CRITERION THREE

*The institution is accomplishing its educational and other purposes.*

THE MISSION

MCO is an academic health science center whose educational mission is the "creation and maintenance of an academic environment that attracts the most highly qualified students and faculty, and fosters the pursuit of excellence in health education, research and service." To this end, the institution is organized into four schools: School of Allied Health, Graduate School, School of Medicine, and the School of Nursing. The overall institutional mission is reflected in the missions and educational objectives of the individual schools and/or programs.

EDUCATIONAL PROGRAMS

MCO does not offer undergraduate degrees; MCO is authorized by the Ohio Board of Regents to offer degrees and certificates at the graduate level only. Students are admitted to MCO based on criteria determined by policies developed by each school (see respective school catalogs, handbooks, and admission materials). Graduate programs require either a baccalaureate degree from a regionally accredited educational institution or, as in the case of the 3+3 Physical Therapy program, appropriate undergraduate coursework.

Students are required to use their intellects throughout rigorous coursework, research projects, and focused laboratory and clinical experiences. Faculty members challenge students to examine values and encourage students to consider various perspectives found in research and the academic community. Faculty members also challenge students to exchange ideas with other students and with faculty in order to build thoughtful, considerate, tolerant
graduates who approach life confidently and with a sense of curiosity and inquiry. As an institution with strong professional programs, MCO’s faculty members provide courses and experiences in which students learn specific skills and attitudes required for licensure or advanced certification. Beyond skills, students learn to conceptualize, analyze and integrate data into information that becomes knowledge.

**Degree Programs**

MCO has authorization from the Ohio Board of Regents for the following graduate/professional degree programs:

- Doctor of Medicine
- Doctor of Philosophy in Medical Sciences
- Master of Science in Biomedical Sciences (MSBS)
  - MSBS-Research Track
  - MSBS-Clinical Radiation Therapy Physics
  - MSBS-Physician Assistant Studies
  - MSBS-Physical Therapy
- Combined MD/Ph.D., MD/MS, and MD/MPH
- Master of Science in Nursing
- Master of Science in Occupational Health
- Master of Occupational Therapy
- Master of Public Health in consortium with Bowling Green State University and the University of Toledo.

**Certificate Programs**

MCO also offers the following graduate-level certificates: Family Nurse Practitioner, Nursing Education, Occupational Health, Health and Medical Science Education (Teaching Scholars), and Pathology. It confers certificates to graduates of the Graduate Medical Education Program (medical residencies). No diplomas are awarded with the certificates.
All of MCO's health profession programs are fully accredited by the respective national and/or state accrediting bodies. Programs are accredited as follows: Liaison Committee on Medical Education for the Doctor of Medicine Program; Commission on Collegiate Nursing Education for the Master of the Science in Nursing Program; Accreditation Council for Occupational Therapy Education for the Master of Occupational Therapy Program; Accreditation Committee on Education for the Physician Assistant for the Master of Science in Biomedical Sciences/Physician Assistant Program; Commission on Accreditation in Physical Therapy Education for Master of Science in Biomedical Science/Physical Therapy, and the Accreditation Board for Engineering and Technology for the Master of Science in Occupational Health. Accreditation for a Master of Public Health degree program is pending with the Council on Education for Public Health (May 31, 2001.)

Faculty members accept responsibility for these programs and develop curricula that provide appropriate learning experiences for students. Course syllabi and programs of study are available for review in each school. Each program in the four schools is consistent with similar programs at other graduate institutions.

All programs are approved, taught and evaluated by faculty members who possess appropriate credentials and experience. Curriculum vitae of all faculty members are available for review in the office of the Director of Faculty Affairs.

The Managed Care College

The Managed Care College was initiated in 1998 as a course to help MCO's faculty, students, and the medical staff understand the forces driving change in the managed care era and to prepare them to practice in an environment with limited resources and increasing financial constraints. The course consists of a multidisciplinary faculty with members from medicine, nursing and allied health committed to preparing students, resident physicians and practitioners
for changing health care delivery systems. The curriculum takes students from the current status of health care delivery to opportunities for quality improvement in health care. Students and faculty address questions that challenge personal values, social rationale for organized health care, economic and technological changes during the past century, and the importance of developing an ethical framework for providing health care today and in the future. Students enrolled in the Managed Care College are required to attend one 2½-hour session every Friday afternoon. Residents are required to rotate through the course as a component of the primary care residency. All students also have access to most of the material on the Academic Intranet as an option to having to attend classes, but all students are required to complete quizzes each week. Residents, medical and nursing students registered for the first semester. For the second semester, only residents and medical students registered due to scheduling conflicts for nursing and allied health students.

After reviewing data from student evaluations, faculty members decided to revise and update some of the content in the Managed Care College curriculum and also to present the modules in a slightly different way. Version 2.0 of the Managed Care College is a series of questions developed by faculty members and related to the theme of improving health care in the United States. Questions were clustered around major themes that serve as organizing units for the content. As the faculty discussed items for clustering, they realized that a framework of ethical quality care was emerging. Hence, new questions focusing on ethics and issues of quality will provide the background for topics aimed at helping students work through four major clusters: public policy, health care team/role, health care delivery systems and processes, and evidence-based practice. Faculty encouraged each other to make optimal use of the material that they already developed and to recast it in the new format, which is focused more heavily on class discussion and less on didactic presentation.
This style of presentation is consistent with the problem-based learning format adopted by the School of Medicine.

**Policies and Programs for Professional Development**

Effective teaching characterizes MCO's courses and academic programs. MCO administration recognizes the critical role played by faculty members and staff in assuring continued excellence in education, clinical service and research. Further, we recognize the obligation of the institution to nurture the personal and professional growth of the faculty and staff once recruited. To that end, the college administration has developed several programs and policies that assure that faculty and staff will receive the assistance they need to be successful in their current roles and gain the new skills they need should they aspire to more advanced roles.

Policies and programs that support the professional development of faculty are as follows:

- **Institutional Policies**
  - Faculty Education Improvement Leave
  - Educational Tuition Reimbursement
  - Departmental Faculty Improvement Fund
  - Sponsored Offices of Continuing Education

- **Office of Faculty and Staff Development**

The Office of Faculty Development was created in 1997. Originally developed for the School of Medicine, the office quickly expanded to provide service for the entire college in 1998. In July 1999, the staff development function moved from Human Resources to the new Office of Faculty and Staff Development. This change allows the professional educators and trainers to pool their resources under one administrative structure.
The following represent current faculty development programs:

- Quarterly Faculty Development Series
- Department/Individual Consultation
- Teaching Scholars Fellowship Program
- Deans’ Awards for Teaching Excellence
- Residents as Teachers
- Academic Basic Skills Training for Faculty
- Leadership Academy for Staff

STUDENT LEARNING ASSESSMENT

The institutional mission of MCO and each of its schools indicate the high value placed upon student learning. Because of the diverse degree programs at MCO and differing requirements from their respective accrediting agencies, assessment plans have been independently developed for the academic programs within each of the schools as has been previously reported in the Student Learning Assessment Plan submitted by MCO and approved by NCA in 1997. The assessment plans have been integrated for the institution initially by review of the Faculty Committee on Governance and more recently by the appointment of a Student Learning Assessment Officer and the appointment of Student Learning Assessment Committee to review and either approve or recommend changes to these program plans.

