THE UNIVERSITY SYSTEM OF MARYLAND (USM)

The twelfth largest university system in the nation, the University System of Maryland (USM), governed by a Board of Regents and headed by a Chancellor, offers over 600 academic programs to more than 126,000 students at 200 sites worldwide. The unparalleled learning opportunities at the system's 13 member institutions include nationally ranked programs, leading edge research collaborations, and innovative business partnerships – opportunities that sustain the USM tradition of quality as they prepare students for the promises and demands of the new century. While specific criteria for achieving excellence may vary from school to school, the USM expects its faculty to teach, to conduct research, and to practice their professional skills through service. At the School of Nursing (SON), service is actualized through clinical practice arrangements, community service, and scholarship.

Commitment to Diversity – State of Maryland and USM

The University of Maryland, as a public university, functions under the auspices of the State of Maryland, which is committed to ensuring equal access to high quality education for all of the state's citizens regardless of race, color, or national origin. The development of statewide policies to improve the recruitment and retention of minority students, faculty, and professional staff has been a consistent goal of the Maryland Higher Education Commission (MHEC). In January 1998, MHEC approved and published a statewide plan for postsecondary education, entitled *Educating for the 21st Century*, which was to serve as a blueprint for the Governor, the General Assembly, and the citizens of the state in developing and improving postsecondary

educational opportunities in Maryland. Its goals, strategies, and tactics addressed (1) the ethnic diversity of PhDs in faculty and administrative positions at all institutions, (2) the promotion of campus climates accepting of diverse groups and the establishment of multicultural approaches to educational experiences at all levels of Maryland education, (3) multicultural diversity on Maryland's campuses, (4) recruitment and retention of minority students, faculty members, and professional staff, and (5) gender and salary equity of the faculty and administrative staff of public colleges and universities.

The *Maryland State Plan for Postsecondary Education 2000* also recognizes the diversity of the state's population as critical to its welfare and ensuring the economic well being of the state. It calls for the need to "provide high quality academic programs for a population of increasingly diverse students."

THE UNIVERSITY OF MARYLAND BALTIMORE (UMB)

The University of Maryland Baltimore (UMB), the founding campus of USM, was established in 1807 as the fifth medical college in America. In 1812, at the time of charter by the General Assembly, the young, privately held institution was named the University of Maryland. This name was uniquely its own until its reestablishment as a public institution following its merger in 1920 with the (then) Maryland State College of Agriculture, located in College Park. Today, located on a 32-acre site in downtown Baltimore, UMB is comprised of six professional schools: dentistry, law, medicine, nursing, pharmacy, social work, and an interdisciplinary graduate school, which manages master of science and doctoral degree programs.

The University of Maryland Medical System (UMMS) includes the University of Maryland Medical Center (UMMC), Kernan Hospital, the University Specialty Hospital,

Maryland General Hospital, North Arundel Health System, and the Mt. Washington Pediatric Hospital. UMMC includes the Greenebaum Cancer Center, the University of Maryland Hospital for Children, and the R Adams Cowley Shock Trauma Center. The University of Maryland Medical Center (UMMC), the Veterans Affairs Health Care System, Baltimore (VAMC), and the Maryland Institute for Emergency Medical Services System (MIEMSS) are located on the Baltimore campus.

UMB is strategically located in the Baltimore-Washington corridor, forty-five minutes from the nation's capitol. The National Institutes of Health (NIH), the U.S. Department of Health and Human Services (DHHS), the Agency for Healthcare Research and Quality, and the National Science Foundation (NSF) are headquartered not far from the UMB campus. UMB represents one of the fastest growing biomedical research centers in the United States, ranking among the top 10 percent of institutions receiving funding from NIH, with grant and contract awards totaling over $305 million in FY2002. UMB is accredited by the Middle States Association of Colleges and Secondary Schools and is a member of the Association of American Universities.

UMB aspires to advance knowledge in health care, law, social welfare, and related disciplines through research, teaching, and service; to promote partnerships and develop interdisciplinary/interprofessional programs that address critical issues in these areas; to assist in the integration and transfer of new knowledge; and to play a significant role in shaping health care, legal, and social services for Maryland and the mid-Atlantic region. UMB's principal goal is to become a center of focused excellence in research and scholarship, both basic and applied. A key strategic objective of UMB is to strengthen institutional collaboration to develop interdisciplinary/interprofessional programs that address current and future health care, legal, and social issues.

The unique composition of the UMB campus enables health professionals to address health care, public policy, and social issues through interdisciplinary collaboration with government, health care institutions, and life science industries. Its location in the Baltimore-Washington-Annapolis triangle maximizes opportunities for such collaboration.

Mission of University of Maryland Baltimore

The University of Maryland Baltimore is the State's public academic health and law university devoted to professional and graduate education, research, patient care, and public service. Using state-of-the-art technological support, UMB educates leaders in health care delivery, biomedical science, social services, and law. By conducting internationally recognized research to cure disease and improve the health, social functioning and just treatment of the people we serve, the campus fosters economic development in the State. UMB is committed to ensuring that the knowledge it generates provides maximum benefit to society, directly enhancing the community. (Mission Statement approved by the Board of Regents, 10/27/00).

University of Maryland Baltimore - Commitment to Diversity

UMB identifies strengthening diversity as a strategic goal, calling on the campus to "build a campus environment that values diversity and is conducive to attracting and retaining a diverse student, faculty, and staff population" (University of Maryland, Facts and Figures, 2000, p. 9). A stated campus institutional objective is to increase the diversity of the faculty, staff, and student body (Objective Number 6 – Mission Statement approved by the Board of Regents, 10/27/00). Campus strategies for achieving this objective include: working with schools, community colleges, and four-year institutions to encourage aspiration of students to professional and graduate education; providing additional mentoring opportunities for women

5

and ethnic minority faculty and staff; and continuing to provide accommodations for persons

with disabilities as they pursue educational opportunities and careers at UMB.

University of Maryland Baltimore - Administrative Infrastructure

The administrative infrastructure of the University is composed of the Office of the

President and six (6) administrative units: Academic Affairs: Administration and Finance: Center

for Information Technology Services: Center for Health and Homeland Security; Office of

External Affairs; and the Office of Research and Development (ORD) each of which is headed

by a Vice President. The UMB campus consists of six schools: Dental, Graduate, Law,

Medicine, Nursing, Pharmacy, and Social Work. Each of the Schools has a Dean who serves in

an autonomous capacity reporting to the President. The Vice President and Deans comprise the

leadership group. (See Figure 1 at the end of this section.).

The campus has enjoyed a period of stability in its senior leadership team since the

appointment of President David J. Ramsay in 1994. This stability has allowed the University to

make substantial progress in fulfilling its mission. The University has a long and rich tradition

of serving the needs of society and of being innovative in the education of the professionals

graduating from UMB's constituent schools.

University of Maryland Baltimore - Students and Faculty

As of Fall, 2002, the University of Maryland Baltimore enrolled 5,470 students

(essentially unchanged from the previous year's 5,476 students). Appendix A provides data for

campus-wide enrollment. These data indicate that the School of Nursing has the largest

enrollment of any of the schools on the campus with a total headcount of 1,430 or Fall 2002.

The majority of UMB students (76%) are enrolled fulltime. However, this is not the case for

graduate (MS and PhD) students in the School of Nursing. Of the total 602 graduate (MS and PhD) students enrolled in the School of Nursing in the Fall of 2002, only 31% were enrolled full-time. A total of 76% of UMB students are residents of the State of Maryland. This figure is slightly higher at 82% for graduate (MS and PhD) students in the School of Nursing. International students comprise 5% of the total campus student enrollment and 3% of the graduate (MS and PhD) students in the School of Nursing. The majority of international students at UMB are from India, the People's Republic of China, or South Korea.

Appendix B shows campus-wide data for faculty. In the Fall of 2002, there was a total of 1,717 faculty on the UMB campus. About 79% of UMB faculty members are employed full-time. Compared to other schools on campus, the School of Nursing has a small percentage of their faculty who are either tenured or on a tenure track.

The Graduate School

Graduate programs of study at UMB, including the Master's and Doctoral programs at the School of Nursing, are offered through the University of Maryland Graduate School, Baltimore (UMGSB), which combines the rich academic and research resources of the University of Maryland Baltimore (UMB) and the University of Maryland, Baltimore County (UMBC) in nearby Catonsville.

Master's students enrolled in the School of Nursing benefit from the numerous resources provided by the Graduate School. For example, the Graduate School has initiated several services to insure that students are prepared to pursue clinical, academic, or research careers when they graduate. Examples of these services include: a writing center with monthly seminars; a survival skills seminar series; and an intensive one-week course in ethics for all students, postdoctoral fellows, and faculty participating in NIH training grants. The Graduate

School has enhanced communication with and among students by developing a listserv that permits announcements to be sent directly to all UMB graduate students. All Graduate School publications, forms, policies, and a collection of other useful data and announcements are available online at http://graduate.umaryland.edu/.

The Graduate Student Association (GSA) is another excellent campus-wide resource for students. The GSA provides opportunities for students to communicate ideas and concerns to faculty and administrators, and offers a platform for discussion of matters that affect student life at the University. Examples of services and programs available to all graduate students through the GSA include awards, travel funds for conferences, career counseling, a computer loan program, and social events. The GSA also hosts an annual Graduate Student Research Conference to showcase the work of the graduate students.

Sources:
1. http://www.umaryland.edu/institutionalresearch/index.html/
2. University of Maryland Board of Regents. (2000). *Mission statement*, 1/27/00.
3. Bell, J. (2002). West-side biotech park planned. *The Baltimore Sun*, 5/23/02, 1C, 9C.

Campus Resources

Library and Data Base Resources

The $50 million state-of-the-art Health Sciences and Human Services Library (HS/HSL) of the UMB opened in 1998 and serves nursing, dental, medical, pharmacy, and social work students and faculty; the UMMS; the Graduate School; and other affiliated institutions. The HS/HSL, a recognized leader in state-of-the-art information technology, is also the regional medical library for ten southeastern states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands as part of the National Library of Medicine's National Network of Libraries of Medicine (NN/LM). This special status grants the library a five-year competitive contract with a budget of approximately $1 million annually and staff of nine. HS/HSL has been awarded this contract for the fourth consecutive five-year period.

The HS/HSL has greatly increased its facilities as it moved into a new building and location in April 1998. Table 1 below lists the differences between the old and new libraries using the 1994 date of the last program review as a comparison.

Table 1: Changes in HS/HSL Facilities

Facilities	1994 Report	2001 Report
Age	Opened 1960	Opened April 1998
Square footage	47,000	190,000
# study rooms	2	40
# study seats	168	900
# meeting/seminar rooms	0	3
# classrooms	1	3 + distance education room
# public terminals	14	56
# data port connections	0	1,500

With the new facilities, the HS/HSL now offers an extensive array of online resources, including electronic journals and databases and is the second largest health science library on the East Coast. This new facility greatly increases the space available for student study, as well as provides additional computer workspace and shelving for books and journals.

The HS/HSL collection includes over 352,000 volumes with approximately 2,300 current print periodical subscriptions and 900 electronic journal subscriptions. Expenditures for the 1999/2000 year for serials, print, and electronic resources totaled $1,619,683. The library adds 8,000 to 10,000 volumes to its collection annually. A list of current holdings indexed in the Cumulative Index to Nursing and Allied Health Literature (CINAHL) database and a list of electronic full-text journals are available from the HS/HSL.

The library provides web-based access to over 40 electronic databases including all of the major health-related databases such as MEDLINE, CINAHL, and Micromedex. Full database access is available on campus, at sites around the state, and from home and office personal computers. A list of the databases available is found on the HS/HSL web site which can be viewed at http://www.hshsl.umaryland.edu/resources/databases.

Faculty, staff, and students using the library who require an item not found in the HS/HSL collection, may obtain it by generating an electronic inter-library loan request. If the item is found within the USM, then there is no charge for obtaining the item. A fee of $6.00 per item is charged if it cannot be found within the system. Usually, inter-library loan items arrive within 7 to 14 days, although this can vary depending on the location of the lending library.

The library is open 90 hours per week and the hours are: 8:00 a.m. – 10:30 p.m. Monday through Friday, 8:00 a.m. – 5:00 p.m. Saturday, and 11:00 a.m. – 8:00 p.m. Sunday. Off-site, web-based access is available from the library's home page (www.hshsl.umaryland.edu). The library has set up a "proxy" server that allows authorized UMB students, faculty, and staff access to electronic resources from any ISP throughout the state and beyond. This includes items on electronic reserve, in addition to electronic databases and electronic books and journals. Authorized users have access to the library's digital resources 24 hours a day, seven days a week.

In order to maintain a strong collection resources to support education, research, and clinical services, the HS/HSL emphasizes an active selective acquisitions program. The library has a number of methods for obtaining and maintaining the book, journal, and electronic collections, and takes into consideration important and emphasized parts of the School's nursing curricula.

1. Using a profile based upon the library's collection development policy.

2. Reviewing books sent to the library for review by Rittenhouse (a commercial book supplier) and lists from various publishers.

3. All books from the current Brandon/Hill Selected List of Print Nursing Books and Journals are obtained for the library.

4. A journal committee reviews and selects journals for subscription.

5. A digital resources committee reviews and selects electronic resources.

6. Faculty, staff, and student recommendations.

7. Recommendations from the School of Nursing faculty liaisons.

Two librarians are designated as liaisons to the School of Nursing. In this capacity, the liaisons conduct orientation sessions for new students, work with faculty and administrators to identify and secure library resources, and collaborate as needed to support nursing student learning experiences. Faculty and students may make recommendations at any point in time regarding library services and resources to either the library staff liaisons or to Library Advisory Board Members who currently are Dr. Patricia Abbott and Dr. Louise Jenkins.

Nursing materials are collected at a research level, meaning that the library has a collection that includes resource materials required for dissertations and independent research, materials containing research reporting, new findings, scientific experimental results, and other information useful to researchers. It also includes all important reference works and a wide

selection of specialized monographs, as well as an extensive collection of journals and major indexing and abstracting services in the field.
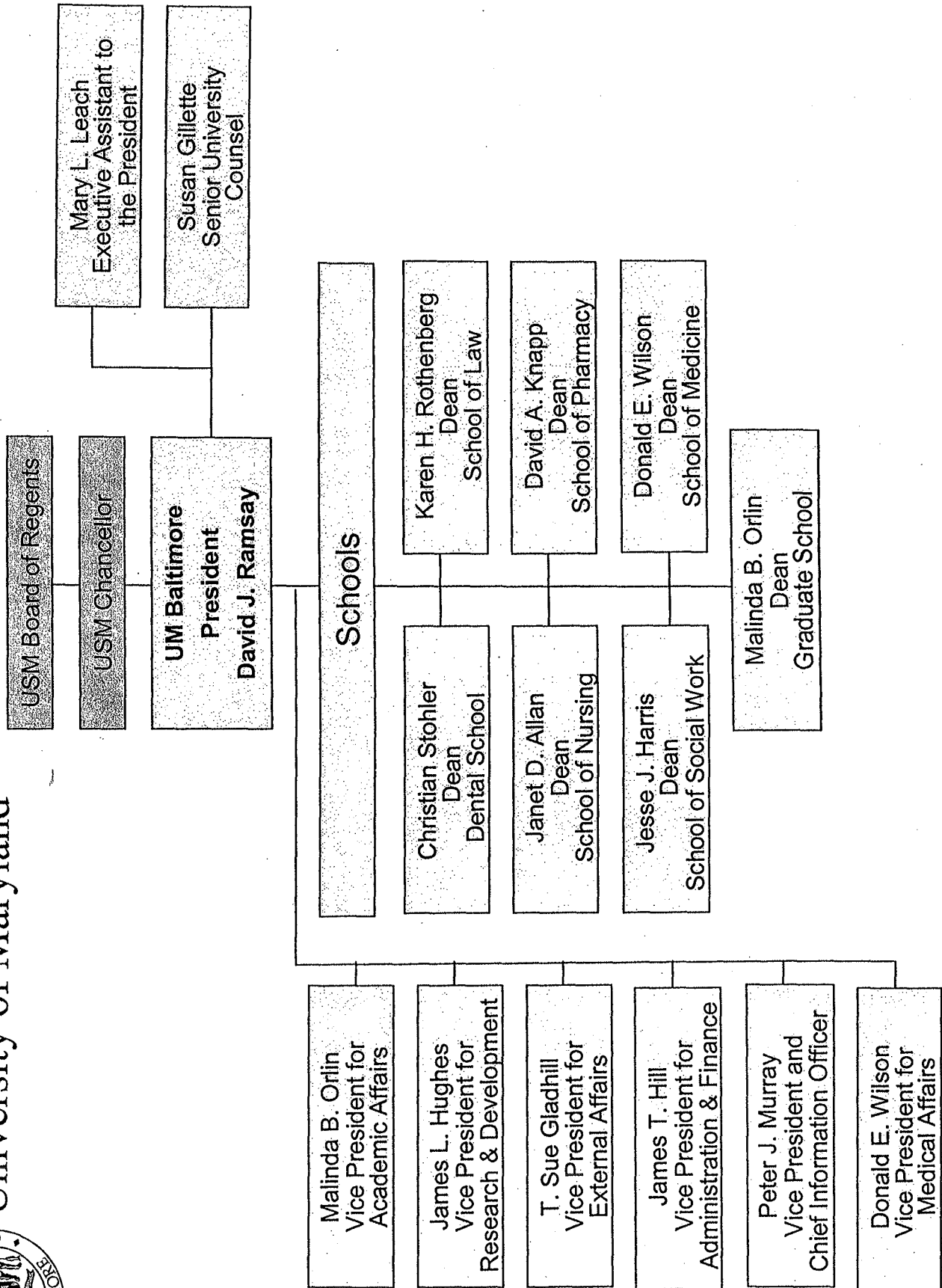
Campus-Wide Computing Facilities

The UMB network is a multi-school fully routed Ethernet LAN that is used as the conduit for campus and Internet connectivity. The campus network supports six professional schools and a major research hospital. The wide area network (WAN) of the campus enables users from all schools and units to access other unit or school specific systems (given authorization to do so) as well as to access resources on the Internet.

