthropy in each succeeding year and the return on the University's investment in this function. To date, a $.12 cost per dollar raised

---

[4] The Executive Director of the Medical Alumni Association manages the School's Annual Fund program.
[5] The Schools of Medicine and Nursing include this function in their staffing.

demonstrates a wise and efficient use of resources for development in a centralized/decentralized model.

2.3.2 Internal Process and Outcomes Assessment

To assess the fiscal health of UMB, detailed State Appropriated Working and Request Budgets are prepared jointly with the academic and administrative units. These budgets are then used to monitor the institution's finances, both internally at various administrative levels and also externally by the Board of Regents and the state legislature.

Multiyear budget plans that project revenues (including projected tuition rate increases) and expenses are prepared to facilitate discussions between the president, the deans, and the vice presidents about the direction in which the institution needs to move to fulfill its mission. The plans are revisited each year to ensure that they meet the needs of the University.

UMB has various policies and procedures in place that govern financial, administrative, and auxiliary operations. These policies and procedures promote good business practices and compliance with state and federal regulations. They are outlined on the UMB Financial Services web site at: www.fincsvc.umaryland.edu/policies.cfm.

2.3.3 External Process and Outcomes Assessment

As a component of USM, UMB is governed by the USM Board of Regents, which has responsibility for developing a consolidated USM annual operating budget request consistent with the missions of the component institutions. The Board of Regents monitors performance indicators, many of them institution-specific, to gauge the extent to which measurable outcomes are congruent with each institution's strategic plan.

The USM budgets are subsequently reviewed by the Maryland Higher Education Commission (MHEC), which serves in an advisory capacity to the governor. The resource allocations proposed in the budgets are examined in the context of how they fulfill the goals of the State Plan for Higher Education, a comprehensive strategic planning document.

Concurrent with the MHEC Review, UMB's budget is reviewed by the State Department of Budget and Management. UMB's attainment of performance objectives is one factor considered in the budgetary decision-making process.

The budget committees of the Maryland General Assembly place great emphasis on faculty productivity and on positive outcomes in terms of graduation rates and retention of a diverse student body. As a public entity, UMB's entire budget undergoes a rigorous annual review, not just the portion that is appropriated from the state's general fund. In preparation for the public budget hearings, the General Assembly's legislative staff makes use of the many performance-related reports that are prepared at each stage of the budget cycle.

An annual independent audit is conducted by Ernst & Young LLP in accordance with generally accepted auditing standards to confirm UMB's financial responsibility. The most recent audit may be found in Appendix E.

2.3.4 Facilities Master Plan

UMB has more than 5.8 million gross square feet of space in 58 facilities located on its downtown campus. An additional 1.9 million gross square feet of space are occupied and used by UMB in non-University facilities adjacent to or near the campus. Within the past 10 years,

major buildings have been constructed on campus for the Schools of Law, Medicine, Nursing, and Pharmacy; a research center has been constructed for the School of Social Work; two administrative facilities have been added; a new Health Sciences and Human Services Library was built; two new 900-car parking garages have been constructed; and a 337-bed student housing project has been opened (see Table 10 for the list of Capital Projects, FY 1998-2008, and Appendix F for the UMB Space Inventory). The total construction cost of these projects is almost $600 million. A new Campus Center and a new Dental School are under construction. Within the next few years, design and construction is expected to begin on an addition to the School of Pharmacy.

Funding for UMB's capital projects has been obtained from several new sources to supplement the traditional ones of state appropriations and University bonds. Philanthropic fundraising and joint ventures with the private sector have enabled the University to leverage its resources to build facilities earlier than would otherwise have been the case. These new facilities have supported the schools in their efforts to attain excellence, remain competitive with their peers, and continue the growth of entrepreneurial activities.

UMB has a well-established facilities planning process that is based on the programmatic and strategic plans of each of the schools and major units on campus. Facilities master planning uses strategic program planning as its foundation, seeking to address the mission and goals of the campus. Each of the key campus goals has major initiatives, which are translated into facilities needs through a series of questions and analyses that consider the following issues: activities associated with the initiatives and/or programs; facilities necessary in order to realize or implement the initiative; the number of persons that will be working or learning in the spaces as a result of each initiative; relationships, physical and programmatic, that are critical to success in achieving the initiative; and how the initiative relates to the larger community

The result is a facilities master plan that defines and prioritizes the need for facilities and the development of the campus (see Appendix G). Every five years, the facilities master plan is reviewed for relevance to the University's mission and the programming needs of the individual schools. Also considered are the development needs of its affiliated institution, the University of Maryland Medical Center (UMMC), and the impact of the evolving campus on the surrounding neighborhoods. The campus successfully addressed 95% of the priorities set forth in the 1991 and 1996 facilities master plans. The individual building or project program, the next step in facilities planning after the master plan, assesses in detail the programmatic needs of the school/unit, verifying and defining the size, types of spaces, adjacencies, uses, and users of the project.

Based on the facilities master plan, five-year capital improvement (state-supported) and USM-funded construction plans are developed for new buildings, infrastructure improvements, street-scaping, and landscaping. Each year the president and the deans review the five- and ten-year budgets associated with physical development to ensure that they are aligned with the programmatic priorities of the University.

In addition, campus spaces are reviewed each year with respect to state guidelines for academic facilities. The review, by type of space, is based on enrollment, weekly student contact hours in classroom and teaching laboratories, number of faculty and staff, number of library volumes, and other relevant space data. This review looks not only at current space allocation, but also assesses future needs for space.

The UMB Office of Facilities Management conducts an assessment of the campus infrastructure and all campus buildings with respect to condition and the need for upgrading and repairs. A building conditions inventory is developed and updated annually. This ensures that the limited funds for deferred maintenance and facilities renewal are used to address the highest priorities.

The University has a property development plan and a well-established acquisition process to ensure that there are sufficient development sites for future projects. It also has a historic preservation plan that inventories and prioritizes its historic resources, both structures and archeological sites, to ensure that the most important and unique physical resources are protected, reused, and available for future generations.

Each school is responsible for managing the use of its space including classrooms, teaching laboratories, offices, and research areas. Research space assignment among departments is based largely on research productivity—the ratio of research grant and contract award dollars per square foot. Underutilized space is recaptured and reassigned by the deans to more productive investigators.

2.4 STANDARD 4: LEADERSHIP AND GOVERNANCE

MSCHE Definition of Standard 4:

> ***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.***

UMB is a constituent institution of the University System of Maryland (USM), which is governed by a Board of Regents. The Board of Regents, in consultation with the USM chancellor, appoints the president of UMB, who serves as the chief executive officer. The president of UMB appoints the deans of the professional schools and the Graduate Shool, who report directly to the president.

2.4.1 University System of Maryland

The USM, an independent unit of state government, is Maryland's public higher education system. Its members include all public colleges and universities in the state, with the exception of Morgan State University and St. Mary's College. USM is the twelfth-largest university system in the nation, and its 13 institutions offer over 600 academic programs to more than 126,000 students at 200 sites worldwide.

USM is governed by a 17-member Board of Regents appointed by the governor of Maryland with the advice and consent of the Senate. Fifteen of the members serve staggered five-year terms; the sixteenth member, by statute, is the Secretary of Agriculture, who serves as long as he or she continues in that position; and the seventeenth member is a USM student who serves a one-year term.[6] The BOR is charged with responsibility for the governance and management of USM and its constituent institutions, centers, and institutes. It appoints the USM chancellor, who serves as its chief executive officer. The BOR has expressly delegated certain authority to the chancellor and the presidents of the constituent institutions (see Appendix H, Bylaws of the University System of Maryland Board of Regents).

The BOR approves and adopts a System-wide plan of higher education, developed by the chancellor on the basis of plans developed by the constituent institutions. Title 12 specifically directed the chancellor to develop a plan that includes certain priorities. The following priority pertains to UMB:

> *Maintain and enhance an academic health center and a coordinated Higher Education Center for Research and Graduate and Professional Study in the Baltimore area, comprised of the University of Maryland, Baltimore and the University of Maryland Baltimore County, with a focus on science and technology.*

---

[6] The student regent undergoes a selection process via the USM Student Council, which forwards three names to the governor. The governor normally chooses one of the three submitted, but is under no statutory obligation to do so.

Actions taken by USM to enhance UMB's professional schools and its joint Graduate School with UMBC are designed to fulfill this requirement.

The BOR reviews and approves the mission statement of each constituent institution, including a review of whether academic programs are consistent with that mission. The BOR recognizes the distinct mission of UMB and historically has been very supportive of UMB's special needs. In vital areas UMB has been given needed latitude by the BOR to carry out its particular mission. For example, the BOR authorized establishment of independent faculty practice plans for the School of Medicine and the Dental School that modified the System-wide faculty appointment procedure to allow School of Medicine faculty to attain tenure, acknowledging their academic accomplishments, yet receive salary support from the practice plans and clinical units of the academic health center in addition to state budget support. The BOR Committee on Finance has the responsibility for reviewing the annual contract and any amendments between USM and the University of Maryland Medical System (UMMS) and recommends appropriate action to the Board of Regents.

The BOR reviews and approves the performance accountability plan for each constituent institution and annually reviews a written report from each president on the attainment by the institution of the objectives in the performance accountability plan of the institution. This report is submitted to the Maryland Higher Education Commission. Each president is held accountable for meeting the objectives of the performance accountability plan. In consultation with the institutions and the chancellor, the BOR establishes standards for funding based on differences in the size and mission of the constituent institutions and approves consolidated budget requests for appropriations for USM with respect to the operating and capital budgets.

2.4.2 UMB Administration

The BOR, in consultation with the USM chancellor, appoints the president of UMB as its chief executive officer. Presidents, all of whom serve at the pleasure of the BOR, are evaluated annually by the chancellor, who discusses the results of that evaluation and consequent recommendations for compensation actions with the designated select committee of the Board of Regents.

The president is responsible and accountable to the chancellor and the Board of Regents, and has the responsibility of taking initiatives to implement the policies of the Board and the constituent institution and to promote the institution's development and efficiency. The president's major responsibilities, for which the BOR has delegated authority, include developing a plan of institutional mission, goals, priorities, and a set of peer institutions; responsibility for all academic matters, including developing new academic programs and curtailing or eliminating existing programs; formulating operating and capital budget requests; appointing, promoting, fixing salaries, granting tenure, assigning duties, and terminating personnel; creating any position within existing funds available to the University; establishing admission standards; setting tuition and fees; administering financial aid; entering into contracts and cooperative agreements; accepting gifts and grants and maintaining and managing endowment income; and overseeing affirmative action and equal employment opportunities in compliance with state, federal, and BOR mandates and policies.

The president of UMB appoints the deans of the professional schools and the Graduate School, who report directly to the president, as well as all vice presidents. The deans have responsibility for academic affairs, administration, research, development, information

technology, and communications within the schools. It is the role of the central administration—the vice presidents of academic affairs, administration and finance, external affairs, information technology, and research and development—to address enterprise-wide issues; ensure that auditing, planning, reporting, and other accountability processes are adhered to; coordinate liaison with external shareholders; and support the deans and faculty of the schools in their academic enterprises.

UMB has had a stable administration under President David J. Ramsay for the past 11 years. Most of the deans have had long tenures as well. (See Appendix I for biographical sketches of President Ramsay, the deans, and vice presidents.) As a result, it has been possible to pursue long-range projects and see them through to completion. Many of these successes were mentioned in Chapter 1, including new buildings/additions for several schools, new student and administrative information systems, the accelerated growth of research and entrepreneurial enterprises including the establishment of the UMB BioPark, and UMB's collaboration with Baltimore government and private developers to improve UMB's neighboring West Side.

Elected UMB faculty, students, and staff participate in the USM shared governance structures—the Council of University System Faculty, the USM Student Council, and the Council of University System Staff. In addition, UMB adheres to the USM system of shared governance, in which faculty, staff, and students discuss and provide input on major issues affecting UMB, through UMB governance structures and school-based committees.

2.4.3 University-Wide Shared Governance

The USM Board of Regents Policy on Shared Governance (I-6.00) (see Appendix J for the policies and other documents on shared governance), which applies to each constituent institution, specifies that faculty, students, and staff shall have opportunities to participate in decisions that relate to mission and budget priorities; curriculum, course content, and instruction; research; appointment, promotion, and tenure of faculty; human resources policies; selection and appointment of administrators; issues that affect the ability of students to complete their education; and other issues that affect the overall welfare of the institution. The faculty, staff, and student governance bodies at UMB adhere to this principle. In addition, these bodies adhere to the BOR requirements that "[a]t least 75% of the voting members shall be elected by their constituencies" and "[s]uch bodies should elect their own presiding officers." The UMB president and other senior administrators consult regularly with these elected representative bodies. In addition to these University-wide groups, each of the schools has established plans of organization for students and faculty. As a result of the decentralized nature of UMB, the key decisions in curriculum, student advancement, and faculty appointment and tenure are made at the school level. These school structures will be described immediately following the discussion of the campus shared governance structures.

UMB Faculty Senate

The UMB Faculty Senate is an elected body whose members are chosen by faculty from the University's six professional schools and the Graduate School. The Faculty Senate makes recommendations to the president on issues of policy that affect faculty across the various UMB schools. The president reports regularly in person to the Faculty Senate and seeks its advice and feedback. The vice president for academic affairs regularly attends Faculty Senate meetings. Other UMB and school administrators may appear, as requested, to report and provide input. Senators are represented on UMB planning committees. For example, the Faculty Senate was

represented on the Future of UMB Committee, the Information Technology Steering Committee, and the Middle States Steering Committee. The Faculty Senate also is represented on USM bodies including the Council of University System Faculty (CUSF).

Representation on the Faculty Senate is proportional to the number of full-time faculty in each School. All full-time faculty are eligible to serve on the Senate. Senators serve staggered three-year terms. Annual elections are held to fill vacancies that occur upon expiration of members' terms. The UMB Faculty Senate meets monthly, and meetings are open to all faculty.

A recent achievement of the Faculty Senate has been the establishment of a University Faculty Grievance Process. Under the new system established in 2003, all schools have a school-based faculty grievance process. If a faculty member exhausts the school's process or demonstrates that there was bias in the handling of the appeal, he/she may appeal to the Faculty Senate. An individual Appeals Board is then convened to hear the case, and its recommendation is forwarded to the UMB president. (See www.umaryland.edu/facultysenate.)

UMB Staff Senate

The UMB Staff Senate is an elected body of 15 Senators who represent nonfaculty employees.[7] The Staff Senate advises the president on policies, procedures, and rules affecting employees, the work environment, issues impacting wages and benefits, and staff morale. Representation is by class of employee (exempt or nonexempt), rather than by school. Staff Senate representatives serve also on the USM Council of University System Staff (CUSS), thereby providing input to USM on staff issues. On campus issues that affect both faculty and staff, the Faculty Senate and the Staff Senate work cooperatively. For example, both senates are working together on the difficult issue of the shortage of affordable downtown daycare for children of University employees. Surveys were distributed to all staff and faculty to assess the need for daycare. Both groups have presented their findings to the UMB president, who has encouraged further investigation into possible options.(See http://www.umaryland.edu/ssenate.)

University Student Government Association

The University Student Government Association (USGA) is a student senate elected by students in the major programs and schools on campus. It is led by an executive board of six. USGA is dedicated to improving life at the University through cultural and social programming and to improving student communication at institutional levels. Through the USGA, students have a voice in University governance. The USGA appoints student representatives to the USM Student Council and to the state's Student Advisory Council of the Maryland Higher Education Commission. The USGA periodically distributes *USGA News* to all UMB students via e-mail. *USGA News* contains University-related announcements and information about events of interest to students. The USGA is responsible for deciding how the $15 annual UMB student activity fee, paid by all students, is allocated. More information is available at the USGA web site: http://www.umaryland.edu/usga.

2.4.4 Shared Governance in the Schools

Besides representation through campus-wide bodies, faculty in each of the professional schools exercise responsibilities for academic programs and standards; provide a venue and

---

[7] In FY 2000 the Maryland General Assembly approved collective bargaining for the USM institutions. Nonexempt employees at UMB subsequently elected to be represented by AFSCME, thereby constricting the role of the Staff Senate in discussions of nonexempt employees' compensation and working conditions.

process for resolving faculty and student grievances; make recommendations about faculty appointments, promotion, and tenure; and provide advice to the dean on a range of issues. Each school also has student organizations, which have representatives on various standing school committees such as student affairs.

Dental School

Faculty governance, described in the Dental School Plan of Organization, provides a means for the faculty to discharge its responsibilities with respect to educational policy, programs, procedures, and other matters. The Plan of Organization is structured to allow faculty to have input to the administration relative to the programs of the school. The Faculty Assembly allows faculty to have input into interdepartmental decision making. Membership is composed of all full-time faculty, part-time faculty, and selected student representatives. In general, this body may initiate action on any matter that may be of concern to the Dental School. It also elects faculty representatives to the USM Faculty Senate. The Faculty Assembly meets once a year but may have special meetings.

The Faculty Council, which meets monthly, acts for the faculty in legislative and advisory capacities. Membership consists of elected and ex-officio faculty and student members of the Faculty Assembly. This body formulates and approves the educational policies of the School (including recommendations for student advancement, dismissal, and graduation, and policies related to student conduct and decorum) and makes recommendations to the dean on general policy matters pertaining to the appointment, promotion, and tenure of the faculty. The Council has standing committees to support its function.

Faculty provide input to department chairs for decision making related to academic issues through departmental meetings and one-on-one discussions. This process occurs routinely and allows faculty input relative to academic issues, patient treatment, dental instruments and material selection, and research initiatives.

The Student Dental Association (SDA) is the organizational structure of the student body. The association is presided over and governed by elected representatives from all classes and is represented on selected committees within the School. The organization participates in certain student/faculty activities and sponsors and directs all student social activities. It is responsible for the publication of the school's yearbook, *The Mirror*, and is unique among dental school organizations in having formulated its own constitution and professional code of conduct.

School of Law

The Faculty Council of the School of Law consists of all full-time faculty and meets monthly. Each year, the dean of the School of Law, in consultation with the associate deans, identifies committees of faculty members and administrators for the following academic year. In addition to several standing committees, additional specialized committees and working groups are established to consider current topics. The Faculty Council approves the list of committees, and the dean provides a charge to each group. Each group develops a plan of action based on the charge, conducts research, including gathering input as appropriate, and develops a proposal. Proposals are presented to the Faculty Council for approval.

The Student Bar Association (SBA) represents all students in the school. It has an elected executive council and elected representatives from both the day and evening classes. The SBA is the umbrella organization for the more than 40 other student organizations at the School and manages the student fee revenue. Each semester, student organizations submit a request for

funds, and the SBA budget committee reviews the requests against predetermined guidelines. Organizations are encouraged to collaborate on events and to plan programs that are educational, social, and recreational as well as public-service-oriented.

School of Medicine

The dean is the chief executive officer of the School of Medicine (SOM) as well as the head of the ancillary nonprofit organizations that produce clinical income for the School. He presides over and is advised by the Medical School Council, a body consisting of department chairs and elected representatives from each department. The Medical Executive Committee, a subcommittee of the Medical School Council, meets monthly and is able to act rapidly on issues that arise. The Faculty Assembly, an independent body of elected faculty, represents the faculty as a whole. The Faculty Assembly advises the dean and provides input on major School decisions.

The SOM Student Council consists of a president, vice president, secretary, treasurer, two representatives from each class, and the class presidents. The Council oversees student activities funds and promotes social activities. Student representatives participate on a number of School committees: Year I and II Committee, Clinical Years Committee, School of Medicine Council (11 student representatives), and judicial board. Students are also invited to serve on special task forces and ad hoc committees.

School of Nursing

The Faculty Organization of the School of Nursing consists of the Faculty Assembly, the Faculty Council, and standing committees. All regular and adjunct faculty are members of the Faculty Assembly. Faculty Associates hold nonvoting membership. In addition, five students elected by their constituencies (Student Government Association, Graduates in Nursing, and the Doctoral Student Organization) are voting members. The Faculty Assembly meets at least twice during each academic year and is chaired by the chairperson of Faculty Council. The Faculty Assembly acts on policies and recommendations referred to it by Faculty Council, approves the School of Nursing mission statement and objectives and all major curriculum changes, addresses matters of concern to the membership, and elects members of the Faculty Senate and the chair and at-large members of the Faculty Council.