The Student Learning Assessment Officer will conduct regular meetings of the student learning assessment committee and provide reports and recommendations from this committee to the Provost. The Student Learning Assessment Officer will maintain a documentation system to ensure compliance with the comprehensive assessment program and to facilitate a review of assessment activities at MCO.

MCO also has demonstrated its commitment to student learning through its annual recognition of outstanding teaching and by the creation of the Office of
Faculty and Staff Development that has developed and maintained the MCO Teaching Scholars Fellowship. MCO publicly and regularly celebrates student learning, performance, and achievement through its graduation and convocation ceremonies, residency Match Day, and research forums. Students from each school are presented with awards and monetary gifts for their scholarly achievement and academic excellence. Future assessment plans at MCO include the Board of Trustees' approval for the construction of the MCO/Mercy Creative Education Center that will house the Academic Test Center to provide medical licensure, board certification, and national standardized testing, and the Clinical Skills Center to assess student's clinical skills. Student learning and assessment at MCO has become an institutional priority.

The diversity of academic programs at MCO dictates a variety of student and program assessment plans and instruments for plan implementation. Although broad and diverse in scope, there are common threads of assessment among the programs. The salient similarities and differences are summarized here. A more detailed presentation of student and program assessment plans is provided in Appendix D.

Some assessment instruments of student learning are common to many programs. These instruments include course examinations, licensing examinations for the professional programs (e.g., School of Medicine, Nursing, etc.), and clinical and fieldwork evaluations by clerkship coordinators. All programs gauge the effectiveness of learning experiences and curriculum integration through the use of student evaluations of faculty, courses and clerkship/field work. All programs utilize graduating student and alumnus questionnaires to rate overall program effectiveness. With the exception of the Graduate School (M.S.B.S., and Ph.D. degrees in Biomedical Sciences) and the School of Medicine, all programs utilize employer surveys. With the
exception of the School of Medicine, all programs rely on scholarly projects or theses for student assessment.

Some assessment instruments are unique to the goals of the individual programs. For example, the described goal of Ph.D. program in Biomedical Sciences (Graduate School) is "...to train students for an independent, creative career in medical research." Therefore, publication of research results in peer-reviewed literature is used as a means of assessment of student progress. Students actively involved in research such as the M.S. (e.g., in Nursing or the Biomedical Sciences) and Ph.D. programs, meet frequently with faculty advisory committees to measure progress and guide student research efforts. A public defense of the graduate student's research thesis or dissertation is an important assessment tool used at the end of the M.S. and Ph.D. research programs. Annual Objective Structured Clinical Evaluations are completed by medical students and physician assistant students in order to gauge student knowledge, interpersonal skills, interviewing, and physical diagnostic skills. Two less commonly used methods of assessment of program and teaching effectiveness are the formal program director/peer evaluation of teaching, which is used by the Department of Physical Therapy and the School of Nursing, and the exit interview which is used by the Graduate School and Physical Therapy.

Analysis of the data in Appendix D has already provided the Student Learning Assessment Committee with insights into how teaching effectiveness might be improved throughout the institution. For example, formal program director/peer evaluation of teaching, as practiced by the Department of Physical Therapy and the School of Nursing, is an important assessment instrument that should be performed campus-wide. It would also be informative for the School of Medicine and the Graduate School (for its Biomedical Sciences program) to seek employer evaluations of graduates.
The plans described in detail in Appendix D include the direct and indirect assessment of student academic achievement and the evaluation of the effectiveness in implementing instruction. Depending on the instrument, the assessment results are used for: student promotion/retention, identification of student strengths/weakness, adjusting course content, identifying curricular strengths/weaknesses, planning curricular change, and evaluating faculty performance. Many of the schools and departments also have incorporated measurable objectives for student learning and how learning will be assessed in all course syllabi. In addition, these are being incorporated into the requirements for proposed new courses to the curriculum.

Assessment plans were developed by each program and reviewed by the Governance Committee as noted previously. Recently, upon the recommendations of the Governance Committee, the Provost appointed a Student Learning Assessment Officer and established a standing Student Learning Assessment Committee. The committee is composed of the Student Learning Assessment Officer, a faculty member from each school with an interest and/or expertise in student academic achievement and assessment, the Director of the Office of Faculty and Staff Development, a student representative from each school and the Director of Academic Accreditation. The Committee's first charge was to develop an Institutional Assessment Plan that reflects the emphasis MCO places upon student learning, the importance of determining and documenting the outcomes of assessing student learning across all academic programs, and the use of assessment results to improve student learning. The plan is to be reviewed by the Provost and endorsed by the deans. The Provost has the ultimate responsibility for overseeing the MCO student learning assessment program and effecting changes in student learning programs from assessment results.
MCO Teaching Scholars Fellowship Program

The Office of Faculty and Staff Development created the MCO Teaching Scholars Fellowship Program as a one-year, inter-professional, longitudinal experience focused on the development of excellence in the areas of teaching, advising and assessing learners. Participants from each of the schools at MCO examine the theory and literature that support "best practice" in student learning and assessment. One of the goals of the fellowship is to identify and nurture current or future educational leaders so they may return to their departments as models of "best practice" in teaching and serve as mentors to other faculty. A variety of topics are covered during the fellowship including teaching/advising, instructional design, and evaluation/assessment. Some of the specific evaluation/assessment topics include: formative assessment, evaluating student learning, designing test items, using item analysis, evaluating blueprints, facilitating student self-assessment, and testing performance. The Provost has personally endorsed this program and also has pledged to reward fellows' commitment to teaching excellence by using this information when making promotion decisions and financially supporting their projects through educational stipends.

Some of the personal endorsements of the fellowship by current and past fellows, as reported in the most recent application announcement for fellowship application, include:

"The interdisciplinary nature of the fellowship provides for an extraordinary opportunity to discuss and share application of theories, new approaches in the classroom and clinical areas, and issues and challenges of educating today's student no matter what the discipline."

"The Teaching Scholars Fellowship has enabled me to have a better understanding of the teaching and learning process, and has broadened my definition of educator. We are not just transmitters of knowledge, but are"
facilitators, mentors and guides to those who aspire to become health care professionals. The fellowship addresses these issues and has provided the guidance, skills, and opportunity necessary to evaluate my teaching abilities and to identify strategies for improvement."

"I have had the luxury of taking a dedicated amount of time each month to consider and improve my teaching effectiveness. The seminars have exposed me to different ideas and points of view. The readings have given me the solid theoretical and research based evidence upon which to modify my teaching."

"The Teaching Scholars Fellowship provides us with exceptional insight into the theory and practice of education. This will certainly be reflected in the continued growth and enhancement of the educational reputation of the Medical College of Ohio."

Through the Teaching Scholars Fellowship, individual faculty members are becoming knowledgeable in the field of assessment and are learning the vocabulary and practices used in effective assessment activities. Both release time to attend the fellowship activities and awarded stipends are resources provided to these faculty who are seeking to develop their skills in teaching and the assessment of student learning.

