

## *Working Group 2*

### **A. INTRODUCTION**

#### *i. The Theme*

The theme of Working Group 2 focuses on Research, Scholarship and Entrepreneurship. As a University with a strong research focus, UMB embraces high standards of scholarship and strives to embrace entrepreneurship to capitalize on important scholarly discoveries through the establishment of business ventures by its faculty. In the current economic climate of greatly diminished federal funding, diversifying its funding portfolio via entrepreneurship and innovative scholarly activities is of great importance to UMB as an institution.

#### *ii. The Standards*

In order for UMB to fulfill its mission as a top research institution and leader in entrepreneurship, it must evaluate its institutional resources (Standard 3) together with its administrative structure (Standard 5) to attract and support the highest quality professionals (Standard 10). It must do so by adhering to its ethical standards and policies (Standard 6) by providing support for academic and intellectual freedom.

#### *iii. The Research Questions*

The working group developed four closely related research questions: 1) What strategies can UMB adopt to diversify the sources of funding for biomedical and social sciences research? 2) How can the University enhance its research environment to make the institution more competitive in securing grants and awards? 3) How can UMB nurture, promote, and sustain an environment where innovation and entrepreneurship in teaching, research, and scholarship are recognized, rewarded and encouraged? and 4) How can UMB continue to effectively promote ethics and integrity in our research, scholarship, and clinical activities? These questions have strong relevance to the working group's theme and affiliated standards as they relate to the ethical implementation of the institution's dynamically changing research, scholarship and entrepreneurial environment.

#### *iv. The Working Group's Process*

After initial meetings with the collective work group membership, 3 subcommittees were formed to focus on the individual research questions and their related standards. Subcommittee 1 focused on both research questions 1 and 2 due to their interrelatedness. The other two subcommittees addressed questions 3 and 4. The general process consisted of gathering relevant documents and data from campus resources as they related to the standards and questions. Additionally, each subcommittee interviewed key stakeholders on campus (Deans, VPs, etc.) to gather input. Each group developed a set of survey questions for dissemination to faculty and staff campus-wide. Based on these collective data, each group submitted draft reports, which were integrated by the two co-chairs to form a completed draft.

## B. STANDARDS

### **i. Standard 3: Institutional Resources**

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.

#### **ii. Approach to Determining Compliance**

The University of Maryland Baltimore uses a comprehensive and integrated planning process to assure that adequate resources are available and properly distributed to meet the institution's mission and goals. This process begins with a 5 year, highly inclusive, strategic planning process (<http://www.umaryland.edu/about-umb/strategic-plan/about/>). The annual budgeting process for operating and capital resources, including 3 year future financial projections, is used to assess and allocate resources at the university and school level. For example, within the School of Medicine additional all funds budgeting and reporting processes are in place to monitor resource allocations to the departmental level. At the Campus level, periodic financial reporting throughout the year provide assurance that the university is on track toward all operating and financial targets. These on campus processes are supplemented and supported by comprehensive system and state agency reporting and planning requirements. Appendix 1 provides document references for these policies and processes.

The university's financial statements are audited as part of the consolidated statements for the University System of Maryland. Field work at UMB is a required part of that audit each year with a more comprehensive review every 2 years. There were no management comments related to UMB in the past audit. In addition to the annual financial statement audit the university system internal auditors review specific financial and operational compliance areas each year. Reference to those audit results can be found in the documentation list in appendix 1. Any issues identified are remedied and a review audit is usually conducted within 6 months. Finally every 5 years the university undergoes a comprehensive audit from the state Department of Legislative Services. That audit report and the follow-up items can also be found in the documentation list.

#### **iii. Supporting Documentation**

In reviewing resources focused on the work groups theme of Research, Scholarship and Entrepreneurship several institutional resources stood out as being particularly important.

UMB has **33 interdisciplinary research centers and institutes**, including the Institute for Human Virology, Institute for Genome Sciences, Center for Pain Studies, Center on Drugs and Drug Policy and more. The Clinical and Translational Sciences Institute (CTSI) provides an infrastructure to facilitate the translation of fundamental science to patient care and to the community (<http://medschool.umaryland.edu/ctsi/>).

The **Office of Research and Development (ORD)** furthers research and economic developments by providing high quality service to investigators, fostering new research and clinical initiatives

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with industry, and promoting translational discoveries into public benefit. For example, the **Office of Technology Transfer (OTT)** recently recruited a Venture group comprising former pharmaceutical industry and biotechnology CEOs and financing experts to the University. Projects encourage economic development in West Baltimore through the **University of Maryland BioPark and the Center for Community Based Engagement and Learning**, and global outreach through the **Center for Global Education Initiatives**. Kuali Coeus, UMB's enterprise system for electronic research administration, manages the complexities of research administration from the faculty researcher through grants administration to federal funding agencies.

<http://www.umaryland.edu/ord/>

<http://www.umbiopark.com/>

<http://www.umaryland.edu/research/offices-and-contacts/global-local/>

Since the last Middle States Review, UMB and UMCP created the joint **Research and Innovation Seed Grant Program**. The intent of the seed grant program is to promote the structured collaboration between UMB and UMCP and advance the institutions' goals in research and innovation. Meant to foster creative teams of investigators working across disciplinary boundaries, the seed grant program has funded over 50 UMB/UMCP research collaborations. <http://www.sgum.umd.edu/home>

Furthermore, a joint **Technology Management** agreement was executed between UMB and UMBC to help encourage collaboration and joint inventions between the two campuses.

To advance research and to develop collaborations within the University and across the nation, the University offers **UMB Experts**. This searchable database of expertise across all disciplines identifies collaborators and their associated works. It builds collaborative teams and successful research relationships within our University System and beyond.

<http://umaryland.pure.elsevier.com/>

UMB's **Center for Information Technology Services** provides high-speed access to national research networks through its membership in the Internet2 consortium and the National Lambda Rail, backup storage for research data, and additional cycles for massive calculations. The Center is the central information technology organization for the University, which develops and maintains mission-critical enterprise systems and technologies including network infrastructure, web and telecommunications.

<http://www.umaryland.edu/cits/service-catalog/research-support/>

The **Health Sciences and Human Services Library** and the **Thurgood Marshall Law Library** provide the expertise, resources, services and facilities that are essential to achieve UMB's strategic priorities. The libraries advance faculty success throughout the research lifecycle, from idea exploration through dissemination of results. Space for collaborative work, interdisciplinary teaching and learning, and scholarship are provided at the libraries. Through the support of the

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**MPower Initiative**, the libraries at UMB and University of Maryland, College Park are expanding shared knowledge resources to encourage collaborative learning and discovery between the campuses.

### **iv. Summary of Findings for Standard 3**

The University is fully compliant with all elements of the standard on institutional resources.

### **i. Standard 5: Administration**

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

#### **ii. Compliance and Supporting Documentation**

The President of the University, Jay A. Perman, MD, is the institution's Chief Executive Officer, with the primary responsibility for leading the institution toward the achievement of its goals and with the responsibility for administration of the institution. Dr. Perman's biography may be accessed at <http://www.umaryland.edu/president/presidents-biography/>. Supporting the President are Senior Vice Presidents, Vice Presidents and Deans who hold executive leaderships roles. See organizational chart referenced in Appendix 2 with links to detailed background documents.

The Office of Institutional Research and Accountability maintains organization charts for the overall University and its partners:

<https://www.umaryland.edu/media/umb/af/ira/institution/organizational-charts/UMBLeadershipNovember2014.pdf> .

There are a number of Assistant and Associate Vice Presidents and Deans with appropriate skills, degrees and training for carrying out their responsibilities and functions. The Office of Human Resources has policies in place on the recruitment and selection of staff employees. UMB strives to hire the best qualified available candidates based on an assessment of their education and work experience against available positions and organizational requirements, see UMB HR policy:

<http://cf.umaryland.edu/umpolicies/usmpolicyInfo.cfm?polid=393>.

There are a number of software applications that are implemented at UMB to streamline various business processes. The Office of Budget and Finance uses PeopleSoft Budget Preparation System:

<https://www.umaryland.edu/media/umb/af/bfa/BUDGETPREPDOCUMENTFY15.pdf>.

UMB also began processing payroll using a customized version of PeopleSoft referred to as eUM HRMS. There are two main software applications supporting research administration, Quali Coeus, UMB's enterprise system for electronic research,

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<http://www.umaryland.edu/kualicoeus/> and the research evaluation portal - Collaborative Institutional Comprehensive Evaluation of Research Online (Cicero), <http://cicero.umaryland.edu>. Raven is UMB's user reporting tool for viewing or downloading Quali Coeus data and financial data. The Student Information Management System (SIMS) addresses the needs of Admissions, Registration, Financial Aid, Student Accounts, Academic History, Graduation, Student Housing and Student Immunization, <https://www.umaryland.edu/sims/>.

The administrative structures and services of the university are formally reviewed each year as part of the annual budgeting process. The costs of these services specific to each school are reported to school leadership each year. To increase transparency central administrative budget presentations beginning with Fy16 are open to school leadership and are structured to present services and cost from a customer point of view. In addition to the annual review process, ongoing efficiency and effectiveness initiatives periodically solicit input from service providers and customers and improvement projects are defined and implemented. All central service areas regularly monitor and report on customer satisfaction and performance metrics. See appendix X for references to these documents.

### **iv. Summary of Findings for Standard 5**

The University has qualified personnel in executive leadership roles that meet the requirements of standard 5. Each executive leader has an extensive combination of academic credentials and professional training, among other qualities appropriate to an institution of higher education and supporting the mission of the institution. Overall, the University is equipped with adequate information and decision-making systems to support the work of administrative leaders.