The Faculty Council meets monthly and is the body of authority for the Assembly between Assembly meetings. Elected members include five faculty from each of the two departments, one Faculty Senator, and one associate/assistant dean elected by the Faculty. The dean serves as an ex-officio member. There are five standing committees: Curriculum; Student Affairs; Appointment, Promotions, and Tenure; Process Improvement; and Technology-Enhanced Instructional Resources. Faculty are elected by departments for membership on standing committees with appropriate administrators serving as ex-officio members. In addition, students selected by their peers, representing undergraduate, master's, and doctoral students, serve on all standing committees with the exception of the Appointment, Promotions, and Tenure Committee. The chairperson of each standing committee is elected from the committee membership.

The School holds three Town Hall meetings a semester, chaired by the dean or one of the associate deans, to hear student issues and concerns. All issues are noted and feedback in the form of an answer or an action is made within a short time.

School of Pharmacy

The School of Pharmacy Faculty Assembly establishes and supervises policies related to the governance of the school's faculty and students. All professorial faculty in the school with at least a half-time position are voting members. The School of Pharmacy Student Government Association appoints a voting member to the Faculty Assembly. All other faculty holding academic appointments are nonvoting members.

The Faculty Assembly has four standing committees. The Curriculum Committee has responsibility for formulation of curriculum policy, review of professional curricula, approval of changes in the curricula, and review and approval of new educational programs. The Faculty Affairs Committee reviews and recommends to the dean actions regarding the appointment, promotion, and tenure of faculty members; supervises appointment, promotion, and tenure procedures; originates and/or reviews proposed policies relating to the welfare of the faculty; supervises and implements faculty grievance procedures; and establishes and carries out election procedures. The Student Affairs Committee formulates and administers school policies on admissions and student promotions, supervision of retention activities, review of student grievances, student affairs and recruiting. The Graduate Studies and Research Committee formulates policies concerning graduate education and research, reviews and approves new programs or changes in graduate curricula, and reviews and approves internal grants.

The Student Government Association (SGA) strives to develop academic achievement, to encourage communication between faculty and students, to coordinate activities within the School, to promote educational programming, to enhance professional and social interests, and to encourage community service. All students belong to the SGA. The executive, legislative, and judicial power of the SGA is vested in the Executive Council. The Executive Council is composed of SGA officers, presidents of organizations, class officers, and the yearbook editor. The Council meets periodically with School administrators to discuss important issues. The Pharmacy Graduate Student Association (PGSA) consists of all graduate students and post-doctoral employees in the School of Pharmacy. It acts as an official liaison body to the School; provides a platform for discussions and suggestions on matters involving graduate students; promotes efficient recruitment and orientation of incoming graduate students; and represents the interests of pharmacy students as members of campuswide organizations.

School of Social Work

The Faculty Organization (FO) is the faculty governance body of the School of Social Work. It consists of the members of the social work faculty of UMB and of the University of Maryland Baltimore County (UMBC), which offers a bachelor's degree in social work. Except for the administrative divisions of the UMB and UMBC programs, the School is not departmentalized and has a single faculty. The functions of the FO are to enable the faculty to exercise its control over curriculum and related academic matters; participate in the planning, execution, and evaluation of policy regarding the School in its relationship to the University and to the social welfare communities; and attend to all matters related to faculty governance. The FO carries final authority for the curriculum and degree requirements for students. The FO also shares responsibility with the dean for developing and implementing University and School policies and procedures.

Faculty members who hold at least a half-time position and professorial rank (tenure track or non-tenure track positions) are voting members of the FO. Visiting and emeritus faculty, clinical instructors, and instructors may participate in FO meetings but do not have voting

privileges. Students are represented at a ratio of one to every four faculty on all standing committees of the School except the Faculty Executive Committee (FEC) and the Appointment, Promotion, and Tenure Committee (APT). Student representatives are offered appointment also to the various curriculum area committees.

2.5 STANDARD 5: ADMINISTRATION

MSCHE Definition of Standard 5:

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

Administration at UMB is characterized by collaboration between the six professional schools and the central administrative structure, which is composed of the Office of the President and the vice presidents' Offices of Academic Affairs, Administration and Finance, External Affairs, Information Technology, and Research and Development. As noted in the discussion of Standard 4, UMB has a strong presidency. President Ramsay, as chief executive, has the primary responsibility to lead the institution, and he has the background and qualities appropriate to UMB's mission. The deans of the professional schools report directly to the president. UMB is not organized around the chief academic officer or provost system. Each of the deans is the chief academic officer for his or her school and is responsible to the president for its academic integrity.

All administrative personnel, including the president and the vice presidents, undergo substantial annual reviews. In-depth external reviews of deans are conducted at five-year intervals under President Ramsay's decanal review policy.

2.5.1 Central Administration at UMB

The central administrative units are directed by experienced higher education professional managers. (See Appendix I for biographical sketches of key UMB administrators.) Within their units they account for the key services necessary to support and facilitate the University's complex education, research, and clinical programs. While staffing levels were reduced in the 2002-2004 period of reduced state support, they never went below the levels necessary to provide efficient and effective services and programs to the schools and the University. (See Appendix K for organizational charts of the University and the five central administrative units and Table 7 for the number of staff per unit.)

Coordination for implementation and decision making among the five administrative units is facilitated by weekly meetings of the vice presidents and key staff of the Office of the President and is presided over by President Ramsay. These are complemented by bi-weekly meetings of the deans and vice presidents, also chaired by the president.

The most recent and pervasive administrative change, which involved three different administrative units—Administration and Finance, the Center for Information Technology Services, and the Office of Research and Development, was the implementation of eUMB. This implementation is spelled out in detail below because it illustrates the collaboration and resource sharing needed to accomplish enterprise-wide goals.

eUMB is a multiyear project that will replace the University's core administrative applications for human resources, payroll, finance, procurement, and grants management. The eUMB project has used technology as a catalyst to enhance as well as transform current practices

and to better meet the University's information needs. The first phase focused on the HR application within the PeopleSoft Human Resources Management System (HRMS). The HRMS application went live with Phase 1 on October 14, 2002 (Human Resources and Position Management modules) and with Phase 2 on March 24, 2003 (Time and Labor, Commitment Accounting, and Payroll modules together with a new interface to the Maryland State Central Payroll Bureau). The implementation of the first phase of the eUMB project was an important milestone toward the goal of implementing systems that promote efficiency as well as optimize operations and services.

Benefits to the campus have included an online/integrated HR, payroll, time, and labor system; a single repository of HR information with enhanced reporting capabilities; and departmental ability to manage employee funding. Employees at UMB who deal with HR matters have online access to a wealth of school/departmental employee information, including personal data, job data, position data, etc.

Most recently, the University completed another phase of the eUMB project, which was the implementation of a new financials and post-award grants system. This new system, which went live on March 1, 2006, provides expanded information and easier and faster access to financial and grants information. Contemporary web reporting capabilities allow for immediate generation of both summary and detailed reports of financials and grants information. Administrators as well as principal investigators, can see real-time online reports of department and project budgets, pre-encumbrances, encumbrances, expenditures, and balances.

The new financial system provides for greater automation and more efficient processes. Purchase requisitions are now routed electronically from the requester to the department and, through the school approver, to the Procurement Office. All procurements are online, saving over 100,000 pieces of paper per year. The online completion and electronic routing of requisitions as well as the online receiving function saves time in schools and departments. It also helps the University analyze procurement data more easily and helps consolidate purchases for better pricing.

eUMB provides more intuitive and user-friendly technology. It is a web-based system that is delivered with a "Portal front-page." Users login once to the Portal page and have access to both the HRMS/Payroll and the Financials/Grants systems. Navigation through the systems is very intuitive, with a "home" page for each of the major processes (Procurement, Accounts Payable, etc.). A link to selected budget reports can be created in the Portal; when this link is clicked, an up-to-date budget/expense report is immediately generated and presented.

Use of this system has resulted in a more sophisticated workforce. Many of the processes that were manual and paper-based are now automated. Staff are using computers to initiate automated processing of financial and grants data. Staff have access to a very intuitive system, but are required to know the "why" as well as the "how" in order to reap the benefits of the system. Users are developing greater knowledge and expertise and are more valuable to campus and school operations.

2.5.2 School-Based Administration and Central Administration

Some administrative services such as procurement, HR, parking, and financial services are structured within central administration, with the schools functioning primarily as users. Other central functions, including external affairs, research and development, and academic affairs, work more closely with the schools in developing, implementing, and evaluating academic programs and services.

A key example is research. All faculty are affiliated with the schools; however, support for the research enterprise is central and available to all faculty regardless of their school. Examples include the human subjects protection program, which is administered by the School of Medicine but supports all University research; the research compliance program, which is located in the UMB Office of Academic Affairs; and the Office of Research and Development (ORD).

ORD is organized to leverage the University's position as a major biomedical research institution for capturing and marketing its growing portfolio of intellectual property. ORD is responsible for the entire spectrum of intellectual property development: identifying research funding sources and assisting faculty in obtaining funding from governmental, corporate, and foundation sponsors; managing the administrative aspects of contracts and grants on behalf of the University; analyzing the commercial potential of intellectual property developed by the faculty; and marketing promising technologies on behalf of the University and the faculty. Over the past five years, each of the schools has established its own research office to mentor its faculty and to focus its research program. The school associate deans for research meet with ORD staff quarterly to discuss common issues.

2.6 STANDARD 6: INTEGRITY

MSCHE Definition of Standard 6:

> ***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 to academic and intellectual freedom.***

Consistent with USM policies, UMB promotes academic freedom for faculty and students. (All of the policies cited in this section may be found in Appendix L of this self-study.) Faculty members may freely discuss in the classroom all subject matter reasonably related to the course. Students are encouraged to pursue free and honest inquiry and expression. By tradition, students and teachers have certain rights and responsibilities that they bring to the academic community. USM Policy III-1.00, spells out these rights and responsibilities, many of which deal with ethical conduct. This policy is part of the Faculty Handbook (www.umaryland.edu/academicaffairs/faculty_affairs.html) and the Student Answer Book (student handbook given in hard copy to all students [see Appendix M] as well as available online: www.umaryland.edu/student/sab). All members of the academic community—faculty, students, and administrators—share responsibility for academic integrity. Evidence of the value placed upon academic freedom may also be found in the USM Policy On Classified and Proprietary Work (IV-2.20), which prohibits classified or proprietary research or research agreements that would not allow acknowledgement of the existence or nature of the agreement or the identity of the sponsor. Furthermore, the policy protects researchers' rights to publish their findings, by prohibiting research agreements that would bar publication.

UMB Policy III-1.00(A) states that each school is responsible for compliance in its policies and procedures with USM Policy III-1.0. Each school has policies that define acts of academic dishonesty, ensure procedures for due process for students accused or suspected of acts of academic dishonesty, and impose appropriate sanctions on students found to have committed such acts. Faculty members are required to make all reasonable efforts to prevent the occurrence of academic dishonesty, including such types of behavior as cheating and plagiarism. When instances of academic dishonesty are suspected, faculty members have the responsibility to see that appropriate action is taken in accordance with school policies.

Definitions of academic misconduct and procedures to investigate allegations of misconduct are detailed not only in school policies but in Board of Regents and University policies. Under USM Policy III-1.10 and UMB Policy III-1.10(A), misconduct in scholarly work by any employee is a breach of contract. Furthermore, misconduct in scholarly work by others associated with UMB (e.g., graduate students, volunteer faculty) is not tolerated. It is the policy of UMB and USM to maintain high ethical standards in science and other scholarly work, to prevent academic misconduct whenever possible; to evaluate and resolve promptly and fairly instances of alleged or apparent academic misconduct; to take disciplinary action, which may include the termination of employment, against any individual found guilty of academic misconduct; to award no degree if academic misconduct in science or other scholarly work contributed to that degree; and, if warranted, to revoke such a degree if academic misconduct is discovered after its award. Two courses specifically designed to satisfy current federal

requirements for trainees on federally sponsored training grants are offered each year. Trainees are required to take the course, but nonfederally sponsored trainees and others are encouraged to take or audit the courses, which comprehensively cover the responsible conduct of research.

Administrative activities also are carried out with strict attention given to sound ethical practice. Employees are directed to report suspected or known fiscal irregularities under UMB Policy VIII-7.10.

UMB, following USM policy, requires prior approval of professional consulting and other external professional activities by the dean of the school or the dean's designee. Professional consulting and other external professional activities, whether paid or unpaid, may be undertaken only when it is assured that all responsibilities associated with the individual's position are fully satisfied and will continue to be met. Ordinarily, these activities are to be undertaken only when their performance gives promise of enhancing the professional standing of the individual or contributing to the fulfillment of UMB's mission. According to policy II-3.10(A), each faculty member must provide a report for each semester indicating all external professional activities.

Academic activities, especially research, are protected from bias resulting from conflicts of interest by either eliminating or managing the conflict. The conflict of interest procedures are integrated into the research and human subjects protection operations and are coordinated on a University-wide basis by the Office of the Vice President for Academic Affairs. UMB procedures implement USM Policy on conflict of interest and may be found at http://www.ord.umaryland.edu/policies_procedures/umproceed.html.

Intellectual property rights and the development of intellectual property for the benefit of the University and for society in general are key to UMB's continued success in the biomedical research field. Researchers who discover and/or develop intellectual property are required to report their findings to the University. The University is responsible for patent and marketing activities, and shares revenue with the researchers/inventors. The applicable USM policy is IV-3.20.

As stated in the UMB policy on human subjects research, IV-2.10(A), UMB is guided by the ethical principles governing all research involving humans as subjects, as set forth in the report of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, *Ethical Principles and Guidelines for the Protection of Human Subjects of Research*, regardless of whether the research is subject to federal regulation, with whom it is conducted, or the source of support. Research investigators must acknowledge and accept their responsibility for protecting the rights and welfare of human research subjects and for complying with all applicable provisions of this policy. In addition, all institutional and noninstitutional performance sites for UMB are obligated to conform to ethical principles that are at least equivalent to those of UMB.

The UMB Human Research Protections Office (HRPO) is the coordinating office for the human research protections program and provides support for the UMB Institutional Review Board (IRB). The HRPO is located physically and administratively within the School of Medicine and reports to the dean of the School of Medicine; however, it reviews protocols from all the schools. The IRB is an administrative body established to protect the rights and welfare of human research subjects recruited to participate in research activities conducted under the auspices of UMB. It conducts ethical and scientific review, compliance, and oversight activities for all clinical research protocols. The office also provides education and training for the more

than 2,000 investigators and staff involved in research involving human subjects. Research that has been reviewed and approved by an IRB may be subject to further review and disapproval by UMB officials. Those officials may not, however, approve research if it has been disapproved by the IRB. Furthermore, approved research is subject to continuing IRB review and must be reevaluated at least annually (and more frequently, if specified by the IRB).

Fairness and impartiality in the hiring, firing, and evaluation of employees are practiced consistent with Personnel and General Administration policies, such as UMB policy VI-1.00, which covers affirmative action and equal employment. Equitability in the treatment of all constituencies is demonstrated in UMB faculty appointment, promotion, and tenure policies and procedures (II-1.00(A) and II-1.01(A)) as well as in the shared governance structure described in USM policy I-6.00.

2.7 STANDARD 7: INSTITUTIONAL ASSESSMENT

MSCHE Definition of Standard 7:

> ***The institution has developed and implemented an assessment plan and process that evaluates its overall effectiveness in: achieving its mission and goals; implementing planning, resource allocation, and institutional renewal processes; using institutional resources efficiently; providing leadership and governance; providing administrative structures and services; demonstrating institutional integrity; and assuring that institutional processes and resources support appropriate learning and other outcomes for its students and graduates.***

UMB has developed and implemented an integrated assessment system, derived in large measure from state mandates (discussed below), that is used to evaluate overall effectiveness in achieving its mission and goals. The assessment plan ensures that institutional processes and resources support appropriate learning and other outcomes for students and graduates. In addition to this accountability process, the president, the deans, and the vice president for academic affairs use the assessments and the recommendations made in professional accreditation reports to stimulate improvements in all aspects of the schools' operations and to measure progress. Finally, part of UMB's assessment process at the institutional level is the review and approval by senior-level administrators of key academic processes: faculty appointment, promotion, and tenure; human research protocols and projects; sabbatical leave requests; minority recruitment; faculty recruitment plans; and central oversight of research compliance.

2.7.1 State-Mandated Assessment Plans

Managing for Results

Managing for Results (MFR) is a statewide strategic planning process in which state agencies craft mission and vision statements and identify key goals supported by measurable objectives. It is a tool for state agency strategic planning, performance measurement, and budgeting that emphasizes the use of resources to achieve measurable results, accountability, efficiency, and continuous improvement in state government programs.

The standards for the assessment plan are established by state law and administered by the State of Maryland's Department of Budget and Management (DBM). DBM has established the format for agency submissions and has general authority to review and approve the components of the plan. Each year, UMB submits its MFR plan to DBM together with its budget request. The Maryland General Assembly also monitors the development of the plan during the legislative session, and legislators and staff provide additional suggestions.

In 2004, MFR was codified through legislation enacted by the General Assembly. The legislation continued the existing practice of agency-based MFR plans, but also required DBM to develop a "super MFR" or State Comprehensive Plan that sets overarching goals and direction for state government. This plan will be reported to the General Assembly each January and will consist of up to 10 goals and 50 to 100 performance measures from across state government. The

Fiscal Note attached to the bill provides a concise assessment of the deficiencies of the then current MFR process.

In spring 2005, UMB's MFR was revised from the ground up. (See Appendix N for the MFR report.) Objectives were recast in the timeframe of five years, through FY 2010. Attainment of the objectives is evaluated through the annual reporting of performance measures, which are the data elements specified in the MFR plan. Each goal in the MFR is defined by two or three objectives. Progress toward attaining these objectives is measured by one or more indicators.

Performance Accountability Plans

Each year, UMB submits to the Maryland Higher Education Commission (MHEC) a performance accountability plan. MHEC has responsibility for approving the plan and presenting recommendations to the governor and the state legislature. For further information on the MHEC Performance Accountability process, see http://www.mhec.state.md.us/publications/research/index.asp.

The annual reporting of performance accountability is now done through the MFR report in order to reduce duplicative processes. Prior to the establishment of the MFR process, MHEC managed the performance accountability process for Maryland's higher education institutions. The MHEC process looks at performance retrospectively rather than prospectively, to assess progress towards a benchmark. The latest iteration of UMB's MFR plan (for FY 2007) contains all of the elements required to meet the Commission's standards of excellence: statement of mission, vision, goals, objectives, and performance measures.

MHEC examines four years of trend data and benchmarks on each indicator. This year, MHEC analyses employ data for the years 2002–2005, while the MFR analyses use data for 2004–2007. Institutions are expected to make progress toward achieving their accountability benchmarks. If an institution's performance is below its benchmarks, the campus must submit a report to MHEC identifying actions that it will take to improve performance.

Peer-Based Assessments

In 1999 MHEC adopted a peer-based model for the establishment of funding guidelines for all USM institutions. The funding guidelines process includes an annual accountability component. The Commission identified a set of comprehensive, outcome-oriented performance measures by which to compare Maryland institutions with their performance peers. Maryland institutions are expected to perform at or above the level of their performance peers on most indicators. The FY 2005 Funding Guidelines Peer Performance Analysis can be found at: http://www.mhec.state.md.us/publications/finance/index.asp.

Under the Peer Performance process, UMB compares its performance as a whole and that of each of its component schools with that of defined peer institutions. For the most recent peer performance data, see Table 11. Although UMB's mix of professional schools makes it unique among public academic health centers, five public universities were selected in 1999 as peers for the purpose of the State of Maryland funding guideline calculations. They are the University of California at San Francisco, the University of Alabama at Birmingham, the University of Illinois at Chicago, the University of Michigan, and the University of North Carolina at Chapel Hill. All of the peer institutions have schools of medicine, dentistry, and nursing. These same five public institutions are also used in the Peer Performance process. Because only two of these institutions have law schools, three additional public institutions were selected for the purpose of law school

comparisons: the University of Connecticut, the University of Texas at Austin, and the University of Virginia. In the MFR process, UMB performance and state funding are compared with the performance and state funding of these peer institutions. It should be noted, however, that comparing individual professional schools presents difficulties because the sources of revenue are very different. There is a significant data collection problem as well because professional schools are reluctant to share such data as passing rates on licensure examinations.