**Faculty Teaching Awards**
Outstanding teaching has been recognized at MCO by the annual presentation of awards in each of the schools. Each recipient receives his/her award at the faculty recognition dinner and receives a cash award, merit salary increase, and matching bonus for their teaching excellence. In addition, pictures of the awardees are hung in the Mulford Library lobby for a year under the banner of "MCO Salutes its Outstanding Educators." Through these
awards, the Provost and deans arrange to honor and publicly recognize those faculty who value and improve student learning.

In the School of Medicine, the Dean's Award for Teaching Excellence was established in 1987 "to recognize outstanding teaching as measured by the quality and time commitment, as well as an attitude which excites and motivates students to strive for excellence." A committee of peers selects the recipients with input from students. Each year one basic science and currently two clinical, one junior and one senior, faculty members are selected for this award. In 1997 a separate category was added to honor outstanding teaching from volunteer faculty. The School of Medicine also recognizes excellence in teaching by annually awarding the Robert T. Tidrick Golden Apple Awards. The Golden Apple awards were named in honor of Dr. Tidrick, a surgeon and an outstanding educator at MCO, who received this award nine times. Members of the School of Medicine graduating class select faculty for this award.

The Graduate Dean's Award for Mentoring was established in 1994. The award recognizes the efforts of a member of the graduate faculty who has made outstanding contributions to the training of graduate students serving as major advisor for Ph.D. and MSBS students and on graduate student advisory committees. Nominations for the Graduate Dean's Award for Mentoring are sought from the graduate faculty and graduate students. Each year, a committee consisting of past winners selects one graduate faculty member for the mentoring award.

The Dean's Award for Teaching Excellence in the School of Allied Health recognizes a full-time member of the faculty in the school who has demonstrated teaching at a level that inspires students to learn and colleagues to emulate her or him. Faculty members, students and alumni are encouraged
to submit nominations. The nominations are reviewed and a committee consisting of three former winners of the award makes a recommendation.

The Dean of the School of Nursing in collaboration with the Executive Committee of the School of Nursing selects the Dean's Award for Teaching Excellence in the School of Nursing. Criteria for selection include fostering critical thinking and demonstrating enthusiasm for teaching. The School of Nursing also presents the Prism Award to faculty members who are selected by the Master of Science in Nursing graduating students. The criteria for selection are master teachers who have reflected the light of students, stimulating and challenging them to learn and to grow and to contribute to the discovery of knowledge in the discipline of nursing. The certificate and a hand-blow glass piece are presented at the School of Nursing convocation.

Student learning is emphasized at MCO in the mission statement of each of the schools as well as the institution's extensive assessment programs developed by each of the schools. The appointment of a Student Learning Assessment Officer and Student Learning Assessment Committee, the annual recognition of outstanding teaching and the development and continued support of the MCO Teaching Scholars Fellowship are other examples of the institution's commitment.

Future assessment plans at MCO include the Board of Trustees' approval for the construction of a Creative Education Center, which will house the Academic Test Center and the Clinical Skills Center. Student learning has become an integral factor to MCO. A culture of evidence appears to be emerging, which is being sustained by the faculty and administration's support of excellent teaching and effective learning.
New Faculty Skills Development Program

This series of workshops was created in response to the need to provide a solid foundation in basic faculty skills for new faculty at MCO. Often, new faculty members are recruited directly from clinical practice or primary research roles. While this prior experience provides a valuable foundation for the applied educational process, individuals may not be adequately prepared to meet the demands of an academic health science center. Therefore, the purpose of this program is to enhance the basic skills that contribute to job satisfaction, student learning and faculty success in the academic environment. The goals of this program are to:

1) Enhance the teaching and evaluation skills of new faculty in order to effectively impact student learning outcomes.
2) Enhance the potential for the faculty member's success as a productive member of the MCO community.
3) Encourage the opportunities for cross discipline collaboration.

Examples of Assessment in Each School

School of Medicine
The Curriculum: An Example of Change Based on Self-Study and External Review

In 1995, a committee was formed to undertake a self-study regarding curriculum reform. The key issues identified in the self-study were lack of integration of clinical and basic sciences, and a weak foundation in pathophysiology.

Based on the findings of the self-study and the Liaison Committee for Medical Education report in 1996, the Dean of the School of Medicine established a curriculum task force in an effort to continue the curriculum reform process. This task force was composed of all basic science chairpersons and was co-
chaired by the acting chairperson of pathology and the chairperson of pediatrics. The charge to the task force was to develop a template for course restructuring to be used in the design of the new curriculum for implementation with the class that matriculated in the fall of 1998. The task force provided the template in June of 1997, and following general faculty approval of the proposed curriculum, the Dean of the School of Medicine established a Curriculum Implementation Committee. This committee was composed of faculty team leaders for each of the new instructional blocks. Team leaders worked with faculty to write content outlines and weekly schedules. As a result, curriculum changes were made as follows:

**Integration:** Substantive horizontal integration is a feature of the redesigned curriculum of years 1 and 2. Ten departmentally administered courses have been integrated and the content is now taught as seven interdisciplinary blocks. There is also substantial vertical integration of basic science and clinical science information built into the design of each instructional segment.

**Physician, Patient, and Society**
An excellent example of this integration is seen in the new Physician, Patient and Society block, which spans the entire first and second year of the curriculum. The doctor-in-society and psychosocial content of our previous Medical Decision Making, Medical Ethics and Substance Use Disorders courses have been integrated with the students' introduction to clinical skills and the ambulatory-based clinical experience. Whenever appropriate, the Physician, Patient and Society block content also is integrated with relevant basic science content being given in the other blocks.

**Student-oriented instruction:** As part of the curriculum design, there is an emphasis on reduction of pedagogical teaching strategies and an increase in student oriented and self-directed learning.
Lecture hours were decreased in years one and two by 21 percent and small group time was increased by 25 percent.

**New Pathophysiology course:** A new pathophysiology course was designed. The course emphasizes horizontal and vertical integration focusing on the mechanisms of the disease process in a problem-based setting. The educational objectives include developing an effective clinical reasoning process, developing effective self-directed learning skills, and increasing motivation for learning.

**Governance of the School of Medicine Curriculum**

Changes in the governance of the medical school curriculum occurred coincident to the curricular changes. A diagram of the hierarchy of curricular management is included as Figure 5. A committee for Undergraduate Medical Education Curricular Governance was established to be advisory to the Dean of the School of Medicine particularly with regard to policies related to the curriculum. Membership of the committee includes the Chairman of the Curriculum Committee as well as pertinent members of the administration. The other changes in curricular management included the development of an evaluation subcommittee. The charge to this committee was to specifically evaluate the effectiveness of the changes made to the medical curriculum. Membership and responsibilities for the Years 1 and 2 subcommittee were changed. The major charge to this group was the management of the schedule and content for years 1 and 2 of the medical curriculum. The Dean of the School of Medicine also established a new position and administrative office, Associate Dean of Undergraduate Medical Curriculum, Years 1 and 2. The purpose of this office is to provide administrative support for the implementation and maintenance of the new curriculum.
GOVERNANCE GROUP
Dean; Chair, Curriculum Committee; Assoc. Deans, Medical Education; Assoc. Dean, Student Affairs; Assoc. Dean, Faculty Development

CURRICULUM COMMITTEE
- Current Size 15 + Ex-Officio + Student members
- Composition 50% basic science, 50% clinical representation
- Charge: Advise Governance Group on:
  - Policy,
  - Evaluation (monitor),
  - Scheduling,
  - Content (monitor)

YEAR 1 & 2 CURRICULUM MANAGEMENT SUBCOMMITTEE
- Implementation Team to become subcommittee in 1998
- Monitor of schedule and content of Years 1 & 2

YEAR 3 & 4 CURRICULUM MANAGEMENT SUBCOMMITTEE
- No immediate change in membership
- Monitor schedule and content of Years 3 & 4

EVALUATION SUBCOMMITTEE
- New subcommittee of Curriculum Committee, July 1998
- Design an evaluation tool to evaluate the curriculum annually
- Develop and distribute annual report
End of Life Care

In February 2000, the Dean of the School of Medicine appointed a task force to address a new Liaison Committee on Medical Education standard on end-of-life care. Specifically, the recently adopted standard states that "clinical instruction should cover all organ systems, and must include the important aspects of preventive, acute, chronic, continuing, rehabilitative, and end-of-life care." The addition of end-of-life care is the new language in the standard.