### **i. Standard 6: Integrity**

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

### **ii. Approach to Determining Compliance**

WG2Q4 subgroup conducted face-to-face interviews with Associate/Assistant Deans for Research and Student Affairs for the six professional schools, graduate school and central administration of the University of Maryland, Baltimore and asked "How can UMB continue to effectively promote ethics and integrity in our research, scholarship, and clinical activities?"

### **iii. Supporting Documentation (See Appendix 3)**

Information conveyed from in-person sessions and written communication corroborates adherence to UMB Core Values, Code of Conduct and institutional, as well as, school policies and yielded specific examples to further demonstrate fulfillment of this Standard. Feedback from individuals across the university was consistent with recommendations to continue existing programs and activities that promote ethics and integrity in research, scholarship, and clinical activities and enhance efforts to collaborate in inter- and intra-professional activities. Reducing

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the divide between faculty and staff and increasing university-wide programs was a common thread. Interviewees expressed commitment to upholding the Core Values and recommended an expanded centralized program to create a culture of accountability, integrity and transparency.

The UMB Middle States Self Study Campus Survey included questions to measure indices related to integrity, such as how well the UMB Core Values are embodied by the campus community. Results are summarized in Appendix 3.

Integrity, accountability, and transparency in research, scholarship and clinical activities is clearly delineated throughout the University of Maryland, Baltimore Mission Statement, written Policies and Procedures, and Core Values. The UMB Mission Statement states, “We emphasize interdisciplinary education and research in an atmosphere that explicitly values civility, diversity, collaboration, teamwork, and accountability.” Written policies and procedures include the UMB Code of Ethics and Conduct [VIII – 7.11(A)], employee and student grievances and discipline, hiring, retention, and compensation, and academic and research related topics (conflicts of interest, intellectual property, use of humans and animals in research, etc.). Written Policies and Procedures are directly in line with University System of Maryland (USM) policies, state laws, federal regulations, and accreditation requirements. UMB’s Core Values are outlined in the UMB Strategic Plan and define the ethical standards that are disseminated throughout UMB programs and activities: Accountability, Civility, Collaboration, Diversity, Excellence, Knowledge, and Leadership. Data from the Middle States Self Study Campus Survey Questions 112-118: “How well are our Core Values embodied by the University?” shows that faculty respondents feel that UMB promotes the Core Values presented in Appendix 3.

UMB leadership expectations of civility and high ethical standards is evidenced by required adherence to written policies and procedures and providing education, training, services and support for the UMB community. UMB has recognition and rewards programs to acknowledge individual excellence in demonstrating the Core Values through awards such as the UMB Employee of the Month, Community Service Awards, Cecil S. Kelly Memorial Employee of the Year, James T. Hill Scholarships, Entrepreneur of the Year, as well as a number of Student Leadership awards. UMB promotes a culture of accountability and transparency that includes an anonymous mechanism for UMB faculty, staff, students, patients, clients, and volunteers to report departures via the UMB Whistleblower Hotline/EthicsPoint. UMB’s policies include protection for reporters against reprisal actions [VIII – 7.11(B) *UM Whistleblower Policy on Reporting Fiscal Irregularities, Illegal Activity, and Violations of Policy*, and VIII – 7.11(C) *UM Procedures for Review and Investigation of Reports of Fiscal Irregularities, Illegal Activity, and Violations of Policy.*]

UMB provides initial and ongoing training and education to inform the UMB community of these policies and procedures and for changes that impact the campus community. New faculty, staff and students participate in an onboarding process through UMB Human Resources Services that provides coordinated, standardized processes for communicating UMB standards and expectations at all levels. All employees are required to stay current with Title IX for Higher Education and Employee Sexual Harassment Awareness courses. Standards to uphold ethics and integrity in research, scholarship and clinical activities are delivered through initial and ongoing education and training programs as required by specific areas, such as Responsible Conduct of Research (RCR), human and animal subject research regulations, conflict of interest disclosure requirements, use of biological materials and radioactive materials in research, HIPAA and

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FERPA, among others. Completion of initial and refresher training requirements for the conduct of research, scholarly or clinical activities is monitored by the appropriate offices.

Under the direction of the UMB Chief Accountability Officer (CAO), the UMB Office of Accountability and Compliance (OAC) has a mechanism for conducting internal audits and investigations of research, scholarly and clinical activities as needed to ensure compliance with ethical, legal and regulatory requirements, as well as institutional policies. Additionally, research conducted on campus is audited by the Human Research Protections Office, the Office of Environmental Health and Safety, the Institutional Animal Care and Use Committee (IACUC), among others, to ensure compliance with the regulations and UMB policies and procedures.

All seven (7) schools of UMB are individually accredited through their respective professional affiliations. Each professional school provides specific education and training on ethics and integrity of students' chosen profession during orientation, which includes information on UMB's Code of Conduct and access to handbooks on policies and procedures on ethics and integrity. Each school informs students of their standards and expectations for academic performance, integrity and accountability. For example, the School of Social Work orients incoming students to the professional standards governing the profession of Social Work as codified in the National Association of Social Workers Code of Ethics. Academic integrity is reflected in the School of Nursing Honor Code that students are introduced to in orientation and held accountable to during their education. Violations of academic integrity are referred to the Judicial Board.

Ethics and responsible conduct of research topics are reiterated throughout students' academic career at UMB in intra- and inter-professional courses on methods and ethics, in on-campus events and challenges such as Global Ethics Day and Moser Ethics in Action, during clinical practice and simulation activities, and during events such as the White Coat Ceremony (for medical and nursing students). The UMB Graduate School strives to create a climate of integrity by engaging students in guided discussions in curricular and co-curricular activities, involvement in scholarship activities, creating effective approaches to teaching, and bestowing Graduate Student Paper Awards on topics of ethics and integrity. School of Pharmacy student organizations intermittently arrange informal discussions and activities related to integrity and accountability, and a leadership development activity at a fall 2014 retreat contained a segment on integrity. The School of Pharmacy recently implemented "The Professionalism Project" which seeks to reinforce the value of honesty and integrity, among other things. Ethical principles and content are integrated across the Baccalaureate, Master's and Doctoral courses within the School of Nursing. Ethics of scholarship are addressed and discussed in relation to authorship/co-authorship, research, and clinical learning activities. The School of Medicine promotes honesty, integrity, individual accountability, and a strong ethical responsibility in all areas of academic, research and clinical activities as set forth in the professional oath of ethical standards. In addition to ongoing clinical case study discussions, training grants and minimester courses for faculty, post docs, fellows, and medical students, the School of Medicine offered a new elective course, MSPR 500- Humanism Symposium, for medical students and faculty addressing topics such as medical ethics.

### **iv. Summary of Findings for Standard 6**

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UMB is compliant with the fundamental elements of Standard 6: Integrity is based on a systematic review of existing policies, procedures, programs and activities, and interviews with key leaders at the campus level and within individual schools.

### **i. Standard 10 - Faculty**

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

### **ii. Approach to Determining Compliance**

Compliance with Standard 10 was determined from examining existing campus documents and policies and key informant interviews with faculty members in the Schools, supplemented by a faculty survey.

### **iii. Supporting Documentation**

The most recent Self-Study documents from the Schools [WG2.104-109], the policies enumerated in the Faculty Handbook [WG2.111], documents from the Faculty Senate [WG2.110], and numerical data provided by the UM Institutional Research and Accountability Office were reviewed. In addition, key informant interviews were conducted with faculty members in the Schools. Standard 10 table contains page references for the indicators for Standard 10 cross referenced with the self-study reports and other documents. A survey of faculty was conducted as a part of the Middle States process [WG2.1].

In the fall of 2014, there were 1,903 full-time (70%) and 807 part-time faculty at UMB. Twenty-eight percent of the full-time faculty are tenured or tenure track. The 2014 faculty headcount decreased 5% from the previous year, while the fall 2014 student headcount enrollment remained static at just under 6,300.

UMB schools conduct annual or periodic surveys of the faculty to inform strategic planning and monitor satisfaction within the school community. The School of Pharmacy conducts an annual faculty survey and in 2014, 88% (70/80) of the UMB pharmacy faculty agreed or strongly agreed with the question "The school has a sufficient number of qualified faculty" compared to 73% of pharmacy faculty at all public institutions. On the question "The college/school consistently applies promotion and/or tenure policies and procedures," 96% (69/72) agreed or strongly agreed compared to 82% of pharmacy faculty at all public institutions. In the School of Medicine, 59% (195/329 respondents) feel that there are sufficient faculty for meeting the needs of the educational program. A majority, 58% (182/314 respondents) felt that teaching, mentoring and other medical education activity is given insufficient weight in promotion and tenure decisions.

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Educational curricula are designed, maintained, and updated by faculty and other professionals who are academically prepared and qualified. For example, the School of Nursing faculty oversee robust standards-based bachelors, masters and doctoral programs. The faculty meet regularly to evaluate and revise courses, review evaluation data, analyze progress toward meeting strategic plan goals, and share insights gained from attendance at national conferences. Program advisory groups comprised of nursing alumni, employers, and other key stakeholders meet once or twice a year to discuss expected student outcomes and current trends in the health care setting relevant to each program and make appropriate recommendations for improvement.

Excellence in teaching is a focus at UMB. The School of Nursing offers a 12 credit teaching certificate to prepare new nurse educators to make the transition from clinician to expert teacher. There are regular lunchtime offerings for specific skills such as teaching online using Blackboard, grading using rubrics, etc. The learning labs and simulation laboratories are staffed with TAs who have expert supervision to learn the skills for clinical teaching. Continuing education includes endowed lectureships and the annual Summer Institute in Nursing Informatics, an internationally recognized CE offering. Other examples include the School of Law's Legal Analysis & Writing faculty who convene regularly to share experiences and engage in demonstration teaching exercises, and collaborative co-teaching which pairs new and experienced faculty. Each summer the School of Pharmacy offers a Teaching Excellence Day for skill development of new faculty, residents and preceptors. The School of Medicine promotes development of teaching portfolios as well as attendance at workshops in instructional methods, curriculum development, and educational assessment.