2.7.2 Internal Assessment

While institutional assessment is conducted at all levels, three offices—the Office of Institutional Research and Planning, the Office of Budget and Planning, and the Office of Capital Budget and Planning—provide information and analysis to inform campus decision making.

The Office of Institutional Research and Planning (OIR&P) is the office at UMB primarily responsible for institutional assessment. Staffed by institutional research professionals, OIR&P collects and supplies verifiable data and information, conducts policy analysis, coordinates campus assessment and evaluation activities, and facilitates planning efforts for the professional schools and for other administrative offices. Each year OIR&P performs extensive analyses of the data collected on performance and reports the results to USM. These analyses are then used to identify problems or areas of weakness, and strategies are developed to improve performance. The data generated are reported as part of the MFR and in other reports submitted to USM.

The Office of Budget and Finance supports academic and other University units in achieving their business goals by maintaining and providing financial information and services. The office develops the University's budget plans and submissions to USM, provides accurate and timely financial information to the state, is a source of financial expertise for internal offices, and adheres to the highest standards of financial accountability.

The Office of Capital Budget and Planning is responsible for the preparation of the capital budget and its management as well as for the USM-funded construction and capital facilities renewal programs. This office also provides planning support to the campus community on matters related to space, facilities, and historic preservation; the development, updating, and implementation of the Facilities Master Plan; design guidelines; the historic preservation plan; and other planning documents. The director serves as the historic preservation liaison officer for the campus.

A final assessment element is that all administrative personnel, including the president and vice presidents, undergo annual review. The deans, under President Ramsay's decanal review policy, are subject to in-depth external performance reviews at five-year intervals.

3. EDUCATIONAL EFFECTIVENESS

Educational effectiveness is clearly the key element in evaluating any higher education institution. As stated in "Characteristics of Excellence in Higher Education," the student is the primary beneficiary of an institution's educational mission and the success of an institution is best measured by the success of its students. As in the discussion of other standards in this report, educational effectiveness and the assessment of student learning at UMB can only be presented as a marriage of school-specific and campus-wide perspectives. Necessarily, most of the detail about admissions, educational offerings, faculty, and assessment of student learning will be specific to a professional school.

3.1 STANDARD 8: STUDENT ADMISSIONS

MSCHE Definition of Standard 8:

> ***The institution seeks to admit students whose interests, goals, and abilities are congruent with its mission.***

All UMB degree programs have separate, independent admissions policies, processes, and standards that are derived from professional accreditation requirements and University standards. Details on all admissions procedures and policies are available to prospective students at the school or program's admissions web sites and in school catalogs. All schools and programs use some degree of electronic communication with prospective students. Since student financial aid is centrally administered, information regarding financial aid, scholarships, grants, loans, and refunds is available on the Student Financial Aid web site: http://www.umaryland.edu/fin/.

To fulfill its commitment to maintaining and increasing the diversity of its student body and, as a larger goal, the diversity of the professional workforce, all UMB schools have programs that encourage minority students at the high school and college levels to take appropriate courses and remain in the pipeline for admission to professional and graduate education. For several years, faculty in the Schools of Medicine and Pharmacy and the Dental School have operated summer programs that bring teachers and students into laboratories on campus so that they can experience first-hand the excitement that science generates. The School of Nursing has successfully partnered with several high schools to encourage students to consider a nursing career and to take the high school courses that are prerequisites for such careers.

The Graduate School has intensified recruitment efforts aimed at underrepresented minorities. For example, application fees for McNair scholars are waived. UMB also has joined Project 1000, which streamlines the Graduate School application process for Hispanic students, and since 2003 has participated in Maryland PROMISE. The university also maintains a campus diversity web page, www.umaryland.edu/diversity.

3.1.1 Admissions Policies and Procedures

To illustrate the different factors taken into account and the processes for admissions, the following sections describe details of the admissions policies and procedures in the various professional schools and the Graduate School.

Dental School

The Dental School selected 100 students from 1,290 applications for the predoctoral dental program class entering 2004. For that same period, the dental hygiene program had 42 applications for 20 available seats. Applicants are expected to present science and cumulative grade point averages (GPA) and Dental Admission Test scores that exceed the national averages and demonstrate the applicants' capacity for exceptional academic achievement. Admissions criteria are not weighted. Criteria for admission are clearly defined and are available on the School's web site together with all admission policies, procedures, technical standards, immunization requirements, and policies and procedures regarding students with disabilities. Recognizing the rigorous nature of the predoctoral curriculum, the Dental School has established appropriate, nondiscriminatory admissions criteria and procedures to ensure that students selected for admission possess the potential for successfully completing the program. Admissions decisions are made by an Admissions Committee whose members include faculty, students, and alumni. Information for prospective DDS students is posted at: http://www.dental.umaryland.edu/admissions/dds/ddsinfo.html

School of Law

The School of Law fully reviewed all 4,300 applications received for the 260 available seats for the 2004-2005 academic year. When assessing the academic record, in addition to the undergraduate grade point average and the LSAT test scores, reviewers consider the nature and level of difficulty of academic work, including college grading practices; the quality of the college student body and course selection patterns; college grade patterns; graduate study; outside work while in college; time interval and activities between college graduation and application to law school; and physical, social, or economic hardships. In addition to academic qualifications, other factors include geographic origin and cultural and language background; racial, social, disability, or economic barriers overcome; interpersonal skills as reflected in extracurricular pursuits, leadership activities, and work or service experience; and potential for intellectual and social growth as demonstrated by talents, skills, maturity, and compassion. These factors are considered as deemed appropriate by the faculty Admissions Committee and by individual committee members as they review applicant files. Information for prospective students is posted at: http://www.law.umaryland.edu/dept/admissions/index.asp

School of Medicine

The School of Medicine draws upon a large pool of highly capable applicants. In 2004-2005, approximately 3,700 applications were received for the 150 places in the MD class. The process is governed on a national level by the Association of American Medical Colleges, with electronic submission of applications followed by School of Medicine Admissions Committee review. Applications are reviewed and students are selected for interviews, with a minimum of two interviews with faculty or other Admission Committee representatives. The Admissions Committee selects students based on college performance; post-college experience and education if any; admission interviews; and letters of recommendations. Information for prospective MD students is posted at: http://medschool.umaryland.edu/admissions/

School of Nursing

The School of Nursing Admissions Committee reviews all applications for undergraduate admission, with consideration of student GPA in general education prerequisite courses including science and nursing core requirements as well as overall performance. Letters of reference, goal statement, scholarship, honors, and work experience are part of the review process. For the 2004-2005 academic year, 1,193 applications were reviewed for the 330 available seats. Applicants to the MS program are reviewed by the departmental Admissions Committee responsible for the specialty concentration that the applicant has identified. Applicants must have a minimum of a 3.0 GPA for admission. In addition, consideration is given to GRE scores, previous academic and professional accomplishments, honors, changes in academic performance, work experience, and previous grades in course work related to the desired area of graduate study. Each of the 486 applicants in academic year 2004-2005 was reviewed, and 134 were admitted. PhD applicants, in addition to the usual review of academic credentials, are interviewed by two faculty members as part of the Doctoral Admissions Committee process. For 2004-2005, there were 34 applicants and 10 admissions to the PhD program. Information for prospective students is posted at:
http://nursing.umaryland.edu/admissions/index.htm

School of Pharmacy

The School of Pharmacy admits 120 new students each fall to the incoming PharmD class. Students must complete 63 credit hours of pre-pharmacy coursework at an accredited college or university. An application is submitted to PharmCAS, the online application system by September 1 for early decision and January 2 for all others. Transcripts, PCAT scores, and three letters of recommendation from professors or employers also are submitted to PharmCAS. A supplemental application is completed on the School's web site. Applicants are scored on the basis of their GPA, PCAT score, letters of recommendation, work experience, and extracurricular activity. They can receive up to a total of 20 points, 4 points in each category. The Admissions Committee reviews the applicant's statement and score to determine whether an an interview at the school will be offered. During the on-site interview, faculty, students, and alumni ask standardized questions to assess the applicant's verbal communication skills, problem-solving ability, emotional maturity, and motivation to enter the pharmacy profession. Applicants also compose a short essay during the interview process to assess their written communication skills. Evaluations from the interview are reviewed by the Admissions Committee to make final decisions about admission. Information for prospective students is posted at: http://www.pharmacy.umaryland.edu/admissions/

School of Social Work

For admission to the MSW program, the School of Social Work requires a baccalaureate degree from an accredited college or university, a minimum of 24 credit hours of liberal arts, and a 3.0 GPA for the final 60 credits. Specific prerequisites are required and no credit is given for life experience. The application process requires three references, essay responses to three questions, and a description of relevant work and volunteer experience. Work and volunteer experience are considered especially relevant in evaluating readiness for and an understanding of the demands of the social work profession. The admissions goal is to put together a diverse class based on state or country of origin, age, ethnic and racial diversity, and work experience. In 2002 (the most recent year for which national comparison data are available), 342 people applied for the first year of the MSW program and 263 (76.9%) were accepted. This compares with a

national acceptance rate of first-year students of 70.4% (Council on Social Work Education, 2004). According to *US News & World Report*, UMB's School of Social Work ranking is 19th. Other schools ranked at the same level are Boston University, University of Illinois (Urbana), SUNY Albany, and Smith College. Excluding Smith from consideration, a small private school, the combined acceptance rate of the other universities is 73.1%. Information for prospective MSW students is posted at: http://www.ssw.umaryland.edu/admissions/index.html.

Graduate School

The University of Maryland Graduate School Baltimore (UMGSB) requires a minimum 3.0 GPA on a 4.0 scale for full admission. Students must also take the Graduate Record Examination. Applicants whose native language or language of the home is not English must take the Test of English as a Foreign Language or the examination of the International English Language Testing System. In addition to these core Graduate School requirements, individual graduate programs have additional specific criteria for admission. Students apply for admission directly to the Graduate School. The application is forwarded to the program to which the student is applying and is reviewed by faculty in that program. A recommendation is made to the Graduate School about whether to admit the student, and the Graduate School then informs the student regarding admission status. Information about admission to the Graduate School is posted at: http://graduate.umaryland.edu/admissions/admissions.html.

3.1.2 Enrollment Management

Because of their specialized programs and requirements, each school conducts its own examination of enrollments and makes enrollment projections on a program-by-program basis. Factors taken into account include the proportion of resident and nonresident students and full-time and part-time students. Each year the schools develop enrollment projections for the following ten years and report them to the Office of Institutional Research and Planning (OIR&P). The most recent report projects enrollments from actual enrollments in fall 2005 through projected enrollments in fall 2015 (see Table 12). The OIR&P examines these reports for consistency and requests explanations of any large projected changes. A University-wide report of enrollment projections is then forwarded to USM. As shown in Table 12, the University projects a moderate headcount enrollment growth of 16.8% over the ten-year period, from 5,510 students in 2005 to 6,436 students in 2015. The average annual increase is projected to be 1.6%.

In general, over the ten year period, enrollment increases are focused in areas of state workforce need. The School of Pharmacy is planning for an enrollment increase over the 10 years of 46.4% in the PharmD program to help meet the regional and national shortage of pharmacists. A new Pharmacy building is planned to accommodate this increase in enrollment. The School of Nursing is placing a stronger focus on the master's program (which includes the heavily enrolled nurse practitioner programs), and has initiated an innovative new Clinical Nurse Leader program for individuals holding a non-nursing bachelor's degree that leads to an entry-level master's degree. As a result of advancing entry-level opportunities to the MS degree for this group of students, a slight decrease in baccalaureate enrollments is projected. The emphasis on graduate programs in nursing is designed to address not only the shortage of highly qualified nurses, but especially the shortage of nursing faculty, which is the prime limiting factor in the production of nursing graduates. Other programs that are expected to have significant enrollment increases are the new Master of Public Health program, the entry-level Doctor of Physical Therapy program, and the undergraduate program in medical and research technology.

3.2   STANDARD 9: STUDENT SUPPORT SERVICES

MSCHE Definition of Standard 9:

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

UMB and the individual schools/programs are acutely aware of the challenges of meeting student needs in a diverse and academically challenging community. To this end, there are central University offices and school-based offices devoted to ensuring that all students are provided with the services necessary for their academic and professional development. These services represent a significant investment by UMB and its schools.

Because of the unique curricula and performance standards in professional education, certain student support services are provided exclusively by the schools. These include admissions, orientation, academic advising, post-graduation planning, profession-specific student organizations, career counseling, and judicial proceedings and other disciplinary elements such as honor codes. Central campus offices have primary responsibility for the following services: registration; financial aid; services to international scholars; health and wellness, and mental and physical health services; nonacademic counseling; services to students with disabilities; recreation, housing, and residence life; and social and cultural programming. However, it is important to note that the central campus offices meet regularly with the student affairs deans and student services personnel in the schools to ensure a coordinated effort to meet students' needs.

Students learn about the services available to them through University and school web sites, through the University's *Student Answer Book* (see Appendix M) and through each school's student handbook. The offerings are as dynamic and varied as the schools' professional offerings and continue to develop to meet student needs. In addition, presentations are made to students by UMB and school personnel throughout the year.

Campus and school administrators and faculty are open and receptive to student input, as articulated through complaints, suggestions, and grievances. Prospectively, students play a vital role in the committee structures in each school and help to shape programs and policies related to students. Similarly, students play an active role in adjudication of other students' complaints. Even on nonstanding committees, such as the search committees for the deans of medicine and social work, students from these schools are full, active participants.

3.2.1   Central Student Support Services

All central student support offices design, implement, and evaluate their services and programs in collaboration with the schools. Service areas where central student support offices have the primary responsibility, but collaborate individually with each school, are described below.

Student Information Management System

SIMS (Student Information Management System), UMB's version of Banner, includes modules for recruiting, admissions, registration, financial aid, student accounts, degree audit, and graduation. Because Banner is designed to accommodate different academic practices, all of UMB's schools can use one student system. SIMS is fully web-based, which gives administrators and students web-browser access to the system from off-campus as well as on-campus locations.

Initial data entry points include fourteen different admission offices and three tape loads as well as applicant self-entry via the web. Similarly, the registration process differs from school to school: a majority of students register themselves via the web while some schools have chosen to continue registering their students in the separate school offices. SIMS has the ability to define each user's access (no access, view only, data entry) to the various parts of the system to meet users' needs. Users with access to the various modules/forms/reports receive up-to-the-minute information.

The student interface, SURFS (Student UseR Friendly System), allows current and former students, through a secure server, to see their grades, billing, and demographic information. Using SURFS, students can register online, request transcripts, apply for graduation, and maintain accurate address, telephone, and emergency contact information. It also allows students to view and accept financial aid awards.

SIMS provides the schools with the ability to manage their own student data. Direct access to information supports improved decision making in areas such as admissions, enrollment management, and student support services. Students benefit from the virtual one-stop shopping that SIMS supports.

Student Health Services

There are four major elements of the Student Health Services System at UMB.

1. Student and Employee Health Service is supported by student fees and provides primary and preventive health care services. These services include routine physical examinations, sick visits, treatment of minor injuries, allergy shot administration, blood pressure screening, routine gynecological examinations, and family planning. Immunizations are provided at cost; some laboratory charges are billed to the student's health insurance carrier.

2. All full-time students with the exception of evening law students must either carry the University's medical insurance—Care First BlueCross BlueShield Plan—which offers hospitalization and specialty care or demonstrate that they are covered by an equivalent plan.

3. The Counseling Center, supported by student fees, provides primary mental health care, including short-term individual, couples, family, and group counseling for dysfunctions that impinge on academic or work achievement.

4. The Dental School offers an optional dental plan for students and their families.

Student Health and the Counseling Center also participate as members of the University's disaster response team. A full explanation of services, insurance information, costs and contact information appears at http://www.umaryland.edu/health/overview.html.

.

Disability Support Services

The Disability Support Services component of the Student Affairs Office acts as a central point of contact for the identification and provision of reasonable accommodations that may include educational support services designed to assist qualified students with disabilities in achieving their academic goals. The campus Student Affairs Office works closely with each of the schools to ensure that qualified students with disabilities receive appropriate and equitable services.

Student Financial Aid

Federal student financial aid is administered by the central Office of Student Financial Aid. To facilitate meeting the needs of different groups of professional and graduate students, each school and major program has an assigned financial aid counselor. This is important because there are different loan limits, federal programs, and merit scholarships available to different levels and types of professional students. Because of the increase in student indebtedness, debt management is a priority. Students in the MD and DDS programs, for example, may accrue more than $120,000 of debt by the time of graduation. The Office of Student Financial Aid provides comprehensive debt management and counseling services shaped around both general principles and the unique configuration presented by each profession. The central office coordinates with each of the schools in the awarding of scholarships.

Writing Center

The Writing Center provides students with individual help in the preparation of class papers, dissertations, and articles for publication in professional journals, grant proposals, resumes and curricula vitae, personal statements, slide presentations, and job applications. In addition, the center offers full-day workshops, mini-workshops, and classes. Recent programs included "Writing for ESL Students" and a one-day writing conference that covered such topics as essay exams, APA style, and practical tips for scientific poster development.

3.2.2 School-Based Student Support Services

In each school, the student and academic affairs offices work in conjunction with campus service providers. The goal is to ensure that coordinated services are provided while recognizing the need for tailoring services to the specific needs of each school's student body. Each school has at least one associate or assistant dean responsible for overseeing the academic program and the student affairs function. Student services professionals have appropriate backgrounds and training in the professional field of the school as well as in student services.

The assistant/associate deans and the vice president for academic affairs meet monthly to discuss student-related issues and to ensure that the combination of campus and school-based student support services adequately addresses students' needs. In addition, the school student affairs office serves as a channel of communication between that school's students and its administrators.

Judicial proceedings and disciplinary actions are handled by the schools. Information about the procedures can be found on the web sites listed in Appendix U under Standard 9.

Complaints and grievances brought forward by students are taken seriously at UMB. Each UMB school or program has a mechanism for addressing student complaints and grievances. In addition, University personnel are accessible and provide an additional resource for students who seek guidance or assistance. Most frequently, students present their concerns

directly to the school's student affairs office. Procedures at each school vary, but there is clear emphasis in each school on listening and providing an individualized response that reflects the needs of each student.

In the sections below, advising and career preparation programs are described below as examples of school-specific student services.

Dental School

The associate dean for professional programs provides personal counseling for students and may refer students as appropriate, including referrals to the campus's support resources. In addition, each class is assigned a team of two class advisors who work with students throughout the four years of the program. Academic counseling is provided by the course directors and course faculty and by the associate dean for professional programs. Faculty utilize student progress reports to notify students of deficiencies in didactic, laboratory, or clinical performance. After reviewing the progress of each student in all areas of the curriculum, the Progression Committees may initiate counseling at mid-semester or at the end of the semester if student progress is not satisfactory. When specific concerns arise regarding student progress, students are counseled by the appropriate department chair and/or the associate dean for professional programs.

At the Dental School, increasing emphasis is being placed on assisting students with their post-graduation planning. From their first days in the program, dental students learn about the wide-ranging career options that exist within dentistry. As students progress through the curriculum, they have opportunities to explore various options in further detail, based on their particular interests. During the third year of the program, students are provided with a framework for strategically managing their specific career choices. Students attend seminars and panel discussions with program directors, meet with recent-graduate mentors, and participate in hands-on workshops. Through these activities and individual counseling, students develop their professional life plans within the framework of their individual professional goals and personal needs.

School of Law

The School of Law offers a wide range of advising services. Students in their first year receive hands-on, individualized guidance from the Office of Student Affairs. In informal settings, students are informed about cocurricular opportunities such as the Moot Court and Trial Team as well as the school's four student-edited journals. Additional services include meetings with faculty who teach electives, information sessions sponsored by the Clinical Law Program faculty, and sessions held by the Student Affairs Office in which information on certifications and "tracks" are made available. Students may also take advantage of numerous online advising services, which include advice on general course selection and suggested courses for practice area emphasis.