Central campus computing resources are available for faculty and student research through Campus Communications and Information Technology Infrastructure. Services are provided on a fee-for-service basis including software used, CPU time, and disc storage, CCITI uses several Sun enterprise servers to accommodate the storage and computing requirements of its researchers. Software such as SAS, SPSS, ORACLE, and SUDAAN are available for research purposes. In addition to these centrally supported campus-computing resources, the library has several digital literature search systems.

Figure ·1

University of Maryland

USM Board of Regents

USM Chancellor

UM Baltimore President David J. Ramsay

Mary L. Leach
Executive Assistant to the President

Susan Gillette
Senior University Counsel

Schools

Karen H. Rothenberg
Dean
School of Law

David A. Knapp
Dean
School of Pharmacy

Donald E. Wilson
Dean
School of Medicine

Christian Stohler
Dean
Dental School

Janet D. Allan
Dean
School of Nursing

Jesse J. Harris
Dean
School of Social Work

Malinda B. Orlin
Dean
Graduate School

Malinda B. Orlin
Vice President for
Academic Affairs

James L. Hughes
Vice President for
Research & Development

T. Sue Gladhill
Vice President for
External Affairs

James T. Hill
Vice President for
Administration & Finance

Peter J. Murray
Vice President and
Chief Information Officer

Donald E. Wilson
Vice President for
Medical Affairs

íl 10, 2003

THE SCHOOL OF NURSING (SON)

Established as the Maryland Training School in 1889, the School of Nursing (SON) provides educational programs in nursing leading to the bachelor's, master's, and doctoral degrees. The School of Nursing became part of the University in 1920 and has subsequently become one of the premier public nursing schools in the country. The School was ranked among the top ten schools of nursing in the nation for the fifth consecutive time in the 2003 edition of the *U.S. News and World Reports Guide to America's Best Graduate Schools*. In addition, three master's specialties (nursing administration, adult primary care nurse practitioner, and community/public health nursing) were ranked in the top ten. The National League for Nursing Accrediting Commission (NLNAC) accredits the Baccalaureate and Master's programs at the School of Nursing; the most recent NLNAC site visit was in February 2002. The School of Nursing received an excellent review and was accredited for a full 8 years. A major provider of continuing education for nurses, the School's continuing education program is accredited by the American Nurses' Credentialing Center (ANCC), the Commission on Accreditation (COA), and serves state, national, and international nursing professionals. As a result of an accreditation visit in October of 2002, the continuing education program was accredited until 2009.

One of the largest schools of nursing in the nation, the School of Nursing has graduated more than 16,000 nurses during more than 100 years and has awarded 2% of all the Master's degrees in nursing in the world. The School of Nursing enrolls more than 1,400 students in its baccalaureate, master's and doctoral programs. In Fall 2002, 444 students were enrolled in the Master of Science (MS) programs. An additional 90 students were enrolled in Fall 2002 as "non degree seeking" graduate students meaning that these students are pursuing a post-master's option or are enrolled on a "course work only" status.

Mission

Since its inception more than a century ago, the University of Maryland School of Nursing has been a pioneer in nursing education and has been instrumental in shaping the profession itself. Today, as the State of Maryland's premier public institution dedicated to the education of nurses, the School's mission is to advance the science of nursing through research; to provide leadership and promote excellence in nursing through its professional, graduate, and continuing education programs; and to engage in clinical practice and service of the highest quality.

The School of Nursing seeks to carry out its mission in research, education, and practice/service by building upon the outstanding capability and diversity of its faculty, staff, students, and graduates. The School promotes nursing scholarship of exceptional merit by supporting and conducting research that informs nursing practice, policy decisions, and health care delivery. The goal of the School of Nursing is to prepare skilled and knowledgeable professionals to assume positions of leadership in nursing and within the health care industry. The faculty remain committed to developing educational programs of excellence, providing students access to sophisticated technology, and promoting critical thinking and caring that reflects the increasing responsibilities and expanding role of nurses in clinical practice and health care management. The intent is to provide an array of needed nursing and health care services to the community and the region through innovative practice arrangements, partnerships, and centers of care. Through evidence-based practice and service, faculty and students contribute to outcomes vital to improving the health of individuals and the population as a whole.

In collaboration with other professional disciplines, the School of Nursing strives to contribute new ideas and knowledge that influence the future of nursing and health care delivery in Maryland, the nation, and throughout the world.

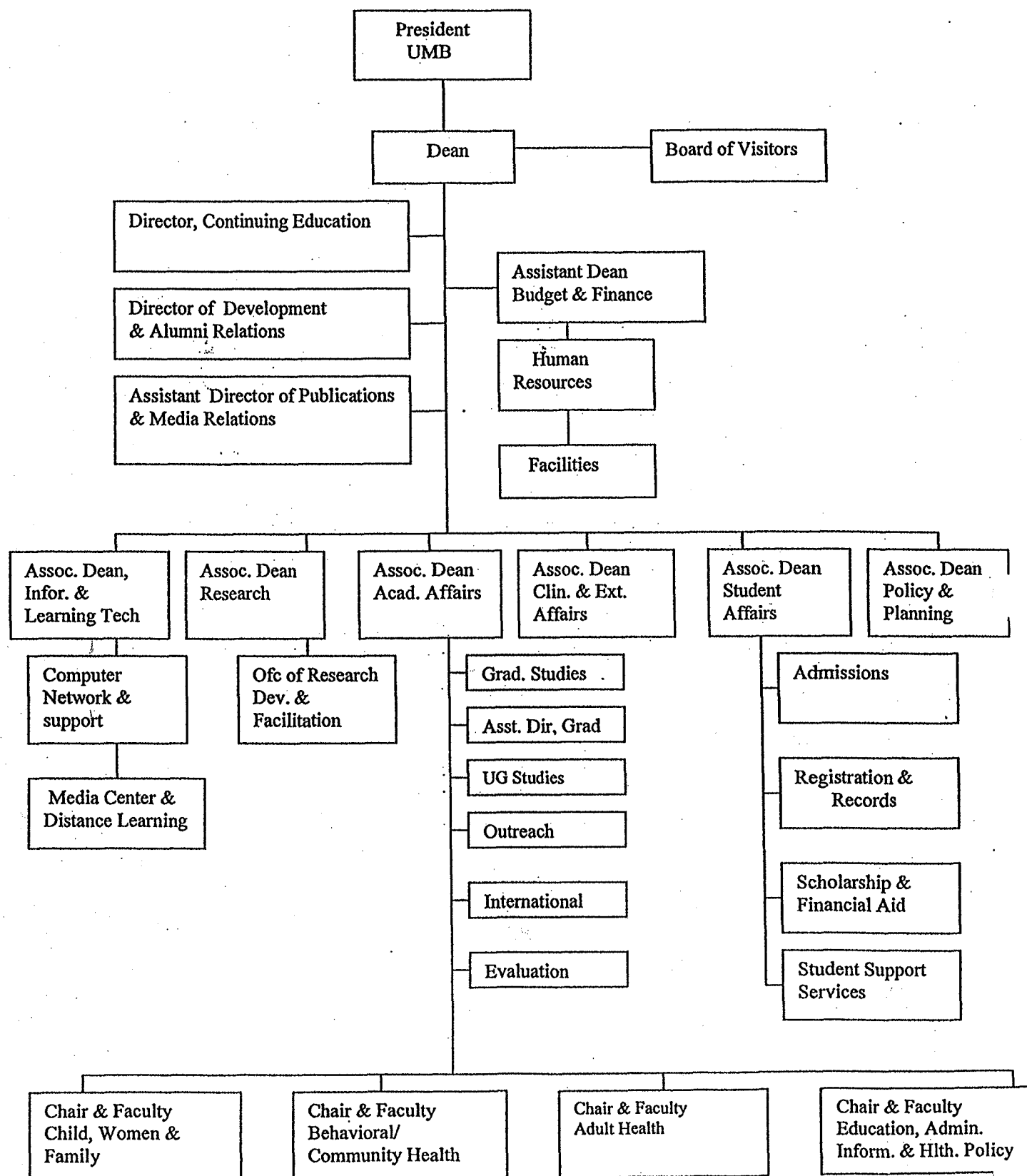**Administrative Infrastructure and Organizational Chart**

The administrative infrastructure of the School of Nursing is comprised of:

- The Dean's Office

- Six administrative units: Information and Learning Technology; Research; Academic Affairs; Clinical and External Affairs; Admission and Student Affairs; and Policy and Planning, each of which is administered by an Associate Dean. The Master's program is directed by the Assistant Director of Graduate Studies, which falls under the Academic Affairs administrative unit. The Assistant Director of Graduate Studies reports directly to the Associate Dean for Academic Affairs.

- The School of Nursing is presently combining its four academic departments into two departments and a Department Chair will head each. The departments being combined are: Child, Women, and Family Health (CWF) with Behavioral/Community Health (BCH); and Adult Health Nursing (AHN) with Education, Administration, Informatics, and Health Policy (EAIHP).

See Figure 2 for an organizational chart for the School of Nursing, which is soon to be revised.

UNIVERSITY OF MARYLAND
SCHOOL OF NURSING

Figure 2

```
                            President
                              UMB
                                |
                             Dean ———————— Board of Visitors
                                |
    Director, Continuing Education
                                |
                                          Assistant Dean
    Director of Development                Budget & Finance
    & Alumni Relations                          |
                                            Human
    Assistant Director of Publications       Resources
    & Media Relations                           |
                                            Facilities
```

| Assoc. Dean, Infor. & Learning Tech | Assoc. Dean Research | Assoc. Dean Acad. Affairs | Assoc. Dean Clin. & Ext. Affairs | Assoc. Dean Student Affairs | Assoc. Dean Policy & Planning |

- Computer Network & support
  - Media Center & Distance Learning
- Ofc of Research Dev. & Facilitation

Grad. Studies

Asst. Dir, Grad

UG Studies

Outreach

International

Evaluation

Admissions

Registration & Records

Scholarship & Financial Aid

Student Support Services

| Chair & Faculty Child, Women & Family | Chair & Faculty Behavioral/ Community Health | Chair & Faculty Adult Health | Chair & Faculty Education, Admin. Inform. & Hlth. Policy |

15A

12/2002

School of Nursing Commitment to Diversity

The record of the School of Nursing in recruiting and retaining a diverse student body with high academic qualifications is highly consistent with the state and UMB priorities. Increasing the diversity of the School's students, faculty, and staff is articulated as a major initiative consistently identified in the School's Strategic Plan over the past decade.

Minority students comprise 33% of the student body at the School of Nursing with African Americans being the largest minority group at a rate of 23%. A comparison of the percentage of minority students in the total nursing school student body in 1990 showed a 15% representation whereas in Fall 2002, there was a total of 460 minority students enrolled at the School of Nursing, of which 23% were minority graduate students. As shown in Table 2, ethnic minority representation of the School of Nursing master's students has remained steady for the past three years.

Table 2: SON Student Diversity Profiles

Program	Ethnicity	2000	2001	2002
MS	White Non-Hispanic	78%	69%	71%
	African American	13%	17%	14%
	Hispanic	2%	2%	3%

Support of Student Diversity - UMB

A culturally responsive campus environment is essential to recruitment, retention, and academic success for culturally diverse students. The UMB Student Services Office assists international students with cross-cultural orientation, nonacademic advising, and social activities. Students from the SON can participate in a variety of campus-sponsored international and ethnic

activities. Student social activities at the campus level address the interests and needs of members of religious and ethnic groups.

The International Student Organization (ISO) serves as a voice for international students at UMB. It functions as the umbrella organization for five subgroups: 1) Arab Student Organization, 2) Chinese Student and Scholar Association, 3) European Association, 4) Indian Association, and 5) Iranian Student and Scholar Association. Its goals are to stimulate cross-cultural exchange and to promote a better understanding among international students and the entire campus community, to integrate international students into the mainstream of the university community, and to help incoming international students adjust to their new milieu. The UMB Student Services Office also sponsors the United Students of African Descent. This organization engages in activities highlighting African American culture on the campus as well as reaches out with health fairs and theatrical performances that benefit the entire community.

Support of Student Diversity – SON

The Student Affairs Committee of the School of Nursing serves as an arena for focusing on aspects of student life. The importance of supporting diversity at the School is emphasized in the establishment of a distinctive Diversity Committee that functions as a subcommittee of the larger Student Affairs Committee. Dr. Vanessa Fahie and Catherine Salam currently serve as faculty co-chairs of this committee.

Diversity Scholarship

Scholarship funds to support diversity come from UMB to the SON. To further enhance its longstanding commitment to a diverse student body, the SON's Diversity Scholarship Program is built on a broad definition of diversity, which includes: 1) personal characteristics (e.g. age, ethnicity, gender, geographic origin, race, and U.S. citizenship status); 2) experiences (e.g., employment, extracurricular activities, and service and leadership opportunities);

3) demonstrated ability to overcome educational, social, economic, or personal disadvantages; and 4) academic promise as demonstrated by past success or evidence of potential for intellectual and professional growth. Approximately 20% of the diversity scholarships are used for recruitment purposes. These scholarships generally range from $1,000-$1,500 for the academic year. The remainder is awarded to undergraduate junior and senior students who apply for these funds and meet scholarship criteria of a 3.0 cumulative GPA, take a minimum of six credits per semester, and qualify for federal financial aid.

Initiatives for Recruiting a Diverse Student Body

The School of Nursing commitment to recruiting a diverse student body is enduring with efforts coordinated by the Office of Admissions and Student Affairs and faculty. Current students assist in these efforts by participating in open houses for prospective students and in new student orientation, and by serving as role models.

School of Nursing initiatives that are directly related to the School's commitment to a diverse student body currently as well as for the future include the following. The Bridge Program is designed to facilitate access to and preparation for graduate study for minority and underrepresented nursing students from UMB, Coppin State College, and Towson University. Under the direction of Dr. Vanessa Fahie, the program offers structured academic support, mentoring, and program enrichment in the form of seminars structured as one-credit courses.

Enhancement of Faculty Diversity

It would be ideal to attain a level of faculty diversity that mirrors that of the State of Maryland. The U.S. census estimates the State of Maryland's population as 32.5% minority (1999 figures were: 28.1% African American and 3.9% Hispanic). A diverse student body requires a well-trained and diverse faculty with active recruitment strategies and policies to support the development of diverse backgrounds, opinions, and points of view.

18

The School of Nursing has a strong ongoing record of recruiting and employing minority faculty and staff. All vacant positions are widely advertised with faculty postings appearing in the Chronicle of Higher Education, specialty journals, and others such as the Journal of Cultural Diversity and the Journal of the National Black Nurses Association. Other outreach efforts are also used such as contact by faculty and recruitment letters that are sent to specialty and selected professional groups. Each School of Nursing department has a search committee composed of both minority and non-minority faculty members with additional members selected based on the criteria of the vacant position. Twelve percent of fulltime faculty members are male, and 17% of the faculty represents primary minority population groups. Table 3 shows the faculty diversity profile at the SON over the past three years.

Table 3: SON Fulltime Faculty Diversity Profile: 2000 - 2002

Year	Female	Male	Total	White	Black	Asian	Hispanic	Total
2002	84	13	97	83	9	1	4	97
2001	83	11	94	78	11	1	4	94
2000	81	9	90	77	9	1	3	90

MASTER'S PROGRAM

Structure and Governance

The structure and governance of the Master's program at the School of Nursing is reflective of its positioning within the School of Nursing and the University of Maryland Baltimore. The ultimate responsibility for program policies and procedures, curriculum, faculty qualifications, admission, progression, graduation of students, and quality assurance of the program rests with the Vice President for Academic Affairs and Dean of the Graduate School, Dr. Malinda Orlin and the Graduate Faculty Council. Through a subcommittee of the Graduate Faculty Council, new Master's programs are reviewed, and all graduate courses are approved. Dr. Janet Allan, Dean of the School of Nursing, has overall responsibility for academic programs, personnel, and fiscal management for the Master's program in the School of Nursing.

Each program in the Graduate School has a program director that serves as a liaison between the Graduate School and the School of Nursing for communication and implementation of policies. The Master's program in the School of Nursing is administered by Patricia Gonce Morton, PhD, RN, CRNP, FAAN, Assistant Director of Graduate Studies at the School of Nursing and is supported by a part-time Administrative Assistant. Dr. Morton reports to Dr. Carolyn F. Waltz, Associate Dean for Academic Affairs, who is responsible for the oversight of all academic programs at the School of Nursing. Dr. Morton also serves as the specialty coordinator for the Trauma, Critical Care, and Emergency Nursing track and is a practicing Acute Care Nurse Practitioner.

As the Master's program director, Dr. Morton is responsible for providing leadership for the program, for setting direction and standards in light of current trends, and for the operation and coordination of the program. Other duties include: 1) recommending faculty teaching

assignments for Master's courses based on current needs and faulty expertise; 2) making and implementing administrative decisions about the program and use of program resources; 3) working closely with the Master's Program Curriculum Subcommittee as a designated member; 4) recommending students to receive scholarships, assistantships, traineeships, and Graduate Merit Awards; 5) implementing program and Graduate School policies as they relate to admission, curriculum, and student progression; 6) recruitment of applicants and marketing of the Master's program in conjunction with the Office of Admissions and Student Affairs; 7) collaborating with School of Nursing Graduate Faculty members and the Office of Admissions and Student Affairs in planning and facilitating the annual incoming student orientation held each fall; 9) planning meetings, forums, and advisement sessions with Graduate Faculty as indicated; 10) conducting monthly meetings with the coordinators of each master's specialty track; and 11) identifying and obtaining needed resources for student and program initiatives.

Master's Specialty Tracks

The Master's program is formulated on the belief that graduate education builds upon undergraduate education. Graduate education is an intensive and analytic expansion of knowledge, enabling perception and development of new and more complex relationships that affect nursing. The School of Nursing has a long tradition in the preparation of advanced practice nurses at the master's level. The primary care nurse practitioner program was among the first to be established in the United States.

