CRITERION FIVE

The institution demonstrates integrity in its practices and relationships.

MCO endeavors to sustain an environment that champions the highest standards of ethics and integrity in all of its activities. For MCO, it is essential that these high standards extend throughout its internal and external relationships with students (both matriculating and candidates for admission), patients, research subjects, faculty, staff, and the local, regional and national community with which MCO interacts. As MCO has grown, it has forged relationships with numerous external entities such as government agencies, other non-profit entities, and corporations which sponsor projects and programs involving personnel, as well as other academic institutions collaborating with MCO faculty on projects and programs.

One section of the faculty rules and regulations of MCO is illustrative of the institution's commitment to high standards of ethics and integrity. This section titled, "Ethical Standards of the Faculty," is quoted below:

"The Medical College Faculty subscribes to ethical values consistent with the highest levels of professional integrity. The faculty shall be governed by the highest standards of academic and professional conduct. These standards include, but are not limited to:

- Practicing and fostering honest academic and professional conduct;
- Encouraging free pursuit of learning;
• Acknowledging significant academic, scholarly and professional contributions from colleagues and staff;
• Respecting the free inquiry of colleagues;
• Accepting a personal share of responsibility for institutional governance;
• Fully honoring the terms of appointments and contracts including observance of renewal and termination provisions; and
• Avoiding exploitation, harassment or discriminatory treatment of individuals in the academic environment.

In addition to being in compliance with the statutes of the state of Ohio which impose legal requirements in areas such as intellectual property, conflict-of-interest, open records, and open meetings, MCO has codified standards of ethical conduct and integrity in its own institutional bylaws and policies. These bylaws and policies are made available to faculty members, staff and students in written form as handbooks, and as policy and procedure manuals, as well as electronically on the Academic Intranet. Within the last two years, these policies, which typically are reviewed and updated twice a year by administration, underwent a thorough review by the MCO Faculty Governance Committee.

MCO COMPLIES WITH THE OHIO LAW

The state of Ohio has very strict statutes governing ethical conduct of state employees while carrying out the responsibilities of their employment. Four of these statutes were mentioned above. The intellectual property statute requires that ownership of all inventions and discoveries made by faculty members and employees within the scope of their employment be assigned to MCO. For students, intellectual property statutes apply to discoveries arising
from scholarly activities. In turn, MCO, via its intellectual property policy (03-003) is obligated to share net royalties with the inventors. The conflict-of-interest statute prohibits a state employee from having a personal interest in any state contract. This statute also is complemented by MCO conflict-of-interest policy (03-005) which was written to comply with Public Health Service requirements regarding conflict-of-interest related to projects funded by the National Institutes of Health. The Ohio public records statute requires disclosure, upon request by any person, of all public records not expressly exempted by the statute. This statute is complemented by MCO public record policy (01-068) which describes the institution's commitment to adhere to this statute and defines the mechanism by which requests under the Ohio Public Records Act are handled internally. The Ohio Open Meetings Act requires, with few exceptions, that all meetings of decision-making bodies be publicly announced and conducted in a public forum. Although there has been some debate regarding the application of the Open Meetings Act to institutional review boards, MCO has elected voluntarily to open its institutional review board meetings to the local news media.

MCO Institutional Compliance Office

In addition to policies which define the institutional standards for integrity in MCO practices and relationships, MCO has established an Institutional Compliance Office and appointed an institutional chief compliance officer to coordinate maintenance of high standards of ethics and integrity in all facets of its operation. The Chief Compliance Officer chairs the institutional compliance committee.

For research compliance issues, the Institutional Compliance Office is augmented by a Research Regulatory Compliance Office within Research and Grants Administration. The Institutional Compliance Office has overall responsibility for all aspects of MCO compliance with laws, regulations, and
guidelines set forth by the state of Ohio and by federal agencies to which the institution must answer.

The Research Regulatory Compliance Office has specific responsibility for oversight of MCO's compliance with federal and other regulations and guidelines governing research with human or animal subjects, as well as the research use of hazardous biological and chemical materials and recombinant DNA. A major role of the Research Regulatory Compliance Office is to coordinate the work of faculty committees mandated by federal regulations (e.g., the Institutional Review Board, and the Institutional Animal Care and Use Committee) that must review and approve all research protocols involving human subjects, animal subjects, hazardous chemicals, and bio-safety hazards such as recombinant DNA research. This office also coordinates the continuing review of these protocols and communications between the committees and faculty members.

Recently, MCO's Institutional Review Board was recognized as exceptional for its policy on recruitment of study subjects in a report from the Department of Health and Human Services Office of Inspector General titled, "Recruiting Human Subjects: Sample Guidelines for Practice." In this same vein, and along with a number of other academic health science centers, MCO has recently become a signatory institution to a pledge titled, "Clinical Research: A Reaffirmation of Trust Between Medical Science and the Public." This is a pledge that MCO will do whatever is necessary to ensure that research involving human subjects will be conducted responsibly and in compliance with the highest ethical standards. One recent step has been the initiation of mandatory training in the area of protection of human research subjects for all personnel involved in research involving human subjects.
MCO COMPLIANCE WITH REGULATIONS
GOVERNING RESEARCH

Research and Grants Administration also is responsible for coordinating institutional compliance with federal regulations governing research integrity and conflict-of-interest. Each of these areas is the subject of institutional policies written to comply with federal regulations governing that particular area. In the area of research integrity, Research and Grants Administration functions both to promote responsible conduct of research by MCO faculty and students via training resources and programs, and to coordinate inquiries and investigations in those rare instances where charges of scientific misconduct arise. A major focus of training in this area has been to promote compliance with the MCO policy titled, "Responsible Conduct of Research and Other Scholarly Activity" (03-012).