The Academic Achievement Program (AAP) is aimed at helping students become acclimated to the School's learning process as well as empowering students to become strong independent learners. To this end, the program includes a comprehensive network of presentations, workshops, and one-on-one tutorials designed to promote strong learning skills and enhance the classroom experience. The AAP offers seminars throughout the academic year for all first-year students on subjects such as class preparation and note-taking, outlining, and exam-taking. The School's Legal Writing Center is available to students of all writing abilities

who want to strengthen their legal writing. Students receive one-on-one feedback from a Writing Fellow who has been trained to help at all stages of the writing process.

The School of Law directly assists students in their professional career development through the Career Development Office. A team of lawyers experienced in legal career counseling and placement teach seminars and workshops throughout the academic year on various topics related to professionalism and developing lawyering skills. They provide individual and group counseling on all aspects of the legal job search process. They also actively advise law students on ways to acquire hands-on experience with employers during the law school years and to find employment upon graduation. First-year students receive an introduction to legal recruitment and the basic elements of conducting a successful job search. In addition, many instructional programs are offered to students at all levels, including a mock interview and interviewing skills series, and career panels with attorneys from diverse areas of law practice. Career development professionals work with students to facilitate participation in programs that identify practice areas of interest and highlight summer, intern, and entry-level opportunities with law firms, government, courts, and public interest organizations. Students have access to a job listing database and a library of career resources.

School of Medicine

In the MD program, advisement starts early and continues throughout the student's program. In the first two years, when all students take the same curriculum, students have the opportunity to seek out a mentor, who is matched with the student on as many traits as possible. Informally, students are encouraged to participate in extracurricular interest groups based on careers in medicine, where they meet with faculty and residents to learn more about possible career pathways. In the middle of the third year, students are asked to project their tentative career paths and are assigned faculty counselors to assist with career guidance. In the fourth year, students meet with one of the three student affairs deans for one-to-three-hour career counseling sessions. The deans are available throughout the fourth year to help students refine their career choices and develop residency matching strategies. For assistance with interpersonal or life issues, the student affairs deans are available on an as-needed basis.

The School of Medicine has an extensive academic counseling program that provides guidance and assistance to students. In the summer before their first year, all students are offered the opportunity to apply to the Prematriculation Summer Program (PSP). Students are identified who have been out of school for an extended period of time, are non-science majors, or who may have attended academically less rigorous undergraduate programs. The PSP is a six-week intensive learning experience that helps incoming students with the basic sciences and allows them to practice taking medical school exams and to refine their study skills and habits. The School has another program, the Second Summer Education Program (SSEP), for entering second-year students who are considered academically to be at risk.

The Office of Academic Development within the Office of Medical Education monitors students closely, identifies any academic performance difficulties, and intervenes as rapidly as possible. The staff also monitor performance on every test during year I and year II, and counseling is subsequently targeted at study skills, test preparation, and time management. All students are contacted before the United States Medical Licensing Exam STEP I at the end of year II, and study plans are prepared for them. Instructors may refer students to the Office of Academic Development for academic evaluation.

School of Nursing

The advisement process for students was reorganized three years ago. Students are no longer randomly assigned to a faculty member, but are assigned according to their specialty interest. As part of the undergraduate admissions process, the questionnaire sent to each admitted student includes a question about their area of interest. To the extent possible, students are then matched to advisors on that basis. Prior to preregistration, faculty are sent advising folders with copies of the questionnaire, a plan of study, a transcript, and the Advising Handbook. Advisors monitor their advisees' academic progress and actively counsel them, directing them to tutoring when appropriate. The result has been a notable decrease in the number of students taking courses out of sequence and a decrease in the number of student complaints about the advisement process. There also appears to be more faculty involvement and support for the advisement process. Graduate students are assigned to an advisor in their declared area of specialization, who mentors them and helps design and monitor their plan of study and professional development.

The School's tutoring program assists undergraduate students in jeopardy of failing critical core courses. In collaboration with a nurse educator, a group tutorial is designed to fit the needs of individual students. Weekly group sessions are developed for question-and-answer opportunities. A weekly workshop devoted to medicine administration is offered on a walk-in basis. Students participating in the tutorial sessions are monitored by the nurse educator and by the faculty of each course to assess the outcomes of the tutoring initiatives. The flexibility of the nurse educator accounts in large part for the success of the program. Hours for tutoring are extended to meet students' schedules.

School of Pharmacy

The School of Pharmacy has a comprehensive career development program that starts in the first year and continues throughout the four-year PharmD program. As students move through their academic program they are exposed to various career opportunities in pharmacy practice and the pharmaceutical sciences through departmental honor seminars, research projects, and elective courses that describe alternative career paths. The curriculum at the School of Pharmacy provides students with a variety of didactic courses and experiences as part of their elective opportunities. Approximately 25% of the curriculum consists of electives. This allows the students the opportunity to explore different aspects of pharmacy practice and to pursue areas of interest or concentration.

Support services are provided by the Office of Student Educational Services and Outreach. The director is responsible for contributing to a student recruitment strategy; personal counseling and facilitating cultural competence; and administering the academic advising and career development programs, tutoring services, and the ADA program. In addition, the school has a comprehensive peer tutoring program to enable students to succeed in their academic courses.

During the fall of their fourth year, students participate in a Career Opportunities Week, where potential employers meet with the students collectively and then individually through personal interviews. The School has developed curricular pathways to organize elective course work around specific curricular content such as pharmacotherapy, geriatrics, management, and other areas. Students develop plans of study outlining their elective course work and possible field of study. They meet with their faculty advisor at least once a semester (prior to registration for the following semester) to review their plan of study.

School of Social Work

The assistant dean for student services manages the School of Social Work's Office of Student Affairs (OSA). The OSA provides an "ear" for students who need immediate assistance with academic or personal issues. The assistant dean coordinates all ADA services within the School and communicates frequently with the University's ADA Office and Counseling Center. The assistant dean manages orientation, the job fair, and graduation and thus has a high profile within in the School.

The School offers a Summer Enrichment Program for students who are accepted into the School on a provisional basis with a GPA below 3.0. Data show that students who enroll in the program maintain a higher GPA than provisional students who do not enroll in the program. In addition to the resources provided by the University Writing Center, the School employs a writing specialist two evenings a week to assist students with academic difficulties related to written expression. The school screens all incoming first year students for writing sufficiency by asking them to produce a writing sample in their first Human Behavior class. Students whose writing performance is deemed inadequate are either required or recommended to seek assistance from the School's writing specialist. The Office of Student Affairs also arranges and pays for tutors for students who need help in specific courses in relation to content.

The School hosts a Job Fair each April to assist students with job placement and maintains a web-based job board. In addition, special workshops are held to help with résumé writing, job interviewing, and license exam preparation.

Graduate School

Most advising and career counseling for graduate students is provided by the graduate program faculty and staff. However, Graduate School staff—academic coordination and enrollment management—are available to students and faculty in graduate programs for advice and guidance in academic areas, including the opportunity to discuss grievances and concerns before initiation of formal processes. In addition, in conjunction with the Graduate Student Association, a year-long survival skills series, an orientation program, and classes in research integrity are provided for all graduate students

3.2.3 Safety of Student Records

UMB strictly adheres to the Family Educational Rights and Privacy Act (Buckley Amendment). The UMB policy on confidentiality and disclosure of student records, III-6.30(A), permits students to inspect their education records, to limit disclosure to others of personally identifiable information from education records without students' prior written consent, and to provide students with the opportunity to seek correction of their education records when appropriate. Each school has developed policies and practices to ensure that this policy is implemented.

Furthermore, UMB has established information technology policies and procedures for protection of information, including student information:

Information Technology Privacy Policy:
http://www.umaryland.edu/cits/docs/privacy_policy.doc

Information Technology Server Security Standard:
http://www.umaryland.edu/cits/docs/server_security_standard.doc

Information Technology Workstation Security Standard:
http://www.umaryland.edu/cits/docs/workstation_security_standard.doc

Information Technology Acceptable Use Policy:
http://www.umaryland.edu/cits/policies/responsible_use.html

Hard-copy records for students enrolled prior to 1980, when records were computerized, are stored in locked file cabinets in a locked room that has a motion detector. The Office of Records and Registration is currently archiving those records to a database, a process that is expected to take at least one year.

3.2.4   Assessment of Effectiveness of Student Support Services

UMB continually strives to ensure that support services for students are comprehensive, effective, and adapted to evolving student needs. Student support services are assessed at the institutional and school level through formal surveys and focus groups.

UMB believes that the current system, in which student support services are provided congruently by central and school-based offices, meets student needs. The overlap is constructive, not redundant, and appears to work well. The campus's overall attrition rate is low, students regularly graduate within the parameters set by their school's accreditation standards, and the loan default rate is one of the lowest in the nation. Nevertheless, services are regularly reviewed to search for opportunities to improve coordination and to expand services. At the school level, professional association surveys and in-house-developed surveys provide valuable insights into students' perceptions of the services they receive and desire. Outcomes of these surveys provide valuable feedback and usually lead to appropriate changes.

A current example of a change in campus procedure based on student interest is the expansion library hours at HS/HSL. Starting in spring 2006, library hours have been extended 10 hours a week, with the result that the building is open until midnight Sunday through Thursday.

Planning for the new Campus Center, which will replace the 50-year-old Baltimore Student Union in 2008, is providing a special opportunity to review student programming and to conceptualize another level of cocurricular activity for UMB students. There will be considerably enhanced wellness, recreation, and fitness programming as well as new types of space, for example a ballroom that can accommodate 500, that enables us to think well beyond the services now provided. Students, faculty, and staff are actively working to design this building to facilitate a different vision of campus life for students.

3.3   STANDARD 10: FACULTY

MSCHE Definition of Standard 10:

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

UMB's success, as is true at all higher education institutions, rests upon the accomplishments of its faculty. The national rankings of UMB's programs and schools and success in external research support are due to the excellence of its faculty. Institutional efforts discussed earlier in this report—building new research and educational facilities such as Health Sciences Facility II and the Nathan Patz Law Center, enhancing support for research and the commercialization of technology, establishment of the BioPark, and the elevation of the Center for Information Technology Services—all were implemented in order to support faculty in their research and scholarship, education, and clinical work. The administration at UMB recognizes that it exists in order to attract, support, and retain excellent faculty.

Consistent with USM policies, UMB promotes academic freedom for faculty and students. Faculty members may freely discuss in the classroom all subject matter reasonably related to the course. Students are encouraged to pursue free and honest inquiry and expression. By tradition, students and teachers have certain rights and responsibilities that they bring to the academic community. USM Policy III-1.00 spells out these rights and responsibilities, many of which deal with ethical conduct. This policy is part of the Faculty Handbook (www.umaryland.edu/academicaffairs/faculty_affairs.html) and the Student Answer Book

In accordance with accreditation and governance policies and regulation, faculty in each school are responsible for the curriculum at UMB. The curricular revision processes and sample results of curricular revisions are described under Standard 11.

3.3.1   Faculty Profile

In fall 2005, UMB had a headcount of 2,197 faculty. (See Tables 13-15 for details of faculty by school, rank, tenure and full-time/part-time status.) As might be expected, 1,304 or 59% of faculty hold their primary appointment in the School of Medicine, with 12% in Nursing, 10% in the Dental School, 8% in the School of Law, 6% in Social Work and 3% in Pharmacy.

Forty-six percent (46%) of the faculty are women. UMB is justifiably proud of the strides made in increasing the diversity of its faculty. Of the total faculty, 23% are ethnic/racial minorities, with 8.7% identifying themselves as African American, 11.1% as Asian or Pacific Islander, 2.9% as Hispanic, and 0.3% as American Indian or Alaskan Native.

Because of the unique character of UMB's mission, non-tenure-track faculty constitute a large proportion of the faculty complement. In 2005, 618 faculty (28%) held tenured or tenure-track positions and 1,579 faculty (72%) held non-tenure-track positions. However, most non-tenure-track faculty hold professorial rank and may be full-time or part-time. In fall 2005, 67% of the faculty held professorial rank as professor, associate professor, or assistant professor. In addition, librarians, since 2000, under USM Policy II-1.00, hold faculty positions equivalent to those of non-tenure-track faculty.

Seventy-one percent (71%) of the faculty are full-time; 29% have part-time appointments. The part-time faculty complement is composed primarily of professional practitioners who supervise students in their clinical practice experiences—for example, in the Dental School and the School of Nursing—or who teach an occasional specialized course, for example, sitting judges who teach in the School of Law. Faculty holding positions at 0.5 FTE or greater receive the same retirement and health benefits as tenure-track faculty, although most benefits are pro-rated. Part-time instructional faculty, whether teaching on-site or off-site, or using web-based instruction or other distance education technology, receive an orientation and are subject to appointment, review and evaluation processes that are similar to those for full-time faculty.

UMB faculty are highly productive. One measure of this comes from the Survey of Non-Instructional Faculty Productivity, which is completed each year by all full-time faculty members at all USM institutions (see Appendix O). In FY 2005, 1,301 faculty members reported the completion of a total of 200 books, 3,821 refereed publications, and 3,253 professional presentations. Per full-time faculty member, productivity was 0.2 books, 2.9 refereed publications, and 2.5 presentations. This represents an increase per faculty member since FY 2001 of 9.6% in books; 39.2% in refereed publications; and 7.7% in presentations. External grants and contracts per UMB faculty members have increased by 68% since FY 2001.

3.3.2 Faculty Qualifications

All UMB schools and professional programs are accredited by professional accreditation bodies which are responsible for guaranteeing the quality and appropriateness of faculty preparation and qualification for the specific discipline or profession. Reflecting this reliance on professionally prepared faculty, faculty members are required to maintain licenses and advanced certifications appropriate to their practice discipline. According to UMB Policy II-1.02(B), any faculty or staff member holding a position with responsibilities involving patient or client services for which licensure is required under state law are required to maintain such licensure. This policy applies to volunteer as well as to paid faculty.

3.3.3 Faculty Hiring, Appointment, and Promotion Policies and Procedures

In addition, USM and UMB have appointment, rank, and tenure policies and procedures that address roles and responsibilities (USM Policy II-1.00 and UMB Policy II-1.00(A)). These policies describe the professorial ranks permitted by the Board of Regents, set criteria for each rank, and establish procedures for appointment, tenure review, and promotion. At UMB all faculty have a primary appointment in one of the six professional schools, where their rank, tenure status, title, and workload are determined. The schools are responsible for evaluation of faculty for appointment, promotion, and tenure. Each school has an approved appointment, promotion, and tenure policy (see Appendix P). All of the schools' policies require a peer review process at the department and/or the school level, with an evaluation by the department chair, which is forwarded to the dean. The dean then forwards promotions for final action to the vice president for academic affairs and the president, a process that guarantees adherence to University-wide standards for promotion. There is no University-wide committee for the evaluation of faculty for promotion. Reviews are based upon an evaluation of teaching (both student input and peer in-class evaluations), research productivity, clinical service (if applicable), and professional and public service. For all promotions to associate professor with tenure and

promotions to professor, external reviews are solicited from peers in leading institutions across the country.

As is appropriate in a decentralized university such as UMB, faculty appointment, promotion, tenure, and development decisions and programs are implemented in the schools. However, University-wide standards are maintained through the review and approval by the president and the vice president for academic affairs of faculty recruitment plans, appointments, promotions, award of tenure, and sabbatical leave.

Librarians at UMB, as at all other USM institutions, are non-tenure-track faculty. They hold ranks of Librarian I–Librarian IV and are reviewed for continuing appointment no later than the end of six years of continuous service in the UMB libraries. A Committee on Appointment, Promotion, and Permanent Status (APP), consisting of members from both libraries, is convened annually to consider requests for promotion and continuing appointment. The Committee considers the candidate's annual performance evaluations in addition to professional participation, service, and academic activities. The vice president for academic affairs approves all permanent librarian appointments.

3.3.4 Equal Opportunity/Affirmative Action Policies

UMB is an Equal Opportunity/Affirmative Action employer and educational institution and is committed to equal opportunity in the workplace, to affirmative action to identify qualified applicants from many backgrounds, and to retaining a diverse workforce (see UMB Policy VI-1.00(A)). The University prepares an annual Affirmative Action Plan aimed at developing and maintaining a broadly representative workforce. Through internal monitoring and reporting systems, the University assesses the effectiveness of its Affirmative Action Plan. The coordination of responsibilities for the implementation and monitoring of the Affirmative Action Plan is conducted by the Manager of EEO/AA and Diversity, Department of Human Resource Services, with the full support of the president, deans, and vice presidents.

3.3.5 Linkages Among Scholarship/Research, Teaching, and Service

UMB faculty are expected to meet their responsibilities in teaching, research/scholarship, and service in full accordance with USM policy, with school and institutional expectations, and with the established tenets of academic freedom. Although all faculty are expected to contribute to the mission of the university, the distribution of workload effort among teaching, research, clinical responsibilities, and service varies according to the type of appointment, the school, and the nature of the individual faculty member's assignments.

As an institution that educates health, law, and social work professionals and scientists, it is difficult to ascribe a precise numeric value to the relative emphasis that UMB places on teaching, research, public service, and patient care. All are critical parts of UMB's mission, and every faculty member is expected to contribute to teaching, research and service, although the balance of responsibility will be different for each school and for each faculty member.

The model for most of UMB's educational programs is a close, intensive interaction between students and faculty mentors as they engage in clinical practice, public service, and research. Indeed, most of the wide range of service activities provided by UMB faculty and students are corollaries to educational and research activities. As such, these service activities are core to UMB's mission, not optional add-ons. Faculty are extensively involved in clinical

practice at UMB, at affiliated institutions, and in the community. They also provide extensive service to governments at all levels and to professional organizations.

The interconnectedness of research, teaching, and service at UMB can be seen by a review of the accomplishments of faculty selected as "Research Lecturer of the Year," "Teacher of the Year," and "Public Servant of the Year" as part of the Founders Week celebrations held each year in October. These individuals are nominated by their schools and selected by the Faculty Senate for the honor. The summaries of the nomination letters for these individuals, given in Appendix Q, in addition to highlighting the accomplishments of these individuals, show how the three activities interrelate at UMB and benefit the educational program.

3.3.6 University-Sponsored Faculty Development Programs

The term faculty development describes those activities faculty members undertake to maintain and improve their capabilities to perform their academic tasks. The objectives for faculty development are different for new faculty and for more senior faculty, and therefore development plans are tailored to the needs of individual faculty members. Such planning is carried out by the department chairperson and/or the school dean together with the faculty member so that realistic goals are set and resources (time and money) may be specifically allocated to achieve these goals.

UMB considers the advancement and development of faculty to be a key institutional responsibility. Faculty development is facilitated through ongoing professional education and mentorship programs and through informal collaborations. The Office of Research and Development (ORD) periodically sponsors workshops to provide faculty with information and training on the federal grants process. Beginning in October 2004, the ORD initiated a series of "Research Development Grand Rounds," highly interactive strategy sessions aimed at increasing faculty success in NIH funding. ORD and senior grant administrators in the schools developed the lead session on the new NIH Roadmap Initiative, which consists of a framework of priorities and a set of initiatives central to extending the quality of healthy life. Succeeding sessions focused on approaches to writing NIH proposals, the NIH review process, and a workshop on writing competitive grant applications. Additional presentations and workshops are being planned.

In addition to utilizing traditional methods of professional development such as workshops, UMB now supports professional development through innovative online software. As part of a commitment to ongoing professional development and to increase productivity, UMB recently established an online training program, e-Learning@UMB. This initiative is designed to supplement rather than replace instructor-led training courses. Through this program, a variety of online programs that focus on enhancing capabilities and organizational skills will be available to administrators at all levels. The online courses can further be used as reference tools to help answer routine questions. The pilot program has already offered the following courses: Incorporating Change in Your Organization, Change Leadership, Organizational Culture and Leadership, Dynamics and Leadership, Communicating as a Leader, Communication Skills for the Workplace, and Techniques for Better Time Management.