The School of Nursing has continued its tradition of innovation in advanced practice nursing education by pioneering efforts such as the establishment of the first nursing informatics program in the world and also the first nursing health policy Master's program. The recently added specialties in advanced practice behavioral health nursing with a child and adolescent focus and the

environmental/occupational health specialty serve as examples of the ongoing tradition of innovation.

Students in the Master's program select from one of about twenty master's specialty tracks that provides them opportunities to think conceptually, to apply research, and to develop in-depth knowledge in a specialized area of advanced practice. The Master's degree requires the completion of a minimum of 35-66 credits depending on the area of specialization. Most specialties can be completed in three to four semesters of full-time study. The master's specialty tracks offered by each department in the School of Nursing are listed in Table 4. For an overview of each specialty, see Appendix C.

Table 4: Specialty Tracks in the Master's Program

Newly Configured Department 1: (Name to be determined)
<u>Adult Health Nursing</u>:
- Adult Primary Care Nurse Practitioner*
- Clinical Nurse Specialist/Acute Care Nurse Practitioner in Trauma, Critical Care, and Emergency Nursing*
- Gerontological Nurse Practitioner*
- Oncology Nursing:*
  - Clinical Nurse Specialist/Adult Primary Care Nurse Practitioner
  - Clinical Nurse Specialist/Acute Care Nurse Practitioner
  - Clinical Nurse Specialist/Gerontologic Nurse Practitioner

<u>Education, Administration, Information, and Health Policy</u>
- Nursing Informatics*
- Nursing Health Policy
- Nursing Administration*
- Nursing Administration/Managed Care*
- Nursing Administration/Business Administration

Newly Configured Department 2: (Name to be determined)
<u>Child, Women's and Family Health</u>:
- Women's Health Nurse Practitioner*
- Nurse Midwifery
- Family Nurse Practitioner*
- Neonatal Nurse Practitioner*
- Advanced Practice Pediatric Nursing:
  A blended Clinical Nurse Specialist/Pediatric Nurse Practitioner*

Table 4 (cont'd)

Behavioral and Community Health:
- Community/Public Health Nursing*
- Community/Public Health Nursing with a focus on Environmental Health*
- Psychiatric Primary Care Nurse Practitioner*
- Advanced Practice Behavioral Health Nursing:
  - Adult Focus*
  - Child/Adolescent Focus*

Denotes a post-Master's option is available.
Note: Nursing Education is available only as a post-Master's option.

Departmental Structure

The departmental structure of the School of Nursing is in transition. The School is moving from a four to a two department structure. The former Department of Adult Health Nursing is being combined with the former Department of Education, Administration, Health Policy, and Nursing Informatics. A new name has not been assigned.

The formerly named Department of Adult Health Nursing offers four master's specialty tracks. These include the Adult Primary Care Nurse Practitioner Program, one of the first advanced practice specialties offered by the School of Nursing and currently ranked 5th in the nation by the 2003 *US News and World Report* ratings of graduate programs. The Trauma, Critical Care, and Emergency specialty track was started through a Division of Nursing grant in 1982 and prepares graduates for the role of the clinical nurse specialists (CNS). The Oncology specialty track was initiated in the late 1980s and prepares the graduate for the role of the clinical nurse specialist. In 1998, a Division of Nursing grant was obtained to expand the Trauma, Critical Care, and Emergency specialty track and the Oncology specialty track to include preparation as both a clinical nurse specialist and as an acute care nurse practitioner. Based on market demands, recent expansion of the options for the Oncology specialty track has been approved and now

students select from one of three options: oncology clinical nurse specialist/acute care nurse practitioner; oncology clinical nurse specialist/adult primary care nurse practitioner, or oncology clinical nurse specialist/gerontological nurse practitioner. The Gerontological Nurse Practitioner specialty, ranked 13th in the nation according to the 2003 ratings from the *US News and World Report*, is also offered through the Department of Adult Health Nursing.

The formerly named Department of Education, Administration, Informatics, and Health Policy offers five master's specialty tracks. Nursing Informatics, the first in the world, is the most popular specialty in the School of Nursing. Nursing Health Policy, also the first in the nation to be established, enjoys the advantage of the school's close proximity to the state capital and to the nation's capital. Nursing Administration, a long established specialty, was recently ranked 7th in the nation according to the 2003 ratings in the *US News and World Report*. Students can also select a combined Nursing Administration/Managed Care specialty track. Students wishing to pursue the joint Nursing Administration/Master's in Business Administration specialty can select from several options. The School of Nursing and the Robert G. Merrick School of Business, University of Baltimore; Frostburg State University School of Business; and the Robert H. Smith School of Business at the University of Maryland, College Park offer joint MS and MBA programs to students seeking advanced research and practice based study in the fields of nursing and business administration. The University of Maryland, College Park Robert H. Smith School of Business offers its entire program on site at the School.

The second new department will be comprised of the former Department of Child, Women's, and Family Health and the Department of Behavioral and Community Health. The formerly named Department of Child, Women's, and Family Health offers five master's specialty tracks. The Advanced Practice Pediatric Nursing specialty is a blended clinical nurse specialist and pediatric nurse practitioner track. The Neonatal Nurse Practitioner specialty was initiated in

1993 through a Division of Nursing grant and is the only Neonatal Nurse Practitioner specialty in the state. The department also offers a Family Nurse Practitioner specialty that was ranked 12th in the nation in the 2003 graduate school ratings by *US News and World Report*. A Women's Health Nurse Practitioner specialty is also offered by the department. The most recent addition to the department is the Nurse Midwifery specialty that is currently supported through a Division of Nursing grant.

The former Department of Behavioral and Community Health offers the Community/Public Health specialty which was recently ranked 8th in the nation according to the 2003 ratings from *US News and World Report*. Through a Division of Nursing grant, that specialty has recently been expanded to offer a focus in Environmental Health. The Psychiatric Nursing specialty has an adult focus that was ranked 13th in the nation by the 2003 *US News and World Report* ratings of graduate programs. The specialty track has expanded recently through Division of Nursing grants to include a new Child/Adolescent focus and a blended Psychiatric/Primary Care Nurse Practitioner specialty.

The Master's program also provides opportunities for nurses pursuing graduate study to combine specialties if they are accepted to both tracks. For example, students may opt to combine a clinical specialty with a non-clinical specialty (e.g. gerontology with health policy). Another popular combination has been Nursing Informatics and Health Policy or Nursing Informatics and Nursing Administration.

The Nursing Education specialty used to be offered as a master's specialty option, but now is available only as a post-master's option. Education courses are also available to students as elective courses. The strategic planning committee, the master's specialty coordinators, and the Master's Program Curriculum Subcommittee are considering re-instituting nursing education as a master's option in light of the faculty shortage.

The School of Nursing has had repeated requests by the Maryland Association of Nurse Anesthetists to start a Nurse Anesthesia specialty track. Although the need has been clearly demonstrated by this group, the funding to support such a specialty track is a major concern to the School of Nursing. Additional information and deliberation is needed before a decision can be reached.

RN-MS Option

The RN to MS option is designed for registered nurses with an associate degree or diploma in nursing who have the interest and demonstrated ability to pursue leadership and specialty preparation at the master's level. Students in the RN to MS option are classified as graduate students after the completion of 31 credits, which includes the master's level core courses (10 credits) and required baccalaureate level courses. Although students in the RN to MS option have already been admitted to the School of Nursing graduate specialty, they must complete the Graduate Record Examination (GRE) and an application to the Graduate School before beginning graduate level specialty courses no later than their final semester of the BSN program. While the total number of additional master's credits that a student in the RN to MS option completes varies by specialty, there is a minimum of 30 graduate credits required by the Graduate School.

RN-MS Plan of Study

A typical plan of study for full-time students who are enrolled in the RN to MS option is outlined in Table 5. Individual student plans may vary.

Table 5: RN-MS Plan of Study

First Semester – Fall/Spring		Credits
NURS 309	Health of Diverse Populations, Communities, Families and Individuals	3 cr
NURS 332	Gerontological Nursing	2 cr
NURS 333	Health Assessment	3 cr
NURS 405	Informatics and Technology	3 cr
NURS 606	Systems in Health Care Delivery	3 cr
Total		**14 cr**

Minimester/Summer		Credits
NURS 418*	Directed Elective(s)	5 cr
Total		**5 cr**

*600-level graduate elective(s) may be substituted for students who demonstrate that they will be able to manage the graduate-level workload and who obtain permission of their advisor, the course coordinator, and the Director of Graduate Studies.

Second Semester – Spring/Fall		Credits
NURS 403	Community Health Nursing	5 cr
NURS 602	Planning Health Care for Populations	3 cr
NURS 701	Research for Advanced Nursing Practice	4 cr
Total		**12 cr**

TOTAL CREDITS	31 cr
Validation Credits and/or Nursing Credits	60 cr
General Education and Prerequisite Courses	<u>29 cr</u>
Total Nursing Credits for RN to MS Option	120 cr

Prerequisite and Corequisite Requirements for the RN to BSN/MS Option are described in the School of Nursing Catalog.

BSN-PhD Option

One option for entry into the doctoral program is the BSN to PhD. Students considered for this option are ones with outstanding academic records including grade point average and GRE scores. Consideration is also given to the extent to which the applicant's goals and objectives are congruent with the faculty research expertise and scholarship as well as institutional resources. Students who select this option usually complete the requirements for one of the specialty tracks although the Graduate School does not require this.

Post-Master's Option

The School of Nursing offers the post-master's option for many of the specialty tracks (See Table 4). The post-master's option has been selected in recent times by nurses who were prepared as clinical nurse specialists and now wish to become certified as nurse practitioners. All post-master's plans of study including didactic and clinical requirements have been approved by the Master's Curriculum Subcommittee. Post-master's students are expected to achieve the same outcome criteria as master's students and the post-master's nurse practitioner students must complete the required number of clinical hours for the specialty track.

Outreach Sites for Master's Education

The Master's curriculum includes three core courses required of all students. These core courses have been offered at outreach sites in the State of Maryland. Only selected master's specialty tracks have been offered at outreach sites. The selection of the specialty was based on a needs assessment and the enrollment of an adequate cohort of students for a specialty in the outreach site. Table 6 lists the specialties that have been offered at outreach sites. The Strategic Planning Committee, the Master's Curriculum Committee, and the Administrative Council are evaluating the feasibility of continuing to offer master's specialties at outreach sites. With

budget constraints and limited faculty resources, it may be difficult to continue to provide master's specialties in the SON outreach sites.

Table 6: Master's Specialties Offered at SON Outreach Sites

Outreach Site	Specialty Offered
Shady Grove (Montgomery County)	- Adult Primary Care Nurse Practitioner - Nursing Administration/Managed Care - Psychiatric Primary Care Nurse Practitioner
Waldorf (Charles County)	- Family Nurse Practitioner (cohort recently completed the program)
Hagerstown (Washington County)	- Family Nurse Practitioner (cohort of 10 will graduate in December 2003)

Admission and Progressions Policies for Master's Education

The Master's degree is granted and issued by the Graduate School. Thus, Graduate School policies for admission, retention, and graduation are followed as specified in the Graduate School Handbook, which is available on the School's web site (http://graduate.umaryland.edu) and in paper form.

All School of Nursing policies are publicly accessible, nondiscriminatory, and consistent with the policies of USM and UMB. Policies affecting students are contained in hardcopy form and on the web in the School of Nursing Catalog (http://nursing.umaryland.edu/catindex.htm); the School of Nursing Graduate Student Handbook (http://nursing.umaryland.edu/catindex.htm); the Graduate School Catalog (http://graduate.umaryland.edu/acad_catalog.html); and the UMB Student Answer Book (www.umaryland.edu/student/sab/index.html). In some cases, the School of Nursing has developed additional policies when warranted by the special circumstances of nursing students.

Faculty members who teach in the Master's program develop admission and academic progression policies that are congruent with those of the Graduate School. Existing policies are

reviewed and new policies are proposed through the standing Curriculum Committee, the

Master's Program Curriculum Subcommittee, and the Student Affairs Committee. Policy

changes approved by the committees are brought forward to the tri-annual faculty assembly and

voted on by the School of Nursing faculty. Approved changes at the School of Nursing level are

then brought forward to the Graduate School Council for final review.

All policies are designed to be consistent with the AACN "Essentials of Master's

Education" and draw on articulated standards for advanced practice nursing and elements of the

Pew Commission Report on "Recreating Health Professional Practice for a New Century." They

are congruent with national standards such as the "Criteria for Evaluation of Nurse Practitioner

Programs, 2002" and with the organizing framework of the Master's program.

Admission to the Master's program in the School of Nursing is based on the following

criteria:

1. Baccalaureate degree with an upper-division nursing major from an NLNAC/CCNE accredited program.

2. Undergraduate grade point average of 3.0. If GPA is below 3.0, provisional acceptance may be considered if the candidate demonstrates graduate study potential by other means.

3. Completion of a course in elementary statistics or nursing research.

4. Official scores on the aptitude portion of the Graduate Record Examination, which includes scores for verbal, quantitative, and analytical skills.

5. Current RN licensure. Applicants not licensed in the U.S. are required to obtain a Commission on Graduates of Foreign Nursing Schools (CGFNS) certificate.

6. Completion of an approved physical assessment course is required for all specialty areas except nursing administration, nursing and business administration, health policy, and informatics.

7. A strong background in or recent review of physiology/pathophysiology is highly recommended for the clinical specialties.

8. Two letters of reference from professionals who can assess the applicant's professional abilities and academic potential for graduate study.

9.   Professional resume.

10.   Personal interview upon request.

Master's students must maintain a grade point average of 3.0. If the student's grade point average falls below a 3.0, the student is placed on academic probation for one semester. If after that one semester, the grade point average continues to be below a 3.0, the student is dismissed from the university.

Recruitment and Marketing for Master's Education

The Office of Admissions and Student Affairs has been working with the Assistant Director of Graduate Studies and the master's specialty coordinators to develop a comprehensive plan for marketing of master's specialty tracks and recruitment of students. The current draft of the Marketing and Recruitment Plan will be available during the site visit. Table 7 lists examples of marketing and recruitment efforts that are currently in place.

Table 7: Examples of Recruitment and Marketing Efforts for Master's Education

- The School of Nursing web-page
- Master's Open House night offered once per semester
- Monthly information sessions on site and at outreach sites
- Information mailed to perspective students within 5 days of an inquiry
- Thank you letters sent to students who attend an information session or open house
- Exhibits at professional conferences
- Personalized invitations sent to currently enrolled BSN students who have a GPA of 3.5 or greater
- Advertisements in local papers and selected professional publications
- Use of the Maryland Board for Nursing mailing list for open house sessions and information sessions
- Recruitment visits to area hospitals
- Recruitment visits to area community colleges and four year colleges
- Direct mailings to BSN alumni

Financial Support for Master's Students

Financial support is available for master's student through a variety of sources. Students can obtain information about financial aid through the UMB financial aid office. In addition, Ms. Richelle Emerick, Assistant Dean for Admissions and Student Affairs in the School of Nursing, oversees the scholarships and financial support awarded by the School of Nursing. Master's students are eligible to apply for research assistant positions, teaching assistant positions, scholarships funded through the School of Nursing, and federal traineeship money. For fiscal year 2003, the School of Nursing was awarded $301,048 for traineeships (the largest award in the US) that provided financial support for a large number of master's students. Master's students also are advised about scholarship opportunities that are funded by foundations, corporations, and professional organizations.

THE MASTER'S CURRICULUM

Throughout its interactive strategic planning processes beginning in the 1990s and extending through the present, School of Nursing faculty and academic administrators have recognized that the future would present many challenges for professional nursing. Rapid changes in health care knowledge, delivery systems, and technology require nurses to be able to design, implement, and evaluate quality patient care more innovatively and to improve the systems through which care is mediated. Market analysis and assessment of industry needs projected nursing shortage as yet another daunting challenge to care delivery. Thus it was imperative that the School of Nursing consider the impact of these sweeping changes and respond accordingly, recognizing that the curriculum process is highly dynamic and integral to continuous quality improvement within the School.

While the Healthy People 2000 document served as a catalyst for greater attention to health promotion and disease prevention in the 90s, the US health care system was reeling with dramatic shifts from emphasis on acute to primary care, soaring hospital costs, shrinking numbers of hospital beds and, indeed, numbers of hospitals, higher acuity levels in patients and even shorter hospital stays making headlines on a routine basis.

Managed care, though in a variety of forms, became a reality with focus on community based care with sicker patients no longer confined to acute care settings. Healthy People 2010 set the stage for greater gains in primary care. The School of Nursing faculty took on the challenge of considering the impact of these dramatic changes on the curriculum. Consideration was given to predicting what was needed in the curriculum to develop graduates to work proficiently in evolving environments not only in the present, but also well into the future. This

is a challenge that the School of Nursing faculty continues to address in the dynamic process of attention to the curriculum in an ongoing climate of sweeping changes in the health care system.

Given the significance of these changes in health care delivery, it was essential to examine the curriculum for relevance. If advanced practice nurses were to make a meaningful contribution to the future development of health care delivery, they must: 1) have skills in leadership, business, information management, and policy; the generation and application of new knowledge and new technology; 2) be able to engage in interdisciplinary collaborations; and 3) be creative in developing community and population-based solutions to prevent and manage disease and promote health, and be able to assume responsibility for managing the care of populations in a culturally competent manner. Critical thinking would need to be a hallmark of this educational process, thereby fostering skills in problem-solving and scholarly inquiry.