The faculty continues to grow professionally in a campus environment rich with opportunities. As an example, the School of Medicine offers training for grant-writing to junior faculty from all of the schools through the office of the Assistant Dean for Research Career Development (Wendy Sanders, MA). The School of Law has implemented a junior faculty development program that includes weekly collaborative workshops to discuss junior faculty members' scholarly works in progress, exchange ideas and share strategies for developing scholarly agendas. The School of Social Work promotes faculty development through frequent workshops and lectures open to all members of the UMB community for faculty members to get feedback on their ongoing projects as well as on projects that they have published or presented at national conferences. Recently 'The Elm', a campus online news source, was started where a common calendar is used to promote events of interest to the campus.

At UMB scholarship, teaching, student learning, research and service derive from the mission of the University to improve the health, social functioning and just treatment of the people. As an example, the SoSW maintains relationships with the practice community in a variety of ways including research and providing direct services to clients and community organizations, outreach to social caucuses, and bringing practitioners into the school to meet with faculty and students.

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*USM addresses shared governance in its bylaws*

[WG2.42](<http://www.usmd.edu/regents/bylaws/Section1/1600.html>). The Faculty Senate ratified an academic freedom resolution in order to protect academic freedom at UMB [WG2.92]. This was done after a discussion of the tenets of academic freedom within the context of the changes brought by the U.S. Supreme Court decision *Garcetti v. Ceballos* (547 U.S. 410) that called the First Amendment rights of faculty into question. Faculty need to have a role in the governance of the schools to enjoy academic freedom. Several of the schools (Medicine and Dentistry and Law) have weak to nonexistent faculty governance, with strong statements in our survey, particularly from the Medical School faculty about the top-down hierarchical nature of the organization and ineffective structures for faculty inclusion.

### **iv. Summary of Findings for Standard 10**

The University of Maryland Baltimore has met or exceeded the elements defining faculty quality as set forward in Standard 10. UMB faculty and other professionals are appropriately prepared and qualified for the positions they hold, with roles and responsibilities clearly defined, and sufficiently numerous to fulfill those roles appropriately. USM addresses shared governance in its bylaws. Implementation of effective faculty governance varies across the schools.

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### **C. RESEARCH QUESTIONS**

Following interviews with various members of the UMB community including administrators, scientists and staff, in addition to the responses gathered from the recent survey designed for the Middle States accreditation self-study, the following information was gathered as the most effective factors promoting successful research at our Institution:

***Question 1: What strategies could UMB adopt to diversify the sources of funding for biomedical and social sciences research?***

***Question 2: How could the University enhance its research environment to make the institution more competitive in securing grants and awards?***

The consensus is that there exists a good diversification of funding sources in the UMB research portfolio. In 2014, approximately 51% of funding was obtained from federal sources, including NIH and non-NIH agencies. However, compared to 2013, NIH and non-NIH federal funding experienced a slight decrease in comparison to funding from other sources. Noteworthy, funding obtained from foundations, associations as well as corporations in 2014 increased significantly in the same year. Total research funding from all sources increased 4.4% from FY2013 to FY2014.

Based on the results gained from the survey as it related to Questions 1 and 2, the following metrics were obtained: From a scale of 5 (strongly agree) to 1 (strongly disagree) an overall score of 3.14 was obtained for Question 139 regarding UMB School leadership strategy for promoting diversity of research funding. A score of 3.2 for question 136 was obtained for provision of sufficient administrative assistance to facilitate research activities. These two scores were the lowest of the 5 focusing on topics directly related to Questions 1 and 2. The highest score of 4.12 was for the HSHSL (Library) providing sufficient assistance to facilitate research. The importance of research at UMB is further illustrated by the following scores on a scale of 5 (extremely important) to 1 (not at all important) for the following metrics and criteria for measuring the overall effectiveness of UMB in achieving its mission.

Question 87 - Overall research funding: 3.99

Question 90 - Number of Faculty publications: 3.86

Question 91 - Research funding per Faculty member: 3.49

Question 97 - National rankings of institution: 3.74

And, one that relates to support from the university for Faculty research and scholarly activities at all levels:

Question 89 - Faculty retention: 4.39

Collaborative efforts among Faculty:

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The collegial environment that exists among outstanding UMB researchers exerts a positive impact for effective collaborative efforts. For instance, these endeavors continue to improve through the allocation of seed money for interdisciplinary/interprofessional pilot grants.

### Collaborative efforts among University System of Maryland (USM) institutions:

A key initiative designed to promote innovation in many aspects of the educational, research and service mission of UMB has been the recent establishment of a joint relationship with the University of Maryland, College Park (UMCP). The *MPowering the State* initiative is set to attract exceptional faculty, better serve students, and improve the economic position of the State of Maryland. UMB is combining its research interests in health, law, and human services with UMCP's science, technology, engineering, mathematics, business, and social sciences programs. Moreover, the *UM Ventures* initiative is also strengthening and integrating the technology transfer and commercialization (i.e., licensing and patenting services) derived from entrepreneurial-driven research at UMB and UMCP to market it to the business community. These efforts are aimed at triggering opportunities to bring research findings derived from the collaboration of clinicians, basic scientists, engineers, lawyers and business experts into the marketplace.

Collaboration among Faculty as well as recruitment of new Faculty members has also been encouraged by the *University of Maryland BioPark*, which is also bringing breakthrough therapies, diagnostics and devices into the marketplace, and promoting the creation of innovative start-up companies.

Core facilities: Inside the UMB research community, the Center for Innovative Biomedical Resources (CIBR) plays a major role in providing specialized expertise, cutting-edge technological and scientific resources to support the robust basic, clinical and translational biomedical research environment. Although it is considered the administrative home for the UMB School of Medicine biomedical core, CIBR serves as a center of excellence for state-of-the-art technologies and high-tech instrumentation for the UMB research community at large. Newly renovated space has allowed the physical consolidation of many core facilities in a common space, creating a dynamic environment that will enhance and stimulate high impact research. Faculty and other researchers can get access to sophisticated instrumentation, as well as highly-trained technical staff who can offer support on experimental design, data analysis and interpretation, and provide training opportunities for graduate and medical students, postdoctoral fellows, and Faculty within the University and its collaborators. Provide ongoing support for upgrading equipment in core facilities and for maintaining the expert personnel necessary for optimal use of the cores.

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***Question 3: How could UMB nurture, promote, and sustain an environment where innovation and entrepreneurship in teaching, research, and scholarship are recognized, rewarded and encouraged?***

### ***Teaching***

Innovation in teaching with technology is moving forward at UMB, and 2/3 of UMB faculty indicated that implementing new technology and pedagogical models to improve academic offerings should be a high or very high priority in a recent faculty survey [WG2.1]. Students now arrive on campus expecting flexible learning from faculty including the ability to hear lectures at the time and place of their choosing, receive online resources rather than paper copies of documents, books, and use online testing. The Schools have invested to provide these teaching methods. For example, the SOD now disseminates all of their lectures using Mediasite. They purchased 450 new laptop computers to provide a testing environment that preserves the integrity of the examination. The SON, through its Teaching in Nursing and the Health Professions Certificate program trains faculty to design courses specifically for the online environment, and has implemented Quality Matters ® to promote the integrity of online course design. As distance learning and hybrid teaching become more common, additional investments may be needed. The teaching technology platforms are not consistent across schools, making interprofessional teaching more challenging.

Teaching at UMB is also personalized. For example, the Diamond Scholars program at the Dental School rewards high-achieving 4<sup>th</sup> year students with advanced clinical experiences that resemble a post-graduate residency. Several schools use the simulation laboratory housed at the SON to provide students with a realistic clinical experience under expert individualized faculty guidance. Law students provide legal services to clients in an onsite law clinic that resembles a mini-firm, while receiving individualized supervision.

Interprofessional education (IPE) has been a strategic focus for the campus [WG2.92] and the annual IPE day has become a big event. The UMB Center for IPE awarded six grantees to develop interdisciplinary teams to educate students across professions. In the Middle States faculty survey [WG2.1], 84% of faculty expressed a desire for an increased investment in additional IPE, yet the “siloeed” nature of the schools was a theme common to all of the key informant interviews that were conducted, and was echoed in the faculty survey. Faculty deemed this one of the key problems preventing better collaboration to improve student learning. Excellence in IPE is not recognized as a criterion for promotion or tenure, and additional cooperation from the SOM was desired by many survey respondents.

Quality teaching is rewarded at UMB, including at the system level (Regent’s Award), campus level (Founder’s Day Award), and at the School level. The SON Dean also sponsors a Teaching Scholar grant, which provides pilot funds for faculty to conduct educational research projects. The Dental School curriculum is so well regarded that it has been purchased by a country in the Middle East.

There are some challenges facing the teaching faculty. When research funding is highly valued and new hires are made on the ability to attract grant money, teaching can suffer. Also, highly productive faculty may need teaching relief to engage in important scholarship. Giving continual priority to teaching in teaching-intensive schools such as the Law School does a disservice to

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students because scholarship and teaching are interwoven. Faculty who are new to teaching with technology regret the loss of relationships with students that they've had in the past, and express concern that this lack of face-to-face mentoring could have downstream effects. Many have not been trained to use technology effectively to teach, and the opportunities to receive this training vary across schools. In the faculty survey [WG2.1] 25% indicated that it would be difficult or very difficult to implement new technology and pedagogical models in their school. The reasons given included a lack of pedagogical training, inadequate funding and a burdensome bureaucracy that would prevent this change, and the relatively lower priority given to the educational mission of the medical school compared to its other missions.