Although MCO offers several clinical experiences in end-of-life care, including palliative care and pain management, this new standard creates the opportunity to design a formal clinical curriculum in end-of-life care. The task force was charged with making recommendations to the Dean of the School of Medicine about clinical instruction on end-of-life care, as well as a proposed plan for implementing the new curriculum in this area. This new standard on end-of-life care was implemented for the class of students entering their third year clerkships in July 2000. The goal was that medical students graduating in June 2002 would have had received some clinical instruction in end-of-life care.

School of Medicine: An example of Change Based on Student Feedback

Medical students in all four years are asked to voluntarily participate in evaluation of faculty and block/clerkship organization. First and second year students fill out faculty evaluation forms on a weekly basis. This information is summarized by the Office of Faculty and Staff Development and distributed to the block directors to be returned and reviewed with individual faculty who teach in the block. At the end of each instructional block the first and second year students also are asked to evaluate the teaching segment for its overall organization, effective integration and the educational alignment of the instruction and assessment. Third and fourth year students participate in a similar form of evaluation at the completion of each clerkship. Evaluation information collected at the end of block/clerkship is summarized and returned
to the appropriate block or clerkship director. This information is open to review by the Associate Deans of Undergraduate Medical Education and the Dean of the School of Medicine.

Medical students also have the opportunity to participate in student feedback sessions that are conducted on a regular basis. For these sessions 25-30 first or second year students are randomly selected and invited to attend a one-hour forum where they answer some specific questions but also have the opportunity for open discussion and may make suggestions for curricular changes. The results of these sessions are recorded and returned to the evaluation subcommittee as well as the Associate Dean of Undergraduate Medical Education, Years 1 and 2 and the block directors. Many changes were made to the overall organization of the first two years of the curriculum based on this student feedback. Some examples of these changes include 1) a reduction in the time allotted for the first curricular block concurrent with an expansion of the time available for the second curricular block, 2) alignment of instructional blocks with the regular vacation schedule, 3) rearrangement of lecture schedules to facilitate integration of basic science information.

**Databases for Tracking Student Learning**

The School of Medicine developed three databases in 2000 that allow tracking of students' academic achievement and learning, support documentation for activities such as curriculum reform, and Liaison Committee of Medical Education questionnaires, as well as respond to queries from faculty members, administrators, government agencies and other constituents. The three databases are: the Curriculum Management Information Tool (CurrMIT), developed by the American Association for Medical Colleges, the Cohort Tracking Report, and the Medical Student Tracking System.

CurrMIT houses a common database with defined data elements that are used in medical schools throughout the United States and Canada. It fosters
networking about courses and tracks teaching methods, contact hours devoted to specific topics, assessment techniques, and materials in use. It is a tool to manage the curriculum, compare what is offered at MCO's School of Medicine with the curricula at other schools, and can be used to analyze trends in medical education in the United States and Canada.

MCO cohort tracking report summarizes the progress and status of a class, as defined by the year of graduation, or cohort. The class/cohort is defined as the matriculated students at the end of the first week of classes.

The Medical Student Tracking System is a repository of information about the matriculated students, from their pre-medical school academic performance and throughout their academic years at MCO. It is a source for accurate and timely information for institutional and academic decision-making.

The School of Allied Health

Occupational Therapy: An Example of Change Based on Data

The Department of Occupational Therapy uses a multi-dimensional approach to assessment of student learning. It provides an effective method to incorporate important data from a variety of perspectives, allowing faculty members to assess results of student learning, and make ongoing changes in the curriculum and policies and procedures. As a means of illustrating its use, the following is an example of one area of the curriculum where changes were made and how changes in the curriculum will continue to be implemented through the use of our multi-dimensional approach to assessment of student learning.

During analysis of graduate surveys, Level II fieldwork evaluation of academic preparation forms, and faculty evaluation of student learning in courses, faculty members identified gaps in student learning in some aspects of practice related to mental health. Analysis revealed that students had good
preparation in Models of Practice that are appropriate to mental health intervention. However, some students expressed a need for additional content related to treatment intervention, group process skills, and behavior management. In response, faculty discussed at curriculum meetings, ways to incorporate targeted mental health content and skills within the existing course structure. As a result, content was added to the Models of Practice IV course that included mental health case presentations, problem identification, and application of appropriate models for intervention. In Models of Practice VII, group process skills and techniques became a strong theme. From the student summative course evaluations and student evaluation of overall semester, faculty learned that the additional mental health content in Models of Practice IV was viewed positively, but may not have covered the range and depth of skill development that faculty felt necessary. Therefore, faculty members have changed Models of Practice IV to include content on specific treatment and intervention skills needed to work with elderly persons who have mental health deficits. Models of Practice IV will include specific interventions in addition to the problem identification noted above. Models of Practice III will explore the involvement of an occupational therapist with mental health expertise to act as a consultant for the student groups developing treatment plans for individuals with major mental illness diagnoses. Finally, Fieldwork Seminar III will include books that deal with mental health from the perspective of the person as options for a reading assignment (e.g., Girl Interrupted, Autobiography of a Face).

Ongoing analysis of the impact of these changes continues. This example illustrates the multiple sources used to gather data, the ongoing nature of the data collection, and the way in which student assessment data are used to continuously assess student learning.
Department of Physician Assistant Studies: An Example of Change Based on Data

The Department of Physician Assistant Studies utilizes a multi-faceted approach to the use of student assessment results for program evaluation and enhancement. The direct and indirect measures of student learning are systematically collected, analyzed and considered by the faculty on a regular basis. These data then provide a foundation for making changes to curriculum, policies and practices, all of which impact student learning and accomplishment. One faculty member in the department has been assigned the responsibility of collecting, analyzing and disseminating student outcome assessment and program evaluation results to the faculty and Advisory Committee.

Faculty members and the Curriculum Committee determined through analysis of qualitative and quantitative data from end-of-program surveys, graduate surveys, preceptor evaluations, and the physician assistant clinical knowledge rating and assessment tool performance summary, over a two-year period, that clinical therapeutics may be an area needing enhancement. For example, although MCO students scored above the national average overall, approximately 41 percent of the responses by the Class of 1998 were unsatisfactory for the clinical therapeutics questions on the physician assistant clinical knowledge rating and assessment tool exam. This improved only slightly (38 percent) for the class of 1999.