Standards are in the forefront of curriculum re-envisioning and frame the design process as a guide. The nursing faculty endorse the Standards of Professional Performance and the Standards of Clinical Nursing Practice of the American Nurses Association (ANA), Pew Commission competencies (Recreating Higher Education), AACN Essentials of Master's Education in Nursing, The Report of the National Task Force on Quality Nurse Practitioner Education: Criteria for Evaluation of Nurse Practitioner Programs 2002, The Nurse Practitioner Primary Care Competencies in Specialty Areas (April 2002), and the NLN Characteristics of Master's Education in Nursing as guiding principles for the Program's curricular development, evaluation, and revision. The NLNAC Principles of Distance Education were adopted for courses offered by interactive video or web. The School of Nursing faculty members believe that the above standards provide guidance for the development of master's graduates who are prepared to assume positions as advanced practice nurses.

The Master's curriculum builds on the BSN curriculum and draws on the following basic

tenets:

Basic Tenets

- Nursing practice roles are based on established professional competencies.

- Research and research utilization guides the practice of nursing.

- Proficiency in information management and technology are essential nursing skills.

- Community and population-based practice is a key to meeting societal health needs.

- Critical thinking is an essential nursing skill.

- High quality health care requires interdisciplinary education for collaborative practice.

- Preparation for nursing leadership, business management, and policy development and analysis are essential to contemporary nursing practice.

- Nursing demands ongoing accountability and professional growth as an integrated scholar focused on clinical practice.

Table 8: Expected Outcomes Related to the Basic Tenets

Basic Tenets	Expected Outcomes
Nursing is a theory based clinical practice discipline	- Incorporate a range of theories into advanced nursing practice. - Utilize theoretical perspectives in addressing a related nursing problem. - Analyze selected nursing conceptual frameworks and theories used in nursing research for their applicability to advanced practice.
Nursing practice roles are based on established professional competencies	- Incorporate ethical, legal, and regulatory mandates and professional standards into advanced nursing practice. - Develop depth in specific knowledge and skills required for defined advanced practice roles. - Function as an expert member of nursing and interdisciplinary research teams for generation of new knowledge and for the appraisal of research findings for utilization in practice.

Table 8 (cont'd)

Basic Tenets	Expected Outcomes
Nursing is a theory based clinical practice discipline	- Incorporate a range of theories into advanced nursing practice. - Utilize theoretical perspectives in addressing a related nursing problem. - Analyze selected nursing conceptual frameworks and theories used in nursing research for their applicability to advanced practice.
Nursing practice roles are based on established professional competencies	- Incorporate ethical, legal, and regulatory mandates and professional standards into advanced nursing practice. - Develop depth in specific knowledge and skills required for defined advanced practice roles. - Function as an expert member of nursing and interdisciplinary research teams for generation of new knowledge and for the appraisal of research findings for utilization in practice.
Research and research utilization guides the practice of nursing	- Utilize scientific inquiry and new knowledge for the provision of nursing care, the initiation of change, and the improvement of health care delivery.
Proficiency in information management and technology are essential nursing skills	- Participate in the development and management of information and new knowledge for the provision of nursing care, the initiation of change, and the improvement of health care delivery.
Community and population based practice is key to measuring societal health needs	- Apply methods of measurement to health and disease in populations using primary and secondary data. - Examine team dynamics in planning for populations
Critical thinking is an essential nursing skill	- Use scientific inquiry and new knowledge for the provision of nursing care, the initiation of change, the improvement of health care delivery. - Evaluate nursing care within the framework of outcomes, using findings for the improvement of health care system, delivery of care, and client outcomes.

Purposes

The purposes of the MS degree program are to prepare nurses:

- With expertise in a specialized area of advanced nursing practice.

- With role preparation as a clinical nurse specialist, nurse practitioner, nurse midwife, administrator, information or policy specialist.

- For leadership in advanced nursing practice, professional and academic organizations, health care agencies, and policy-generating bodies.

- For entry into doctoral study.

Beliefs

In addition to the basic tenets and philosophical beliefs, the beliefs specific to underpinning the Master's curriculum design include the following:

- There is an essential core of advanced nursing knowledge common to all specialized areas of nursing that requires enhanced critical thinking skills.

- Graduates must have competence in an area of advanced nursing practice including preparation for leadership and role performance.

- Graduates must have knowledge and skill in research and the ability to evaluate and apply research findings to a specialized area of nursing.

- Graduates must have knowledge of the community and population-based context of care delivery.

- Graduates must have skills in information management and use of technology relevant to their area of specialization.

- The Master's program anticipates and responds to changing societal, health care, and professional needs.

- Past experience and career goals are considered in planning an individual student's program of study.

- Teaching and learning strategies support the philosophy and goals of the Master's program.

- Graduates must have a focus on interdisciplinary and collaborative education and practice.

Table 9: Competency Outcome Goals

Competency/ Outcome Goal	MS Program
Critical Thinking	Incorporate a range of theories into advanced practice nursing.
Communication and Interdisciplinary	Collaborate with nursing and interdisciplinary colleagues and with consumers for the attainment of shared health care goals that focus on health promotion and disease prevention and management.
Assessment	Evaluate nursing care within the framework of outcomes, using findings for the improvement of the health care system, delivery of care and client outcomes.
Role Development	Manifest personal accountability for lifelong learning, professional growth, and commitment to the advancement of the profession. Advance nursing practice as a clinical nurse specialist, nurse practitioner, nurse midwife, administrator, informational or policy specialist.
Business Management and Leadership	Adhere to ethical, legal, and regulatory mandates and professional standards for advanced nursing practice. Provide leadership in the development and evaluation of strategies for improving delivery of health care, using knowledge of economic, political, organizational, and regulatory systems.
Research	Utilize scientific inquiry and new knowledge for the provision of nursing care, the initiation of change, and the improvement of health care delivery. Function as a clinical expert in nursing and on interdisciplinary research teams for generation of new knowledge and for the appraisal of research findings for utilization in practice.
Technical Proficiency	Provide expertise in a specialized area of advanced nursing practice.

## Organizing Framework

Course objectives/competencies and learning activities within the Master's program articulate within a model that involves the acquisition of a core of foundational knowledge and skills, the integration of such knowledge and skills into practice, and the synthesis of knowledge with leadership and management skills appropriate to the level of nursing practice. The Master's

program curriculum stresses critical thinking within a specialization in advanced nursing practice and thus places greater emphasis on practice, theory, and research in a specific area.

The organizing framework guiding the Master's curriculum represents the knowledge required for preparation as an advanced practice nurse. Building on a group of three foundational core courses (10 credits) that all Master's students take, students complete a specified number of specialty core courses (e.g. in clinical course, these courses include pathophysiology and pharmacology) and specialty advanced practice courses within the chosen specialty to develop advanced practice skills. The number of credits beyond the 10 credits of core courses varies from 25 to 45 depending on the specialty area, and the requirements of certifying bodies for graduates. These credits are comprised of: 1) specialty core courses, typically ranging from 6 to 10 credits, which are foundational to the 2) advanced practice specialty core and specialty courses. While the trend is for certifying bodies to increase the minimum required number of clinical hours in the specialty, every effort is made to incorporate such changes within current credit requirements for each specialty so that students can complete programs in a timely fashion and be prepared to bring their much needed advanced practice skills into the workforce.

Three concentric circles in the Figure 3 below represent the model of the organizing framework for the Master's program. At the center are courses that are core. The next circle represents specialty core (MS) level courses and the outermost circle represents advanced practice (MS) courses.

Figure 3

Specialty

Specialty Core

Core (10 Credits)

NURS 602
NURS 606
NURS 701
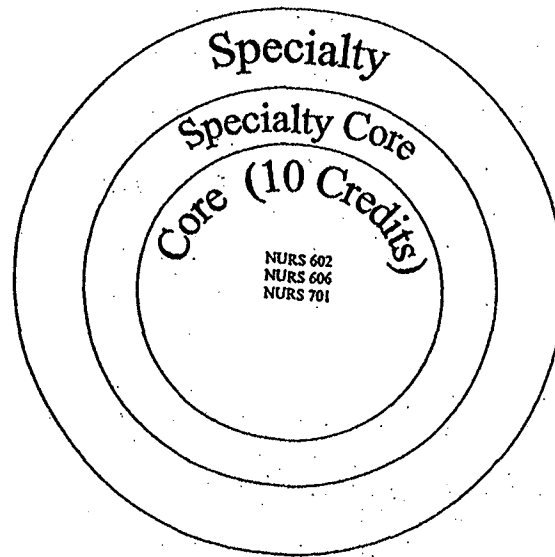
The Foundational Core Courses

The 10-credit Master's foundational core represents knowledge needed by all Master's

students regardless of specialty area. The Master's core courses provide the student with

advanced nursing knowledge including the many environmental factors influencing health care

needs of populations (NURS 602, Planning Health Care for Populations), health care systems

and policy (NURS 606, Systems of Health Care Delivery), and nursing and health care research

(NURS 701, Science and Research for Advanced Nursing Practice).

In NURS 602, Planning Health Care for Populations (3 credits), selected conceptual and

contextual frameworks, needed by advanced practice nurses for the delivery of health-care services

to populations in an evolving health care system, are discussed. The course introduces a variety of

theories and models for managing health care of populations from a population perspective.

Students engage in a range of learning activities including using quantitative, qualitative, and

epidemiological methods related to health indicators and accessing relevant health databases for

health care planning purposes. Planning concepts and quality indicators needed to effect changes

in health status of selected populations provide the student with practice applications. Cultural

determinants of care also are addressed.

NURS 606, Systems of Health Care Delivery (3 credits), provides a systems-level analysis of health care policy trends and their effects on organizations and delivery systems as well as provider and consumer roles in health care delivery. Policy and societal trends affecting health care, the nursing profession, and nursing practice are investigated. Health care delivery systems responding to rapidly changing financial incentives that influence the industry at the community, state, national, and international levels are analyzed. The dynamics of these changes on the roles of health care providers and consumers from the economic, social, organizational, political, ethical, legal, and technological perspectives are assessed. Nursing roles and leadership strategies for influencing policy decisions are examined and emphasis is placed on the role of nurses in affecting the health care environment and on the effects of external forces on advanced practice roles and the profession.

NURS 701, Science and Research for Advanced Nursing Practice (4 credits), focuses on the acquisition, evaluation, and interpretation of information designed to link nursing theory and science as a foundation for advanced nursing practice. Working from a body of literature related to broad and middle range theoretical frameworks, students are actively involved in an ongoing program of research critique with emphasis on applications to and implications for nursing practice, consideration of the usefulness of selected theories and research for relevance to nursing practice, and the development of beginning skills to become actively involved in selected research activities.

In addition to the knowledge and practice components of the Master's program, the faculty members believe that the behavior of Master's students should reflect an internally consistent value system demonstrating appreciation and regard for scientific inquiry as a basis for professional practice. Faculty members strive to support students in developing the knowledge, skills, and desire to be leaders and active contributors to the nursing profession. It is

41

expected that graduates will value scientific inquiry as a basis for professional practice and will seek to increase their contributions to the nursing profession.

Specialty Core Courses

Each Master's student selects a specialty area within a clinical or functional role area of advanced practice. The specialty core courses include essential content for the student to gain the knowledge, skills, critical thinking, and communication ability needed to engage in advanced professional nursing practice. Specialty core courses provide the foundation for advanced practice in the respective specialty area. In clinical specialties, courses in pathophysiology (e.g. NPHY610) and pharmacology (e.g. NURS 723) and advanced practice physical assessment skills (NURS 605) are examples of specialty core courses which are typically taken early in the course of study and are pre-or co-requisite to specialty courses. In non-clinical specialties, specialty core courses are also foundational and pre- or co-requisites to practice courses. For example, in nursing informatics, NURS 736 and NURS 737 are specialty core courses laying the foundation for more advanced work in nursing informatics. For the Nursing Administration specialty track, NURS 690 Managerial Health Finance and NURS 691 Organizational Theories: Application to Health Service Management serves as the specialty core courses.

Specialty Courses

The advanced practice specialty courses within each specialty track afford the student real world practice opportunities in a series of courses ranging in ever-increasing levels of complexity and skill required. The number of credits in both specialty core and specialty courses varies across specialty tracks to provide the appropriate advanced practice skills within the specialty and to meet the criteria of certifying bodies.

The specialty courses provide practice and didactic learning experiences identified and defined by professional specialty nursing organizations and certifying bodies such as ANA/ANCC to assist students to gain competence in an area of advanced nursing practice. Clinical experiences in the Master's specialty tracks offer advanced practice opportunities for students to work with preceptors on a one-to-one basis. These experiences include professional practice with clinical nurse specialists and with nurse practitioners in the School's Clinical Enterprise such as Open Gates, The Governor's Wellmobiles, Senior Care Center, and the Pediatric Ambulatory Care Center (PAC). Nurse practitioner faculty having service contracts for care provision in organizational and community settings precept Master's students in clinical learning experiences and serve as role models for students. Non-clinical advanced practice in fields such as administration, informatics, and health policy offer students exceptional preceptored experiences with top-level professionals in organizations such as the NIH, Health Care Financing Administration (HCFA), UMMS, and Johns Hopkins Medical Institutions.

Integration of Standards

Course objectives, competencies, and learning activities flow from the organizing framework and are designed to proceed in a logical progression and reflect the integration of standards of professional nursing practice. The faculty approved the ANA's Standards of Professional Practice (1998) for use in organizing course curricula and identifying course content. Table 10 lists the ANA Professional Standards in relation to curricular content. Other standards of professional nursing practice are reflected in required courses for program options and specialty tracks as well as elective courses.

Table 10: ANA Professional Standards Related to MS Curriculum

ANA Standards of Professional Practice	Where Implemented in Curriculum
Standard I: Quality of Care The nurse systematically evaluates the quality and effectiveness of nursing practice.	A variety of theories and models for managing health care of populations are examined in relation to planning concepts and quality indicators (NURS 602). A critical analysis of policy, regulations, and their impact on the effectiveness of nursing practice is an emphasis in NURS 606. The Science and Research for Advanced Nursing Practice course (NURS 701) provides skills to objectively assess quality of care.
Standard II: Performance Appraisal The nurse evaluates his/her own nursing practice in relation to professional practice standards and relevant statutes and regulations.	In the Systems of Health Care Delivery course (NURS 606) students examine nursing roles and leadership strategies to affect the health care environment. In specialty clinical courses and their advanced practice role components, students learn to assess their practice in relation to nursing standards.
Standard III: Education The nurse acquires and maintains current knowledge in nursing practice.	Adult learning theory and self-directed learning provides the theoretical basis for the curriculum, instruction, and evaluation, and supports students in adopting a philosophy of life-long learning.
Standard IV: Collegiality The nurse interacts and contributes to the professional development of peers, colleagues, and others.	Students work in groups and in concert with faculty to contribute to the professional development of their peers and to participate in collegial relationships. In each of the master's specialties, students complete a practicum in which there is an opportunity for development of a collegial relationship between student and mentor.
Standard V: Ethics The nurse's decisions and actions on behalf of clients are determined in an ethical manner.	Ethical dilemmas are critically examined in NURS 606 as related to policy and societal trends affecting health care, the nursing profession, and nursing practice. Ethical considerations in clinical practice are addressed in specialty clinical courses. Ethical considerations in research are considered in NURS 701. Many of the courses within the curriculum contain ethics content as seen in the course descriptions (SON catalog; course syllabi).

Table 10 (cont'd)

ANA Standards of Professional Practice	Where Implemented in Curriculum
Standard VI: Collaboration The nurse collaborates with the client, significant others, and health care providers in providing client care.	Collaboration with nursing and interdisciplinary colleagues and with consumers is emphasized in many courses for the attainment of shared health care goals. The required practicum in each of the master's specialties provides for interdisciplinary collaboration, which is integral to the successful completion of the experience.
Standard VII: Research The nurse uses research findings in practice.	Working from a body of literature related to broad- and middle- range theoretical frameworks, students are actively involved in an ongoing program of research critique. Students develop beginning skills in research activities in NURS 701. Research findings are integrated into specialty clinical courses as a foundation for advanced practice nursing.
Standard VIII: Resource Utilization The nurse considers factors related to safety, effectiveness, and cost in planning and delivery of client care.	Students critically analyze health care delivery systems (NURS 606) and examine applications to and implications for nursing practice (NURS 701). Master's courses emphasize the use of new knowledge for the provision of nursing care, initiation of change, and improvement of health care delivery.

The AACN has recommended the essentials for master's education as including research, policy, organizations, health care financing, ethics, professional development, theory, and human diversity. Table 11 depicts these essentials and their location in the MS core curriculum.

Table 11: AACN Master's Education Essentials and Master's Nursing Curriculum

Essential Core Curriculum	MS Course Work
Research	NURS 701, Integrated
Policy, Organizations, Financing of Health Care	NURS 606, NURS 602
Ethics	NURS 602, NURS 606, NURS 701, Integrated
Professional Development	Integrated
Theoretical	NURS 602, NURS 701
Human Diversity	Integrated, NURS 602
Practitioner Curriculum	
Advanced Health Assessment	NURS 605, NURS 611, NURS 634, NURS 620, NURS 623, NURS 636, NURSE 639, NURS 643, NURS 667, NURS 671, NURS 679, NURS, 706, NURS 716, NURS 734, NURS 742, NURS 748, NURS 776
Advanced Physiology	NPHY 600, NPHY 610, NURS 649, NURS 752
Advanced Pharmacology	NURS 723, NURS 743, NURS 751

Master's specialty programs of study meet criteria established for national certification in

the individual specialty area. These include the American Nurses Association/American Nurses

Credentialing Center (ANA/ANCC), the National Certification Corporation (NCC), the

American Academy of Nurse Practitioners (AANP), the American College of Nurse Midwives

(ACNM), and the National Certification Board of Pediatric Nurse Practitioners and Nurses

(NCBPNPN) as noted in Table 12.