### *Research*

UMB is a leader in research, with half a billion dollars in external grants and contracts in AY 2013-14 (\$500, 912, 032)[WG2.92]. Yet, innovation and entrepreneurship in research is at a crossroads at UMB, similar to other health sciences campuses associated with an academic health center. The cost of doing research is high, and support from indirect cost recovery is lower as faculty seek research funding from foundations and corporations as Federal grants have become more difficult to garner. UMB responded to this challenge by making a significant investment in promising areas for commercialization [WG2.92]. The UMB Biopark co-locates academic investigators with commercial life science companies. The Institute for Genome Sciences and the Institute for Human Virology are two prominent research centers that have developed products for licensing. There are 33 organized research centers throughout the campus. The campus also provides significant services to innovators who develop new molecules or devices (or other patentable products) to transfer technology to commercial applications using the services of UM Ventures. Efficiencies are present through the use of the Core Services. The campus has not achieved funding success for a CTSA award.

UMB provides mechanisms to stimulate collaboration between USM campuses (seed grants for UMB-UMCP, UMB-UMBC) and across the professional schools on this campus. Yet in the faculty Middle States survey [WG2.1], 80% of respondents moderately or strongly agreed that increasing interaction among the UMB schools would improve the chances of securing research funding, 75% desired increased interaction between UMB and other USM institutions, and 78% thought that increasing relationships with corporate and philanthropic organizations would improve the chances for increasing research funding. One example is the recent partnership with MedImmune, the global biologics research and development arm of AstraZeneca, which announced a 5-year \$6+ million strategic collaboration that includes UMB, UMCP, and UMBC. Another example of a successful approach to this is the Center for Innovative Pharmacy Solutions (SOP) where patient-centered chronic disease management services are provided to selected clients using a social entrepreneurship approach. Structural barriers to collaboration in early stage (pre-funding) research include State regulation that prevents paying collaborators from other schools, but the collaboration is necessary to eventually be a funded effort. Faculty indicate that workload measures do not really capture the effort required to obtain grants and contracts, and when helping others to be successful. Limitations of physical infrastructure and administrative assistance were also cited as a barrier to research. In a faculty survey, the UMB Office of Research Development was deemed ineffective for assisting in the development of grant applications [WG2.1].

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### *Scholarship*

Faculty noninstructional productivity is at a high level [WG2.110]. For the AY 2013-2014 UMB faculty published 259 books, 5,609 refereed publications, 810 non-refereed publications. They engaged in 2,301 creative activities, gave 3,790 professional presentations, and contributed 10.2 days in public service per FTE. Faculty who responded to the Middle States survey indicated that these productivity metrics were moderately to very important. Faculty assessment of their School's active support (funds and/or programs) to increase scholarship was neutral to moderately positive. There was uniform positive regard for the contributions of the HSHSL for facilitating research and scholarly activities (Mean 4.12 on 1 to 5 scale with 5 being strongly agree) [WG2.1].

To increase innovation and entrepreneurship in scholarly activities, there are three strategies that can be adopted: (1) strong mentoring programs, (2) the development and valuing of nontraditional dissemination vehicles, and (3) providing additional mechanisms to improve interprofessional scholarship.

Strong faculty mentoring programs can assist new faculty and those that are re-tooling to develop or maintain a high level of productivity. Faculty mentoring varies widely in content, dose and duration between Schools, and between departments within some Schools. Excellent examples of systematic mentoring exist on the campus. The SOL's "half-baked" junior faculty sessions encourage faculty to share scholarly ideas and writing in the gestational stage and receive expert input. This model has been so well-regarded that students from the University of Baltimore and Georgetown University Law Schools regularly attend. The Department of Epidemiology and Public Health (SOM) specifies a mentor in its offer of appointment, and within the first year the new faculty member identifies two additional mentors including one member external to the department. Mentors are formally recognized for their work with mentees and there is a regular reporting mechanism to the department chair. A similar "team mentorship" program has also been successful at the SoSW. The SON faculty mentoring taskforce reviewed national reports and programs on faculty mentoring and solicited input from within the SON and from campus leaders. Specific recommendations were made but budget concerns prevented implementation. Faculty from the SOD indicated that their school lacks a mentoring program.

Traditional forms of dissemination (publication in peer reviewed journals, books) are highly valued and form the basis for promotion and tenure. Creative projects are also common among faculty but hold less value for recognition and promotion despite their effectiveness in rapidly disseminating information in a more targeted and direct way. UMB has not been as aggressive at using the newer media forms (e.g. youtube) as other universities but used this format to document ceremonial events. A video format was successful to educate students, faculty and field instructors on how to assess patients for substance abuse in a SAMHSA funded collaborative project with UMBC. The Law School faculty have expertise in intellectual property including web dissemination.

Reducing the silos that separate the schools holds the most promise to increase innovation. In every key informant interview, the issue of silos was raised. There are some successes where the silo has been breached. The SosW and SPH have become better integrated in working on maternal child health and mental health interprofessional scholarship. The SON and SOD have

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collaborated on a project to improve diabetes screening during routine oral examination, and improve screening and referral for childhood obesity.

### ***Summary of findings for research question 3***

Innovation and entrepreneurship are valued at UMB, particularly in research areas where commercialization opportunities exist. Innovation in teaching is a developing area, particularly in interprofessional education. Although there have been some early successes, IPE could be enhanced by removing some structural barriers.

### ***Question 4: How can UMB continue to effectively promote ethics and integrity in our research, scholarship, and clinical activities?***

Face-to-face interviews were conducted with Associate/Assistant Deans for Research and Student Affairs for the six professional schools, graduate school and central administration of UMB. The primary question asked was “How can UMB continue to effectively promote ethics and integrity in our research, scholarship, and clinical activities?”

### **Summary of Findings**

Information conveyed from in-person sessions and written communication corroborates adherence to UMB Core Values, Code of Conduct and institutional, as well as, school policies and yielded specific examples to further demonstrate fulfillment of this Standard. Feedback from individuals across the university was consistent with recommendations to continue existing programs and activities that promote ethics and integrity in research, scholarship, and clinical activities and enhance efforts to collaborate in inter- and intra-professional activities. Reducing the divide between faculty and staff and increasing university-wide programs was a common thread. Interviewees expressed commitment to upholding the Core Values and recommended an expanded centralized program to create a culture of accountability, integrity and transparency.

The UMB Middle States Self Study Campus Survey included questions to measure indices related to integrity, such as how well the UMB Core Values are embodied by the campus community. Results are summarized in Appendix 1.

Integrity, accountability, and transparency in research, scholarship and clinical activities is clearly delineated throughout the University of Maryland, Baltimore Mission Statement, written Policies and Procedures, and Core Values. The UMB Mission Statement states, “We emphasize interdisciplinary education and research in an atmosphere that explicitly values civility, diversity, collaboration, teamwork, and accountability.” Written policies and procedures include the UMB Code of Ethics and Conduct [VIII – 7.11(A)], employee and student grievances and discipline, hiring, retention, and compensation, and academic and research related topics (conflicts of interest, intellectual property, use of humans and animals in research, etc.). Written Policies and Procedures are directly in line with University System of Maryland (USM) policies, state laws, federal regulations, and accreditation requirements. UMB’s Core Values are outlined in the UMB Strategic Plan and define the ethical standards that are disseminated throughout UMB programs and activities: Accountability, Civility, Collaboration, Diversity, Excellence, Knowledge, and Leadership. Data from the Middle States Self Study Campus Survey Questions

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112-118: “How well are our Core Values embodied by the University?” shows that faculty respondents feel that UMB promotes the Core Values presented in Appendix 1.

UMB leadership expectations of civility and high ethical standards is evidenced by required adherence to written policies and procedures and providing education, training, services and support for the UMB community. UMB has recognition and rewards programs to acknowledge individual excellence in demonstrating the Core Values through awards such as the UMB Employee of the Month, Community Service Awards, Cecil S. Kelly Memorial Employee of the Year, James T. Hill Scholarships, Entrepreneur of the Year, as well as a number of Student Leadership awards. UMB promotes a culture of accountability and transparency that includes an anonymous mechanism for UMB faculty, staff, students, patients, clients, and volunteers to report departures via the UMB Whistleblower Hotline/EthicsPoint. UMB’s policies include protection for reporters against reprisal actions [VIII – 7.11(B) *UM Whistleblower Policy on Reporting Fiscal Irregularities, Illegal Activity, and Violations of Policy*, and VIII – 7.11(C) *UM Procedures for Review and Investigation of Reports of Fiscal Irregularities, Illegal Activity, and Violations of Policy*.]

UMB provides initial and ongoing training and education to inform the UMB community of these policies and procedures and for changes that impact the campus community. New faculty, staff and students participate in an onboarding process through UMB Human Resources Services that provides coordinated, standardized processes for communicating UMB standards and expectations at all levels. All employees are required to stay current with Title IX for Higher Education and Employee Sexual Harassment Awareness courses. Standards to uphold ethics and integrity in research, scholarship and clinical activities are delivered through initial and ongoing education and training programs as required by specific areas, such as Responsible Conduct of Research (RCR), human and animal subject research regulations, conflict of interest disclosure requirements, use of biological materials and radioactive materials in research, HIPAA and FERPA, among others. Completion of initial and refresher training requirements for the conduct of research, scholarly or clinical activities is monitored by the appropriate offices.