Currently, the students take a three-hour course in pharmacology during the first summer term. Course evaluations have been above average. However, the course focuses on basic principles of pharmacology and major classifications of therapeutic agents. Faculty members noted that a clinical pharmacology course is needed, particularly since some graduates are practicing in states that allow medication prescription by physician assistants.
This issue also was identified by the Program's Self-Study Committee and listed in the Program's Self-Study Report.

The Physician Assistant Curriculum Committee was charged in July 1999 to examine the entire curriculum and make recommendations for revision of prerequisites and the didactic and clinical curricula. The issue of clinical therapeutics was just one area the committee was asked to address. The Curriculum Committee's initial recommendation was to develop and implement a two-credit course in clinical therapeutics in the didactic curriculum. Clinical practitioners such as Pharm.Ds., physicians and physician assistants will teach this course. Currently, faculty members are in the process of developing the entire curriculum revision package. Anticipated implementation is the 2001-2002 academic year. Continued student assessment and program evaluation activities will direct further enhancements.

The School of Nursing: An Example of Change Based on Assessment Data

Preceptor selection and evaluation are coordinated through the efforts of the clinical faculty and the associate dean. Student experiences in the clinical settings are paramount to the success of the students in the program, their achievement on certification examinations, and in future employment. Therefore, preceptors are evaluated each semester.

One evaluation process that was reviewed was the student evaluation of preceptors. Prior to the fall of 1998, faculty members had used a variety of methods to review clinical experiences in the graduate nursing program. Faculty members' visits to preceptors and telephone conversations, written evaluations by students in the Family Nurse Practitioner major, and faculty/student conferences held prior to classes were ways that faculty had accomplished formative and summative evaluations of experiences in each course. The master plan for the evaluation committee of the School of
Nursing determined that there was a need to develop a consistent method that could be used in both the undergraduate and graduate programs of the School of Nursing.

The committee developed a form that included a Likert scale with a series of statements about the preceptor and open-ended general comments about the experience and the clinical site. The entire Faculty Assembly (governance group of the School of Nursing) evaluated the proposed form and extensive revisions were made. The form was approved after the 1999 spring semester began but was not implemented except in a spotty nature by one member of the Family Nurse Practitioner faculty.

The Associate Dean of the Graduate Program recognized at the end of the 1999 fall semester that these data were not being collected. The Center for Nursing Research is responsible for sending faculty a list of evaluation tools and asking faculty to select the evaluation forms they need at the end of a semester. Some faculty members had incorporated their own forms into class workbooks or syllabi and did not use the standardized form that had been approved. The request for forms to faculty members did not specify the approved form, so the request was revised.

Students in the clinical course taught in fall semester 1999, also were together spring semester 2000 and the approved form was given to them at the end of the spring semester. Review of the analysis was completed by the Associate Dean, faculty members, and the evaluation committee. Faculty members in only one of five courses taught in the spring used the form. The Associate Dean has clarified with faculty that they must use the form for all clinical courses where there are preceptors.

This activity has a direct impact on the curriculum because preceptors not only assist the faculty in providing clinical office and agency experience, but also
provide faculty with examples of both negative and positive learning experiences. Therefore, faculty can teach students in clinical conferences how to interpret the interactions they have with health care professionals.

The Graduate School: An Example of Reorganization based on Self-Study and External Review

In 1995, the Ph.D. in Medical Sciences Degree Program underwent an extensive self-study followed by a site visit and subsequent review by a life science external review panel appointed by the Ohio Board of Regents. At the time of the self-study, the Ph.D. program was an umbrella program with 10 departmentally aligned areas of concentration. Each area of concentration was required to prepare its own self-study report. The overall self-study report was prepared by a self-study committee, which was composed of faculty and students. The self-study committee reviewed the curriculum, faculty, students, resources, finances, academic performance, graduate placement, and student evaluation of their education. For the latter, all graduates of the Ph.D. program from 1990-1995 were surveyed. The Graduate School received an outstanding response (40/72). For the most part, the evaluations were very positive with most students responding positively to questions about the quality of the curriculum, their advisor, the faculty, resources, and a supportive environment.

Throughout the self-study process and subsequent review by external reviewers, it became apparent that the Ph.D. program would be improved if the departmental aligned programs were reorganized around two or three areas of greatest research strength of the faculty, regardless of the department affiliation. In 1997, the Ph.D. program was restructured into three interdisciplinary programs: cellular and molecular neurobiology, molecular basis of disease, and molecular and cellular biology. The reorganization from departmental programs into research-focused programs resulted in renewed excitement among students and faculty who were able to contribute to the
design and implementation of the programs. Faculty and students from departments with formerly small student programs gained by being part of the larger, research-area focused programs, where increased student numbers in classes contributed to more interactive discussions and student-to-student collaborations. The change also led to higher levels of collegiality among faculty.

The Graduate School: An Example of Change as Result of Problem Noted

While student evaluations of courses and faculty are used for many graduate courses, faculty members recognized that the evaluations were not a universal practice and have not always been monitored in a systematic manner. To address this problem, the following were proposed in June 2000.

Each formal didactic course of the Master of Science in Biomedical Sciences (Research Track), and the Ph.D. program must implement a tool for students to evaluate the course content as well as methods and quality of teaching. When students complete the Ph.D. degree program, they will be asked to evaluate their overall educational experience. The results of these evaluations will be used by the program directors, course coordinators, and individual instructors to make changes such that students' concerns are addressed without compromising the major educational goals of the course. In addition, initial and subsequent employment records will be maintained to evaluate employment success of our graduates.

Dr. James Trempe, Associate Professor of Biochemistry and Molecular Biology, was appointed by the Dean of the Graduate School to oversee the assessment process. Dr. Trempe will work with the respective program committees to enforce and monitor the evaluation process and report findings/conclusions to the Dean of the Graduate School annually.
RESEARCH

Research and maintaining a productive research environment are integral parts of MCO's mission. The strategic plan for research was approved by the Board of Trustees in January 1998 and is the guiding principle for research development at MCO.

Scholarship is the defining core of higher education; indeed, the raison d'être of a university is to serve as a gathering place for scholars from which they disseminate information, and make discoveries, inventions, innovations and creations. Teaching students current knowledge represents only one form of information dissemination. Publication of new discoveries/knowledge is another form of information dissemination, which reaches a far broader audience. Although the exact nature of scholarly activity may vary among the faculty of the four schools at MCO, and from department to department within any school, it is an essential component of all.

As an academic health science center, research at MCO primarily is focused on health-related issues affecting humans. Within this relatively narrow scope, however, research at MCO spans the spectrum from very basic biomedical research studying the molecular and genetic basis of disease to applied clinical research. The research strength of MCO is evident in the Graduate School, the School of Nursing, School of Allied Health, and in its School of Medicine and more specifically in the basic science departments of that school. Research is a required component of all tenure track faculty members. The majority of tenure track faculty in these basic science departments have acquired peer-reviewed, extramural funding to support their research program, with most of that funding (78 percent) coming from federal agencies, with the National Institutes of Health providing 81 percent of those federal research dollars. In addition to the involvement of basic science faculty in investigator-initiated research, MCO clinical, School of Allied Health and School of Nursing faculty members also are involved in basic biomedical
and clinical research. Other clinical faculty members also are active participants in multi-center clinical trials of new therapeutic modalities, which are largely sponsored by corporate entities.