Table 12: National Certification Examinations that Master of Science Graduates are Eligible for by Specialty

Master of Science Specialties	Clinical Hours Completed by SON Students	National Certification Examination(s)
Adult Nurse Practitioner Required Certification Hours: 500	500 Clinical Hours	American Nurses' Association/American Nurses' Credentialing Center (ANA/ANCC) Adult Nurse Practitioner Certification Examination
Gerontological Nurse Practitioner Required Certification Hours: 500	500 Clinical Hours	ANA/ANCC Gerontological Nurse Practitioner Certification Examination
Women's Health Nurse Practitioner Required Certification Hours: 500	600 Clinical Hours	ANA/ANCC Adult Nurse Practitioner Certification Examination and National Certification Corporation (NCC) Women's Health Nurse Practitioner
Nurse-Midwifery Certification Hours: Required- Not Stated Documentation – Core competencies	Document Core Competencies Minimum of 900 hours	ACNM (American College of Nurse Midwives) Certification Council, Inc. National Certification Examination
Pediatric Nurse Practitioner Required Certification Hours: 500	550 Clinical Hours	ANA/ANCC Pediatric Nurse Practitioner Certification Examination and National Certification Board of Pediatric Nurse Practitioners and Nurses (NCBPNPN) Certification Examination

Table 12 (cont'd)

Master of Science Specialties	Clinical Hours Completed by SON Students	National Certification Examination(s)
Family Nurse Practitioner Required Certification Hours: 500	805 Clinical Hours	ANA/ANCC Family Nurse Practitioner Certification Examination and the American Academy of Nurse Practitioners (AANP) Family Nurse Practitioner Certification Examination
Neonatal Nurse Practitioner Required Certification Hours: 600	600 Clinical Hours	NCC Neonatal Nurse Practitioner Examination
Psychiatric Primary Care Nurse Practitioner Required Certification Hours: 500	830 Clinical Hourse	ANA/ANCC Adult Nurse Practitioner Certification Examination and ANA/ANCC Clinical Nurse Specialist in Psychiatric and Mental Health Nursing - Adult Certification Examination or ANA/ANCC Clinical Nurse Specialist in Psychiatric and Mental Health Nursing - Child and Adolescent Certification Examination
Acute Care Nurse Practitioner: Advanced Practice Trauma, Critical Care and Emergency Nursing Required Certification Hours: 500	540 Clinical Hours	ANA/ANCC Acute Care Nurse Practitioner Certification Examination and American Association of Critical Care Nurses (AACN) Critical Care Clinical Nurse Specialist Examination
Acute Care Nurse Practitioner: Advanced Practice Oncology Primary Care Nurse Practitioner: Advanced Practice Oncology Gerontological Nurse Practitioner: Advanced Practice Oncology Required Certification Hours: 500	540 Clinical Hours for ACNP 500 Clinical Hours for ANP 500 Clinical Hours for GNP	ANA/ANCC Acute Care Nurse Practitioner Certification Examination and Oncology Nursing Certification Corporation (ONCF) Advanced Certification in Oncology Nursing
Community Health Nursing Required Certification Hours: 500	295 Clinical Hours*	ANA/ANCC Clinical Specialist in Community Health Nursing Certification Program
Advanced Practice Psychiatric Nursing Certification Hours: 500	540 Clinical Hours	ANA/ANCC Clinical Nurse Specialist in Psychiatric and Mental Health Nursing-Adult Certification Examination or ANA/ANCC Clinical Nurse Specialist in Psychiatric and Mental Health Nursing-Child and Adolescent Certification Examination
Nursing Administration Certification Hours: NA	N/A	ANA/ANCC Nursing Administration, and Nursing Administration, Advanced
Nursing/Health Policy Certification Hours: NA	N/A	No national certifying body
Nursing Informatics Certification Hours: NA	N/A	ANA/ANCC Informatics Nurse Certification Examination

Hour requirements are being revised to meet certification guidelines.

Clinical Sites and Preceptors

Clinical experiences within the Master's program provide opportunities for a broad range of learning activities beginning with those building on skills acquired in generic nursing programs. These clinical experiences increase in complexity and in aspects of the nursing advanced practice role development as students progress through their specialty courses. It is at this level that specialty practice becomes a reality. Clinical experiences take place under the supervision of School of Nursing faculty and preceptors. While students' self evaluations and preceptors' evaluations of students are considered in the evaluation of student performance, it is the faculty member who holds the responsibility for student evaluation.

Clinical sites for master's students are selected, monitored, and evaluated by faculty. The School of Nursing enters into a clinical contract with each clinical site used for student clinical experiences. The School of Nursing has contracts with nearly 500 facilities in the Mid-Atlantic region thus providing adequate sites for student experiences. These rich resources provide students with a variety of learning opportunities that reflect current nursing trends and afford opportunities to achieve the terminal objectives of the program. Course-specific practice learning environments are selected to further the attainment of course objectives and to provide students with sites that allow them to practice the skills learned in the didactic and pre-clinical simulation and standardized patient laboratories. The following criteria guide the selection and evaluation of clinical practice learning environments:

- Quality learning experiences are available to meet the learning objectives of the course and the learning needs of the students.

- Agency policies and personnel interest and flexibility facilitate student learning.

- Professional education of agency personnel is consistent with academic requirements of the School of Nursing.

- Sufficient numbers of patients/clients, variety, and diversity of learning experiences.

- Accreditation by an appropriate agency as indicated.

Members of the clinical teaching faculty undertake an annual review of practice learning environments. Students also complete an evaluation of the clinical site. The faculty members assess the quality of the clinical experience and recommend any changes to the specialty coordinator and department chairperson.

Preceptors contribute to the educational experience of Master's students by providing one-on-one supervision. Faculty members select and evaluate the clinical preceptors for the Master's program. Students also complete an evaluation of the clinical preceptor and members of the faculty carefully review this information. Preceptors must hold a Master's degree in nursing, a current registered nursing license, hold certification in the area of specialty if applicable, and have experience and expertise in their area of practice. Preceptors are appointed as Faculty Associates in the School of Nursing. All preceptors are oriented to their role, the course and clinical requirements, and faculty's expectations of the preceptors' role in oversight and evaluation of students.

The number of clinical sites and the number of preceptors are diverse and sufficient in number to support the objectives of the curriculum. The number of clinical sites and the number of preceptors for each specialty track are listed in Table 13.

Table 13: Master's Specialties - Number of Clinical Sites and Preceptors

Master's Specialties	Number of Clinical Sites	Number of Preceptors
Adult Primary Care Nurse Practitioner	48	57
Clinical Nurse Specialist/Acute Care Nurse Practitioner in Trauma, Critical Care, and Emergency Nursing	25	98
Gerontological Nurse Practitioner	25	25
Oncology Nursing: - Clinical Nurse Specialist/Adult Primary Care Nurse Practitioner - Clinical Nurse Specialist/Acute Care Nurse Practitioner - Clinical Nurse Specialist/Gerontologic Nurse Practitioner	7	25
Women's Health Nurse Practitioner	30	32
Nurse Midwifery	13	25
Family Nurse Practitioner	20	25
Neonatal Nurse Practitioner	8	30
Advanced Practice Pediatric Nursing: - A blended Clinical Nurse Specialist/ Pediatric Nurse Practitioner	50	50
Community/Public Health Nursing	10	15
Community/Public Health Nursing with a focus on Environmental Health	4	4
Psychiatric Primary Care Nurse Practitioner*	23	25
Advanced Practice Behavioral Health Nursing: - Adult Focus - Child/Adolescent Focus	25	30
Nursing Informatics	80	100
Nursing Health Policy	25	20
Nursing Administration Nursing Administration/Managed Care Nursing Administration/Business Administration	15	50

Clinical Enterprise

The Clinical Enterprise of the School of Nursing was conceived as a new approach to nursing education and practice, a core aspect of the academic enterprise of the 21st century. The Clinical Enterprise enables uninsured and underserved populations to access high quality health care in the neighborhoods where they live. See Appendix D. The Clinical Enterprise also provides rich learning experiences for master's students as well as superb opportunities for faculty practice. Early on and throughout the process of development of the Clinical Enterprise, helpful input was provided by Dr. Judy Igoe, University of Colorado, Dr. Pat Hinton Walker, University of Rochester, experts respectively on community-based rural models of health care and school-based wellness centers, and Dr. Colleen Conway Welch, Vanderbilt University and Dr. Michael Carter, University of Tennessee, advocates for nurse managed clinics. The importance of graduates being able to manage patient populations, served as a focal point in the development of the curriculum and its integration with the Clinical Enterprise.

The Master's program is designed to promote interdisciplinary education through student involvement in the School's Clinical Enterprise that includes educational, clinical, and research initiatives. The School of Nursing is committed to practice and service as a means to serve the community, create innovations in nursing practice, provide educational experiences, and serve as a site for research. The Clinical Enterprise is evidence-based, with a research intent, to enable the demonstration of effective nursing practice and to inform the curriculum and instruction. The findings and models of clinical practice have a direct tie to education and research; direct links between clinical practice and specific courses/course content are identified; and practices serve as research sites for the testing of research hypotheses. The clinical practice sites are viewed as learning laboratories to develop and refine nursing models of care and promote interdisciplinary approaches to care and to teach and model collaboration among multiple

51

professional and lay providers. Direct community service affords the opportunities for students, faculty, and staff to increase their understanding of community needs and to develop citizenship. This richness of experiences exemplifies the model of the integrated scholar and has the added benefit of providing needed health care and nursing services to underserved populations.

Open Gates, a nurse-managed center providing primary care services for medically underserved clients in southwest Baltimore was the School's first Clinical Enterprise initiative. School-based wellness centers were developed in four Baltimore County Schools as learning laboratories that resulted in students having increased access to school-aged children and their families and to a nursing practice model that enabled them to participate with faculty role models in offering an array of community-based health care services. A serendipitous result of this effort was the fact that it provided a vehicle for meeting the needs of disadvantaged and underserved patient populations as well as a learning laboratory for School of Nursing students. Following this successful model, the school district replicated it in other Baltimore County schools as well as in Baltimore City schools. Further, the model became a prototype for other counties. These school-based centers became a valued source to the community. This model was subsequently used in other Clinical Enterprise services such as the Governor's Wellmobiles, the Senior Care Center, the Southwestern Family Center, and the Pediatric Ambulatory Center.

In addition to providing learning experiences for Master's specialties, the Clinical Enterprise offers students in non-clinical specialties learning opportunities as well. For example, nursing students in informatics participated in setting up information systems on the Wellmobile and at the Senior Care Center. Students in nursing administration were offered opportunities to learn first-hand about concepts such as patient volume at Open Gates and managing patient populations in the real world setting. Thus, the School's Clinical Enterprise was designed to be fully integrated and connected to the School of Nursing curriculum at all program levels. The

Clinical Enterprise further facilitates the building of both faculty and students as integrated scholars.

Each of the sites of the School of Nursing Clinical Enterprise integrate the components of education of students, practice of faculty, research and evaluation, as well as service into learning experiences. This information is summarized in Appendix D.

Interdisciplinary Education

Opportunities for interdisciplinary practice and collaboration abound. Faculty nurse practitioners practice in the Clinical Enterprise settings and serve as preceptors and role models to graduate students. The Clinical Enterprise of the School of Nursing was purposefully expanded to afford opportunities for students to learn in diverse health care settings some of which are described below. The Master's program is designed to promote interdisciplinary education through student involvement in the School of Nursing Clinical Enterprise that includes educational, clinical and research initiatives.

Master's students in community health, primary care and administration have an opportunity for learning experiences at Open Gates, a community-based health center for primary and preventive health care delivered by advanced practice nurses, social work and medical collaborators in southwest Baltimore. Likewise, nurse practitioner students and informatics students in collaboration with the Schools of Pharmacy and Social Work and through affiliations with the AHECs of the Eastern Shore and Western Maryland are able to obtain clinical practice experience with the Wellmobile Program, designed to provide health services in Central Maryland, the Eastern Shore, and Western Maryland. Pediatric nurse practitioner students participate with medical students in providing pediatric primary care and follow-up services for 400-500 children per week at the Pediatric Ambulatory Care Center (PAC), located

in the School of Nursing and jointly operated and staffed by the School of Nursing and the School of Medicine's Pediatric Department. Abundant opportunities for collaboration with faculty and students from the Schools of Pharmacy and Social Work are available. In the PAC, the School has two funded programs that offer additional opportunities for interdisciplinary practice and collaboration. The first funded program, Partnership for Quality Education (PQE), is designed to provide interdisciplinary education for collaborative practice in the managed care environment. Funded through the Robert Wood Johnson Foundation, the PQE provides for nursing students and pediatric residents to share educational and practice experiences on managing care. The second funded program, The Collaborative Interprofessional Team Education (CITE) program, funded by the Robert Wood Johnson Foundation, further advances interdisciplinary education for collaborative practice in disease management, focusing on chronic illness in children in the community. This model of learning includes nursing, medicine, social work, and pharmacy, faculty and students in education and practice.

Evaluation

The various tools used for the evaluation of student achievement are based on course and clinical objectives. In the Master's program, written tests are developed to insure that course objectives are adequately tested. Clinical evaluation tools are based on course and clinical objectives and are developed to reflect progression in clinical competencies. These clinical evaluation tools help document student achievement of specialty course objectives. The School of Nursing adheres to the same grading scale in all courses. The grading scale is: A – 90-100; B – 80-89; C – 70-79; D – 60-69; F less than 59. Clinical courses are a combination of pass – fail for the clinical portion and grades for the didactic portion. Students must pass both didactic and clinical portions of clinical courses in order to pass.

As discussed previously in the section on clinical sites and preceptors, all clinical sites are evaluated by students and by faculty. Students and faculty also evaluate clinical preceptors each semester. At the end of each semester, students evaluate each course by completing the Course Evaluation Questionnaire Data form. All of these evaluations are used to determine needed revisions in courses and the selection of appropriate sties and preceptors. Data are also used by the Master's Curriculum Subcommittee to make necessary curriculum changes.

Once students graduate, alumni surveys are distributed so that graduates can rate how effectively the master' program prepared them for their present position. Data are also obtained from employers of the graduates of the Master's program to determine their perception of the student's competencies.

FACULTY

Faculty at the School of Nursing represent a wide diversity of academically and experientially well-qualified faculty, including both nurses and non-nurses, who work together as a team to provide the highest level of teaching to students; service to the School of Nursing, campus, and the community; and scholarly activity in research and clinical practice. As of Fall 2002, there are 97 School of Nursing full-time faculty and 53 part-time faculty members. Of the 97 full-time faculty, 16 were tenured; 13 male and 84 female. Full-time faculty members represent a minority population of 9 African Americans, 1 Asian or Pacific Islander, and 4 Hispanics. The ratio of full-time to part-time faculty is two to one, indicating that there is a critical mass of full-time faculty available, augmented by part-time faculty to provide master's students with the most academically and experientially qualified instructors.

Faculty teach across program levels, but at any given point in time the primary focus of their teaching is at either the undergraduate or graduate level. There is a high percentage of full-time faculty involved in funded projects. In Fall 2002, there were 46 funded projects at the School of Nursing. Of these, 15 (32.6% of total projects) were research projects; and three (6.5% of total projects) clinical trials. There were also three training projects (6.5% of total projects) and 25 clinical service projects (54.4% of total projects). Thirty-two percent of full-time faculty were engaged in clinical practice. Most of the part-time faculty practice in their clinical area of expertise as well as teach, and many of them have taught in School of Nursing programs for many years resulting in a well integrated teaching force.

Sixty-two percent of the full-time faculty possesses doctoral degrees, and 95% of the tenured and tenure track faculty have earned doctorates. Four faculty members are enrolled in doctoral study. Of the full-time faculty who are nurses, 95% have a graduate degree in nursing.

All faculty teaching clinical nursing courses have a graduate degree in nursing. All faculty who are nurses are required to meet state licensure requirements and have a valid and up-to-date license in their personnel files. Eighteen of the full-time faculty are Fellows of the American Academy of Nursing (FAAN). All specialty coordinators for the Master's program have vast experience in their area of expertise. All nurse practitioner specialty tracks are coordinated by a certified practicing nurse practitioner except gerontology and neonatal nurse practitioner. The coordinator of the gerontology specialty track is a nationally recognized expert in gerontology and works closely with three doctorally prepared gerontological nurse practitioners (2 full-time and 1 part-time) and one Master's prepared gerontological nurse practitioner. The coordinator of the Neonatal Nurse Practitioner program is an experienced neonatal and pediatric nurse practitioner, although not currently certified.

To realize the School of Nursing's goal to increase diversity and improve nursing students' recognition of the importance of an interdisciplinary team approach to health care and related scholarship, the School of Nursing has employed five full-time faculty who are non-nurses (physician, methodologist/statisticians, an attorney, and a physiologist), all of whom have graduate degrees and are doctorally prepared in their area of expertise and are seasoned researchers with a nursing and health care focus. These faculty members bring to the students a broader understanding of contemporary nursing practice in an environment that requires them to function as members of an interdisciplinary team in providing health care.

All faculty members are expected to teach either directly in scheduled classroom and/or clinical courses, or indirectly through their involvement in activities such as advisement, service on dissertation committees, or guest lecturing. In addition, faculty members are expected to engage in scholarly activity and to seek support for their research or practice to further enable the School of Nursing to be effective in its mission and to meet the goals of the institution. Most of

the nurse practitioner faculty also are engaged in clinical practice. These faculty practices provide excellent opportunities for students and faculty to work together. Information on individual faculty is available in their CVs that will be available during the peer review.

The School of Nursing has two types of faculty appointments, tenure and non-tenure track. The tenure and non-tenure tracks are differentiated by the relative weights placed on research, teaching, and service. A revised system-wide policy on appointment, promotion, and tenure was established in July 1998. The change was implemented to allow for consistency of the Appointment, Promotion, and Tenure (APT) criteria and policies at all schools in the USM including the UMB campus and School of Nursing.

Full-time faculty members hold the academic ranks of clinical instructor, assistant professor, associate professor, and professor. Appointment to the tenure or non-tenure track is a decision based on review of the faculty candidate's records and goals and is made at the time of initial appointment to the School of Nursing faculty. Faculty members appointed at the assistant professor rank require approval of the Vice President of Academic Affairs. Associate and full professors require approval of the President. Appointments to the tenure track at the rank of associate and full professor require review by the School's Appointment, Promotion, and Tenure (APT) committee. A transfer from one track to another may be made at any time prior to the final tenure review or at the time of contract renewal, with the approval of the Department Chairperson and the Dean. A transfer from one track to another may be made only once. Part-time appointments, which are made on a semester or an annual basis, are used to augment specific instructional capacity: for example, individuals employed to teach research and methodology, clinical, pathophysiology, or pharmacology courses.