Under the direction of the UMB Chief Accountability Officer (CAO), the UMB Office of Accountability and Compliance (OAC) has a mechanism for conducting internal audits and investigations of research, scholarly and clinical activities as needed to ensure compliance with ethical, legal and regulatory requirements, as well as institutional policies. Additionally, research conducted on campus is audited by the Human Research Protections Office, the Office of Environmental Health and Safety, the Institutional Animal Care and Use Committee (IACUC), among others, to ensure compliance with the regulations and UMB policies and procedures.

All seven (7) schools of UMB are individually accredited through their respective professional affiliations. Each professional school provides specific education and training on ethics and integrity of students’ chosen profession during orientation, which includes information on UMB’s Code of Conduct and access to handbooks on policies and procedures on ethics and integrity. Each school informs students of their standards and expectations for academic performance, integrity and accountability. For example, the School of Social Work orients incoming students to the professional standards governing the profession of Social Work as codified in the National Association of Social Workers Code of Ethics. Academic integrity is reflected in the School of Nursing Honor Code that students are introduced to in orientation and

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held accountable to during their education. Violations of academic integrity are referred to the Judicial Board.

Ethics and responsible conduct of research topics are reiterated throughout students' academic career at UMB in intra- and inter-professional courses on methods and ethics, in on-campus events and challenges such as Global Ethics Day and Moser Ethics in Action, during clinical practice and simulation activities, and during events such as the White Coat Ceremony (for medical and nursing students). The UMB Graduate School strives to create a climate of integrity by engaging students in guided discussions in curricular and co-curricular activities, involvement in scholarship activities, creating effective approaches to teaching, and bestowing Graduate Student Paper Awards on topics of ethics and integrity. School of Pharmacy student organizations intermittently arrange informal discussions and activities related to integrity and accountability, and a leadership development activity at a fall 2014 retreat contained a segment on integrity. The School of Pharmacy recently implemented "The Professionalism Project" which seeks to reinforce the value of honesty and integrity, among other things. Ethical principles and content are integrated across the Baccalaureate, Master's and Doctoral courses within the School of Nursing. Ethics of scholarship are addressed and discussed in relation to authorship/co-authorship, research, and clinical learning activities. The School of Medicine promotes honesty, integrity, individual accountability, and a strong ethical responsibility in all areas of academic, research and clinical activities as set forth in the professional oath of ethical standards. In addition to ongoing clinical case study discussions, training grants and minimester courses for faculty, post docs, fellows, and medical students, the School of Medicine offered a new elective course, MSPR 500- Humanism Symposium, for medical students and faculty addressing topics such as medical ethics.

### **D. RECOMMENDATIONS**

#### **i. Level 3 Recommendations**

##### **Recommendation 1:**

Considering that in recent years federal funding for biomedical research activities has significantly decreased, UMB principal investigators are being motivated to secure research grants provided by private foundations, associations and corporations that often do not cover full indirect costs. A recurring theme gathered throughout the Middle States process indicated that research awards obtained by faculty through non-traditional sources of funding are not given the same consideration for academic career advancement (i.e., promotion and tenure). Based on this evidence, it is recommended that a more consistent implementation of policies related to promotion and tenure for faculty involved in this type of scholarly activities should exist throughout the campus.

Recognize and reward innovation in interprofessional scholarship, with accountability at the level of Deans to ensure that investments are made towards this goal.

Significant School level barriers remain that continue to inhibit interprofessional research. To ensure continued progress and a cultural shift, the Deans must champion a changed culture, with accountability to the President.

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### Recommendation 2:

Reduce “silos” that discourage interprofessional and interdisciplinary collaborations in research, teaching, and scholarship. This change in culture needs to occur at the level of Deans, with accountability to the President. It will require thoughtful and informed planning from experts in creating successful macro-organizational change.

Some specific changes recommended to support interprofessional and interdisciplinary collaboration include:

Make advisement easier for faculty and students. It is easier to find courses on other campuses (UMBC, UMCP) than at our own campus, we need a centralized registration so faculty and students can locate electives.

Convene a campus wide task force on faculty mentoring to include best practices for creating mentorship teams that are interprofessional.

### Supporting evidence:

Data Source	Evidence
Key informant interviews	The “siloesd” nature of the schools was a theme common to all of the key informant interviews that were conducted. Faculty deemed this one of the key problems preventing better collaboration to improve student learning and develop research collaborations.
Faculty survey	<p><i>Question 59/60: The importance of innovative interdisciplinary and interprofessional experiences in education, practice and research is promoted across the institution [within my school, Q 60] (1-2 with 1 being strongly disagree and 5 being strongly agree). Scored ranged from 2.64 to 4.29 by school; 2 of the 9 faculty categories averaged below, a three, with responses for “school left blank” as one of those two, suggesting no confidence in anonymity. When the same question was posed as a ‘within school’ question the same school’s faculty also rated their own school as a 2 ‘disagree’.</i></p> <p><i>Question 85: How easy do you think it would be for UMB to implement new technology and pedagogical models to improve academic offerings?</i> 25% difficult or very difficult (Selected responses below)</p> <ul style="list-style-type: none"> <li>• Difficult because of the school silos, also lack of funding.</li> <li>• Each school seems to be very different in this regard. There is not always consistent adoption across the university. For instance, the School of Medicine seems to adopt technologies on its own. Why doesn't the SOM use BlackBoard?!</li> <li>• Resistance to change; schools in silos; medical school in a bubble</li> <li>• large bureaucracy; individual schools and faculty are territorial re pedagogy; faculty need rewards for change; much depends upon an individual Dean's buy-in and leadership</li> <li>• Education comes a distant third in our school's priorities, and everyone</li> </ul>

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	<p>knows it</p> <ul style="list-style-type: none"> <li>• i think there is a lot of room for improvement of UMB's use of technology, especially IT which is poorly coordinated across the campus.</li> </ul> <p><i>Question 107. Has UMB made progress in the past three years in promoting interprofessional teaching and learning across professions?</i></p> <p>Overall, faculty feel that progress has been made. Comment below reflect need for reduction in silos:</p> <ul style="list-style-type: none"> <li>• The IPE team tries its best, but one activity a year isn't going to achieve true interprofessional teaching and learning. The schools each have a long way to go to achieve interprofessional education, especially the school of medicine</li> <li>• Center for Interprofessional Education operational. Will need greater cooperation from the School of Medicine</li> <li>• The effort has been there. My school (medicine) has NOT bought in.</li> <li>• The president has been very active in promotion IPE but not all schools are on board.</li> <li>• Yes- but nursing is doing the most reaching out to the other schools and not always reciprocated. The new center for IPE is great. We need to be creating a model that is integrated across specialties and includes sharing didactic and shared clinical experiences - especially for APRN and Med Students. right now things are too compartmentalized</li> <li>• UMB is doing a good job promoting IPE, but not as good a job implementing it</li> <li>• Difficult to find colleagues in other schools with similar or complementary interests and talents</li> <li>• they give lip service to this but it has no effect on the professional advancement of faculty</li> <li>• Limited recognition for excellence in teaching for faculty result in teaching innovation being of diminished importance for APT, thus resulting in diminished innovative effort into interprofessional teaching or teaching in general.</li> <li>• Not really. Due to institutional silos and power of particular Deans (elitism between professions)--there is unwillingness to truly work interprofessionally in any capacity.</li> <li>• President Perman has made attempts, but these are limited to key schools. I believe additional students should be included in the groups. Also, I have concerns that the medical school leadership doesn't always place student learning at the top of the agenda.</li> <li>• There needs to be some incentive to be serious.</li> <li>• Lip service, SOM not on board</li> <li>• All schools need to value and embrace the concept.</li> </ul> <p><i>Question 140: Increasing interaction among UMB schools would increase the chance of securing research funding: 80% of faculty respondents strongly agreed or agreed with this statement.</i></p>
<p>Assessment of campus resources</p>	<p>Resources for distance education and various teaching methods</p> <ul style="list-style-type: none"> <li>• Different online platforms in each School makes teaching collaboration difficult</li> <li>• "Ownership" of distance learning requires other schools to ask permission to use this</li> <li>• Successfully shared Clinical Education and Evaluation Laboratory (SOM, SON)</li> </ul> <p>Resources for faculty development and mentoring</p> <ul style="list-style-type: none"> <li>• Excellent SOM Office for Research Career Development is shared with others but at a fee, should be a campus resource</li> <li>• Mentoring into teaching role is inconsistent across Schools</li> </ul>

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### **Potential outcomes if recommended changes are made:**

1. Increased number and quality of research grant submissions
2. Increased number of courses taught by interprofessional faculty
3. Increased clinical teaching by interprofessional faculty
4. Reduced costs of web-based and distance education when shared platforms are adopted
5. Reduced costs for faculty development as school resources become campus resources
6. Improved educational experience for students who can locate courses on centralized menu of course offerings

### **Recommendation 3:**

Make centralized decisions about technology and require the Schools to adopt a single platform for teaching with technology. Provide campus-wide pedagogical training for all new faculty and faculty who are new to teaching with technology. Synchronous teaching technology should not be “owned” by individual schools but should be a central campus resource for all Schools to use.

### **Recommendation 4:**

Due to the current adverse climate for research funding along with a Maryland move towards fiscal austerity, we request that the President put additional time into fund-raising and share the responsibility for fund-raising with Deans. We recommend that the President set an example for the Deans about making fund-raising a priority.

### **Recommendation 5:**

Bring together leaders and key representatives from each of the six professional schools, graduate schools and central administration to establish a collaborative campus-wide ethics and integrity Program. Where possible, integrate interprofessional programs and activities to improve coordination of services, increase efficiency, reduce redundancy, and ensure compliance with applicable ethical, legal, institutional, and regulatory requirements. Engage in evidence-based management practices to evaluate existing programs and promote ethics and integrity in research, scholarship, and clinical activities. Conduct periodic outreach activities to all seven schools to communicate and assist in creating a culture of accountability and transparency.