3.3.7   School-Based Faculty Development and Assessment Programs

Dental School

Department chairs mentor faculty, foster faculty development, and give a written explanation of the development necessary to qualify for a tenure-track position if that type of position is desired by the faculty member. Every Dental School department provides monetary support to each full-time faculty member that helps defray the cost of attending one continuing education seminar or class per year. As part of the School's Performance Evaluation Process, department chairs are required to meet with full-time faculty (defined for this purpose as 0.5 FTE or greater) at least annually to review and discuss performance and career development. The primary focus of annual performance evaluations is goal setting, mentoring, and developing individualized approaches to assisting faculty members to carry out their responsibilities.

The School has also sponsored workshops to increase and integrate the use of information technology in its teaching and patient care programs. These workshops have covered areas such as using Blackboard for online coursework, developing expertise in PowerPoint basics for presentations, and using Digital radiography. Additionally, Dental School faculty members have participated in customized development programs within their departments.

School of Law

Prior to 2002-2003 the School relied on informal mentoring relationships. Since then a new working group has been established composed of newly appointed faculty as well as more senior colleagues who have an interest in pedagogy and in the process by which new teachers develop a research agenda. The group meets monthly to provide informal support to junior faculty. The School is committed to finding and making available a variety of outside resources to support the scholarship and professional development of individual faculty members. As part of this process, the School is examining how to best employ resources to support and promote the professional development of the faculty while preserving a collegial culture. Some of the factors being considered are the availability of individual faculty research and travel budgets directed to research projects; additional endowed chairs or professorships; reduced teaching loads for productive scholars; and selection criteria for these opportunities.

An ad hoc faculty committee has been charged with creating programs and activities to foster faculty development in areas of teaching and research. The School sponsored a retreat at which experts in innovative teaching methodologies worked with faculty to expand the range of educational interventions and techniques that can be used with students. In addition, the School has teaching discussion groups, where faculty members review videotapes and offer critiques of one another's teaching. Faculty who teach in specific subject areas have organized discussion groups focused on common research interests as well as common teaching issues.

School of Medicine

The School of Medicine has an established faculty development program with a staff member dedicated to this activity. In 2005, the existing Office of Student and Faculty Development presented 23 teaching skills and professional development workshops for 137 faculty. In 2005 the office was reorganized and is now called the Office of Professional Development. In addition to its role in coordinating continuing medical education for faculty and physicians, the Office of Professional Development will now also sponsor programs to help faculty develop their skills as effective teachers and scholars, and document their achievements for promotion. As a result of the reorganization, a full schedule of faculty development programs

has been implemented, including a redesigned new-faculty orientation and a new day-long research survival skills program. In addition, a teaching portfolio curriculum has been developed and distributed to all new faculty. The office also is piloting the use of distance education technologies in faculty development curricula. A sample of programs offered in fall 2005 included: "Small Group Teaching," "Giving a Large Group Lecture," "Research Survival," "Writing Exam Questions USMLE Style," and "The Art of Feedback."

School of Nursing

The School of Nursing is in the process of moving from an informal mentorship program to a more formal development program. The new Strategic Plan for the School of Nursing has a goal to "develop a formalized system that promotes the professional growth of all faculty." A survey was conducted to assess the developmental needs of the faculty. The School has revised its new faculty orientation program and developed guidelines to assist clinical instructors to achieve promotion to the rank of assistant professor. In addition, the School has developed a three-year research-intensive program for new faculty and a two-year research-intensive program for current faculty that include a formal mentoring system, $10,000 for research expenses or a half-time graduate research assistant, and a reduced workload. Currently, four faculty are participating in the program.

School of Pharmacy

Department chairpersons are expected to play an active role in faculty development for both new and established faculty. For new faculty they are expected, together with the faculty member, to establish a faculty development plan leading to tenure and to help new faculty establish collaborative research activities, balance teaching, research, and service activities, learn grant-writing skills, and understand University procedures. In addition, a New Faculty Orientation program, consisting of a series of presentations on faculty roles and resources, is held each fall. The School's Faculty Affairs Committee assists in development planning for new faculty by meeting with them during their first semester and then offering a voluntary review of their credentials after three years of performance.

For more established faculty, chairpersons collaborate with the faculty member in planning activities so that faculty development goals can be set and accomplished. An annual review and planning session is scheduled with each faculty member, with the resulting agreement formalized in writing. The review in the following year is then based on this agreement.

School of Social Work

Course evaluations are used extensively in working with new and seasoned faculty. These evaluations, completed anonymously by students at the conclusion of the semester, are read by the individual faculty member, the associate dean, and the dean. The deans work with junior faculty and other instructors who have problematic evaluations. Adjuncts usually are not retained if their evaluations are poor. The deans also meet with tenured faculty to discuss their evaluations if there is a consistent problem with their teaching. Often faculty members will seek out meetings with the deans. Every attempt is made to make the classroom environment one where trust is nurtured. The evaluations are placed in the computer lab for students to read before they register for future semesters. The assessments are used in evaluating faculty for promotion and tenure.

3.4 STANDARD 11: EDUCATIONAL OFFERINGS

MSCHE Definition of Standard 11:

> *The institution's educational offerings display academic content, rigor, and coherence that are appropriate to its higher education mission. The institution identifies student learning goals and objectives, including knowledge and skills, for its educational offerings.*

UMB offers professionally accredited degree programs in dentistry, genetic counseling, law, medical and research technology, medicine, nursing, pharmacy, physical therapy, public health, and social work. UMB strives for the highest quality in professional education and is proud of the success of its graduates on professional licensing examinations, in obtaining prestigious residency positions and post-doctoral appointments, and in securing important positions in government, academia, health care and social service institutions, and industry.

The educational programs offered by the schools are closely aligned with the standards and requirements of professional accrediting associations. Adherence to professional accreditation standards, as demonstrated by the continuous accreditation of all of the University's programs, is a primary method of determining the rigor and coherence of UMB's educational programs. The second method, also incorporated into the first, is monitoring how UMB graduates perform on post-graduation professional and licensing examinations.

Educational programs are student-centered and provide links to the broader community, as will be seen in the descriptions given of the programs in each school. However, two examples may be given here. The School of Law's Clinical Law Program has long been on the cutting edge of new developments in clinical education. The program established one of the first environmental law clinics, one of the nation's most ambitious economic and community development clinics, and a clinic that pairs law students and high school students in collaborations to improve the economic and social conditions in particular neighborhoods. The School of Social Work and the Department of Psychiatry in the School of Medicine have mental health programs that operate in approximately 30 city schools. These programs provide assistance and expertise not only to Baltimore students, but also to their families and to school faculty and administrators.

In the sections below, the professional and school-based graduate programs offered by each school are discussed. First, the degree programs are described, then the approaches to student learning, and, finally, the processes for curriculum assessment and revision.

3.4.1 Dental School

Degree Programs

The Dental School offers the Doctor of Dental Surgery (DDS) degree program, baccalaureate and master's degree programs in dental hygiene, Advanced Dental Education programs, and graduate programs. PhD programs are offered in Biomedical Science and Oral and Experimental Pathology. In 2004, the DDS and other core programs were granted

accreditation until 2010 by the Commission on Dental Accreditation of the American Dental Association.

Student Learning

The DDS program combines a strong base of study in the biological sciences and an outstanding clinical education, with a focus on the application of the latest research findings. Students have the opportunity to utilize innovative educational methodologies, including online learning activities. The clinical education program, featuring patient-centered and student-centered General Practices, simulates the structure of a dental practice. Dental graduates are well prepared to enter advanced dental education programs and to practice their professions in a wide range of private practice, public service, and academic settings.

The DDS curriculum integrates the basic, behavioral, and clinical sciences. The Dental School has its own biological science faculty who ensure that students develop a solid understanding of oral and craniofacial health and its relationship to overall health. Students begin their patient care experiences during their first year of study. They acquire a full range of clinical experiences including treatment of emergency, medically compromised, and physically and mentally challenged patients. The comprehensive patient care approach to clinical education prepares students for the demanding responsibilities of dental practice.

Wide-ranging extramural service learning experience is a required part of the year IV predoctoral dental curriculum. Currently the Dental School has more than 50 service-learning sites, each with a practicing dentist who guides the student during the experience. Faculty-guided patient care rendered by students impacts thousands of patients in the Dental School clinics and in the community. The faculty of the Dental School selects extramural sites. All extramural clinical education sites must reflect a commitment to quality oral health care services and adhere to the clinical operation and education guidelines found in the Dental School's *Clinic Manual*. Students also volunteer for non-academic community service programs and outreach activities to assist persons in the local, regional, national, and international community, including the Dominican Republic and the Operation Smile Vietnam Dental Mission.

The Dental Hygiene program takes full advantage of the state-of-the-art environment of the Dental School. The program is characterized by small classes, modern clinical facilities, caring faculty members, and an innovative curriculum that utilizes online educational experiences. Dental hygiene and dental students work as a team to provide patient care and participate in ongoing research and community service programs.

The graduate programs in the Dental School are structured to provide contemporary education and training in various aspects of cell and molecular biology, infectious disease and immune function, the neurosciences, and the mechanisms and events of human disease related to the craniofacial complex.

Curricular Assessment and Revision

Every course in the predoctoral dental curriculum is reviewed in alternate years. Departments assume primary responsibility in this review. Each course review considers the number of hours devoted to standardized topics (as described by the American Dental Education Association) compared with the national average for that topic. Course reviews include specific proposals to eliminate, reduce, add, or resequence content; to familiarize students with new technology; and to add treatment modalities. Based on the results, an individual department may implement some types of curricular changes. Curricular modifications spanning more than one

course or discipline must be approved by the Committee for Educational Innovation and Management. Requests for new courses, changes in hours and credits, schedule changes, and/or curriculum changes are ultimately reviewed and approved by the Faculty Council.

Since 1997, exiting seniors have been interviewed to capture the views of graduating Dental School students. The deans use the qualitative data as one way to provide feedback to faculty and staff, and to make improvements to all aspects of the Dental School program, including changes to the curriculum. Throughout their course of study, predoctoral dental and dental hygiene students are invited at the conclusion of every course to complete a survey evaluating the instruction in the course. Course directors use this outcome measure in the departmental-level review of the course.

In response to data from these assessments, the curriculum evolves continuously to ensure that it meets the learning needs of students. For example, in 2004 students had only limited experiences in the placement and restoration of dental implants. Faculty estimated that 50 students (one-half of the class) restored approximately 75 implants; however, no predoctoral dental students placed any implants. Post-course evaluations and survey results reflected students' lack of confidence in their ability to manage implants. To meet student demand for experience in this emerging field of dentistry, the Department of Endodontics and Periodontics has piloted a program in which a limited number of students will surgically place implants. Through the Prosthodontic clerkship, students have increasing opportunities to place and restore implants.

3.4.2   School of Law

Degree Programs

The School of Law offers the Juris Doctor (JD) degree in both day and evening programs. In 2003, the JD program was reaccredited until 2010 by the American Bar Association, Section on Legal Education.

The academic program in the School of Law is designed to help students acquire the four basic characteristics of the well-educated lawyer: knowledge, professionalism, a broad perspective on the social implications of legal issues, and the ability to communicate effectively. Fundamental to each of these characteristics is the development of certain habits of mind crucial to thinking like a lawyer: clarity, precision, and analytical skill.

In addition to certificate programs in Environmental Law and Law and Health Care, the School offers several programs within the JD program that provide some specialization: a comprehensive *Business Law Program*; the *Clinical Law Program*, which focuses on the integration of theory and practice through its in-house public interest law firm; the *Intellectual Property Law Program*; the *International and Comparative Law Program*; and the *Women, Leadership & Equality Program*, which has the goal of developing lawyers—both men and women—who are aware of the barriers to women assuming leadership in society and who will actively promote women in leadership roles. Dual degree programs and interdisciplinary study further prepare graduates for the real-life interplay between legal and other professionals.

Student Learning

The full-time faculty, who teach both day and evening courses, are teacher-scholar-practitioners whose varied backgrounds and experiences bring differing perspectives to the classroom. Those different experiences and perspectives are further augmented by members of

the bar and bench who serve as adjunct faculty teaching courses in their areas of specialization. The student-faculty ratio of approximately 14 to 1 provides for a supportive academic and professional relationship in which students have the opportunity to reach their full potential.

Required courses in the first and second years include: Civil Procedure, Constitutional Law, Contracts, Criminal Law, Property and Torts. Courses in Legal Profession and Advanced Legal Research also are required for upper-level students. All full-time day students are required to fulfill the Cardin Requirement by taking one of several designated offerings integrating traditional classroom learning with live client representation under the close supervision of experienced faculty practitioners. These courses introduce students to professional roles and responsibilities through the supervised provision of legal services to the underrepresented. Live client representation courses also are available to, but not required of, evening students.

As a graduation requirement, students must have two courses in research. The first, taken during the second semester of the first year, covers the basics of electronic and print legal research. An advanced course, taken by upper-class students, covers additional research topics including in-depth coverage of Internet research and electronic searching. Through a broad range of electives, the curriculum provides students with opportunities for in-depth study in many areas of law.

Because writing and analysis are such important components of legal education, students have many writing opportunities, both required and elective. The Legal Analysis, Writing and Research (LAWR) program engages students in increasingly complex writing assignments throughout their first three semesters. Electives annually include more than 40 upper-level writing seminars. Students must fulfill an advanced writing requirement that entails preparing a substantial paper analyzing a particular legal or law-related problem. The School supports four student-edited journals: *Journal of Business and Technology Law*, *Journal of Health Care Law and Policy*, *Maryland Journal on Race, Class, Religion and Gender*, and *Maryland Law Review*. The student Moot Court Board sponsors and supervises a broad range of intra- and inter-school programs in written and oral advocacy.

Curricular Assessment and Revision

Several years ago, the School of Law undertook a comprehensive review and reform of its curriculum. As part of the evaluation of the existing curriculum, the chair of the Curriculum Committee conducted structured interviews with most full-time faculty members to seek their assessment of the curriculum and to solicit ideas for revision. The Curriculum Committee also facilitated a series of faculty workshops that focused on specific aspects of the curriculum. To ensure meaningful student input, the student members of the committee administered and analyzed a survey of current students regarding curricular strengths and weaknesses. The committee also collected and presented information about curricula at more than 25 other law schools. These efforts culminated in a detailed report, *Options for Reforming the Law School Curriculum*. The report, which was reviewed and endorsed by the faculty, summarized faculty and student views and identified a number of areas where there was strong consensus for reform. Using the report as its base, the Curriculum Committee produced an initial proposal for revision of the curriculum. The proposal focused on the School's required curriculum and emphasized the need to modernize that curriculum to reflect trends that have affected law practice and the role of lawyers: the explosion of information; the growth of the administrative state; globalization; and increasing specialization within the profession. These curricular reforms were approved by the faculty and were implemented beginning in the 2001-2002 academic year.

3.4.3 School of Medicine

Degree Programs

The School of Medicine offers the professional degree of Doctor of Medicine (MD). The Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association last accredited the MD program in 2000. The School of Medicine's self-study for reaccreditation in 2007 is underway.

The MD curriculum is a four-year program consisting of a didactic emphasis in the first two years followed by two years of clerkships, sub-internships, and electives. The School of Medicine also offers a baccalaureate and a master's program in medical and research technology, the Doctor in Physical Therapy (DPT), a master's program in genetic counseling; the Master of Public Health, and several MS and PhD programs in the life sciences. In an effort to nurture more interest in basic research and to meet the increasing demand for physician-scientists, the school offers a combined MD/PhD program in 10 biomedical disciplines and an MD/MS program in preventive medicine.

Student Learning

The approximately 1,000 faculty members in the School of Medicine are all called upon to teach in a variety of lecture, small group, and clinical settings. In addition to the faculty, medical students receive instruction from the residents employed through the University of Maryland Medical System (UMMS). In the required junior rotations, the clinical faculty provide the majority of training.

The School of Medicine provides students with a broad exposure to clinical medicine from their first day of medical school and utilizes a problem-based approach to learning, including an emphasis on small group sessions. The current medical student curriculum differs from more traditional curricula in several respects. During the first two years, the basic sciences are no longer taught as discipline-specific "courses" but are integrated and taught as "blocks," utilizing an interdisciplinary teaching approach. Lectures are limited to allow small group discussion and integration of basic material. Ample time is provided for independent study and the exploration of clinical and research opportunities outside of the classroom. The third and fourth years of the medical student curriculum consist of clerkships, sub-internships, and electives designed to prepare the student to become an excellent clinician as well as to introduce specialties across the spectrum of medicine. Particular emphasis is placed on competence in both inpatient and ambulatory settings and preparation for the first year of postgraduate training.

Other innovative features are the School's emphasis on informatics and the use of standardized patients (actors portraying patients). The School was the country's first medical school to make computer informatics training an essential part of the curriculum. All entering medical students are required to own and use laptop computers throughout their studies. The School makes use of standardized patients throughout the curriculum for both teaching and assessment purposes. Students' interviews with these patients are videotaped so that students can review their performance in conjunction with evaluation and feedback from both the faculty and the standardized patients.

The School maintains an Office of Student Research, which, in addition to providing a wide variety of research opportunities for predoctoral students throughout their medical school experience, also extends its mentorship services to undergraduate students outside UMB who are preparing for medical school.

The School has a wealth of sites for clinical rotations and is able to accommodate 150 students easily within all the required clerkships and fourth-year electives. Besides the two major teaching facilities of UMMS and the Baltimore Veterans Affairs Medical Center, students also rotate though Mercy Medical Center, Franklin Square Hospital, Union Memorial Hospital, Spring Grove State Hospital, and a variety of University and private offices throughout the city. In addition, during the fourth year, students rotate at the Area Health Education Centers located on the Eastern Shore, in Western Maryland, and in Baltimore City, which are targeted to underserved populations.

Curricular Assessment and Revision

The main educational body of the School of Medicine is the Curriculum Coordinating Committee (CCC). This committee, which is advisory to the dean and works in coordination with the Office of Medical Education, serves as the policy maker and manager of the curriculum and must approve any changes in the curriculum. Membership consists of coursemasters and clerkship directors throughout the four-year curriculum. Since the last major curriculum revision in 1994, when interdisciplinary blocks rather than traditional discipline-specific courses were introduced, a number of revisions have been made to the basic curriculum. However, the overall structure of limited lecture time, increased small group learning, and responsibility for independent study has been maintained.

The committee reviews each course through the year; electronic feedback from students is available for review by the committee. Evaluations by students are coordinated centrally through the Office of Medical Education. In addition, student focus groups are conducted by coursemasters and clerkship directors to explore course satisfaction. Recent examples of reexamination of the curriculum based on the results of student evaluations include the proportion of ambulatory versus hospital-based teaching, the parts of the curriculum devoted to teaching in nutrition, and the amount of time dedicated to issues of gay/lesbian and transgender health. The School of Medicine continues to adapt its graduate programs and research to correspond to national trends in scientific research such as the NIH Roadmap for medical research.

3.4.4 School of Nursing

Degree Programs

The School of Nursing offers an undergraduate program that leads to the bachelor of science degree in nursing (BSN) for traditional students as well as for those who are already registered nurses (RNs). The School has one of the largest graduate nursing programs in the country, offering programs that lead to the MS (13 specialties), including a new generalist MS entry into practice for students with non-nursing degrees, and to the PhD. The school is planning for the first enrollments in its new Doctor of Nursing Practice (DNP) degree program in fall 2006.

In 2002, the National League of Nursing Accreditation Commission reaccredited the baccalaureate and master's programs until 2010.

The BSN program is an upper-division professional program based on a foundation of preprofessional courses that provide a liberal education and support the study of nursing. Students complete a minimum of 61 upper-division, professional course credits. Partnership programs for BSN completion link the School of Nursing with the University of Maryland Baltimore County, the University of Maryland College Park, Washington College in

Chestertown, Maryland, as well as all of Maryland's community colleges. Dual admission to UMB is also available for BSN students applying to select universities, colleges, and community colleges throughout Maryland.

Combined programs to enhance graduate study include the MS/MBA, MBA/PhD, and MS/LLD programs offered in conjunction with partner institutions such as the University of Baltimore, Frostburg State University and the University of Maryland, College Park, which offers its MBA program on site at the School of Nursing in Baltimore.

The School follows the Graduate School policy of allowing six transfer credits to the master's program following academic review and recommendation by the appropriate specialty/department. Undergraduate students may transfer in more than six credits upon approval of the associate dean for academic affairs based on course equivalency with required undergraduate program courses.