Graduate Faculty Membership

Full time doctorally prepared faculty teaching in the Master's program must become members of the Graduate Faculty. There are two classifications of Graduate Faculty: Regular Member and Associate Member. Only Regular members of the Graduate Faculty are eligible to chair doctoral dissertations, and serve on the Graduate Council and Committees. Associate members are eligible to serve as thesis committee chairs, and either co-chair or serve on doctoral dissertation committees. All course coordinators of graduate level courses must be members of the Graduate Faculty. Table 14 shows School of Nursing faculty who are regular and associate members of the Graduate Faculty.

Table 14: Graduate Faculty Status

Regular Membership: Eligible to chair PhD Dissertation Committees, serve on Graduate Council and Committees, and vote in the Graduate School Faculty Assembly.

Patricia Abbott, PhD, RN, FAAN	Louise S. Jenkins, PhD, RN	Sandra Picot, PhD, RN, FAAN
Janet D. Allan, PhD, RN, CS, FAAN	Carole P. Jennings, PhD, RN	Keith Plowden, PhD, RN
Elizabeth Arnold, PhD, RN	Meg Johantgen, PhD, RN	Joseph Proulx, EdD, RN
R. Barker Bausell, PhD	Denise Korniewicz, DNSc,RN, FAAN	Barbara Resnick, PhD, CRNP, FAAN
Rita Braun, PhD, RN	Jane Lipscomb, PhD, RN, FAAN	Karen Soeken, PhD
Leonard Derogatis, PhD	Margaret McEntee, PhD, RN, CPC	Ann Marie Spellbring, PhD, RN
Mary Haack, PhD, RN, FAAN	Sandra McLeskey, PhD, RN	Sue Thomas, PhD, RN, FAAN
Ruth Harris, PhD, RN, CRNP, FAAN	Mary Etta Mills, ScD, RN, FAAN	Linda Thompson, DrPH, RN, FAAN
Barbara Heller, EdD, RN, FAAN	Patricia Morton, PhD, RN, CRNP, FAAN	Alison Trinkoff, ScD, RN, FAAN
Nalini Jairath, PhD, RN	Nilda Peragallo, DrPH, RN, FAAN	Carolyn F. Waltz, PhD, RN, FAAN

Associate Membership: Eligible to chair MS Thesis Committees and serve as members (and co-chair) of PhD Dissertation Committees.

Todd Ambrosia, PhD, MSN, CRNP	Karan Kverno, PhD, RN	Marianne Shaughnessy, PhD,RN, CRNP
Kathleen Charters, PhD, MSSM, BSN	Gail Lemaire, PhD, RN, CS-P	Claudia Smith, PhD, MPH, RN
Vanessa Fahie, PhD, RN	Ann Mech, JD, RN	Rachel Smith, PhD, RN
Thomasine Guberski, PhD,RN,CRNP	Michele Michael, PhD, CRNP	Mary Tilbury, EdD, RN
Brian Gugerty, DNSc, RN	Kathryn L. Montgomery, PhD, RN	Sally Tom, EDM, RN, CNM, FACNM
Kathy Hausman, PhD, RN	Carles Muntaner, MD, PhD	Elias Vasquez, PhD, FAAN
Dorothy Herron, PhD, RN	Carol O'Neil, PhD, RN	Chris Ward, PhD
Karen Johnson, PhD, RN, CCRN	Barbara Sattler, PhD	Susan Wozenski, JD, MPH
Catherine Kelleher, ScD, H,MS,BSN	Rosemarie Satyshur, DNSc, RN	
Cara Krulewitch, PhD, RN	Doris Scott, PhD, RN	

Part time clinical faculty must hold at least a Master's degree in nursing and show clear evidence of expertise in clinical practice and potential for or experience in teaching. They are employed on a part-time basis, as determined by the Department Chairperson and the Associate Dean for Academic Affairs, and approved by the Dean to meet the instructional needs of students in courses with a clinical component.

The School of Nursing also has categories of faculty who receive non-salaried appointments based on their contribution to the mission and goals of the School. These categories include adjunct and associate faculty. Adjunct faculty are individuals with outstanding expertise in their discipline and demonstrated achievement, who have been recommended by School of Nursing faculty and are eligible for rank appointment in the School. Nominations originate within the department or other administrative unit and are reviewed by the appropriate chairperson or director and associate dean. Curriculum vitae of nominees are evaluated by the APT Committee, which forwards its recommendations to the Dean for approval and appointment of the individual.

Faculty associates are persons identified by the faculty as supportive and contributing to the School's Philosophy and Goals (i.e., clinical preceptors), and who are experientially and academically qualified to instruct students. Nominations, which include a review of credentials and faculty recommendations, originate at the department level and are considered annually by the Faculty Council who recommends appointment to the Dean of the School of Nursing.

The School of Nursing has one Professor Emeritus, Mary V. Neal, PhD, RN, FAAN, who was a role model for future researchers through her groundbreaking work in the 1960's and 1970's with premature infants and her invention and patent of the H-V Swingette, a human vestibular stimulator ("the rocking hammock").

Visiting professors provide the faculty with expertise in research, publishing, and curriculum design. For example, Dr. Doris Modly brings a global perspective to her work with the School of Nursing and serves as a resource for the School's involvement in international activities.

Table 15 shows the faculty teaching in the Master's program, their credentials, and practice site.

Table 15: Certification, Academic Rank, Employment Status, and Practice Sites for Faculty

ADULT PRIMARY CARE NURSE PRACTITIONER	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Cynthia Collins, DNSc, RN, CRNP	Adult Primary Care Nurse Practitioner	Assistant Professor	Full-Time	N/A
Therese Craig, RN, MS, CRNP	Adult Primary Care Nurse Practitioner	Clinical Instructor	Full-Time	N/A
Rebecca Fishel-Mooney, RN, MS, CRNP	Adult Primary Care Nurse Practitioner	Clinical Instructor	Part-Time	N/A
Jana Goodwin, MSN, RN, CRNP	Adult Primary Care Nurse Practitioner	Clinical Instructor	Full-Time	Potomac Ridge Behavioral Health Center
Thomasine Guberski, PhD, RN, CRNP Specialty Coordinator	Adult Primary Care Nurse Practitioner	Associate Professor	Full-Time	UMMS – Evelyn Jordan Center
Ruth Harris, PhD, RN, CRNP	Adult Primary Care Nurse Practitioner	Professor	Full-Time	N/A
Jane Kapustin, RN, MS, CRNP	Adult Primary Care Nurse Practitioner	Clinical Instructor	Full-Time	Contemporary Health for Women

TRAUMA, CRITICAL CARE, & EMERGENCY NURSING	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Tonya Appleby, MSN, RN, CCRN, CRNP	Acute Care Nurse Practitioner	Clinical Instructor	Part-Time	Good Samaritan Hospital ER Dept.
Karen Johnson, PhD, RN, CCRN	Certified Critical Care Nurse	Assistant Professor	Full-Time	N/A
Patricia G. Morton, PhD, RN, CRNP, FAAN (Specialty Coordinator)	Acute Care Nurse Practitioner	Professor	Full-Time	UMMC – Pre-Surgical Center
Nancy Munro, MN, RN, CCRN, CRNP	Acute Care Nurse Practitioner & Certified Critical Care Nurse	Clinical Instructor	Part-Time	Washington Hosp. Center Cardiac Surgery ICU
Valerie Sabol, MSN, RN, CRNP, CCNS	Acute Care Nurse Practitioner & Critical Care Clinical Nurse Specialist	Clinical Instructor	Full-Time	UMMC – Surgical Intermediate Care Unit

Table 15 (cont'd)

GERONTOLOGICAL NURSE PRACTITIONER	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Penelope Paul, DSN, RN, CRNP	Gerontological Nurse Practitioner	Clinical Instructor	Part-Time	N/A
Marianne Shaughnessy, PhD, RN, CRNP	Gerontological Nurse Practitioner	Assistant Professor	Full-Time	N/A
Ann Marie Spellbring, PhD, RN (Specialty Coordinator)	N/A	Associate Professor	Full-Time	N/A
Barbara Resnick, PhD, RN, CRNP, FAAN	Gerontological Nurse Practitioner	Associate Professor	Full-Time	Roland Park Place

ONCOLOGY NURSING	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Sandra McLeskey, PhD, RN (Specialty Coordinator)	N/A	Associate Professor	Full-Time	N/A
Anne Reb, MS, RN, CRNP	Adult Primary Care Nurse Practitioner	Clinical Instructor	Part-Time	Georgetown Medical Center

WOMEN'S HEALTH NURSE PRACTITIONER	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Norma Rawlings, MS, CRNP (Specialty Coordinator)	Women's Health Nurse Practitioner	Assistant Professor	Full-Time	MD Practice

NURSE MIDWIFERY	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Lily Fountain, MS, RN, CNM	Certified Nurse Midwife	Clinical Instructor	Full-Time	Pregnancy Aid Center
Cara J. Krulewitch, PhD, RN, CNM	Certified Nurse Midwife	Assistant Professor	Full-Time	Prince George's Center
Catherine M. Salam,, MS, RN, CNM	Certified Nurse Midwife	Clinical Instructor	Full-Time	Prince George's Center
Carol A. Snapp, MSN, RN, CNM	Certified Nurse Midwife	Clinical Instructor	Full-Time	N/A
Sally Tom, EDM, MPA, RN, CNM, FACNM (Specialty Coordinator)	Certified Nurse Midwife	Assistant Professor	Full-Time	N/A

FAMILY NURSE PRACTITIONER	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Todd F. Ambrosia, PhD, RN, CRNP (Specialty Coordinator)	Family Nurse Practitioner	Assistant Professor	Full-Time	State's Attorney Office & VOCA
John W. Distler, MS, RN, CRNP	Family Nurse Practitioner	Clinical Instructor	Full-Time	ED Sinai Hospital
Jacqueline G. Snelson, MSN, RN, CRNP	Family Nurse Practitioner	Clinical Instructor	Full-Time	MD Practice

NEONATAL NURSE PRACTITIONER	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Elias Vasquez, PhD, FAAN (Specialty Coordinator)	N/A	Assistant Professor	Full-Time	N/A
Maria Vaidya, MS, RN, CRNP	Neonatal Nurse Practitioner	Clinical Instructor	Part-Time	UMMC - NICU

Table 15 (cont'd)

ADVANCED PRACTICE PEDIATRIC NURSING	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Blanche R. Brown, MSN, RN, CRNP	Pediatric Nurse Practitioner	Clinical Instructor	Full-Time	PAC- SON
Kathleen Feroli, MS, RN, CRNP	Pediatric Nurse Practitioner	Clinical Instructor	Part-Time	School Based Clinic
Debra L. Goulden, MS, RN, CPNP CRNP	Pediatric Nurse Practitioner	Clinical Instructor	Full-Time	School Based Clinic
Mary Therese Herr, MS, RN, CPNP	Pediatric Nurse Practitioner	Clinical Instructor	Full-Time	Harford Co. School Based Clinic
Michele A. Michael, PhD, RN, CRNP (Specialty Coordinator)	Pediatric Nurse Practitioner	Assistant Professor	Full-Time	School Based Clinic
Brigit Van Graafeiland, MS, RN, CRNP	Pediatric Nurse Practitioner	Clinical Instructor	Full-Time	PAC-SON & Harford Co. School Based Clinic

COMMUNITY/PUBLIC HEALTH NURSING	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Jane A. Lipscomb, PhD, RN, FAAN	N/A	Associate Professor	Full-Time	N/A
Carles B. Muntaner, MD, PhD	N/A	Associate Professor	Full-Time	N/A
Carol A. O'Neil, PhD, RN (Specialty Coordinator)	N/A	Assistant Professor	Full-Time	N/A
Nilda P. Peragallo, DrPH, RN, FAAN	N/A	Associate Professor	Full-Time	N/A
Barbara Sattler, PhD, RN	NA	Associate Professor	Full-Time	N/A
Susan Wozenski, JD, MPH	N/A	Associate Professor	Full-Time	N/A
Claudia M. Smith, PhD, MPH, RN	N/A	Assistant Professor	Full-Time	N/A
Rachel W. Smith, PhD, RN	N/A	Assistant Professor	Full-Time	N/A
Alison M. Trinkoff, , ScD, RN, FAAN	N/A	Assistant Professor	Full-Time	N/A

BEHAVIORAL HEALTH NURSING	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Elizabeth C. Arnold, PhD, RN (Specialty Coordinator)	Clinical Nurse Specialist Adult Mental Health Nursing	Associate Professor &	Full-Time	Family Counseling & Consulting Assoc.
Mary Haack, PhD, RN, FAAN	N/A	Associate Professor	Full-Time	N/A
Patricia A. Harris, MS, RN, CS-P	Clinical Nurse Specialist in Child & Adolescent Mental Health Nursing	Clinical Instructor	Full-Time	N/A
Karan Kverno, PhD, RN, CS-P	Clinical Nurse Specialist Adult Mental Health Nursing	Assistant Professor	Full-Time	Open Gates

Table 15 (cont'd)

BEHAVIORAL HEALTH NURSING	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Sarah M. Raphel, MS, APRN, CS-P, FAAN	Clinical Nurse Specialist in Child & Adolescent Mental Health Nursing	Clinical Instructor	Full-Time	N/A
Doris E. Scott, PhD, RN, CS-P	Clinical Nurse Specialist in Child & Adolescent Mental Health Nursing	Assistant Professor	Full-Time	School Based Clinic

NURSING INFORMATICS	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Patricia A. Abbott, PhD, RN, FAAN (Specialty Coordinator)	Informatics Nurse Board Certified	Assistant Professor	Full-Time	N/A
Kathleen G. Charters, PhD, MSSM	N/A	Assistant Professor	Full-Time	N/A
Brian Gugerty, DNSc, RN	N/A	Assistant Professor	Full-Time	N/A
Meg Johantgen, PhD, RN	N/A	Assistant Professor	Full-Time	N/A
Carol Romano. PhD, RN, BC, FAAN	Informatics Nurse Board Certified	Clinical Instructor	Part-Time	N/A

NURSING HEALTH POLICY	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Carole P. Jennings, PhD, RN (Specialty Coordinator)	N/A	Assistant Professor	Full-Time	N/A
Catherine Kelleher, ScD, MPH, MS	N/A	Associate Professor	Full-Time	N/A
Ann Mech, JD, RN	N/A	Assistant Professor	Full-Time	N/A
Katherine Montgomery, PhD, RN	N/A	Clinical Instructor	Part-Time	N/A

NURSING ADMINISTRATION, BUSINESS & MANAGED CARE	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Mary Etta Mills, ScD, RN, FAAN	N/A	Associate Professor	Full-Time	N/A
Joseph R. Proulx, EdD, RN (Specialty Coordinator)	N/A	Professor	Full-Time	N/A
Mary S. Tilbury, EdD, RN	N/A	Assistant Professor	Full-Time	N/A
William Ward, MBA	N/A	Clinical Instructor	Part-Time	N/A

EDUCATION	CERTIFICATION	ACADEMIC RANK	STATUS	PRACTICE SITE
Rita Braun, PhD, RN	N/A	Assistant Professor	Full-Time	N/A

The School of Nursing is proud of the highly qualified students that enroll in the Master's program. In the Fall 2001, a total of 510 students enrolled in the Master's program and another 93 were admitted as non-degree seeking status. This status includes students who are enrolled in the post-master's option and those who are enrolled as course work only. Applicants are permitted to take two of the Master's core courses on a "course work only" basis without being admitted to the Graduate School (See Table 16).

In the Fall 2002, there was a slight decline in enrollment for the Master's program when 444 students were enrolled in the Master's program and 90 students were enrolled as non-degree seeking students. Table 17 indicates that about two thirds of the students attend the Master's program on a part time basis and this figure has remained consistent over the two year period. During this two- year period, the percentage of men enrolled in both the Master's program and as a non-degree seeking student has remained constant at about 10%.

Table 16: Master's Program Student Enrollment

Category	Fall 2001	Spring 2002	Fall 2002	Spring 2003
Enrolled Master's Students	510	435	444	408
Non-Degree Seeking Students	93	83	90	63
Total Number of Students	603	518	534	471

Table 17: Number and Percentages of Full-Time and Part-Time Master's Students

Category	Fall 2001	Spring 2002	Fall 2002	Spring 2003
Full-Time Students	170 (33%)	177 (34.2%)	152 (34.2)	174 (36.9%)
Part-Time Students	340 (66.6%)	341 (65.8%)	392 (65.7%	298 (63.1%

Enrollment figures by specialty can be found in Table 18. The slight difference in figure totals between Table 16 and Table 18 occurred because the figures in each table were collected at different points in the semester. The data in Table 18 indicate that the specialties with the largest enrollments are: nursing informatics; trauma, critical care, and emergency nursing; family nurse practitioner; and adult nurse practitioner. Some of the specialties with the smaller enrollment figures are the more recently initiated specialties such as Community/Public Health Nursing with an Environmental focus and Behavioral Nursing with a Child and Adolescent focus.