### **Conclusion**

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**Appendices**

**Appendix 1**

Standard 3 Documentation		
<p>1. Strategies to measure and assess the level of, and efficient utilization of, institutional resources required to support the institution’s mission and goals.</p>	<p>The university measures and assesses the level of institutional resources required to meet the mission and goals each year as part of the annual budgeting process. The university's strategy is to solicit the expert input of each of the deans and vice presidents concerning accomplishments, challenges and resources needs in their area.</p>	<p>See links to the budget related documents listed below.</p>
	<p>The efficient use of resources in support of the university mission is measured at the highest level by the Managing for Results report prepared each year for submission to the state. This is supported by detailed periodic reporting, depending on the mission area</p>	<p><a href="http://www.umaryland.edu/institutionalresearch/">http://www.umaryland.edu/institutionalresearch/</a>  <a href="http://www.umaryland.edu/institutionalresearch/accountability/performance-accountability/">http://www.umaryland.edu/institutionalresearch/accountability/performance-accountability/</a>  <a href="http://www.umaryland.edu/institutionalresearch/education/student-enrollment/">http://www.umaryland.edu/institutionalresearch/education/student-enrollment/</a>  <a href="http://www.umaryland.edu/institutionalresearch/institution/research-activity/">http://www.umaryland.edu/institutionalresearch/institution/research-activity/</a> (yearly reports – * try to get monthly)</p>
<p>2. Rational and consistent policies and procedures in place to determine allocation of assets.</p>	<p>The annual budgeting process assures consistency and transparency in the allocation of resources</p>	<p><a href="#">WG2.2</a> Campus Budget Cycle Middle States</p>
	<p>Within that process discussions of how tuition revenue, state general funds, and indirect cost revenues are used to support the ongoing and new programs.</p>	<p>See the links to the budget documents below.</p>

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<p>3. An allocation approach that ensures adequate faculty, staff, and administration to support the institution’s mission and outcomes expectation.</p>		<p>See budget documents listed below.</p> <p>*Ask KMB – include financial model reports?</p>
<p>4. A financial planning and budgeting process aligned with the institution’s mission, goals, and plan that provides for an annual budget and multi-year budget projections, both institution-wide and among departments; utilizes planning and assessment documents; and addresses resources acquisition and allocation for the institution and any subsidiary</p>	<p>Annual guidelines for the budgeting process, linkage to the strategic plan and emerging strategic issues are published to the leadership each year.</p>	<p><a href="#">WG2.12-UMB Planning Process</a></p> <p><a href="#">WG2.25-2015 Budget Presentations - Schools</a></p> <p><a href="#">WG2.145-2015 Budget Presentations - Units</a></p>
<p>affiliated, or contracted educations as well as for institutional systems as appropriate.</p>	<p>Each major school and unit of the university presents an operating and financial plan in a 3 year planning context</p>	<p><a href="#">WG2.8-SOP - FY14 Budget Presentation 0314</a></p> <p><a href="#">WG2.16-SSW - FY14 President's Update 031314</a></p> <p><a href="#">WG2.17-SON-FY14 President's Update 031714</a></p> <p><a href="#">WG2.18-SOM FY15 Budget Presentation 040114</a></p> <p><a href="#">WG2.19-SOL-FY14 President's Update 031314</a></p> <p><a href="#">WG2.20-SOD - FY14 President's Update</a></p> <p><a href="#">WG2.121-University Operations FY14 Budget Update</a></p> <p><a href="#">WG2.122-A&amp;F Fy14 Budget Presentation</a></p> <p><a href="#">WG2.123-Office of Communications &amp; Public Affairs FY14 Budget Update</a></p> <p><a href="#">WG2.124-Office of Development and Alumni Relations FY14 Budget Update</a></p> <p><a href="#">WG2.125-Office of Academic Affairs Budget Update &amp; Plan – March 2014</a></p> <p><a href="#">WG2.126-CITS FY14 Budget</a></p>

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		Update <a href="#">WG2.127</a> -ORD FY14 Budget Update
	Throughout the state funding request and university budget process presentations are made to the executive leadership. At the end of the process in May a series of decisions making meetings allows the leadership team to determine priorities and assign funding within a resource constrained environment	<a href="#">WG2.10</a> -DVP 12_12_12 <a href="#">WG2.11</a> -DVP Working Budget Presentation - 5_13 <a href="#">WG2.13</a> -110712 Admin Deans Presentation <a href="#">WG2.15</a> -Deans VPs Meeting - 101514 v3 <a href="#">WG2.21</a> -Deans 4_16 as presented <a href="#">WG2.22</a> -Admin Leadership Forum - 010713 Financial Update v3 <a href="#">WG2.23</a> -A-Deans Meeting - 110413 Financial Update <a href="#">WG2.56</a> -Deans VPs Meeting - November 2014 final
5. A comprehensive infrastructure or facilities master plan and facilities/infrastructure life-cycle management plan, as appropriate to mission, and evidence of implementation.	Facilities and infrastructure planning begins with the 10 year facilities master plan which is a broadly participatory process culminating in a comprehensive planning documents and presentations to the campus community and the board of regents.	<a href="http://www.umaryland.edu/planning/facilities-master-plan/">http://www.umaryland.edu/planning/facilities-master-plan/</a>  *Angela to send scope of future master plan.
	Annually, the campus produces based on state guidelines a comprehensive report on our facilities and facilities needs	<a href="#">WG2.27</a> -UMB SGAP 2013
	Annual capital budgets from various funding sources are produced each year reviewed with the campus community and submitted to the system and the state	<a href="#">WG2.30</a> -2015 Capital Budget Presentation 02.19.14 <a href="#">WG2.112</a> -Cash Projects FY 2016 MAR2515 <a href="#">WG2.113</a> -SFCP Ten Year Plan FY2016 -2025 final 03.25.15 <a href="#">WG2.114</a> -Ten year CIP FY 2017-2026 Final 03.24.15

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	<p>There is a formal process for the request and evaluation of new space needs. This begins with inclusion in the dean or units annual budget presentation and is further detailed in the space request form</p>	<p><a href="#">WG2.28</a>-Space Request Form  <a href="#">WG2.29</a>-Space Management Policy presentation</p>
	<p>Deferred maintenance is assessed internally and externally periodically and projects are tracked over time.</p>	<p><a href="#">WG2.33</a>-FR DM Master Projects List Updated November 10 2014 AM  <a href="#">WG2.32</a>-Plant Funds Projection FY2015  <a href="#">WG2.31</a>-Facilities Renewal Master List by Building (12-15-14)   *Add Infrastructure report (next week) &amp; VFA presentation of findings (end of April)</p>
<p>6. Recognition in the comprehensive plan that facilities, such as learning resources fundamental to all education and research programs and the library, are adequately supported and staffed to accomplish the institution’s objectives for student learning, both on campuses and at a distance.</p>	<p>Educational facilities are a key component of the facilities master plan.</p>	
<p>7. An educational and other equipment acquisition and replacement process and plan, including provision for current and future technology, as appropriate to the educational programs and support services, and evidence of implementation.</p>	<p>Educational and other equipment planning and acquisition is specific to each school within the university. Significant needs are brought up during annual budgeting A system wide equipment loan fund is available to assist schools and departments with significant equipment purchases.</p>	<p><a href="#">WG2.128</a>-Equipment Fund Purchases - 4 years  <a href="#">WG2.129</a>-Equipment loan program instructions</p>

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<p>8. Adequate institutional controls to deal with financial, administrative and auxiliary operations, and rational and consistent policies and procedures in place to determine allocation of assets.</p>	<p>The university has a comprehensive set of internal policies and procedures which are audited regularly by the system internal auditors. Issues and concerns are followed up on regularly and rechecked by audit in 6 months.</p>	<p><a href="http://www.umaryland.edu/financialservices/policies-and-procedures/">http://www.umaryland.edu/financialservices/policies-and-procedures/</a></p>
<p>9. An annual independent audit confirming financial responsibility with evidence of follow-up on any concerns cited in the audit's accompanying management letter.</p>	<p>Use the financial statement audit explanation from the spreadsheet.</p>	<p><a href="#">WG2.118</a>-USM Audit Plan CY 2014  <a href="#">WG2.119</a>-USM Audit Plan CY 2015  <a href="#">WG2.120</a>-USM Audits Completed in FY 15</p> <p><a href="http://www.ola.state.md.us/top_pgs/Publications/pubs_AGENCY_USM_UMB.html">http://www.ola.state.md.us/top_pgs/Publications/pubs_AGENCY_USM_UMB.html</a></p> <p><a href="#">WG2.34</a>-USM Mgmt ltr- YEO6-30-13 (2)_Final(signed)  <a href="#">WG2.35</a>-Mgmt Recom Ltr YE06-30-14_Final(signed)-new  <a href="#">WG2.36</a>-USM SB &amp; Co report FY14  <a href="#">WG2.37</a>-USM SB &amp; Co. financial report</p>
<p>10. Periodic assessment of the effective and efficient use of institutional resources.</p>		<p><a href="#">WG2.115</a>-Financial Data Report - April 30, 2014  <a href="#">WG2.116</a>-Financial Data Report - June 30, 2014  <a href="#">WG2.117</a>-Financial Data Report - Jan 31, 2015</p> <p><a href="#">WG2.4</a>-FY14 - Year End  <a href="#">WG2.5</a>-FY14 - Mid Year  <a href="#">WG2.6</a>-FY 2015 First Quarter</p>