A significant level of faculty research activity extramural funding and publications is occurring on campus in all four schools. Over the 10 year period from 1990 to 2000, our extramural funding has shown a two-fold increase, from $10.8 million in fiscal year 1990 to nearly $20 million in fiscal year 2000 (Table 3.1 and Figure 6). Special recognition of faculty research efforts nationally include one National Institutes of Health program project grant, two National Institutes of Health merit awards, a CIBA award, and a National Cancer Institute training grant in cancer biology. Over 750 peer-reviewed publications resulted from faculty scholarly efforts in fiscal years 1998 and 1999. A majority of the publications included students in the authorship.

Research efforts of the faculty and students at MCO are supported by federal, state, and local grants awarded through the peer-reviewed process as well as other funding mechanisms. For fiscal year 2000, $13.7 million in federal support was received from the National Institutes of Health, National Science Foundation, Environmental Protection Agency, Health Resources Services Administration, and the Department of the Interior. MCO ranks third in National Institutes of Health support for research among Ohio public universities.
### Table 3.1
**MEDICAL COLLEGE OF OHIO**
**GRANT AND CONTRACT AWARDS FOR FISCAL YEAR 2000**
**(SCHOOL/DEPARTMENTAL SUMMARY)**

<table>
<thead>
<tr>
<th>SCHOOL/DEPARTMENT</th>
<th>CURRENT YEAR AWARD</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DIRECT</td>
<td>FAC</td>
</tr>
<tr>
<td><strong>ACADEMIC PROGRAMS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>1,692,273</td>
<td>19,242</td>
</tr>
<tr>
<td>School of Allied Health</td>
<td>551,866</td>
<td>22,629</td>
</tr>
<tr>
<td>Interdepartmental</td>
<td>392,308</td>
<td>9,657</td>
</tr>
<tr>
<td>Physician Assistant Studies</td>
<td>133,265</td>
<td>10,661</td>
</tr>
<tr>
<td>Public Health</td>
<td>12,855</td>
<td>9,8</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>13,637</td>
<td>1,363</td>
</tr>
<tr>
<td><strong>School of Medicine</strong></td>
<td>11,021,019</td>
<td>3,224,554</td>
</tr>
<tr>
<td>Anatomy &amp; Neurobiology</td>
<td>362,350</td>
<td>147,769</td>
</tr>
<tr>
<td>Biochemistry &amp; Molecular Biology</td>
<td>1,420,882</td>
<td>500,563</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>280,385</td>
<td>22,031</td>
</tr>
<tr>
<td>Medicine</td>
<td>1,869,850</td>
<td>386,423</td>
</tr>
<tr>
<td>Microbiology &amp; Immunology</td>
<td>1,762,952</td>
<td>434,655</td>
</tr>
<tr>
<td>Neurology</td>
<td>276,493</td>
<td>58,597</td>
</tr>
<tr>
<td>Obstetrics &amp; Gynecology</td>
<td>189,002</td>
<td>83,161</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>236,553</td>
<td>86,444</td>
</tr>
<tr>
<td>Pathology</td>
<td>1,424,865</td>
<td>429,910</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>285,420</td>
<td>9,273</td>
</tr>
<tr>
<td>Pharmacology &amp; Therapeutics</td>
<td>1,599,981</td>
<td>656,620</td>
</tr>
<tr>
<td>Physiology/Molecular Medicine</td>
<td>1,106,245</td>
<td>380,768</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>79,716</td>
<td>4,258</td>
</tr>
<tr>
<td>Radiation Therapy</td>
<td>5,000</td>
<td>-</td>
</tr>
<tr>
<td>Surgery</td>
<td>17,000</td>
<td>4,250</td>
</tr>
<tr>
<td>Urology</td>
<td>104,225</td>
<td>19,635</td>
</tr>
<tr>
<td><strong>School of Nursing</strong></td>
<td>640,049</td>
<td>137,195</td>
</tr>
<tr>
<td><strong>Academic Programs Subtotal</strong></td>
<td>13,905,207</td>
<td>3,403,020</td>
</tr>
<tr>
<td><strong>Support Programs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCO Facilities</td>
<td>2,083,240</td>
<td>169,580</td>
</tr>
<tr>
<td>Outcomes Management</td>
<td>17,240</td>
<td>-</td>
</tr>
<tr>
<td><strong>Support Programs Subtotal</strong></td>
<td>2,100,480</td>
<td>169,580</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>$16,005,687</td>
<td>$3,573,200</td>
</tr>
</tbody>
</table>

**NOTE:** Clinical trial agreements are reported as the maximum contracted amount.
MCO receipts may vary based on actual patient enrollment.

*Facilities and Administrative Costs (formerly referred to as Indirect Costs).
MEDICAL COLLEGE OF OHIO
GRANTS AND CONTRACTS AWARDED*
10 YEAR COMPARISON

*TOTAL COSTS (DIRECT + FAC)
**PRIVATE, CORPORATE, FOUNDATIONS, ETC.
Although there has been an increase in the number of faculty and the amount of research dollars awarded, MCO ranked 98th on the National Institutes of Health list of medical schools (total 125) in 1999, similar to its 98th position in 1990. This mirrors a national trend that found most medical schools maintained and did not significantly change their relative positions in the National Institutes of Health ranking over the last 10 to 20 years. Of special note is the ranking of the basic science departments by the American Association of Medical Schools. In the latest data available (1998-1999 Institutional Profile System Data Reports) MCO ranked 71/125 among U.S. medical schools in basic science research support/basic science faculty member ($92,951). However, the clinical departments only ranked 106/125 ($11,815). The School of Nursing ranked 34th in the country among schools of nursing in the amount of research dollars funded by the National Institute of Nursing Research for fiscal year 2000.

During fiscal years 1999 and 2000, 309 and 347 proposals for new, continuing and renewal grants and contracts were submitted, respectively, by MCO faculty. During fiscal years 1999 and 2000, 142 and 140 grants and contracts (81 for fiscal 1999 and 96 for fiscal 2000 of which were new applications or competitive renewals) were awarded to MCO, respectively. For fiscal year 1999, the total value of these awards was $18,117,285. This included $14,750,431 of direct costs, for the support of costs specific to the funded projects (e.g., laboratory supplies, equipment and personnel), and $3,366,854 for facilities and administration. For fiscal year 2000, the total value of awards was $19,578,887. This included $16,005,687 of direct costs, for the support of costs specific to the funded projects, and $3,573,200 for facilities and administration.

It is worthy of note that during this same period (July 1, 1999 - June 30, 2000) approximately $2.5 million of faculty academic salaries and fringe benefits was paid from extramural grants, resulting in a direct savings to the college budget.
of a like amount. Since $3,573,200 in facilities and administrative costs recovered from grant expenditures during fiscal year 2000 also went directly into the college general fund, extramural grants and contracts contributed over $5.4 million to the college general fund during the past year. In addition to faculty academic salaries, these grants also were directly responsible for the full- or part-time employment of approximately 220 non-faculty research personnel with salaries and fringe benefits of over $4.7 million and were a major factor in supporting Ph.D. students. Approximately one-third ($327,000) of the compensation paid to graduate students in the Ph.D. and M.D./Ph.D. programs was paid from extramural grants and contracts. Finally, it should be noted that the $661,826 in Research Challenge funds received from the Ohio Board of Regents during fiscal year 2000 biennium is the direct result of extramural (non-state) research funding generated by MCO faculty.