Table 18: Master's Program Student Enrollment By Specialty and Semester**

Specialty	Fall 01		Spring 02		Fall 02		Spring 03	
	No.	% of Semester Total	No.	% of Semester Total	No.	% of Semester Total	No.	% of Semester Total
B Hlth Adult	5	1%	6	1%	8	2%	9	2%
B HlthChild	5	1%	5	1%	7	2%	8	2%
Ad Primary Psych	7	1%	5	1%	2	*	4	1%
Psych Primary Care	14	3%	11	3%	14	3%	17	4%
Ad Prim Care	51	10%	37	8%	46	10%	33	8%
Comm Pub Hlth.	16	3%	19	4%	19	4%	14	4%
Environ/Occ Hlth	2	*	1	*	1	*	1	*
Family	68	13%	44	10%	58	13%	42	11%
Gerontology	16	3%	19	4%	18	4%	17	4%
Hlth Policy	14	3%	16	4%	14	3%	11	3%
Informatics	102	20%	95	22%	82	18%	74	19%
Nurs& Bus Admin.	15	3%	10	2%	9	2%	10	3%
Midwifery	19	4%	18	4%	15	3%	14	4%
Nurse Admin	19	4%	19	4%	22	5%	18	5%
Nurse Admin M/Care	14	3%	13	3%	10	2%	12	3%
Neonatal	6	1%	7	2%	13	3%	17	4%
Oncology	10	2%	9	2%	13	3%	8	2%
Ad Primary Peds	31	6%	29	7%	24	5%	17	4%
TCC & Emergency	70	14%	56	13%	64	14%	57	14%
Women's Health	22	4%	17	4%	14	3%	15	4%
TOTAL	506	100%	436	100%	453	100%	398	100%

*Less than 0.5 %.
**Data do not include non-degree seeking students.

Table 19 shows the total number of credits taken by students in each of the Master's specialties for Spring 2003. These data indicate that the same four Master's specialties (nursing informatics; trauma, critical care, and emergency nursing; family nurse practitioner; and adult nurse practitioner) account for about half of the credits taken by Master's students.

Table 19: Total Credit Hours Taken by Students in Specialty Track and Percentage of Total for Spring 2003

Specialty Track	Total Number of Credit Hours	% of Total Credit Hours
Adult Primary Care	219.00	8%
Community Public Health	107.00	4%
Environ/Occup Health	1.00	0%
Gerontolgy	143.00	5%
Adv Practice Oncology	49.00	2%
Nursing & Business Admin	48.00	2%
Nursing Administration	105.00	4%
Nursing Admin/Managed Care	64.00	2%
Nursing Health Policy	71.00	3%
Nursing Informatics	427.00	16%
Family NP	355.00	13%
Neonatal NP	136.00	5%
Nurse Midwifery	147.00	5%
Women's Health NP	94.00	3%
Adv Practice Pediatric Nursing	87.00	3%
Behavioral Health/Adult	49.00	2%
Behavioral Health/Child-Adol	49.00	2%
Psychiatric Primary Care	114.00	4%
Adv Practice Psychiatric Nursing	33.00	1%
Adv Practice T/CC & Emerg	404.00	15%

Tables 20 through 22 show the number of Master's applicants to each specialty, the number of students accepted, and the number of new enrollees for the current and previous two academic years. These data show a decline in the total number of applicants between academic year 2000-2001 and year 2001-2002. There was a slight rise in the number of applicants for academic year 2002-2003. This trend of increasing applicants appears to be continuing. As of

April 8, 2003, there have been 90 applicants to the Master's program for the Fall 2003 as compared to 31 applicants this time last year. The number of applicants consistently exceeds the number of accepted students and the number of new enrollees. This difference is not because a large number of applicants are rejected by the School of Nursing (see Table 23). Rather, this difference can be accounted for because students often apply to more than one specialty and students frequently initiate the application process without completing it. Occasionally, the number of new enrollees exceeds the number of accepted students. This discrepancy can be accounted for by the number of students that transfer from one specialty to another and the number of students that are accepted but defer enrollment. Tables 20 through 22 also show that for the three academic years, about 50% of the applicants, accepted students, and new enrollees were in one of the four Master's specialties: nursing informatics; trauma, critical care, and emergency nursing; family nurse practitioner; and adult nurse practitioner.

Table 20: Number of Applicants, Acceptances and New Enrollees
For Academic Year 2000-2001

Master's Specialty	Applicants		Accepted		New Enrollees**	
	No	% of Total*	No.	% of Total*	No.	% of Total*
Adult Nurse Practitioner	41	11%	24	12%	DNA	DNA
Advanced Practice in Oncology Nursing	5	1%	2	1%	DNA	DNA
Advanced Practice in Psych Nursing	22	6%	13	6%	DNA	DNA
Psych Primary Care Nurse Practitioner	8	2%	1	0%	DNA	DNA
Behavioral Health Nursing – Adult	4	1%	2	1%	DNA	DNA
Behavioral Health Nursing – Child/Adult	3	1%	2	1%	DNA	DNA
Advanced Practice TCC & Emergency	42	11%	25	12%	DNA	DNA
Community/Public Health Nursing	22	6%	9	4%	DNA	DNA
Environ/Occup Health	2	1%	2	1%	DNA	DNA

Table 20 (cont'd)

Master's Specialty	Applicants		Accepted		New Enrollees**	
	No	% of Total*	No.	% of Total*	No.	% of Total*
Family Nurse Practitioner	49	13%	23	11%	DNA	DNA
Gerontological Nurse Practitioner	9	2%	4	2%	DNA	DNA
Neonatal Nurse Practitioner – Advanced	5	1%	2	1%	DNA	DNA
Nurse Midwifery	14	4%	7	3%	DNA	DNA
Nursing Administration	11	3%	5	2%	DNA	DNA
Nursing Administration – Managed Care	5	1%	3	1%	DNA	DNA
Nursing & Business Administration	1	0%	3	1%	DNA	DNA
Nursing Health Policy	3	1%	2	1%	DNA	DNA
Nursing Informatics	83	22%	52	26%	DNA	DNA
Pediatric Advanced Practice Nursing	22	6%	12	6%	DNA	DNA
Women's Health Nurse Practitioner	8	2%	6	3%	DNA	DNA
Unspecified	13	3%	2	1%	DNA	DNA
TOTAL	**372**	**98%**	**201**	**96%**	**DNA**	**DNA**

*Figures were rounded.
**May include students who change specialty and students who deferred entry into program.
DNA = Data is Not Available

Table 21: Number of Applicants, Acceptances and New Enrollees For Academic Year 2001-2002

Master's Specialty	Applicants		Accepted		New Enrollees**	
	No.	% of Total*	No.	% of Total*	No.	% of Total*
Adult Nurse Practitioner	25	8%	13	8%	12	7%
Advanced Practice in Oncology Nursing	7	2%	5	3%	5	3%
Advanced Practice in Psych Nursing	1	0%	1	1%	0	0%
Psych Primary Care Nurse Practitioner	12	4%	5	3%	6	4%
Behavioral Health Nursing – Adult	7	2%	4	2%	5	3%
Behavioral Health Nursing – Child/Adult	4	1%	3	2%	3	2%

Table 21 (cont'd)

Master's Specialty	Applicants		Accepted		New Enrollees**	
	No.	% of Total*	No.	% of Total*	No.	% of Total*
Advanced Practice TCC & Emergency	48	15%	24	15%	21	13%
Community/Public Health Nursing	21	6%	9	6%	11	7%
Environ/Occup Health	0	0%	0	0%	0	0%
Family Nurse Practitioner	39	12%	20	12%	23	14%
Gerontological Nurse Practitioner	13	4%	4	2%	6	4%
Neonatal Nurse Practitioner – Advanced	4	1%	2	1%	2	1%
Nurse Midwifery	16	5%	11	7%	10	6%
Nursing Administration	12	4%	8	5%	9	6%
Nursing Administration – Managed Care	13	4%	4	2%	4	2%
Nursing & Business Administration	3	1%	2	1%	2	1%
Nursing Health Policy	24	7%	10	6%	10	6%
Nursing Informatics	49	15%	22	14%	20	12%
Pediatric Advanced Practice Nursing	18	5%	10	6%	6	4%
Women's Health Nurse Practitioner	13	4%	5	3%	8	5%
Unspecified	3	1%	0	0%	N/A	N/A
TOTAL	**329**	**100%**	**162**	**100%**	**163**	**100%**

Figures have been rounded to the next number.
**May include students who change specialty and students who deferred entry into program.*
DNA = Data is Not Available

**Table 22: Number of Applicants, Acceptances and New Enrollees
For Academic Year 2002-2003**

Master's Specialty	Applicants		Accepted		New Enrollees**	
	No.	% of total*	No.	% of total*	No.	% of total*
Adult Nurse Practitioner	20	6%	15	8%	17	9%
Advanced Practice in Oncology Nursing	11	35	9	5%	6	3%
Advanced Practice in Psych Nursing	0	0%	0	0%	0	0%

70

Table 22 (cont'd)

Master's Specialty	Applicants		Accepted		New Enrollees**	
	No.	% of Total*	No.	% of Total*	No.	% of Total*
Psych Primary Care Nurse Practitioner	12	4%	8	4%	8	4%
Behavioral Health Nursing – Adult	13	4%	6	3%	5	3%
Advanced Practice TCC & Emergency	59	17%	34	19%	31	17%
Behavioral Health Nursing – Child/Adol	9	3%	5	3%	5	3%
Community/Public Health Nursing	22	6%	7	4%	9	5%
Environ/Occup Health	1	0%	0	0%	1	1%
Family Nurse Practitioner	36	11%	18	10%	20	11%
Gerontological Nurse Practitioner	13	4%	8	4%	7	4%
Neonatal Nurse Practitioner – Advanced	16	5%	9	5%	9	5%
Nurse Midwifery	13	4%	6	3%	6	3%
Nursing Administration	16	5%	9	5%	9	5%
Nursing Administration – Managed Care	2	1%	1	1%	2	1%
Nursing & Business Administration	7	2%	5	3%	8	4%
Nursing Health Policy	11	3%	6	3%	4	2%
Nursing Informatics	45	13%	27	15%	28	15%
Pediatric Advanced Practice Nursing	21	6%	6	3%	5	3%
Women's Health Nurse Practitioner	9	3%	3	2%	3	2%
Unspecified	0	0%	NA	NA	NA	NA
TOTAL	**339**	**100%**	**182**	**100%**	**183**	**100%**

Because of rounding it may not add to 100%.
**May include students who change specialty and students who deferred entry into program.*
DNA Data is Not Available

Table 23: Number of Master's Student Applicants Who Were Denied Admission

SEMESTER	NUMBER DENIED
Spring 2002	4
Summer 2002	1
Fall 2002	8
Spring 2003	2

Based on Tables 18 through 22, which reflect the number of credit hours taken by Master's students, the number of Master's applicants, and the number of new Master's enrollees, it is clear that the same four specialties account for the largest numbers and this is a pattern that will probably continue.

Inquiries to the School of Nursing for Master's Education

In an effort to determine market demand and interest in Master's education, several sources of data are used. The School of Nursing conducted a state wide needs assessment and asked respondents about their interest in graduate education. One third of all registered nurses in the State of Maryland were selected randomly to comprise the sample for the survey. About 10% of those who were queried returned the survey. Results of the survey are shown in Appendix E. These data indicate that of those who responded, the areas of greatest interest were: trauma, critical care, and emergency nursing; community/public health; adult primary care nurse practitioner; nursing administration; family nurse practitioner; education; and women's health. For most specialties, the respondents preferred to have courses offered at the Baltimore campus

or through the web and the outreach site that was most frequently indicated as a desired location for course study was Shady Grove.

As another means to collect data about interest in Master's nursing education, the School of Nursing subscribes to a service called "All Nursing Schools" that tracks inquiries to the School's web site. Appendix F shows inquiry data for the period May 1, 2002 through February 1, 2003. Please note that the Master's specialties listed in the document are those pre-set by the vendor and do not reflect all of the specialties offered by the School of Nursing. The School is working with the vendor to change the document to include all of the SON specialty areas for future inquiries. Until the change is made, data on inquiries in certain specialties like nursing informatics and nursing health policy are not available. The data show that over 4,500 inquiries were made to the School of Nursing through the web site and of the total, 9.9% were inquiries about Master's education and another 7.5% were queries about the RN to MS option. The Master's specialties that received the most inquiries were: nurse midwifery; nurse practitioner (type not specified), neonatal nurse practitioner, family nurse practitioner, and pediatric clinical nurse specialist.

The Office of Admissions and Student Affairs also tracks inquiry data based on telephone contact with admissions counselors. Table 24 shows inquiry data for projected start dates of Summer 2002 through Spring 2005. These data indicate that the specialties that received the most inquiries are: informatics; adult primary care nurse practitioner; trauma, critical care, and emergency nursing; and family nurse practitioner.

Table 24: Master's Program Specialty
Inquiries Made to the Office of Admissions and Student Affairs

01-Oncology　　06-Education　　11-Neonatal
02-Gerontology　　07-Health Policy　　12-Pediatric
03-Trauma/Critical Care　　08-Informatics　　13-Midwifery
04-Adult/Primary Care　　09-Business　　14-Women's Health
05-Administration　　10-Family　　15-Community

16-Community/Environmental
17-Behavior-Adult
18-Behavior-Child
19-Psychiatric
20-Unknown

Projected Start Date		Specialty Codes									
Year	Semester	01	02	03	04	05	06	07	08	09	10
2002-2003	Summer	0	1	2	2	2	1	0	3	0	3
	Fall	21	31	87	89	52	31	17	109	7	83
	Winter	0	0	1	3	5	1	0	0	0	3
	Spring	9	13	23	33	15	12	6	32	4	44
2003-2004	Summer	0	3	1	8	3	1	0	3	0	9
	Fall	19	20	51	86	32	28	3	39	4	62
	Winter	0	1	0	2	0	0	0	0	0	1
	Spring	2	2	3	7		1	0	1	2	5
2004-2005	Summer	0	0	2	3	2	1	0	0	1	2
	Fall	4	2	12	25	3	6	0	3	0	22
	Spring	0	1	1	1	0	0	0	0	0	1

Projected Start Date		Specialty Codes										
Year	Semester	11	12	13	14	15	16	17	18	19	20	Total
2002-2003	Summer	0	1	2	1	1	0	0	0	1	12	32
	Fall	36	51	64	40	58	4	26	18	51	223	1098
	Winter	2	1	4	5	1	0	0	0	4	8	38
	Spring	20	18	28	18	14	6	7	2	18	98	420
2003-2004	Summer	6	0	4	2	7	0	1	1	4	21	73
	Fall	46	42	87	68	37	9	12	9	30	295	979
	Winter	2	0	3	3	2	0	0	0	0	5	19
	Spring	4	2	6	2	2	0	0	0	2	13	58
2004-2005	Summer	2	0	2	2	3	0	0	0	1	9	30
	Fall	25	15	36	24	7	0	0	1	3	78	266
	Spring	3	2	2	0	1	0	0	0	0	3	15

Data do not reflect inquiries made to faculty.

Graduate Student Organizations

As discussed in Section I, Master's students benefit from the many resources offered by the Graduate School. One of these resources is the Graduate Student Association (GSA), the Graduate School's official student organization that is comprised of one representative from each department on the UMB campus that offers a graduate degree. GSA's main purpose is to enhance graduate student life by providing efficient organizational lines for communicating concerns to the Office of the Dean of the Graduate School and to the Graduate Council. GSA chooses a member each year to be a voting member of the Graduate Council and also elects representatives to the UMB Senate.

All School of Nursing graduate students are members of Graduates in Nursing (GIN). The purposes of the organization are to foster unity among graduate students; aid in the pursuit of individual, institutional, and professional goals; and enhance communication among faculty, students, and community. GIN serves the student body through orientation programs, educational and social functions, and the establishment of ad hoc committees when student, faculty, and community needs arise.

Student Support Services

All School of Nursing students have access to the UMB student support services. Student and Employee Health provides comprehensive care for students by appointment or on a walk-in basis that includes routine physical examinations, sick visits, gynecological and family planning services, and immunizations. The UMB Counseling Center provides professional counseling by appointment for issues that include stress, relationships, eating disorders, addictions, and changes in school or home life. Dental care is available through the Dental

School Clinic by appointment or on an emergency basis. Approximately 60% of students utilize one or more of the campus health services.

The Campus Bookstore sells all required texts and offers a wide array of medical equipment and personal items. The Writing Center assists students with the preparation of papers, theses, reports, applications, and resumes; offers workshops to enhance writing, test taking, and communication; and provides assistance for students for whom English is a second language. Approximately 8% of students utilize these resources. Support services for students with disabilities include authorization for additional time on examinations, note taking assistance, and support for students with visual disabilities; fewer than 1% of students utilize these services. International student support service, utilized by approximately 3% of students, focuses on cross-cultural orientation, non-academic advising, and social activities.

Childcare for infants through age 5 is available at Downtown Baltimore Child Care. The Campus Housing Office manages university housing as well as helps students locate housing off-campus. The Athletic Center offers a variety of intramural sports, fitness and wellness activities, informal recreation, mini-courses, and special events. Campus Transportation includes caravan services in the University Center area as well as to the UMBC campus. Security is a major focus on campus, and the University Police Force has full law enforcement authority. Campus police provide an escort patrol vehicle that makes runs around campus every 20 minutes between 6:00 p.m. and 12:30 a.m. and a walking escort service for campus destinations not on the van route.

The Office of Records and Registration provides grade reports and transcripts for all students. The Office of Student Financial Aid assists over 400 School of Nursing students each year who are receiving federal financial aid, processes in excess of 500 scholarships and grants, and counsels students on debt management.

A comprehensive, full scope of services are also offered through the School of Nursing Office of Admission and Student Affairs, including but not limited to, processing of applications, admission counseling for the baccalaureate program, the RN to MS option, the Master's program specialties, and the Doctoral program are available by either an appointment or on a drop-in basis. All student files are maintained, onsite and on-line registration for upcoming semesters, schedule changes, and graduation clearance are managed; applications for licensure and certification are verified and processed; and degree verification requests from employers are completed by the office's records and registration unit. Approximately $1.4 million in School of Nursing scholarships, HRSA traineeships, and graduate teaching and research assistantships from a variety of sources that support over 400 students annually, are centralized within the office.