Student Learning

The BSN program provides educational opportunities for men and women seeking a career in nursing and for registered nurses with an associate degree or diploma in nursing who wish to pursue baccalaureate-level study in nursing. The undergraduate program prepares nurses who are liberally educated and equipped with clinical knowledge, technological skills, proficiency in scientific and clinical decision making, critical-thinking abilities, and humanistic skills. Graduates of the program are well positioned to play a significant role in shaping the future of nursing and health care.

The School currently offers a variety of flexible and combined programs to accelerate degree completion. These include the MS entry into practice program, the RN to MS program, and the post-baccalaureate entry option into the PhD program. To increase access to baccalaureate education across Maryland, the School offers some of its programs off-site and online. The traditional BSN is offered at the Universities at Shady Grove. The RN-BSN program option is offered in Western Maryland (Cumberland and Hagerstown). The online RN to BSN program option enables registered nurses to benefit from the flexibility offered by this learning format. The school has greatly expanded its use of telecommunications and distance learning technology for off-campus programs, continuing education, and international programs. More information about off-campus programs is given below in section 3.6.5.

Nationally recognized for pioneering the incorporation of informatics and technology in nursing curricula, the School of Nursing provides a setting in which undergraduate students learn to use a variety of data sources and technologies in the delivery of nursing care.

The School's location on the campus of a major academic health science center offers a rich learning environment. Clinical practice is incorporated as part of each program of study offered by the School of Nursing. Undergraduates complete a minimum of 730 clinical hours. Graduate students complete clinical hours as required by their program specialty or professional certifying organization. Students have the opportunity for clinical experiences at any of more than 500 locations, including faculty practice sites operated by the School of Nursing, hospitals, long term care institutions, ambulatory centers, and school-based clinics.

The post-baccalaureate master's degree program offers an opportunity for advanced preparation in nursing in a variety of specialty areas. These include advanced practice practitioner options in trauma/critical care and emergency nursing; oncology; and adult, gerontological, pediatric, family, and psychiatric primary care. Specialties also are offered in

community/public health, with an emphasis in environmental/occupational health; behavioral health nursing, with adult or child and adolescent emphasis; health care services leadership and management; informatics; nurse-midwifery; nurse anesthetist; and clinical research management.

Research rotations are required as part of the doctoral program. All doctoral students complete a minimum of two research rotations with active researchers. The Office of Research provides technical advice to support the initial and ongoing sponsored research of faculty and graduate students, provides for the scientific overview of sponsored research proposals, identifies new sources of funding, and disseminates research findings.

The School's Institute for Educators in Nursing & Health Professions offers courses to master's and doctoral students to prepare them with the essential knowledge and skills to assume teaching roles in professional nursing programs.

Curricular Assessment and Revision

The School of Nursing has a School-wide Curriculum Committee that provides review and oversight of all curriculum and course additions, deletions, and revisions brought forward by the three curriculum subcommittees (Undergraduate, Master's, Doctoral). These committees are composed of elected faculty from each of the two departments; the appropriate associate dean of the program is an ex officio member. New program proposals are developed by faculty, taking into consideration the School's strategic plan, faculty and facility resources, health services needs and market demand, and advancements in the nursing profession. These proposals are reviewed for approval or revision by the Administrative Council of the School of Nursing, the pertinent curriculum committees, and other School officers or committees as appropriate. Recommendations for new graduate courses, specialties, and programs are referred by the School-wide Curriculum Committee to the Graduate School for approval.

3.4.5 School of Pharmacy

Degree Programs

The School of Pharmacy offers the four-year Doctor of Pharmacy program (PharmD) and two graduate programs leading to the PhD—Pharmaceutical Science and Pharmaceutical Health Services Research. The PharmD program is currently (2006) under review by the American Council of Pharmaceutical Education. Its most recent accreditation was in 2000.

Students applying for admission to the PharmD program must have completed at least 63 semester hours of course work of pharmacy prerequisites. The nontraditional pathway for licensed baccalaureate pharmacists who wish to retain their full-time practices while earning the PharmD is being phased out. The final applicants were admitted in fall 2002 and the final pathway graduation is scheduled for May 2006.

The School also offers dual degrees. The PharmD/PhD program is a cooperative program encompassing the PharmD curriculum and the graduate curriculum of either Pharmaceutical Sciences or Pharmaceutical Health Services Research. A similar program, awarding both the PharmD and MBA degrees, is offered in collaboration with the University of Baltimore. In 2000, the school initiated a joint PharmD/JD degree with the University of Maryland School of Law.

The School of Pharmacy does not allow transfer of credits unless the student has taken courses that the faculty deem similar to current courses offered at the School. Students who wish to transfer credits must pass a comprehensive test administered by the School.

Student Learning

UMB's PharmD program was developed in partnership with employers and practitioners from all areas of pharmacy. More than 1,600 hours of experiential learning unite classroom learning with day-to-day practice. The combination of Maryland's challenging curriculum, faculty with experience and external recognition, and a focus on patient care, prepares graduates to work comfortably as members of multiprofessional health care teams, regardless of the practice setting

The four-year program is divided into six levels: Fundamentals, Basic Science, Pharmaceutical Science, Integrated Sciences and Therapeutics, Experiential Learning, and Curriculum Practice Interface, with a required total of 132 credits. These credits include didactic, experiential and elective courses. The curriculum at the School of Pharmacy provides students with a variety of didactic courses and experiences as part of their elective opportunities. Approximately 25% of the curriculum is elective. This allows the student to explore different aspects of pharmacy practice and to pursue areas of interest or concentration.

The School operates a Pharmacy Practice Laboratory (Model Pharmacy), where students learn the operations of a pharmacy with real-life exercises. The students fill prescriptions, counsel patients, and learn physical assessment skills in simulated situations. Students spend the entire last year of the curriculum in the community with pharmacy preceptors.

The School of Pharmacy incorporates service-learning activities in the experiential rotations and as part of student organization activities. Pharmacy students have the opportunity to rotate through over 300 sites, in Maryland and other states, in community pharmacies, hospitals, nursing homes, and other agencies. Students spend 1,600 hours in these clinical sites. The Student Government Association is very instrumental in organizing service learning activities. Research rotations also are available as elective opportunities in laboratory settings and external research facilities, including government research centers and the pharmaceutical industry.

The two PhD programs are collaborations with the Graduate School. The doctoral program in Pharmaceutical Sciences trains independent, creative research scientists to conduct state-of-the-art research and discovery in the areas of cellular and chemical biology, neuroscience, pharmacology, biopharmaceutics, and drug delivery. The doctoral program in Pharmaceutical Health Services Research provides teaching, service, and scholarly activities related to the behavioral sciences, pharmacoeconomics, pharmacoepidemiology, and regulatory issues.

Curricular Assessment and Revision

The School's PharmD curriculum has been a national model since its implementation in 1993. The curriculum is managed by a school-wide Curriculum Committee, consisting of faculty and student representatives. This committee oversees all curricular changes and evaluates changes to be considered by the faculty. The committee provides recommendations for all course additions, deletions, and revisions. New program proposals are reviewed by the Curriculum Committee, forwarded to the Executive Council, and approved by the School's Faculty Assembly. Graduate-level courses and programs are reviewed by the School's Graduate Studies and Research Committee and forwarded to the Graduate School Council for approval.

The School of Pharmacy has an assessment plan for institutional and curricular assessment. In the School's Office of Academic Affairs, the academic affairs administrator is

responsible for overall assessment activities in collaboration with the School's standing committees and administrative committees. Student and curricular assessment was one of the priority areas for the Office of Academic Affairs in 2005.

Course evaluations are conducted for both didactic and experiential courses. Blackboard is the current system utilized to conduct course evaluation. While Blackboard may be easy to use for anonymous, customized surveys, it has very limited data analysis capabilities. It provides only averages as percentages for each answer, and data cannot be compared among other courses within a semester, or longitudinally. In an effort to improve the School's curricular assessment, a new service is being piloted for the fall 2005 semester (www.OnlineCourseEvaluations.com). The service provides anonymous responses to customized surveys. In addition to the basic features, it allows reporting and analysis features such as mean, median, standard deviation and distribution analysis as well as a percentile rank analysis. The system is able to track performance over time, and the data can be exported to Excel for additional reporting. This course evaluation system will be a strong component of a long-term program assessment plan.

3.4.6 School of Social Work

Degree Programs

The School of Social Work offers a continuum of accredited social work degree programs: the baccalaureate program (BSW) at the University of Maryland Baltimore County and the Master of Social Work (MSW) and PhD programs at UMB. Preparation for the self-study for the MSW and BSW reaccreditation by the Council on Social Work Education in 2008 is underway. Those programs were last accredited in 2000.

The foundation year (first year of the MSW program) is offered off-campus at the Universities at Shady Grove. Four dual degree programs are available: the MSW/MBA with the University of Maryland College Park; the MSW/JD with the University of Maryland Law School; the MSW/MA (Jewish Studies) with the Baltimore Hebrew University; and the MSW/MPH with the Department of Epidemiology and Preventive Medicine, the University of Maryland School of Medicine, or The Johns Hopkins University Bloomberg School of Public Health. The School also offers a one-year advanced standing program for students entering with a BSW degree from an accredited program. The PhD program is designed for professionals with a master's degree in social work. Upon completion of their studies, graduates have advanced analytical, research, and theoretical knowledge and skills to provide leadership, scholarship, and teaching that will further the social work profession.

Student Learning

The School of Social Work is designed to meet the needs of students interested in studying clinical social work, human service management, and community organization. The 60-credit program is divided between 24 foundation credits and 36 advanced credits. Students have a choice in the advanced year between the Clinical Concentration and the Management and Community Organization Concentration (MACO). It is also possible to combine the two. In addition, students select a specialization, or field of practice, which focuses their work in a particular area of study within the concentration. These specializations include Aging, Employee Assistance Programs, Families and Children, Health, Mental Health, Social Action and Community Development, and Substance Abuse.

 All students are required to complete 1,240 hours of successful social work practice within an agency setting. The School maintains educational affiliation agreements with

approximately 400 agencies throughout the state and region in order to provide the clinical settings for this practice requirement. In addition the School has, at any given point in time, about 12 field instruction units under the supervision of a faculty member at the School. These units are funded through the School's Social Work Community Outreach Service (SWCOS) and the Education for Public Welfare Project.

Curricular Assessment and Revision

To ensure that the curriculum is current and relevant, faculty in the School of Social Work oversee content areas in the foundation year (policy, practice, research, human behavior, field instruction) through a structure of separate committees. The advanced year curriculum is divided by concentration and specialization, with separate committees for each. All the committees report to the Master's Program Committee, which reports to the faculty as a whole. When a new course is suggested, it must first be reviewed and approved by the committee within whose scope it falls before being forwarded to the Master's Program Committee. Examples of recent additions to the curriculum include: Clinical Social Work with Gay and Lesbian Populations; Clinical Social Work in Relation to Death, Dying, and Bereavement; and Spirituality in Clinical Social Work. These courses were developed because of a perceived need by faculty and students for content in these areas. Largely in response to feedback from students indicating a perception of redundancy in the foundation curriculum and a desire to have the opportunity to take more advanced electives, the School of Social Work has consolidated the foundation courses, thereby increasing the available number of advanced and elective credits.

3.4.7 Graduate School

As noted earlier, graduate programs at UMB are offered as a collaboration between one or more of the professional schools and the Graduate School. The Graduate School offers graduate education and research opportunities in more than 20 programs related to the health, biomedical, life, and social sciences. These programs have been described earlier in this chapter under the heading of the relevant school.

In addition to its degree-granting programs, the Graduate School offers programs in the responsible conduct of research and a survival skills seminar series. The latter aims to provide professional enrichment and addresses such topics as effective oral presentations, grant writing, and mentor selection. These programs are open to all students and faculty.

The Graduate School supports the activities of the Graduate Student Association (GSA), a student-run organization that represents graduate students in all schools. The GSA coordinates many services and programs including awards and grants, orientation, social events, a research conference, and a graduation ceremony for PhD students.

The Graduate School is a key partner in PROMISE, Maryland's Alliance for Graduate Education and the Professoriate (http://www.umaryland.edu/promise). PROMISE seeks to increase enrollment and diversity in PhD programs in the sciences and engineering and to encourage graduates in those fields to pursue academic careers. PROMISE serves the needs of graduate students across three campuses (UMB, UMBC, and the University of Maryland College Park) through activities that range from retreats, seminars, and conferences, to informal breakfast discussions. The services and programs of PROMISE are open to most graduate students who are seeking or interested in obtaining a PhD, regardless of discipline.

The Graduate School is part of the University of Maryland Graduate School, Baltimore (UMGSB). The UMGSB oversees the joint academic and research resources of UMB and

UMBC and facilitates a joint Graduate Council, which reviews and approves new and existing graduate programs, courses, faculty, and policies on both campuses. The Graduate Council, composed of elected faculty representatives, is responsible for approval of all proposals for new graduate programs or significant modifications of existing ones and for the approval of all new courses offered in any graduate program.

3.4.8 Interdisciplinary Activity

The six professional schools and the Graduate School provide selected interprofessional and interdisciplinary educational opportunities for students. There is great potential for expanding such opportunities, not only for students but also for faculty. In 2003, the Office of Academic Affairs surveyed existing interdisciplinary and interprofessional programs and activities and identified barriers to expansion. The report, which was intended to be a starting point for discussion, made a number of recommendations designed to remove existing barriers in order to give all students interdisciplinary, interprofessional, and team training experience (see Appendix R). The key findings of the report are summarized below.

Education: UMB offers a small number of courses that have been planned to attract students from the professional schools. Some of the courses are cross-listed among schools and have been approved by the curriculum committees from each of the participating schools. In addition, courses are listed under the category of "interprofessional courses" in the Graduate School catalog. Faculty incorporate interdisciplinary material into professional courses by inviting faculty from other schools as guest lecturers or enlisting them to provide specialized materials, including web-based information, to enhance interdisciplinary exposure and thinking among students. Some web-based activities ask students to become part of a simulated interdisciplinary team. In addition, a number of degree programs give students an opportunity to enroll in courses in other schools or at other universities.

Research: UMB's graduate research programs are structured to provide students with opportunities to learn about and participate in interdisciplinary research activities. These programs enable students to appreciate the importance of interprofessional collaboration in framing and implementing research in the increasingly complex world of biomedical research. Many graduate programs and training grants, such as the interdepartmental program in Neuroscience and Cognitive Sciences, with over 90 faculty members in the Dental School, School of Medicine, School of Pharmacy, and the Maryland Psychiatric Research Center, are inherently interdisciplinary. Federal grant requirements have been one stimulus for the establishment of interdisciplinary programs. Active encouragement by the University president and the deans has led to the establishment of interdisciplinary research centers. These centers have been effective in forging research collaborations of faculty across school lines. In many cases, the schools have provided supplementary funding to support faculty and staff engaged in creating interdisciplinary research and training projects.

Clinical Training: Each of the schools has a number of training venues that encourage interdisciplinary participation. For example, the Pediatric Ambulatory Clinic, Open Gates, the Baltimore Veterans Affairs Medical Center's Geriatrics Evaluation Management Unit, Levindale Hebrew Geriatric Center and Hospital, and Keswick Multi-Care Center are some of the health care facilities that have staff who precept UMB students. The Geriatrics and Gerontology Education and Research Program (GGEAR) in the Office of Academic Affairs has assisted in supporting placements for the School of Social Work's Aging Specialization to enable students to receive training as part of an interdisciplinary team. Programs such as the Center for Families

and Family Connections, which is a joint venture between the Schools of Medicine and Social Work, also provide interdisciplinary training opportunities for students. Descriptions of many of these programs can be found on the UMB Community Affairs web site (http://www.oea.umaryland.edu/community).

Barriers to Interdisciplinary/Interprofessional Training: Faculty and staff interested in fostering interdisciplinary/interprofessional training have experienced numerous obstacles in planning and implementing such programs. The term "silo approach" is frequently used at UMB to describe how the six schools implement clinical training. Some of the barriers to planning interdisciplinary education discovered were the following: (1) Discipline-specific training accreditation requirements often leave students little time for electives; (2) The schools rarely develop new courses together because of budgetary and teaching load issues or the need to accommodate their own students in courses; (3) Faculty and advisors may not themselves have been trained in interprofessional environments; (4) Each school develops its own calendar and course schedule, and therefore length of courses, clinical rotation days, etc., are unique to the school; (5) Interprofessional training tends to develop through the interest of particular faculty members or through special funding rather than through institutional processes. Therefore, interprofessional/interdisciplinary courses may disappear if these individuals leave the University or the funding disappears.

The report made the following recommendations to help overcome these barriers:

- The University's leadership should articulate the goal of interdisciplinary training for all students. Incorporating interdisciplinary training into educational, research, and clinical programs will augment the ability of students to meet the complex challenges of working in health care, social work, and law settings.

- An advisory board on interdisciplinary training, with representatives from each of the schools, should be established through the Office of Academic Affairs. The charge to the group should be to establish overall goals, identify venues for collaboration, and identify extramural funding sources. Attainable short- and long-term goals could be established that would build on existing programs and on sources of University support and extramural funding.

- A web site should be designed to provide links to information about courses, cases, projects, centers, conferences, seminars, and curricula that have interdisciplinary content.

As illustrated by the 2003 review of interprofessional activities cited above, it is difficult to organize interprofessional education programs at UMB. What seems to work better for UMB's professional programs is the dual-degree approach. UMB offers many dual-degree programs where students are admitted to and fulfill the requirements of both degree programs. Among the numerous examples are: MD/PhD, DDS/PhD, PharmD/PhD, MSW/MPH, JD/MPH, MSW/JD, PharmD/MPH, PhD Nursing/MBA, MS Nursing/MBA, MS Nursing/MPH, and JD/MBA.

3.4.9 Learning Resources

Extensive learning resources for students are provided by campus-wide library and computer facilities and by specialized laboratories, clinics, and other program-based resources in the professional schools.

Campus Resources

Health Sciences and Human Services Library

The University of Maryland Health Sciences and Human Services Library (http://www.hshsl.umaryland.edu) is dedicated to providing quality information resources, services, and infrastructure supporting the education, research, clinical care, and public service missions of the University. One of the largest health sciences libraries in the United States and a recognized leader in state-of-the-art information technology, the HS/HSL supports the programs of the professional schools (with the exception of the School of Law, which operates the Thurgood Marshall Law Library, described below) and the Graduate School as well as the University of Maryland Medical Center, the R Adams Cowley Shock Trauma Center, and the Baltimore Veterans Affairs Medical Center.

The HS/HSL serves as the headquarters of the National Network of Libraries of Medicine, Southeastern/Atlantic Region (Region 2). This distinction—a five-year competitive contract—has been held by the HS/HSL since 1983. Region 2, with a staff of nine, serves ten southeastern states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.

In 1998 the HS/HSL moved into a new facility housing the library as well as central campus computing and communications resources. The building provides 118,000 net square feet of space with 900 seats for users and 1,500 data connections located throughout the building. Wireless capability was added in 2004. There are three microcomputer-teaching labs, with a total of 57 computers, and technology to support the teaching process. A distance learning room with a satellite downlink seats 40, and there are over 40 small group study rooms for students. Of the more than 100 public access computers, 37 are supported in the Research and Information Commons, where users can access library information resources, desktop applications, databases, e-mail, or the Internet. In FY 2005, users accessed digital resources over 25,000,000 times.

The library is open 90 hours per week, including weekend and evening hours. The Circulation, Reference and Computing Assistance desks provide quality service to faculty, staff, and students. In FY 2005, the service desks responded to more than 53,000 inquiries.

Twenty-eight faculty librarians and 41 support staff serve the UMB campus. At the end of FY 2005, the HS/HSL held 383,252 titles, over 3,300 in-scope print and electronic journals subscriptions, and 87 database products. Approximately 20,000 journal titles are available through the USM consortium. Total collection expenditure for FY 2005 was $1.69 million.

The HS/HSL's successful School Liaison Program offers knowledge-based instruction to students throughout the curriculum. Within the past academic year, 5,704 students attended 140 instructional sessions. Library faculty liaisons serve each of the schools at UMB.