The concept of inquiry is an integral part of graduate education and is stimulated by an environment in which faculty pose questions, challenge beliefs, and require critical thinking throughout the program. Research courses are offered and research is discussed in most of the courses. Students are encouraged to publish papers in refereed professional journals. Students are expected to attend local and regional research conferences and to submit abstracts for paper or poster presentations. To promote the latter, the Graduate School has had a travel budget to support graduate student travel to present at meetings. Currently, each master’s student who is presenting a paper is supported up to $500 for travel and each Ph.D. student is supported up to $1,000 for travel to two meetings. Similar support is available for medical students presenting at meetings.

**The Cancer Institute**

The creation of the MCO Cancer Institute in 1999 represents a new initiative to develop Centers of Excellence at MCO. The overall mission of the MCO Cancer Institute is "to foster an interdisciplinary, interdepartmental approach to
cancer research, cancer education, and cancer patient care at MCO." As of December 2000, the MCO Cancer Institute has developed and opened comprehensive, multidisciplinary centers in breast, gynecological, and lung cancer. Additional centers planned for development in 2001 include comprehensive centers in neurooncology, genitourinary, gastrointestinal cancers, tumors of the head and neck and dermatologic cancers. Ancillary support programs for patients that have been developed to complement these centers include a psychosocial assessment and support program, a lymphedema program and a high-risk assessment/genetic testing program. Additional support programs in pain management and complementary and alternative medicine are planned for 2001. These clinical activities are supported by a growing number of experimental therapy trials conducted under the aegis of the Cancer Institute in conjunction with MCO faculty and its network of affiliated clinical programs. As of December 2000, experimental trials of a genetically engineered monoclonal antibody for breast and ovarian cancer, as well as an autologous ovarian cancer vaccine trial have been initiated with studies of biological therapy for chemorefractory pancreatic cancer and a phase II monoclonal antibody trial in breast cancer planned for 2001.

The MCO Cancer Institute has enlisted the support of the basic science faculty at MCO toward the goal of developing new knowledge in cancer in several ways. First, working groups of faculty whose expertise is applicable to the study of malignant disease have been created in areas such as pathogenesis/carcinogenesis, immunology, molecular biology, and signal transduction. In addition, support for pilot cancer research projects was obtained from the administration in fiscal year 2000 with competition for the funds being judged by a peer review study group consisting of faculty from MCO, the University of Toledo, and Bowling Green State University. This first competition resulted in 16 applications for support and 4 awards. Furthermore, the development of core research facilities as part of the cancer
research center of the MCO Cancer Institute is planned for fiscal year 2001-2002 which will include a tumor/tissue bank, a genomics/proteomics core, an imaging center, and a transgenic and SCID mouse facility.

The MCO Cancer Institute also is creating organ site-specific working groups as a mechanism to involve clinicians and scientists from the greater northwest Ohio area in its research programs. The first such group, called The Committee on Breast Cancer, met during of December 2000. This committee includes faculty from MCO, the University of Toledo, and Bowling Green State University as well as physicians from northwest Ohio and southern Michigan. Committees on gynecological cancer, lung cancer and genitourinary cancer will be constituted in 2001.

Educational programs underway or under development by the MCO Cancer Institute include: 1) the MCO Alumni Continuing Medical Education Series in Cancer Medicine which will be initiated in 2001; 2) the MCO Plenary Lecture Series in Cancer Medicine which was begun in May, 2000; and 3) a series of regional, national and international symposia on selected topics in cancer research and medicine. In the year 2000, an international symposium on mouse lung cancer carcinogenesis was held as were symposia devoted to recent advances in prostate cancer and multidisciplinary approaches to breast cancer.

**Research Regulatory Compliance Committees**

MCO's research regulatory committees are charged with ensuring that all research conducted at MCO and by MCO faculty members is in compliance with federal and state guidelines and MCO policies. The Institutional Review Board, responsible for approving all research involving human subjects, reviewed 556 and 513 research protocols in 1999 and 2000, respectively. The Institutional Animal Care and Use Committee, responsible for approving all research involving vertebrate animals, reviewed 70 and 65 research protocols
during fiscal years 1999 and 2000. The Academic Biological and Chemical Hazards Committee, responsible for approving all research utilizing hazardous or infectious materials, reviewed 15 research protocols and the Institutional Biosafety Committee, responsible for approving all research involving recombinant DNA, reviewed 18 research protocols in fiscal year 2000.

In fiscal years 1999 and 2000, MCO received five and eight invention disclosures, respectively, from its faculty and staff. During fiscal years 1999 and 2000, five and two United States patents were issued respectively, which included Medical College of Ohio inventors. Currently there are 13 (11 U.S. and 2 foreign) active licenses managed by MCO. In fiscal year 2000, seven of these licenses generated royalties totaling $70,512.

GRADUATE MEDICAL EDUCATION
MCO offers 23 graduate medical education programs (residencies and fellowships) all of which are accredited by the Accreditation Council for Graduate Medical Education. Graduate medical education includes the following training programs: internal medicine, general surgery, pediatrics, obstetrics and gynecology, psychiatry, child psychiatry, neurology, family medicine, orthopedic surgery, urology, diagnostic radiology, anesthesiology, pathology, physical medicine and rehabilitation, plastic surgery, cardiology, pulmonary medicine, nephrology, infectious disease, orthopedic trauma, maternal-fetal medicine, dentistry, and pain fellowship. All programs have fully developed curricula in compliance with their respective residency review committee standards, assuring residents learning opportunities which prepares residents to be eligible for specialty board certification at the completion of their training. The institutional graduate medical education curriculum provides common education for all residents in elements common to all practicing physicians, for example health care law.
A residency in Family Medicine provides the resident with a variety of patient care experiences, practice settings, and longitudinally structured learning situations. Paralleling the family practice experience is a program of in-depth development in other specialty fields broadly covered by family practice.

A three-year residency is offered in Internal Medicine with the object of training residents to become competent general internists and prepare them to meet requirements for further training in a subspecialty. The Department of Medicine also supports fellowship training programs in cardiology, infectious disease, pulmonary medicine and nephrology.

The obstetrics-gynecology residency is a four-year program in which the resident rotates through the associated hospitals giving the resident the opportunity to develop an interest in a clinical or basic research area in the field and to provide the clinical experiences necessary to become a competent obstetrician/gynecologist. A maternal-fetal medicine fellowship is managed by the Department of Obstetrics and Gynecology to prepare physicians for subspecialty practice.

The Department of Orthopedic Surgery offers a five-year residency program that stresses a strong foundation in basic sciences, continuity of patient care, and intimate faculty participation in the learning process that will provide the resident with the skills, knowledge, attitudes and clinical acumen to be a competent orthopedic surgeon. The Department of Orthopedic Surgery also sponsors an Orthopedic Surgery Trauma Fellowship.