In addition to faculty advisement, the Office of Admissions and Student Affairs coordinates academic advisement services. Such advisement services involve working with the department chairs to assign advisors and conducting undergraduate and graduate advisement workshops prior to each registration cycle are coordinated by the office. A free peer tutoring program for classroom and clinical instruction is available. Career development opportunities include resume writing workshops, job postings, and information on advanced study and workforce initiatives. Activities of the various student government organizations are supported by the office as described in the response to the Mission and Governance Standard. Judicial review of alleged the Office of Admissions and Student Affairs manages violations of the School of Nursing Code of Conduct by BSN students, while referrals are made to the Graduate School for alleged violations made by graduate students. The Office provides guidance on school, campus, and university policies and prepares the Undergraduate and Graduate Student Handbooks and the School of Nursing catalog.

Students who take course work at the outreach sites have access to the full range of services offered on-campus as well as access to the services available where their classes are offered.

SCHOOL OF NURSING FACILITIES

In 1998, the School opened its new $38 million state-of-the-art facility adjacent to and bridged with the existing School of Nursing building adding 154,000 square feet of teaching, research and laboratory space. The new facility is recognized as a model for the integration of research, teaching and practice. Incorporating the most advanced classroom and laboratory design and sophisticated distance-learning technologies, the building sets a new standard for nursing education and offers the latest in research, instructional, and patient-care facilities, including:

Research Space

- Applied clinical and bench research space.

- Simulated hospital and home care environments including the School's nurse-managed clinic.

- Behavioral laboratory space with capacity for observation and recording.

- Bench research space including a cold room, autoclave, ice machine, water purifier, -80 freezer, liquid nitrogen storage, a darkroom, biosafety cabinets, and microscope rooms.

Instructional Space:

- New classroom and conference space, all of which are well equipped with the most up to date teaching technology, including a computer teaching theater.

- Advanced distance learning classrooms.

- A 470-seat auditorium.

- 24 state-of-the-art pre-clinical simulation laboratories that afford students extensive "hands-on" training in a simulated environment.

- A clinical education and evaluation laboratory that affords students the opportunity to practice and learn clinical skills with standardized patients who are live actors.

- A living history museum that provides a unique interactive learning environment where faculty, students, alumni and others learn of people, events and forces that shaped the University's School of Nursing over the past 150 years within the context of modern nursing in America.

Patient-Care Facilities:

- A 7,000 square foot onsite outpatient clinic, jointly operating and staffed by the School of Nursing and the School of Medicine's Pediatrics Department. The clinic provides pediatric primary care and follow-up services for 400 to 500 children per week in a multidisciplinary practice setting. This site is used by many of the master's students for clinical experiences.

Additionally, the School of Nursing is slated o receive $10 million in capital funds in FY 2005 for renovation of the 1970 wing of its facility. This work will result in an updated, state-of-the-art Student Life Area that will afford an environment for the high quality education of the students of today a well as the future. Teaching spaces and learning facilities will be redesigned and renovated to meet the needs of the technology-rich programs offered at the School. This major renovation program will provide sufficient and efficient office suites to accommodate the needs of growing service areas supportive of student life, including the management of the Office of Admission and Student Affairs.

Pre-Clinical Simulation Lab

The School of Nursing facility houses 24 state-of-the-art Pre-Clinical Simulation Labs, which operate under the direction of the Clinical Simulation Manager, Debra Spunt, MS, RN,

who is assisted by School of Nursing faculty and six (6) School of Nursing funded teaching assistants. These contemporary simulated clinical settings provide undergraduate and graduate students with the opportunity to learn and enhance their skills in a pedagogically supported environment. The clinical laboratories include nine health assessment laboratories that offer faculty-directed and self-directed learning for individuals and groups of students. This is accomplished through the use of clinical case scenarios, faculty guidance, and advanced technological resources that facilitate critical thinking and decision-making. These health assessment laboratories are by all nurse practitioner master's students for their health assessment courses.

The pre-clinical simulation laboratories are designed to replicate a variety of inpatient practice settings, including basic hospital units, critical care, pediatrics, neonatal intensive care, and maternity. Students enrolled in the neonatal nurse practitioner specialty use the neonatal intensive care laboratory to gain knowledge in the cognitive, psychomotor, and affective domains. Students in the trauma, critical care, and emergency specialty use the ten-bed intensive care unit laboratory for advanced health assessment, advanced skills acquisition, and case study analyses. A diagnostic laboratory with microscopes and centrifuges also is available for nurse practitioner students.

Two of the Pre-Clinical Simulation Labs are designed as a home environment, which includes a living room, eat-in-kitchen, bedroom, and two bathrooms. These labs assist the community health master's students in the modification and application of psychomotor skills to the home care setting and the development of advanced assessment skills used in a home setting.

Clinical Education and Evaluation Laboratory (CEEL)

The Clinical Education and Evaluation Laboratory (CEEL) is a project funded jointly by the Schools of Nursing and Medicine. It is directed by Dr. Louise Jenkins, Director of Graduate Studies, School of Nursing and Dr. David Mallott, Associate Dean, School of Medicine, and managed by two professional staff, Kathy Schaivone and Nancy Budd. Through this collaborative effort, many departments across campus are working together to meet common clinical education requirements. Simulated experiences are offered for nursing students, medical students, and residents within their disciplines and also in interactive, combined encounters. The CEEL is a state-of-the-art facility for evaluation, assessment, and teaching of clinical skills. It is available to all university departments. It includes

- Six fully equipped patient examination rooms

- Video cameras and two-way audio response capability in each exam room

- Main control room with six observation stations, computer control panel for video projection, videotape recording, and audio announcement capability.

- One multiplex station to view all exam rooms simultaneously

- Computer-supported automation system for timed or rotating sessions through examining rooms

- One exam room equipped with dual video cameras for video production

Services provided by the CEEL include:

- Administration of clinical skills assessment, communication skills evaluation, and clinical teaching programs for medicine, nursing, pharmacy, allied health, and other health-related professions

- Training standardized patients

- Consultation for case development and implementation of Clinical Skills Assessment Program

Standardized Patients (SPs) are trained professionals that help teach and evaluate students in the health professions, including nursing, medicine, and pharmacy. The CEEL currently employs 66 SPs on an as-needed basis. SPs portray an actual patient, role-playing a specific medical, social, or emotional problem. SPs have been carefully trained to portray the psychosocial and physical characteristics of an actual patient. SPs are used for various clinical experiences. They may undergo a basic physical exam or may be involved in an interview or communication session. Some SPs are known as Genitourinary Teaching Associates (GUTAs) who train students in genitourinary clinical skills and the communication skills associated with performing this sensitive exam. SPs provide clear and supportive feedback to the student after an encounter, often evaluating the performance of the student against specific criteria identified in advance by University faculty.

Nurse practitioner Master's students use the CEEL as part of their health assessment course. Selected specialties schedule additional laboratory sessions for their students to meet other course objectives.

Interactive Video Network (IVN) /Maryland Interactive Distance Learning Network (MIDLN)

At the state level, the Maryland State Plan for Postsecondary Education 2000 specifically targets outreach education as a critical need for the state with strategic goals that include the need to: 1) establish Maryland as one of the most advanced states in the use of information technology to improve learning and access; 2) achieve a cost effective and accountable system of delivering high quality postsecondary education; and 3) provide affordable and equitable access for every qualified Maryland citizen.

UMB specifically addresses development of asynchronous education as a strategic goal. The School of Nursing has taken a leadership position in setting forth a strategic direction in distance education that is highly consistent with State and Campus priorities as evidenced by the delivery of the highest number of distance education courses as well as web-based courses at both undergraduate and graduate levels.

The School of Nursing provides access to quality nursing education across the State through distance education technologies connecting the new SON building with outreach sites at Shady Grove, in Western Maryland; on the Eastern Shore; and in Montgomery, Charles, and Washington counties.

Additionally, technology is being used to further connect students to UMB to enable them to participate in governance and student activities. For example, teleconferencing was employed to connect the Shady Grove students with UMB for the Dean's Town Meetings held in the Fall 2001 and Spring 2002. Developing strategies to link the outreach students and to enable them to fully participate in student forums, meetings, and activities on campus are increasing exponentially as full programs and web courses are offered to students at the outreach sites across Maryland, the U.S., and globally.

The School's commitment to and support of distance learning has grown considerably during its more than two decades of experience. The current use of fully integrated interactive technology, virtual reality, the world-wide-web, and sophisticated distance learning classrooms is a far cry from faculty traveling weekly across the state to teach students in distant locations. The evolution of distance learning at the School of Nursing has been exponential and resulted from significant investment of resources. In 1992, the USM initiated a system-wide Interactive Video Network (IVN). This televideo network enabled nursing classes to be broadcast to outreach sites in Western Maryland, Southern Maryland, the Eastern Shore, and Montgomery

County. In addition to providing the capability for carrying on real-time discussions, IVN has added a great deal of flexibility to broadening the availability of coursework to more students and has become a valuable way of linking faculty and students throughout the USM. Other systems used in School of Nursing distance learning offerings include Picture-tel and Verizon distance learning, the newest system that was provided by a gift of two high-tech classrooms donated by Verizon. A complex variety of strategies, such as two-way compressed interactive video, and transmission over T-1 lines are used to connect UMB with the outreach sites. Students are able to interact with the faculty member via a return audio and video link and online courses. Distance education is further supported by convenient computer and Internet access for all students and faculty. The distance learning resources of the School of Nursing have been a valuable asset to the Master's program since they enable the transmission of several Master's level courses such as pharmacology and the three master's core courses to the outreach sites.

Two corresponding units were established to support the academic development and delivery of distance learning at the School of Nursing. The Learning Technologies and Media Center and the Network and Computer Support Services share joint responsibility for technology in the School. Their mission is to provide leadership, training, support, and innovation in computing and telecommunication technology to nursing students, faculty, and staff to achieve academic goals, improve service to students, and increase administrative productivity through appropriate application of technology. These units collaborate to avoid temporary system malfunctions that compromise smooth delivery of individual classes and faculty and student satisfaction with learning experiences.

A requirement for distance learning programs is that the quality and content of courses be consistent with that of courses provided at UMB. Other distance learning concerns include provision of access to student services, faculty interaction with students, and meeting different

technical requirements at each outreach site. To this end, School of Nursing has established an ad hoc technology committee charged with the development of a distance learning master plan to address school-wide distance learning needs. This committee also is charged with developing strategies to meet the needs of student users across the state while at the same time overseeing the integration of new technology within the nursing program.

Web-Based Courses

The world-wide-web has allowed the full emergence of distance learning through web-based courses and supplemental learning materials so that students in their own homes can study at times convenient for their schedule. Currently the School of Nursing offers selected Master's specialty courses, accessed via the world-wide-web, in addition to a growing number of web-enhanced courses at both undergraduate and graduate levels. Grant funding for specialties such as midwifery and community/environmental health will enable the expansion of web offerings in those specialties. The dedication to integrating new technology in nursing education exemplifies its ability to offer quality education by various media that are convenient to students.

The web-based format provides access to library materials, online databases, full text articles, and courseware; computer-mediated chat rooms for class discussions; support for work groups within classes for team projects; electronic mail; online help and technical support; and secure access to protect privacy of class discussions. Within the School of Nursing is an ad hoc web-based course committee, chaired by Dr. Mary Etta Mills, which meets on a regular basis to develop and implement web-based courses. The goals of the committee are to improve quality service to the users, to further integrate technology into the curriculum, and to foster the development of new initiatives in distance learning technology.

In October 2000, the Vice President of Academic Affairs of the UMB campus initiated an interdisciplinary campus committee initially centered on the campus plan to use Blackboard for web-based courses. It is currently used as a forum for issues related to the development of web-based courses. Dr. Waltz, Dr. Mills, and Ms. Nola Stair represent the School of Nursing on this committee. Faculty members have received support through the transition of web-based courses from Web-CT to the Blackboard format.

Satellite

Satellite downlink provides the capability to view one-way video programming of courses, lectures or other types of health and educational programming. The School of Nursing is equipped with a three-meter programmable satellite dish for down-linking one-way video programs. This capability enables the dish to downlink with any satellite in geosynchronuns orbit over North America. It can receive both analog and digitally encoded signals in both C and Ku bands. These signals can then be broadcast throughout the School of Nursing via closed-circuit cable television or digitally in MPEG-a and MPEG-2 via the Cisco IPTV video-on-demand-server. Two-way interaction is possible with speakerphone and fax machine during some satellite programs. In October 2001, the School of Nursing Environmental Health Education Center coordinated the satellite broadcast to the School of Nursing of the National Institute of Environmental Health Sciences Children's Environmental Health Session live from the American Public Health Association meeting in Atlanta, Georgia.

Media Center staff provides orientation and frequent updates for faculty teaching using distance education; provide technical assistance during instruction; and offer professional services that include digital imaging, audio-visual technical support, photography, graphic design, video production, and multi-media production. Media Center staff has created posters,

35mm slides, Powerpoint presentations, advertisements, signs, and instructional videos, using a variety of software and hardware. The Media Center strives to be on the cutting edge of new media technology and incorporating it into instructional use.

Current facilities include:

> 20 x 20 ft. Television Studio
> Photographic Darkroom for Professing E-6 Slide Film
> Media Center Office (work area, storage area for equipment, and videotapes)
> Computer Labs (4)
> Teaching Theater (25 computer workstation and AV projection)
> Multimedia Viewing Area
> Distance Learning Classrooms:
> - Five (5)in the School of Nursing Building
> - Two (2) at USM Shady Grove Center

Media Center

The Media Center, which is located on the second floor of the School of Nursing, is staffed by seven (7) full-time experienced staff: a center manager, an instructional design technologist, a multi medial technician, two distance learning technicians, and one secretary. Ms. Nola Stair, who is the instructional design technologist, reports directly to the Associate Dean for Academic Affairs and supports the School of Nursing web-based initiatives in conjunction with Media Center staff. Specifically, the instruction design technologist provides leadership in the development of instructional technology strategies, the use of advanced technologies across all programs, and enhancement efforts to:

- Convince faculty of the possibilities of technology, motivate them to use technology tools, and keep them up-to-date with emerging capabilities.

- Use technology to offer a traditional quality of education to non-traditional students;

- Ensure network access to a broad range of information for research applications;

- Catalog and publicize technological resources (e.g., software, multimedia materials) that might be of interest to others on and off campus; and

- Use Internet-based instruction to supplement traditional learning with new sources of content-rich instruction.

These recent technological advances have created new, as well as endless, possibilities of teaching and learning. In addition, part-time student employees from within the School of Nursing and other campuses assist the staff in the day-to-day operations of the Media Center in Baltimore and at outreach sites.

Computer Laboratories

The School of Nursing has more than 105 student computer workstations in four computer laboratories and a computerized classroom that accommodates 50 students – the Teaching Theater. Each of the four computer laboratories is equipped with 20 Pentium-II 300 mghtz computers with 17" monitors. There are over 25 instructor workstations and over 35 classroom/bedside computers devoted exclusively to nursing student and faculty use. All of these public access computers are IBM 300 GL Pentium II Windows-based machines and come equipped with Microsoft Office software, SPSS, Netscape, Internet Explorer, telnet clients, and other Internet-based tools and computer –aided instruction. Additionally, all computers are equipped to access the Cisco IPTV video-on-demand server to access full-screen, full-motion video in MPEG-1 format. Each computer's "desktop" profile and configuration is controlled dynamically via Novell's ZENworks enterprise toolset.

The School's two General Computer Labs are each comprised of 20 personal computers with networked printers for use by students and faculty. Two Nursing Informatics Labs, comprised of 24 personal computers each, are also available for general student use.

School of Nursing – Office of Research (OoR)

In the Fall of 1999, the School of Nursing opened the Office of Research (OoR), a division dedicated and designed the facilitate and enable the sponsored research programs of School of Nursing faculty and doctoral students. Initial costs for personnel, salaries, benefits, and operating expenses were in excess of $300,000. This amount does not reflect the additional costs for allocation of office space and other infrastructural type costs. Under the leadership of Leonard Derogatis, PhD, Associate Dean for Research, and an internationally respected researcher, the OoR staff provides expertise in experimental design, outcomes measurement, bio-statistics, and regulatory guidelines for sponsored protocols.

OoR provides an effective infrastructure that supports and facilitates research proficiency and excellence and enhances synergy between researchers and research efforts. The Office of Research provides effective technical advice to support ongoing sponsored research, provides scientific overview of sponsored research proposals, identifies new sources of funding, and disseminates research finds. Through outreach, networking, and administrative support, the OoR serves as a repository of information and a center of excellence concerning the varied facets of sponsored research, and reviews with faculty the most expeditious strategies for its conduct. The OoR is dedicated to strengthening and promoting the work of School of Nursing researchers, with a particular focus on expanding collaborative endeavors between School of Nursing investigators and colleagues doing science in local, national, and international venues.

In addition, the OoR makes a distinctive effort to encourage young faculty to conduct research through its administration of State monies to fund pilot studies. The State of Maryland created the Designated Research Initiative Fund (DRIF) to provide opportunities for strengthening scholarly and research endeavors at state universities. On a regular basis,

proposals are solicited from faculty and funds awarded on a competitive basis after review and ranking through an NIH-modeled peer review system. This activity is an example of how junior faculty, those new to Associate membership in the Graduate Faculty, and active researchers pursuing new directions, may be mentored and supported in their career development.

The OoR has been very focused on efforts to create a more substantive research culture at the School of Nursing. The OoR was instrumental in bringing the COS Research Database to the entire UMB campus, providing an outstanding mechanism for information in a real time basis about relevant funding opportunities and potential opportunities for research collaborations. Staff from the OoR developed and delivered training seminars on grants preparation for School of Nursing secretaries and administrative assistants.

Funding for research-related data searches, computer time for running research data analyses, research assistants, and partial funding for research presentations are available for faculty. Research seed money is available through the Dean's Office for faculty. The Graduate School provides funding for graduate students to act as research assistants for doctorally prepared faculty. In exchange for their services, the students receive tuition remission, a stipend, and mentoring in the research process. In addition, faculty submitting grants for external funding, whenever it is within the guidelines of the funding agency, are expected to include a request for monies for RA's with the same benefits and at the same rate as provided by the Graduate School.