In order to maintain a strong collection supporting education, research, and clinical service, the library emphasizes an active collection development program and invites both faculty and students to participate in planning the collection's move from print to digital media. To facilitate communications, a Library Advisory Committee, with representation from across the UMB community, meets regularly. The HS/HSL web site (www.hshsl.umaryland.edu) serves as an information, access, and service portal for all HS/HSL resources.

The Thurgood Marshall Law Library

The Thurgood Marshall Law Library (http://www.law.umaryland.edu/marshall) is the largest and most comprehensive academic law library in Maryland. Although part of the School

of Law, the library is available for use by the entire University community and external constituencies. The library occupies a new building with ample space for collection expansion, attractive study space, and the latest technology for patrons and staff. The collection consists of over 400,000 volume equivalents. The library maintains a core collection of all reported federal court decisions and reported decisions of the highest appellate court of each state, and all regional reporters; all federal codes and session laws and one current annotated code for each state; all published treaties and international agreements of the United States; all published regulations of the federal government and Maryland; and all federal and Maryland administrative decisions. As a selective federal depository, the library maintains a collection of U.S. Congressional materials as well as substantial other federal material in a variety of formats. A great deal of emphasis is placed on participation in collaborative ventures with other libraries within USM and with affiliated institutions in order to meet the needs of faculty and students engaged in interdisciplinary research and study.

The Marshall Law Library has services and programs to assist faculty with instruction. In addition to a library liaison for each law faculty member, the liaison also assists students in their courses. Research pages are routinely developed for all courses that involve research and writing, including seminars and clinics. These pages track coverage of the courses and contain links to primary and secondary sources to help students begin their research. Information about the library liaison and a link to any relevant course pages are included on each Blackboard course page. In addition, the library handles copyright clearance for course materials including print course packs.

The library's professional staff consists of 11 full-time faculty librarians (including the library director), of whom eight are in public services. Five have JD degrees in addition to the MLS. There are 10 full-time support staff, and another 4 FTE provide support for a variety of tasks on a contractual basis. Library faculty are responsible for teaching two required courses in research skills: an introductory course for first-year students and a second course in advanced legal research

3.4.10 School-Based Resources

Dental School

Dental students learn to perform dental procedures to high standards of precision, quality, and accountability on lifelike manikins in simulated and real practice settings, before treating patients. This is accomplished in the Dental School's multidisciplinary laboratories, a unique clinical simulation unit that replicates the features of a dental practice operatory, and in the general practice clinics in which patients receive care. Professional skills and habits acquired in realistic clinical simulation ensure student ease, confidence, and competence in their later application to patient care.

The Dental School currently has a total of 359 dental chairs and 435 laboratory workstations. Of these, 237 chairs are primarily utilized by the predoctoral students. All Year III and Year IV students use the General Practices and other clinical areas for approximately 30 hours per week for patient treatment. Sufficient space is available for the clinical activities of year I and year II students. The patient treatment areas within the General Practices are also shared with the baccalaureate Dental Hygiene Program, and a symbiotic relationship exists between the programs.

In the past few years, the research laboratories in the Department of Biomedical Sciences have undergone significant renovations. The Center for Clinical Studies was refurbished in 1999.

A new Dental School building will replace the existing facility in 2006. The new 10-story, 360,000 square foot facility will offer more spaces for interactive, small-group, and hands-on learning than the present facility. Four of the floors are dedicated to clinics for patient care. Building program highlights include a highly developed electronic patient record system that will allow easy access to patient treatment plans, digitized x-rays, photographs, and account information from every one of the 340 clinical chairs as well as from reception desks, faculty offices, and off-site locations; online availability of much of the dental and dental hygiene curriculum; state-of-the-art classrooms, laboratories, and lecture halls; a comprehensive body of continuing education seminar rooms available both on-site and online for practicing oral health professionals; a learning center; a simulation laboratory to complement the clinical operations; and a same-day surgery suite with an observation area.

School of Law

Every seat in the School's classrooms, library carrels and tables, student lounges and other informal spaces around the building is equipped with power and data ports for portable computers, providing access to the School's computer network and, through it, to the Internet. Beginning in fall 2005, all incoming first-year students are required to have a notebook computer with specified software. A pay-for-print system allows students to print from any data port to any of several printing kiosks in the library and elsewhere in the building.

A computer laboratory in the Thurgood Marshall Law Library equipped with V-LAN technology provides the capacity to project from any computer in the room to a large screen or to any other computer in the laboratory. A second technology-assisted learning center houses desktop computers with full Internet access as well as access to the School of Law's intranet, CALI exercises, Blackboard technology, and other applications. Carrels for students in the Clinical Law Program and other student practice courses are equipped with desktop computers supporting, in addition to the standard applications, a sophisticated case management system, database technology, and other user services.

Classrooms, seminar rooms, courtrooms and conference rooms are equipped with the latest computer and audio-visual presentation technology, including ceiling-mounted projectors capable of displaying from a variety of sources. A central control room permits studio-level control and broadcasting from or to each classroom and courtroom. Classrooms are equipped with easily operated audio or videotaping equipment to facilitate review by faculty of their teaching as well as student access to classes held on religious holidays. Each classroom and courtroom is equipped with a "smart lectern," housing a computer, document camera, and touch screen display capable of controlling all the technology in the lectern and equipment closet.

In addition to hardware, the School has made essential investments in application software and support. Virtually all full-time faculty members, and most adjunct faculty have established "virtual classrooms" running on the Blackboard platform. Accessible through the web, and thus from virtually any computer to which students and faculty have access, Blackboard provides the capability to post electronic syllabi and course resources as well as providing message centers and bulletin boards. Electronic "drop boxes" allow students to submit assignments electronically, and threaded listservs extend class discussion beyond the physical constraints of the classroom.

School of Medicine

A major learning resource in the School of Medicine is the web site, Medscope, developed and maintained by the Office of Medical Education. The medical curriculum for year I and year II are mounted on this web site. Students are required to purchase laptop computers when they first enroll in medical school. The multidisciplinary labs—a large multiroom facility—provide the capability of using 180 asynchronous laptop computers in instruction, supplemented by overhead computer projection, televisions, view boxes, and group teaching microscopes. The multidisciplinary labs serve as the major educational laboratory for year I and year II students and as the facility where students take online examinations. The Department of Physical Therapy and Rehabilitation Science also uses the multidisciplinary labs for selected courses. Medscope includes such resources as PowerPoint slides for lectures, audio recordings of lectures, and any supplemental notes, outline materials, or graphics that instructors wish to use. Utilization of Medscope by classroom teachers throughout the first two years of the medical school curriculum is well over 90%.

The School of Medicine and the School of Nursing jointly operate a patient simulation facility. Standardized patients are used in all four years of the curriculum including interviewing in year I, support for physical diagnosis in year II, teaching on required clerkships in year III, and the required multi-station Objective Structured Clinical Examinations (OSCE) in the fall of year IV, a requirement for successful completion of medical school. Physical therapy students also use the standardized patient facility.

School of Nursing

The Clinical Simulation Labs in the School of Nursing provide over 134 beds in 24 contemporary preclinical simulation settings, in which undergraduate and graduate students learn and enhance their skills using intelligent mannequins and clinical simulators. The Clinical Education and Evaluation Laboratory contains six clinical examination rooms in which students have learning and evaluation interactions with standardized patients, who are actors trained to consistently portray patients using faculty-developed scripts. Basic Science Laboratories provide more than 3,000 square feet for dedicated bench research. The School's Computer Network provides a wide range of data services that are tightly integrated with the UMB campus network and support a total of 31 sections of web-based courses, 19 hybrid courses, and 83 web-enhanced courses (9 doctoral, 56 master's-level, and 18 undergraduate courses). Distance Learning Technologies and Media Center services include multimedia production, audiovisual support, video production, distance education, online learning, faculty development in teaching with technology, and computer laboratory support. The Computer Learning Laboratories have more than 105 student workstations in four computer laboratories. A computerized Teaching Theater incorporates the best of technology applications in a face-to-face setting.

School of Pharmacy

Basic Science and Compounding Laboratories in the School of Pharmacy include ample space for students to gain research experiences in various didactic and elective courses. The laboratories in Pharmacy Hall and Health Sciences Facility II allow faculty to pursue state-of-the-art research initiatives including nanomedicine, biotechnology, biopharmaceutics, pharmacology, and computer modeling. All courses offered by the School are mounted on the Blackboard platform and supported by the School's Computer Services unit. All students are required to have a laptop, which is supported by Computer Services. Each classroom is equipped with the necessary technology to allow faculty to use a wide variety of teaching tools such as

video, DVD, and presentation software. The School also has a small Distance Learning Center, which is used on occasion to broadcast courses to other schools of pharmacies in the nation or to other sites in Maryland. The School's Computer Laboratory provides students with 10 additional computer terminals, printers, and scanners.

The School of Pharmacy also has a Pharmacy Practice Laboratory (Model Pharmacy), where students learn the operations of a pharmacy. The students fill prescriptions, counsel patients, and learn physical assessment skills.

School of Social Work

The School offered its first web-based courses in spring of 2002, at which time it stopped offering distance education. It now offers 10 web-based courses a year. Faculty also make extensive use of Blackboard technology and the reserve collection capabilities of the HS/HSL.

The School has a laptop computer lab, a mobile computer lab, and a computer training classroom available for use by students and faculty. There is also a media center, which is a two-story facility equipped with complete closed-circuit television and a series of monitors, cameras and extensive recording equipment for use by students and faculty. Students use the facility to produce tapes demonstrating their clinical skills and for community projects and presentations. Each classroom features technology that integrates Internet, audio, and video into the teaching and learning experience.

3.5 STANDARD 12: GENERAL EDUCATION

MSCHE Definition of Standard 12:

> ***The institution's curricula are designed so that students acquire and demonstrate college-level proficiency in general education and essential skills, including oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, technological competency, and information literacy.***

As an upper division and graduate professional schools university, UMB does not provide general education and essential skills curricula. The three baccalaureate programs—nursing, dental hygiene, and medical and research technology—accept general and essential skills education as provided by the institutions from which students transfer under negotiated and publicized articulation agreements. USM maintains an online transfer articulation system: ARTSYS: http://www.acaff.usmd.edu/artweb/.

3.6 STANDARD 13: RELATED EDUCATIONAL ACTIVITIES

 MSCHE Definition of Standard 13:

> ***Institutional programs or activities that are characterized by particular content, focus, location, mode of delivery, or sponsorship meet appropriate standards.***

As a public higher education institution in Maryland, UMB follows the MHEC and Board of Regents approval processes for all new programs including certificates and off-campus programs (http://www.usmd.edU/Leadership/USMOffice/AcademicAffairs/program%20approval%20Grid.doc; the document is also printed in Appendix S) .

3.6.1 Basic Skills

UMB offers no precollege-level basic skills or developmental courses as part of its educational offerings.

3.6.2 Certificate Programs

All certificate programs, whether or not they meet the MHEC thresholds (i.e., 12 or more semester hours at the master's level), are developed, approved, implemented, and evaluated within the school's curriculum approval processes. The office of the Vice President for Academic Affairs approves certificate programs.

3.6.3 Credit for Life Experience

None of UMB's programs or schools accept life experience for academic credit.

3.6.4 Non-Credit Offerings

Non-credit offerings by UMB's professional schools are offered through their continuing education programs. Each of the schools has a formal approval process for developing, approving, implementing, and evaluating continuing education programs in collaboration with the pertinent professional bodies. For example, the School of Medicine's Office of Professional Development is responsible for overseeing the development and implementation of all Continuing Medical Education activities that are approved for AMA Professional Recognition Award category 1 credit.

3.6.5 Branch Campuses, Additional Locations, and Other Instructional Sites

UMB offers course work and programs in nursing and social work at off-campus locations in order to increase educational access to these programs for students outside of the Baltimore area. All off-site UMB programs meet the same standards for admission, progression, curricula, and faculty as programs delivered at UMB.

The primary off-site locations are the University System of Maryland regional higher education centers at Shady Grove and Hagerstown. Regardless of the location or method of instruction, all programmatic offerings are held to one consistent standard including faculty

preparation, course content, objectives and requirements, instructional materials, and outcome expectations.

The regional education centers are crucial elements of the plans of the USM and the State of Maryland to improve access to higher education. UMB's relationships with Shady Grove and Hagerstown are governed by Memoranda of Understanding (MOU). The vice president for academic affairs represents UMB on the governing boards of both USM regional centers. For the nursing programs at Shady Grove see http://nursing.umaryland.edu/offices/opo-ce/shady-grove.htm. The social work programs at Shady Grove are described at: http://www.ssw.umaryland.edu/academic_programs/off_site_programs.htm. For the Hagerstown nursing program, see http://hagerstown.usmd.edu.

To address Maryland's continuing need for baccalaureate-educated nurses and to improve access for RNs seeking to continue their education, the School of Nursing operates several outreach sites for delivery of the RN-BSN option and one outreach site for delivery of the traditional BSN program. This permits registered nurses and traditional BSN students to work toward their degree while maintaining professional and personal obligations in their local communities. The traditional BSN program and the RN-BSN program option are available at the Universities at Shady Grove (Montgomery County). The RN-BSN program option is offered also in Western Maryland. Two graduate programs were offered for the first time in fall 2005 at the Universities at Shady Grove: the adult nurse practitioner program and the health services leadership and management program.

The programs at the Shady Grove campus are offered on-site in face-to-face classes. Occasionally master's-level courses or RN-BSN courses may be offered through distance education through Verizon interactive video in real time. The entire RN-BSN option as well as some graduate courses can be completed entirely online in addition to being available in a face-to-face venue. Students at outreach sites have the same faculty and support services as students at the main campus. Each outreach location has a School of Nursing faculty coordinator present on-site who ensures program uniformity in collaboration with the School's associate dean for academic affairs and the associate dean for organizational partnerships and outreach.

The School of Social Work offers the foundation year of the Master of Social Work program at the Universities at Shady Grove on a full-time and part-time basis. The advanced-year courses are only offered in Baltimore; a few are web-based. Full-time students at Shady Grove take four courses and foundation field instruction in the fall, and two courses and foundation field instruction in the spring. These students may begin advanced courses in the spring semester in Baltimore. Part-time students may take two courses in the fall and one in the spring in Shady Grove and a second spring course in Baltimore (either advanced research or foundation policy). In their third semester (fall), students take foundation field instruction, Practice I, and foundation policy in Shady Grove (or advanced research in Baltimore). In their fourth semester (spring), they take foundation field and Practice II in Shady Grove and have the option of traveling to Baltimore for advanced courses. The School of Social Work maintains an on-site coordinator at Shady Grove. As in the case of the nursing program, the standards for courses, faculty, and support services are identical to those at the Baltimore campus.

The Health Sciences/Human Services Library supports students at Shady Grove, providing them with access to the same resources and services that are available to students at the UMB campus. These services and resources are accessed through the HS/HSL web site. Course reserves are available digitally. Facilitated by participation in the University System of

Maryland and Affiliated Institutions (USMAI) library consortium, students and faculty can have materials delivered to the Shady Grove campus. Faculty liaisons travel to Shady Grove to teach classes if requested by the instructor. At least once a year, staff from HS/HSL and Shady Grove meet to discuss issues of mutual concern. The same system will be put into place in Hagerstown. The shift to a primarily digital environment has helped the HS/HSL to effectively partner with schools and faculty offering distance or distributed learning. E-resources (journals, books, databases) are linked to instruction. E-reserves systems are used for course reserves, and e-orientations are available for each school via the HS/HSL web site.

3.6.6 Distance or Distributed Learning

Most UMB schools and programs offer some courses delivered through distance learning modalities - the Internet, television, video-conferencing or other means. The School of Nursing offers online the undergraduate RN-BSN program, three online certificate programs, and three required core graduate master's courses. Two physical therapy programs are delivered online, using formats that combine independent study, weekend seminars, and web-based learning. These are the post-professional Doctor of Science of Physical Therapy (DScPT) and the transitional Doctor of Physical Therapy programs. The other schools either offer a few courses online or supplement traditional classroom courses with online learning technology. Regardless of the extent of the distance learning, all courses and program proposals are subject to professional accreditation and school curricular oversight. UMB participates in the USM OnLine Learning initiative.

3.6.7 Contractual Relationships and Affiliated Providers

All UMB's schools have relationships with a wide variety of institutions for clinical instruction and externships. Each relationship is maintained through a Memorandum of Understanding (MOU), affiliation agreement, or contract which designates the responsibilities of the school or program and the institution. UMB's University Counsel and the vice president for academic affairs review all MOUs.

3.7 STANDARD 14: ASSESSMENT OF STUDENT LEARNING

MSCHE Definition of Standard 14:

> *Assessment of student learning demonstrates that the institution's students have knowledge, skills, and competencies consistent with institutional goals and that students at graduation have achieved appropriate higher education goals.*

3.7.1 University Assessment of Student Learning

UMB does not have a common approach to the assessment of student learning, because of the specific and unique requirements of separate, independent professional accreditation of UMB's academic programs. However, there is a common thread in all of UMB's programs. Each program requires not only coursework but also clinical experience as part of the curriculum, and students are evaluated on both components. For this reason, the Self-Study Steering Committee adopted a new method to determine the commonalities in assessment of student learning outcomes across all degree programs. The method was a survey (see Appendix T) of each of the 24 degree programs, identifying University-wide expectations of graduates, the sources of those expectations, student learning outcomes, and assessment methods and schedules. The Educational Effectiveness Work Group reviewed all responses to the surveys and provided the following summary.

Goals for Graduates of the Program: After reviewing all programs, baccalaureate through doctoral, the committee concluded that UMB programs share the following expectations of student learning: that upon graduation students will be able to:

1. Provide quality, comprehensive, and ethical treatment of individuals who require professional services.

2. Provide evidence-based, state-of-the-art practice in a dynamic environment.

3. Pass licensure and professional examinations required for practice.

4. Become the next generation of leaders in improving the health and well being of our society through research and education.

Sources of Program Goals: These expectations arise, first, from the missions and strategic plan of UMB and the professional school in which the program resides. The second source of program goals includes the accreditation and licensing regulations of the individual professional programs. Third, external forces such as community needs, professional standards of practice, training and research grant requirements, technological change, and curriculum advancement and enhancement are taken into account.

Student Outcomes: The following outcomes are common to UMB's academic programs:

1. Achieve a passing score on national licensure and certification examinations.

2. Demonstrate the competencies needed for safe and effective professional practice.

3. Demonstrate critical abstract thinking skills and critical processing skills.

4.   Design, conduct, evaluate, apply, and communicate research as appropriate to the level of the program from which the student is graduating.

5.   Demonstrate the knowledge, skills, and professionalism needed to pursue specialized career goals in teaching, research, and service.

Assessment Methods and Schedules: Most programs have several points at which they assess student outcomes:

1.   Performance in individual courses is embedded in the curriculum and assessed each semester.

2.   A number of schools give advancement examinations at a given point in the curriculum.

3.   National and state licensing and certification examinations are taken upon completion of the program..

4.   At the doctoral level, completion and defense of the dissertation, considered the final assessment of performance, occurs at the end of the program.

5.   Each school gathers information about students' post-graduation positions and conducts employer/alumni surveys.

3.7.2 School Assessment of Student Learning Outcomes

In this section, we will explain the mechanisms by which student achievement is assessed by the schools and how student learning assessment information is used to improve teaching and learning and is part of institutional assessment in that school/discipline.

Dental School

The Dental School faculty carefully monitors the performance of dental hygiene and predoctoral dental students in the didactic, laboratory, and clinical components of the educational program. Internal and external measures of outcomes are used to determine the degree to which the stated teaching goals and related competencies are being met.

Competency is at the core of an outstanding professional; statements of expected competence, known as the Maryland Dental Competencies, have been developed by the Dental School faculty. Taken together, the Maryland Competencies reflect the desired synthesis of educational outcomes of the biomedical, behavioral, and clinical curriculum of the Dental School. Prior to graduation, predoctoral dental students are expected to demonstrate that they have attained the required knowledge, skills, and values by passing each of 55 standardized Maryland Competency Exams. These exams may be case-based reports, demonstrations, oral or written exams, or presentations, and are formal didactic and practical examinations that are administered as part of the curriculum. Performance on the Maryland Competency Exams is carefully tracked to monitor student readiness and to evaluate the effectiveness of the curriculum in preparing students for independent practice.