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<b>Standard 5 Documentation</b>		
<p>1. A chief executive whose primary responsibility is to lead the institution toward the achievement of the goals and with responsibility for administration of the institution.</p>	<p>The President is appointed by the Chancellor of the university system to have primary responsibility for leading the institution. The Chancellor and the board of Regents set goals for the president each year and evaluate performance against those goals. The administrative and academic leadership of the university report directly to the president and are responsible for all areas of the institution. The President regularly communicates with the university about his goals, the strategic priorities and attainment.</p>	<p><a href="#">WG2.139</a>-President's Goals and Objectives  <a href="#">WG2.140</a>-State of the University Address</p>
	<p>The administrative and academic leadership of the university report directly to the president and are responsible for all areas of the institution</p>	<p><a href="#">WG2.146</a>-President's Office Org Chart   <a href="http://www.umaryland.edu/institutionalresearch/institution/organizational-charts/">http://www.umaryland.edu/institutionalresearch/institution/organizational-charts/</a></p>
<p>2. A chief executive with the combination of academic background, professional training, and/or other qualities appropriate to an institution of higher education and the institution's mission.</p>		<p><a href="#">WG2.43</a>-Perman Bio [change name]   <a href="#">WG2.45</a>-CV - Jay A Perman MD</p>
<p>3. Administrative leaders with appropriate skills, degrees, and training to carry out their responsibilities and functions.</p>	<p>The leadership of the university is carried out by administrative Vice Presidents with responsibility for central functions and by the Deans who have administrative and academic responsibility within their schools</p>	<p><a href="http://www.umaryland.edu/about-umb/university-leadership/">http://www.umaryland.edu/about-umb/university-leadership/</a>   <a href="http://www.umaryland.edu/institutionalresearch/institution/organizational-charts/">http://www.umaryland.edu/institutionalresearch/institution/organizational-charts/</a></p>

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		<p><a href="#">WG2.40</a>-ORD Org Charts  <a href="#">WG2.38</a>-Academic Affairs Org Chart  <a href="#">WG2.130</a>-AdminFinOrgChart  <a href="#">WG2.131</a>-CITS Org Chart  <a href="#">WG2.132</a>-Communications Org Chart  <a href="#">WG2.133</a>-Development Office Org Chart  <a href="#">WG2.147</a>-UnivCounselOrgChart</p> <p><a href="#">WG2.134</a>-School of Pharmacy Org Chart  <a href="#">WG2.135</a>-School of Law Org Chart  <a href="#">WG2.136</a>-School of Nursing Org Chart  <a href="#">WG2.137</a>-School of Social Work Org Chart  <a href="#">WG2.138</a>-University Operations Org Chart</p> <p><b>*Get SOD &amp; SOM next week.</b></p>
4. Qualified staffing appropriate to the goals, type, size, and complexity of the institution.	Policies and business process are in place to assure qualified staffing	<p>Hr hiring process</p> <p><a href="http://cf.umaryland.edu/umpolicies/usmpolicyInfo.cfm?polid=393">http://cf.umaryland.edu/umpolicies/usmpolicyInfo.cfm?polid=393</a></p>
5. Adequate information and decision-making systems to support the work of administrative leaders.		* Add Enterprise systems doc
6. Clear documentation of the lines of organization and authority		See the organizational charts listed above.

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<p>7. Periodic assessment of the effectiveness of the administrative structures and services.</p>	<p>In addition to information provided in the budget presentations referred to above most administrative areas undergo periodic customer satisfaction review and report periodically on operating metrics</p>	<p>IT monthly operating metrics – <a href="http://www.umaryland.edu/cits/news-and-updates/availability-metrics/">http://www.umaryland.edu/cits/news-and-updates/availability-metrics/</a></p> <p>* add A&amp;F year end operating metrics?</p>
	<p>The central administrative services allocable to each school are reported to them each year.</p>	<p><a href="#">WG2.141</a>-3. CSR Report - Trend Reports  <a href="#">WG2.142</a>-2. CSR Report - School Reports  <a href="#">WG2.143</a>-1. CSR Report - Summary</p>

**Appendix 3**

**Supporting Documents**

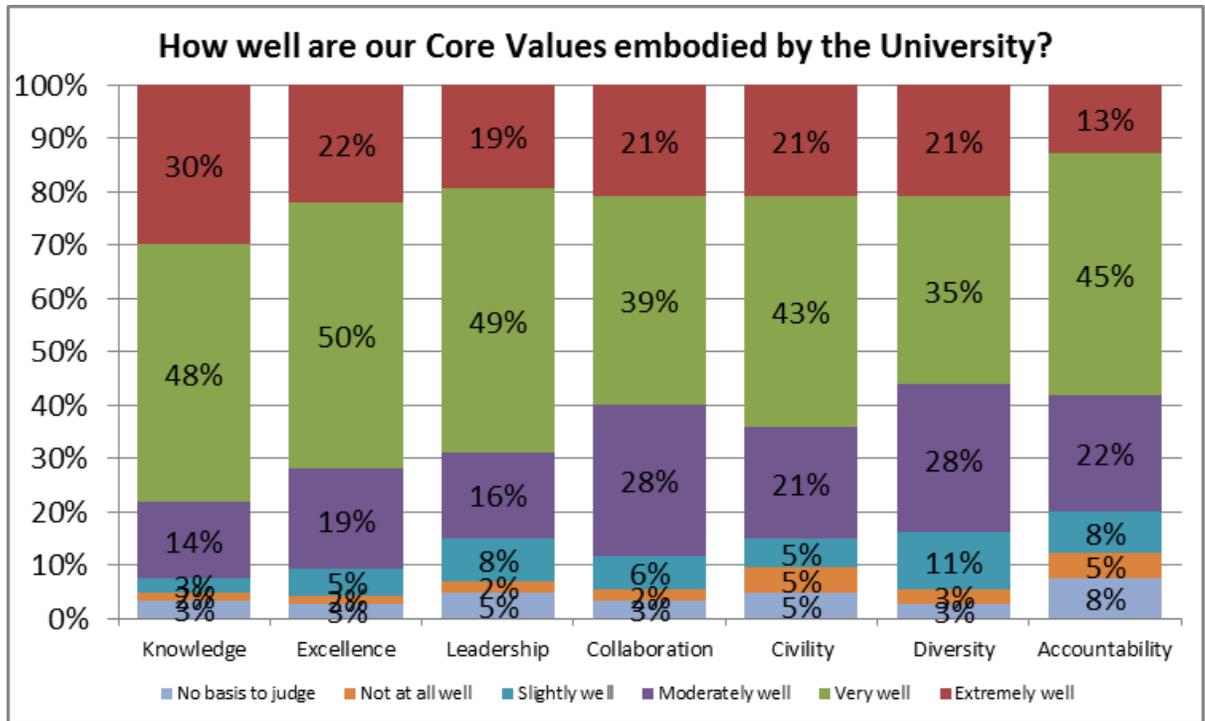
**STANDARD 6: INTEGRITY**

**Middle States Self Study Campus Survey**

**Faculty Responses\***

**January 2015**

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\*Results are presented in mean descending order

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**Appendix 4**

**Supporting Documents**

**STANDARD 6: INTEGRITY**

Standard 6 Fundamental Elements	If This Fundamental Element <i>IS</i> Applicable to This Institution, Indicate Those Document(s) Listed Above That Demonstrate Compliance With This Fundamental Element
<p>Fair and impartial processes, published and widely available, to address student grievances, such as alleged violations of institutional policies. The institution assures that student grievances are addressed promptly, appropriately, and equitably</p>	<p>Student Grievance Procedures Regarding Accommodation Decisions  <a href="http://www.umaryland.edu/disabilityservices/policies/grievance_policy.html">http://www.umaryland.edu/disabilityservices/policies/grievance_policy.html</a>); Dental School Student Grievance Policy  <a href="http://www.dental.umaryland.edu/dentalstudent/dentalhandbook/hbdownloads/SP-Student%20Grievance%20Policy.pdf">http://www.dental.umaryland.edu/dentalstudent/dentalhandbook/hbdownloads/SP-Student%20Grievance%20Policy.pdf</a>); Law School Grade Grievance Procedure  <a href="http://www.law.umaryland.edu/students/resources/policies/standards.html?section=p11#a11">http://www.law.umaryland.edu/students/resources/policies/standards.html?section=p11#a11</a>); Graduate Council Grievance Committee Guidelines  <a href="http://www.graduate.umaryland.edu/grad_policies/grievance_committee.html">http://www.graduate.umaryland.edu/grad_policies/grievance_committee.html</a>); MSW Student Handbook  <a href="http://www.ssw.umaryland.edu/ssw_students/student_handbook/2012_Folder/12_13_student_handbook_final.pdf">http://www.ssw.umaryland.edu/ssw_students/student_handbook/2012_Folder/12_13_student_handbook_final.pdf</a>)</p>
<p>Fair and impartial practices in the hiring, evaluation and dismissal of employees</p>	<p>Human Resource Policies  <a href="http://cf.umaryland.edu/umpolicies/unit.cfm?section=hr">http://cf.umaryland.edu/umpolicies/unit.cfm?section=hr</a>)</p>