The Anesthesiology Residency prepares competent physicians as practitioners and consultant specialists in anesthesiology eligible for certification by the American Board of Anesthesiology. The Department of Anesthesiology also sponsors a fellowship for Pain Medicine.
The Division of Dentistry offers a one-year residency to dentists who plan to enter general dentistry. It emphasizes development of comprehensive skills in oral diagnosis, treatment planning, patient consultation and hospital dental procedures. The program provides the opportunity for residents to spend a second year in the MCO Graduate School studying oral biology and obtaining a master's degree with concentration in oral biology.

The four-year Pathology Residency provides the resident with two years in anatomical pathology and two years in clinical pathology, or a four-year straight anatomic or clinical pathology program.

Psychiatric Residency at MCO is a four-year program designed to train physicians in the fundamentals of clinical psychiatry and provide experience with patients in both inpatient and outpatient settings. The Child Psychiatry Residency program provides specialty education for residents who have foundation training in psychiatry.

The Diagnostic Radiology Residency is a four-year program that focuses on preparing physicians for the practice of diagnostic radiology in private practice or on pursuing an academic career in the field of radiology.

A four-year training program in the Rehabilitation Medicine Residency is designed to train the resident to become a competent physiatrist prepared to meet requirements of the American Board of Physical Medicine and Rehabilitation.

Objectives of the five-year Surgical Residency program at MCO are to encourage a commitment for excellence in surgical management and complete patient care and to prepare surgeons for advancement into academic or community surgical practice.
The residency program in Plastic and Re-constructive Surgery is part of the Graduate Surgical Education Program of MCO.

The Urology Residency program is a five-year program that trains clinical urology surgeons who will continue to pursue educational opportunities.

The Neurology Residency is MCO's newest residency and is growing rapidly. This residency uses the strong neuroscience faculty and talented clinical faculty to assure excellent resident education.

The three-year Pediatrics Residency at MCO provides a resident training with a large, diverse patient population in modern clinical facilities guided by an excellent teaching faculty, and program graduates. A comprehensive, state-of-the-art children's hospital on the campus of St. Vincent Mercy Medical Center, Mercy Children's Hospital (St. Vincent/MCO), was established in 1999. It brings the region's largest concentration of pediatric specialists and subspecialists together in a single location to provide training to a variety of learners from MCO and other learning institutions in northwest Ohio.

COMMUNITY SERVICES
MCO's offerings in the community are extensive. MCO faculty and staff continuously provide educational sessions, health care screening, participate in health fairs and distribute free education materials.

Community Health Council
The Community Health Council acts as a planning and coordinating body for community assessment and event activities for MCO. Membership of the council includes representatives from the medical staff, college, institutional advancement office, business development, human resources and clinical areas.
Community Outreach and Education

Staff in the Business Development Office has been assigned to assist in the planning and implementation of the community assessment, community events, community health care education forums and community-based health care screenings. The staff facilitate the systematic collection and data entry of community-related activities into a community benefits database (Community Benefits Inventory for Social Accountability - CBISA), to allow the aggregation and reporting of all MCO-sponsored external community programs and resources applied to these efforts. The software allows the following:

- Tracks the organization's involvement in meeting community needs.
- Provides guidance to managers for planning and budgeting services.
- Helps demonstrate to employees and physicians that they are part of a mission-driven organization.
- Assists the community to understand the difference between profit-motivated and community-oriented healthcare organizations.
- Demonstrate that the organization's tax-exempt purpose is being met.

MCO offers monthly community education seminars in the months of January through April and in the months of September through November. These free seminars on current health topics have been presented both on MCO campus and in the community. MCO has published a comprehensive speakers' bureau resource guide that is distributed to businesses and organizations in the community. The Resource Guide includes health topics, continuing medical education topics and various other subjects.

The MCO HIV/AIDS clinic stands as a community education resource for northwest Ohio and southeastern Michigan. The clinic offers HIV anonymous counseling and testing. HIV education and prevention programs are offered to schools, health care agencies, corporations, and private organizations. Also in
August 2000, MCO received a Ryan White Title IV award which was secured to expand the family centered clinic. The grant funds support a multidisciplinary clinic for persons with HIV infections. Multi-disciplinary care, including specialists in pediatrics and adult infectious diseases, adolescent medicine, obstetrics and gynecology, general pediatrics, and mental health counseling is provided through clinic settings in two different venues. In addition, medication adherence outreach is provided by advanced practice nurses through home visits to children, pregnant women and adolescents infected with HIV. The program works in concert with David’s House Compassion Inc., a community-based AIDS service organization.

MCO staff also assists regional hospitals and physician organizations with coordinating continuing medical education programs to meet physician education requirements. In addition, various customized programs have been provided to meet specific business needs, including a back injury prevention program.

The community-based trauma prevention program exists to assist the community in decreasing injuries in targeted high-risk areas. Most trauma prevention programs are implemented in conjunction with other community organizations. Programs include violence prevention, drinking and driving awareness/prevention, bicycle safety, car safety seat, fire prevention, rape prevention, water/boating safety, motorcycle safety, and sports injury prevention.

Through a variety of student organizations, students in all schools participate in numerous community service activities throughout their academic years.
SPECIFIC PROGRAMS

The School of Medicine Community Health Project
The Community Health Project provides students in the School of Medicine with a deeper understanding of the socioeconomic, cultural and environmental factors that contribute to an individual's health. Medical students gain this understanding via placement at local social service agencies that serve the medically under-served population. Each year, fifteen to twenty medical students participate in the program during the summer after their first year of medical school. In addition to being beneficial to the medical student, the Community Health Project fosters MCO's commitment to the community by providing well-trained interns to their agencies. The program reaffirms to the agencies that they are not alone in their commitment to the under-served.

The School of Allied Health
Faculty members in the School of Allied Health have a long tradition of providing educational and consultative services to the community. In addition to the numerous educational programs that faculty present to the community, a number of faculty hold offices on community organizations and boards. In addition to these activities, many faculty in the school incorporate community service into their class assignments. Finally, federal training grants received by faculty members in the School of Allied Health focus on providing community service to rural, older adults in northwest Ohio.

The School of Nursing
As an opportunity to blend skill with concepts of epidemiology, health promotion, disease prevention, community health, nursing theory and citizenship, nursing students and faculty have participated in several major immunization projects throughout the area. Faculty arranged the experiences as part of clinical courses in conjunction with community sponsors. Faculty members have an impressive record of active involvement in community agencies as consultants and board members. They provide presentations to a
variety of groups on subjects ranging from “Coping with Menopause” to “How to Read Food Labels.” Several faculty members have joint appointments with agencies and physician practices in the region. These occasions generate revenue for the agency/practice, allow the faculty member clinical hours that are applicable to national re-certification, and bring credibility to the student-faculty interaction.

**Strengths**
- Development and implementation of extensive assessment of student learning programs by each school.
- Programs of professional and scientific education which are recognized in local, regional, national and international arenas.
- Strong faculty development programs with the goal of helping students learn more effectively.
- Recognition of outstanding teaching and student achievement with awards, raises, bonuses and scholarships.

**Challenges**
- Maintain relevant curricula in view of the rapid and exponential growth of knowledge, changes in global and local demographics, advances in technology and an ever-evolving health care delivery system.
- Strengthen the research program through hiring of well-funded senior investigators and raising more research-directed dollars by the MCO Foundation.