Each student must also pass national and regional standardized licensure examinations as a condition of graduation. Student success rates in licensure examinations are monitored over time and are critically examined in relation to the demands of the curriculum and the clinical experiences available to every student.

Graduating DDS students also self-evaluate their preparedness in relation to the Maryland Dental Competencies. The results of this survey are analyzed and constitute a formal part of the curriculum evaluation loop. In alternate years, surveys are sent to employers of dental and dental hygiene program alumni who graduated in the previous year and to directors of educational programs in which Maryland dental graduates have enrolled. Items are structured to assess the level of knowledge, skills, and competencies developed during the educational program. Data from these questionnaires are supplemented by surveys administered one year after graduation to Dental School graduates, who self-appraise their knowledge, skills, and level of competence.

For 2004-2005, UMB dental students scored an average of 85.41 (90.2% pass rate) on the Part I National Board Dental Examination as compared with a national score of 84.74 (85.6 pass rate). On Part II, 92.5% of UMB students passed compared with 92.4% of students nationally. At the end of May 2005, 100% of UMB students passed the Dental Simulated Clinical Exercise, Periodontics, and Simulated Patient Clinical Exam sections of the Northeast Regional Boards (NERB). On the NERB Restorative Exercise, the passing rate was 98.8%.

School of Law

The academic program of the School of Law is designed to ensure that students acquire the four basic characteristics of the well-educated lawyer: knowledge; professionalism; a broad perspective on the social implications of legal issues; and the ability to communicate effectively. Fundamental to each of these characteristics is the development of certain habits of mind crucial to thinking like a lawyer: clarity, precision, and analytical skill.

Student performance is evaluated by a variety of methods including written examinations, writing assignments, and regular supervisory sessions with clinic students. Cardin courses place students in professional roles and require that they undertake their responsibilities through the supervised provision of legal services to the underrepresented. In the course of this supervised representation, faculty members are able to assess the analytic, writing, and problem-solving skills that students develop elsewhere in the academic program. The advanced writing requirement is met by successful completion of a substantial paper defined, in part, to be a grade of "B" or better. Students must earn 85 credits to be eligible for graduation.

UMB graduates of the School of Law have consistently had higher pass rates on the Maryland Bar Examination than other first-time takers. Over the period July 2002-July 2004, the pass rates on the Maryland exam for first-time takers averaged 69%. For the same period, the pass rate for UMB graduates taking the exam for the first time was 79%.

School of Medicine

The School of Medicine evaluates learning outcomes in a number of ways. Every course has learning objectives, and attainment of these objectives is assessed by course. Internal testing of students is conducted to assess competency. The results of external testing of competency, both in the United States Medical Licensing Exam (USMLE) paper-and-pencil test and the new clinical skills examination, also are evaluated.

All medical courses have been developed within the context of the Medical Student Objectives Project (MSOP), which delineates learning objectives in four main areas. These include altruism, knowledge, skillfulness, and dutifulness. Year I and year II courses are concerned primarily with knowledge acquisition, but every course has objectives in all areas. Learning outcomes are measured for all of these objectives, with altruism being the most

difficult assessment category. Altruism and skillfulness rely primarily on observation of the student in clinical settings.

The School has established multistation Objective Structured Clinical Examinations, in which students demonstrate basic clinical skills. These examinations help prepare students for the USMLE Step II Clinical Skills Examination, which is now a required part of USMLE certification for licensure.

The internal examinations are evaluated by the Office of Medical Education using statistical guidelines and are provided to the coursemasters. Clerkship examinations in year III are, for the most part, off-the-shelf examinations provided by USMLE. USMLE STEP I is taken at the end of the second year of medical school and is a requirement for progression to year III. UMB student pass rates are comparable to national pass rates on STEP 1, STEP 2, and STEP 3.

In addition to ongoing monitoring of student learning by the Curriculum Coordinating Committee, periodic mini-retreats are scheduled to address student outcomes and possible educational modifications. The dean's senior staff retreat also addresses student learning outcomes and improvement opportunities within the school.

The dean or the senior associate dean for academic affairs meets regularly with student officers in medicine, physical therapy, medical and research technology, and genetic counseling to elicit feedback about any academic needs. Their comments are referred to appropriate educational managers for action. In addition, the senior associate dean for academic affairs meets with a large number of students, seeking feedback on all aspects of the educational program. A recent meeting focused on professionalism issues in the curriculum and the clinical setting to identify opportunities for improvement.

An important measure of student learning outcomes is perceived competitiveness for residencies after medical school. While this is difficult to interpret given such factors as student preferences and geographic limitations, School of Medicine graduates appear highly competitive for residencies on the national level.

School of Nursing

The School of Nursing has implemented a total testing program through a contractual relationship with Educational Resources Inc. (ERI), effective September 2000. Using standardized testing, all entering traditional undergraduate and entry-level MS students are administered a Nurse Entrance Test (a measure of preparation for academic work such as math skills, reading comprehension, learning style) and a Critical Thinking Process test. Entering RN-BSN students are administered the Critical Thinking Process Test. Student results are normed against national achievement rates, and individual results are returned to students along with interpretive guidelines. Copies also are sent to each student's advisor and maintained in the Office of the Associate Dean for Academic Affairs. Students achieving below the national norm are directed to a study skills review guide and online review available through ERI. Additional computer-based NCLEX style practice review is offered at the School's Media Center.

Standardized, comprehensive achievement tests are administered to undergraduates and entry level MS students in all clinical courses. Students receive individual reports of their results, which are again normed against national results. Results also are sent to the appropriate course coordinator for reference in examining student performance in the context of course content. Students falling below the passing score receive specific direction regarding required remediation and, following remediation, retake the assessment test.

Prior to graduation all traditional and entry-level MS students take two standardized examinations: the Pre-RN Assessment Test, and the Critical Thinking Process Test. RN-BSN students take the Critical Thinking Process Test only. The Pre-RN Assessment test is predictive of the National Council of State Boards of Nursing Examination (NCLEX) performance, the national nursing licensing examination, according to national studies conducted by ERI. Prior to taking this examination, students enroll in the Clinical Emphasis Practicum. This course includes a critical thinking component that is intended to assist students in the integration of curricular content. As part of the course, students are required to complete five interactive NCLEX review exams with a pass rate of 90. Students are administered the Pre-RN test approximately six weeks prior to graduation. Individual results are returned to students and are maintained in the Academic Affairs Office. Students not performing satisfactorily on the Pre-RN Assessment Test are individually notified of remediation assistance provided through study guides and audio tapes on specific content. A four-day on-site NCLEX review included in the student's tuition is required of all students who will be taking the NCLEX examination following the end of the semester. Results of the standardized tests and the NCLEX examination are used to evaluate, inform, and revise course content and instruction. In 2005 the undergraduate curriculum was revised, with increased content integration and a redesign of courses and program plans.

The School of Nursing carefully monitors the NCLEX results for BSN graduates and the National Certification results for master's students. Student performance while enrolled and post-graduation performance on national examinations are compared, and action based on those results is taken by the faculty committees that review the curriculum. Senior BSN students in their final semester of study are assigned to a one-on-one preceptored experience for further development of knowledge application and evaluation. This facilitates an assessment of the level of content synthesis achieved.

The NCLEX pass rate for School of Nursing graduates has consistently exceeded the required passing rate for the State of Maryland (78%) and the average for all U.S. Schools of Nursing (86.6%). The pass rate for the most recently reported year (2004) was 90.33%, with 243 first-time test takers passing out of 269 total test-takers.

School of Pharmacy

The performance of PharmD students in didactic and experiential learning courses is continuously monitored. Students are responsible for their academic progress and are expected to take the initiative to meet with their academic advisor and/or the coursemaster(s) when academic problems occur. The director for student services, the class advisor, faculty, and administrators are available to help students meet the School's academic standards. Experience has demonstrated that the earlier and more actively students recognize and address potential problems, the greater their likelihood of avoiding further academic difficulties. By the same token, faculty members are encouraged to initiate discussions with students whose performance appears likely to result in a failing grade.

To remain in acceptable academic standing and to be eligible for graduation, students must maintain a minimum cumulative GPA of 2.0 in required courses. Students with a cumulative GPA below 2.0 or a failing grade in a didactic or experiential learning course are subject to academic dismissal. Students must pass all first- and second-year courses before advancing to the third year, and all third-year courses before advancing to fourth-year courses. At the end of each semester, the associate dean of student affairs reviews the academic status of

all students in the PharmD program. Students with a failing grade in any course are subject to academic dismissal.

Graduates of the School of Pharmacy take the North American Pharmacist Licensure Examination (NAPLEX), as well as a law exam in the State where the graduate is applying for a license. The School of Pharmacy NAPLEX passing rate for the year 2004 was 91.4%.

School of Social Work

Numerous assessments of student learning outcomes occur on multiple levels both external and internal to the School of Social Work. One way in which the success of the MSW program is measured is by comparing UMB graduates' pass rates on the social work licensing examination (LGSW) with national averages. (It should be noted, however, that peer institutions are sometimes unwilling to provide that information.) Over the last five years for which data are available (1999-2003), the average pass rate for first-time exam takers from the School of Social Work was 83.4%. By comparison, the national pass rate was 79.4% over that same period.

Second, all students complete one-to-two years of internships (depending on whether they enter with advanced standing), where they are evaluated by licensed field instructors from the community. Students in the Clinical Concentration, for example, are rated on their abilities in 7 knowledge objectives, 15 skill objectives, and 5 attitude objectives. These are consistent with the reaccreditation standards of the Council on Social Work Education and with the MSW program goals. Feedback through these evaluations from the community-based field instructors as well as through meetings and committee representation allow the faculty to evaluate the effectiveness of the MSW program in preparing graduates for advanced practice.

Classroom evaluation of students in the form of examinations, papers, in-class presentations, and discussions allow the faculty to evaluate the competence of the student in terms of written and verbal skills as well as conceptual and critical thinking. All graduates are surveyed within six months of graduation to ascertain whether and in what setting they are working and how well they believe they were prepared by the School for their first post-MSW position. Employers who attend the School's job fair are surveyed about how well prepared they believe the School's students are to enter the workforce.

A number of feedback loops exist to improve student learning. For example, an alumni survey of recent graduates is conducted, and the results are used by faculty to improve the program. The Master's Program Committee monitors the curriculum to ensure that it is meeting the needs of students. Curriculum committees also review content in their areas to ensure relevancy. For example, the faculty used survey results during the curriculum modification process that began in 2004. Feedback from the survey and from currently enrolled students indicated that they thought the content in the Foundation Year was repetitive and that they did not have enough electives. As a result, some courses were condensed and more electives were added to the curriculum.

Graduate School

Periodic review of graduate programs is conducted under procedures and a timetable established by the USM. At UMB the review of existing academic programs includes both a self-study and an on-site external review. Graduate programs are usually reviewed every seven years under the direction of the dean of the Graduate School.

In preparation for a site visit, the graduate program under review conducts a self-study, which is a comprehensive review of the program that addresses, in particular, the curriculum and

such outcomes as student productivity (grants, abstracts, publications, awards). The self-study is forwarded to the reviewers, the vice president for academic affairs, and the dean(s) of the professional school(s) involved in the program.

The external team is usually composed of three reviewers selected by the dean of the Graduate School from a list of suggestions drawn up by the program director. Other reviewers, however, may be included. The site visit generally lasts two days and includes meetings with faculty responsible for the program, including admissions/progression and curriculum; the department chair; the school dean or designee; faculty teaching in the program and those responsible for significant research and/or training grants; and students, including an open session that all students can attend.

The external reviewers provide a written report that explicitly identifies program strengths and weaknesses and suggests actions that could improve the program's national ranking if the program is not already in the top five. The program chair then prepares a written response addressing the reviewers' recommendations and proposing a plan for implementing the recommendations or providing an explanation of why the recommendations should not be followed. This response is shared with the same individuals/groups that received the report. In the summer following the review, the vice president for academic affairs forwards a summary of the program review to USM, which then reports it to the Board of Regents. The Program Review Committee of the Graduate Council also receives reports of programs reviewed at UMB,

4. OUTCOMES OF THE SELF-STUDY

As mentioned in the Executive Summary, UMB's self-study had five goals: to provide the Middle States Commission on Higher Education with the information and analysis necessary to make a decision about the institution's reaccreditation; to identify institutional strengths and weaknesses relative to each accreditation standard and to use that information to make recommendations for improvement; to identify how UMB's accredited academic programs assess student learning outcomes and the results of these assessment activities; to understand the impact of UMB's centralization/decentralization of services on student support services, advancement and development, support for research, and achievement of institutional goals; and to identify institutional activities that can increase entrepreneurial income, such as private philanthropy, external support for research, commercialization of technology, and new partnerships.

Each of these goals is discussed below.

1. **Provide the Middle States Commission on Higher Education with the information and analysis necessary to make a decision about the institution's reaccreditation**.

The Steering Committee and the Work Groups believe that they have provided sufficient information and analysis for the Commission to conclude that UMB meets the MSCHE Standards for Accreditation.

- **Standard 1: Mission, Goals, and Objectives.** UMB has a clearly defined mission that defines its purpose within higher education in Maryland. UMB and its schools have goals and objectives that are consistent with that mission, relate to external as well as internal contexts and constituencies, focus on student learning, and foster institutional improvement.

- **Standard 2: Planning, Resource Allocation, and Institutional Renewal.** The University and its schools have clearly stated goals and objectives that are used for planning, resource allocation, and institutional renewal. Implementation and evaluation support the development and change necessary to improve and maintain institutional quality.

- **Standard 3: Institutional Resources.** UMB has the human, financial, technical, physical facilities, and other resources necessary to achieve its mission.

- **Standard 4: Leadership and Governance**. UMB's system of governance, within the context of USM and including the governance structures in the schools, 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 ensure institutional integrity and to fulfill its responsibilities of policy and resource development.

- **Standard 5: Administration**. UMB's administrative structure and services facilitate learning and research/scholarship, foster quality improvement, and support the institution's organization and governance. The President reports to the governing body and provides institutional vision and leadership.

- **Standard 6**: **Integrity.** UMB, because of the extent and sensitivity of its research involving human subjects, has very highly evolved ethical standards including academic and intellectual freedom.

- **Standard 7**: **Institutional Assessment.** UMB has developed and uses planning processes that assess overall effectiveness. Ongoing assessment of outcomes is accomplished through annual reviews including several state-mandated processes: Managing for Results, Performance Accountability, and Peer Assessment.

- **Standard 8**: **Student Admissions.** UMB's schools have very competitive admissions standards and, therefore, the students who are admitted are highly qualified and have very appropriate backgrounds for our programs.

- **Standard 9**: **Student Support Services.** UMB and its schools provide a wide range of targeted student services intended to meet the needs of a highly diverse student body.

- **Standard 10: Faculty.** UMB has an outstanding faculty with responsibilities for instruction, research, and service. Faculty are responsible for the curricula in all UMB programs and schools.

- **Standard 11: Educational Offerings.** All of UMB's professional educational offerings are accredited by the appropriate national bodies. Learning is student-focused, and extensive resources are provided to support the curricula.

- **Standard 12: General Education.** Since UMB has no general education requirements, this standard does not apply to UMB.

- **Standard 13: Related Educational Activities.** UMB has few related educational activities other than delivery of two programs – Social Work and Nursing – at the two USM Regional Education Centers at Shady Grove and Hagerstown. These programs meet all the same standards as the on-campus programs.

- **Standard 14:** Assessment of Student Learning. UMB meets this core standard since professional education accreditation requirements mandate assessment of student learning outcomes. However, the self-study did identify the need to detail how PhD programs assess student learning outcomes in their self-studies.

2. **To identify institutional strengths and weaknesses relative to each accreditation standard and to use this information to make recommendations for improvement.**

Regarding the Institutional Effectiveness Standards, the Steering Committee concluded that these processes were strong and well grounded. The objectives for improvement are clearly stated and reflect conclusions drawn from assessment results. The improvement objectives are directly linked to the mission/strategic plan of the University or of the individual school. The decision-making processes and the authorities that institute planning and renewal are clearly defined and support the principle of shared governance. All planning appears to consider the economic, political, and social environment in which UMB operates. There is definite evidence of the changes resulting from continuous improvement efforts. Almost all planning employs an analysis of best practice models and benchmarks applied to the specific improvement effort. There is substantial evidence of quality improvement activities and significant documentation of

improvement efforts at the University and school levels. There is substantial and frequent review of resource allocation decisions; although, as should be expected, there is not consistent agreement about the wisdom of these resource allocation decisions.

In regard to the Educational Effectiveness Standards, the Steering Committee concluded that UMB should be characterized as very strong for the following reasons: the high national rankings for all UMB schools produced by our outstanding faculty and programs; the recent dramatic increase in extramural funding, which is the "report card" for research universities; the success with which all professional programs achieve professional accreditation; the rigorous monitoring of student learning outcomes established with reference to professional accreditation standards; the consistent use of information on student learning outcomes by faculty and administrators in program planning and curriculum change; and, finally, the extensive structures and personnel in all schools and programs to identify when students have academic or clinical difficulties and follow up with student support services.

An area identified for improvement is the review of the PhD programs. While all PhD programs are reviewed by an external site team on the basis of an internal self-study, at present the requirements of the self-study do not place sufficient emphasis on assessment of student learning outcomes. The Graduate School is establishing a committee to consider how to strengthen the graduate program review process.

3.   To identify how UMB's accredited academic programs assess student learning outcomes and the results of these assessment activities.

We discovered that although there is no single approach to assessing student learning outcomes, each school has a clear, well-publicized assessment plan that is applied consistently. In all of the professional programs, students must demonstrate mastery of skills in addition to mastery of knowledge. The outcomes of these assessments are consistent across the schools. No significant deficits were identified after all programs were reviewed. However, as mentioned above, the standards by which PhD programs conduct their reviews will be strengthened.

4.   To understand the impact of UMB's centralization/decentralization of services on student support services, advancement and development, support for research, and achievement of institutional goals.

The basic conclusion of the self-study was that UMB's hybrid or centralized/ decentralized services to students, research, and development is functional for the campus and its schools. The balance between centrally provided and school-provided services is continuously reviewed to ascertain what changes might increase effectiveness. The balance is also affected by the resources and unique environments within which schools operate. For example, the School of Social Work relies more on central development services than does the School of Law, which has a different development program. Similarly, the Dental School has decided it would be more effective to delegate most of the responsibility for information technology services to the central technology office. In contrast, the School of Nursing is focusing on developing in-house information technology services unique to its programs. Both approaches are effective and easily implemented within the existing structure.

It was also the conclusion of the Steering Committee and the Work Group that the balance between school and central student support services worked well to meet student needs.

Central student support services are responsive when school student service personnel request assistance and do not duplicate the services provided by the schools.

5.   To identify institutional activities that can increase entrepreneurial income such as private philanthropy, external support for research, commercialization of technology, and new partnerships.

Over the past ten years, UMB has been successful in managing a large, complex organization with multiple private partners and various funding streams. However, the future consequences for UMB are heavily dependent on such factors as the adequacy of state funding; limited revenues from tuition and fees; major cutbacks in patient care reimbursements; growth in the state Medical Assistance Program; potential size of the uninsured patient population; and proposed capping of the NIH budget. These factors require a funding model focused on the challenges that face any major university with an academic health center setting. Although the campus has been able to absorb most of the increases in its mandatory costs without increases in state support, this has taxed the research and clinical budgets and support programs.

To enhance private philanthropy, the chief development officer at each of the professional schools has requested significantly increased support at the campus level, especially in the areas of annual giving, planned giving, and gift processing. At the time of writing, the directors of these areas are conducting a needs audit to develop measurable program goals for accountability to the units. Following this process, they will present the staffing and budgeting recommendations required to implement enhanced central functions.

UMB has experienced significant growth in entrepreneurial income from extramural funding sources and through increased efforts in the commercialization and protection of intellectual property. The development of the UMB BioPark represents a new partnership that is expected to boost the robust research capacity at UMB, with increased collaborations and enhanced reputation as expected outcomes.

In summary, the self-study proved a highly valuable experience for the University community to review its existing structures, the attainment of strategic goals and objectives to date, and its assessment processes.