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<p>Sound ethical practices and respect for individuals through its teaching, scholarship/research, service, and administrative practice, including the avoidance of conflict of interest or the appearance of such conflict in all its activities and among all its constituents</p>	<p>Maryland Public Ethics Law (<a href="http://ethics.gov.state.md.us/ethicslaw.htm">http://ethics.gov.state.md.us/ethicslaw.htm</a>); 58.0 III-1.11- Policy on Conflicts of Interest in Research or Development (<a href="http://www.usmd.edu/regents/bylaws/SectionIII/III111.htm">http://www.usmd.edu/regents/bylaws/SectionIII/III111.htm</a>); University Position on Management of Researchers' Conflicts of Interest (<a href="http://www.umaryland.edu/academicaffairs/grievance%20policies/conflictinterest.pdf">http://www.umaryland.edu/academicaffairs/grievance%20policies/conflictinterest.pdf</a>); Procedures Implementing Board of Regents Policy on Conflicts of Interest in Research or Development (<a href="http://www.ord.umaryland.edu/policies_procedures/umproceed.html">http://www.ord.umaryland.edu/policies_procedures/umproceed.html</a>); ORD Policies and Procedures - Conflict of Interest (<a href="http://www.ord.umaryland.edu/policies_procedures/policies_conflict.html">http://www.ord.umaryland.edu/policies_procedures/policies_conflict.html</a>)</p>
<p>Equitable and appropriately consistent treatment of constituencies, as evident in such areas as the application of academic requirements and policies, student discipline, student evaluation, grievance procedures, faculty promotion, tenure, retention and compensation, administrative review, curricular improvement, and institutional governance and management</p>	<p>Grievance policies by school (<a href="http://www.umaryland.edu/academicaffairs/policies.html">http://www.umaryland.edu/academicaffairs/policies.html</a>); Section II - 4.00(A) UMB Faculty Grievance Policy and Procedure (<a href="http://cf.umaryland.edu/umpolicies/usmpolicyInfo.cfm?polid=66&amp;section=all">http://cf.umaryland.edu/umpolicies/usmpolicyInfo.cfm?polid=66&amp;section=all</a>)</p>
<p>A climate of academic inquiry and engagement supported by widely disseminated policies regarding academic and intellectual freedom</p>	<p>Mission and Vision (<a href="http://um.umaryland.edu/about/">http://um.umaryland.edu/about/</a>); USM Policy III-1.00. Reflected in the Faculty Handbook (<a href="http://www.umaryland.edu/academicaffairs/faculty_affairs.html">www.umaryland.edu/academicaffairs/faculty_affairs.html</a>) and the Student Answer Book (<a href="http://www.umaryland.edu/student/sab">www.umaryland.edu/student/sab</a>); Academic Freedom Document (<a href="http://www.umaryland.edu/academicaffairs/faculty_senate.html#academic_freedom">http://www.umaryland.edu/academicaffairs/faculty_senate.html#academic_freedom</a>)</p>
<p>An institutional commitment to principles of protecting intellectual property rights</p>	<p>IV - 3.20 – University System of Maryland Policy on Intellectual Property (<a href="http://www.usmd.edu/regents/bylaws/SectionIV/IV320.html">http://www.usmd.edu/regents/bylaws/SectionIV/IV320.html</a>)</p>

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<p>A climate that fosters respect among students, faculty, staff, and administration for a range of backgrounds, ideas, and perspectives</p>	<p>Mission and Vision and Core Values (<a href="http://um.umaryland.edu/about/">http://um.umaryland.edu/about/</a>); Strategic Plan (<a href="http://www.umaryland.edu/strategicplan/docs/Strategic%20Plan.pdf">http://www.umaryland.edu/strategicplan/docs/Strategic%20Plan.pdf</a>)</p>
<p>Honesty and truthfulness in public relations announcements, advertisements, and recruiting and admissions materials and practices</p>	<p>emailed Laura Kozak 9/26/14</p>
<p>Required and elective courses that are sufficiently available to allow students to graduate within the published program length</p>	<p>Graduate School Catalog (<a href="http://www.graduate.umaryland.edu/catalog/index.html">http://www.graduate.umaryland.edu/catalog/index.html</a>); Medical School Curriculum (<a href="http://medschool.umaryland.edu/admissions/curriculum_menu.asp">http://medschool.umaryland.edu/admissions/curriculum_menu.asp</a>); Dental School Catalog (<a href="http://www.dental.umaryland.edu/catalog/index.html">http://www.dental.umaryland.edu/catalog/index.html</a>); Class and Orientation Schedules for the Law School (<a href="http://www.law.umaryland.edu/academics/program/curriculum/schedules/">http://www.law.umaryland.edu/academics/program/curriculum/schedules/</a>); School of Nursing Academics (<a href="http://www.nursing.umaryland.edu/academics/">http://www.nursing.umaryland.edu/academics/</a>); School of Pharmacy Catalog (<a href="http://www.pharmacy.umaryland.edu/catalog/2011.pdf">http://www.pharmacy.umaryland.edu/catalog/2011.pdf</a>); School of Social Work Calendars and Course Schedules (<a href="http://ssw.umaryland.edu/academics/calendars.htm">http://ssw.umaryland.edu/academics/calendars.htm</a>); SURFS (<a href="http://umaryland.edu/surfs">http://umaryland.edu/surfs</a>)</p>
<p>Reasonable, continuing student access to paper or electronic catalogs</p>	<p>See above for electronic catalogs</p>
<p>When catalogs are available only electronically, the institution's web page provides a guide or index to catalog information for each catalog available electronically</p>	<p>UMD Website allows for searching for catalogs</p>
<p>When catalogs are available only electronically, the institution archives copies of the catalogs as sections or policies are updated</p>	<p>Catalogs are dated and previous versions are available online</p>

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<p>Changes and issues affecting institutional mission, goals, sites, programs, operations, and other material changes are disclosed accurately and in a timely manner to the institution’s community, to the Middle States Commission on Higher Education, and to any other appropriate regulatory bodies</p>	<p>Communications; Accreditation Process; Strategic Plan website (<a href="http://www.umaryland.edu/strategicplan/">http://www.umaryland.edu/strategicplan/</a>)</p>
<p>Availability of factual information about the institution, such as the Middle States Commission on Higher Education annual data reporting, the self-study or periodic review report, the team report, and the Commission’s action, accurately reported and made publicly available to the institution’s community</p>	<p>Middle States Accreditation (<a href="http://www.umaryland.edu/middlestates/about/">http://www.umaryland.edu/middlestates/about/</a>); Annual Clery Campus Security and Fire report (2014) (<a href="http://www.umaryland.edu/police/files/2014_Annual_Clergy_Campus_Security_and_Fire_Report_%20FINAL.pdf">http://www.umaryland.edu/police/files/2014_Annual_Clergy_Campus_Security_and_Fire_Report_%20FINAL.pdf</a>); University Reports (<a href="http://www.umaryland.edu/offices/accountability/university_reports.html">http://www.umaryland.edu/offices/accountability/university_reports.html</a>)</p>
<p>Information on institution-wide assessments available to prospective students, including graduation, retention, certification and licensing pass rates, and other outcomes as appropriate to the programs offered</p>	<p>PharmD Program Disclosure (<a href="http://www.pharmacy.umaryland.edu/about/info/accreditation/ACPEDisclosure.pdf">http://www.pharmacy.umaryland.edu/about/info/accreditation/ACPEDisclosure.pdf</a>); School of Nursing Self Report (<a href="http://www.nursing.umaryland.edu/media/SON/Home/CCNE-Self-Study-Report-with-Cover.pdf">http://www.nursing.umaryland.edu/media/SON/Home/CCNE-Self-Study-Report-with-Cover.pdf</a>); Law School Retention Rate (<a href="http://www.law.umaryland.edu/prospective/consumer/index.html">http://www.law.umaryland.edu/prospective/consumer/index.html</a>); Graduate School Statistics (<a href="http://www.graduate.umaryland.edu/aboutus/statistics.html">http://www.graduate.umaryland.edu/aboutus/statistics.html</a>); School of Medicine “Just the Facts” (<a href="http://medschool.umaryland.edu/mission.asp">http://medschool.umaryland.edu/mission.asp</a>)</p>
<p>Institutional information provided in a manner that ensures student and public access, such as print, electronic, or video presentation</p>	<p>University Website (<a href="http://www.umaryland.edu">www.umaryland.edu</a>); Blackboard (<a href="http://blackboard.umaryland.edu">blackboard.umaryland.edu</a>); email</p>
<p>Fulfillment of all applicable standards and reporting and other requirements of the Commission</p>	<p>UMB complies with all reporting requirements of Federal and state agencies, accreditation bodies (Middle States, AAHRPP, etc.); See below for Self Reports and Accreditation Reports</p>

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<p>Periodic assessment of the integrity evidenced in institutional policies, processes, practices, and the manner in which these are implemented</p>	<p>COI Annual Reports (<a href="http://www.umaryland.edu/offices/accountability/coi.html">http://www.umaryland.edu/offices/accountability/coi.html</a>) ; HRPP Plan (<a href="http://hrpo.umaryland.edu/includes/HRPP_PLAN1.pdf">http://hrpo.umaryland.edu/includes/HRPP_PLAN1.pdf</a>); Laboratory Audit Program (<a href="http://www.ehs.umaryland.edu/Lab%20Chemical%20Safety/Lab%20Audit/">http://www.ehs.umaryland.edu/Lab%20Chemical%20Safety/Lab%20Audit/</a>); State Audit Information (<a href="http://www.mas.umaryland.edu/images/Audit-Information-Sheet.pdf">http://www.mas.umaryland.edu/images/Audit-Information-Sheet.pdf</a>); IACUC Biennial Reviews (<a href="http://medschool.umaryland.edu/IACUC/policies.asp">http://medschool.umaryland.edu/IACUC/policies.asp</a>); 2011 Periodic Review Report; Commission on Dental Accreditation: Self Report for the Evaluation of the Predoctoral Dental Education Program; School of Law Self Study (Prepared for the ABA 2011); School of Medicine LCME Self Study Faculty Affairs Subcommittee Report (accreditation report); Self Study Report to the Commission on Collegiate Nursing Education (2009); School of Pharmacy Self Study Report for Re-Accreditation (2012); School of Social Work Self Study 2007</p>
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