At the beginning of fiscal year 2000, this policy, with an attached copy of the National Academy of Sciences publication titled, "On Being a Scientist: Responsible Conduct in Research" was mailed to every MCO faculty member. Since that time, a copy of this policy, with this publication attached, has been given to each new faculty member when they meet with the Director of Faculty Affairs at their orientation session.

During 2001/2002, MCO will initiate mandatory training for all investigators and research personnel in responsible conduct of research. In the area of conflict-of-interest, Research and Grants Administration requires that all personnel associated with grant/contract proposals complete a financial disclosure form in compliance with the MCO conflict-of-interest policy. In those instances where an individual discloses a "significant" financial interest (greater than $10,000 annual income from, or ownership of greater than 5 percent of the outstanding stock) in an entity sponsoring his or her research, or a company closely associated with that research, Research and Grants Administration
coordinates review of the situation by the MCO Conflict-of-Interest Review Committee to identify means to manage, minimize, or eliminate the potential conflict-of-interest. In this regard, we hold the firm belief that management of real or perceived conflicts-of-interest of an individual must begin with full disclosure, both to constituencies within and outside MCO.

Research and Grants Administration also serves as the primary institutional contact with external institutions, agencies and corporations which provide project-specific grant and contract support of MCO academic and research programs. This office reviews and approves all grants and contract proposals submitted by MCO on behalf of its faculty in accordance with the institutional sponsored project policy (03-001). The Office also monitors both the technical and financial aspects of grants and contracts that are awarded to MCO.

In addition to these grants and contracts coming to MCO from extramural sponsors of academic programs, Research and Grants Administration also serves as the primary interface for MCO with other institutions with which MCO investigators and project directors choose to subcontract work with collaborators. In some cases MCO is the prime awardee, subcontracting work to other institutions; while in other cases, another institution is the prime awardee, subcontracting work to MCO. In all of the above situations, it is the responsibility of Research and Grants Administration to ensure that MCO adheres to the highest standards of ethics and integrity in this contracting process.

OVERSIGHT OF MCO CONTRACTING ACTIVITIES

Coordination of MCO contracting activities with extramural entities, outside the very focused area of sponsored projects, is the responsibility of the Office of Liability Control. All contracts are reviewed by the administrator for liability control, with assistance from retained legal counsel where appropriate. With the exception of sponsored project contracts, the originals of which are stored
in Research and Grants Administration, the originals of all other MCO contracts are stored in the Office of Liability Control. This office has implemented appropriate institutional policies, including one titled, "Contract Review and Approval Process" (# 03-008) to guide institutional contracting activities. This activity is further guided by a limitation on who can execute a contract on behalf of MCO, a matter clearly defined in a policy titled, "Authorizing Signatures for Financial Affairs" (#03-009).

MCO COMPLIANCE WITH REGULATIONS REGARDING STUDENTS AND EMPLOYEES

Other MCO offices also are charged with direct oversight of MCO compliance with specific types of federal or state regulations and related MCO policies. For example, the Office of Student Services, which includes the Registrar's Office, Office of Student Financial Aid, Office of Student Life, Student Health Services, and the Academic Enrichment Center, ensures that MCO complies with all federal and other regulations governing student financial aid, access to student records, and compliance with the Americans with Disabilities Act. It is the primary administrative contact point for MCO's interface with one of its most important constituencies, its students. The Human Resources Department is charged with ensuring MCO compliance with all laws and regulations governing employment and has implemented institutional policies addressing a broad spectrum of employment-related issues.

Office of Equal Opportunity

It is the responsibility of the Office of Equal Opportunity to ensure that everyone has access to, along with full equal enjoyment of, all services and accommodations of MCO. The office upholds MCO's mission to not discriminate against staff, students, faculty, patients, vendors or applicants for employment on the basis of race, color, creed, gender, sexual orientation,
disability, age, veteran status, national origin, religion or political affiliation as set forth in policy 01-001 of MCO's General Policies and Procedures manual. Some of the functional responsibilities of the Office of Equal Opportunity include Compliance with the Americans With Disabilities Act of 1990, responding to complaints filed by existing or former employees, conducting internal investigations, sexual harassment training, preparation of the annual affirmative action compliance plan, counseling and crisis intervention.

Office of Multicultural Affairs

Although not a compliance office, the Office of Multicultural Affairs is involved in promoting mutual respect among all MCO constituencies. Like most academic institutions, the MCO community is composed of a multi-racial, multi-national population, and this office plays a major role in the promotion of mutual understanding, tolerance of differences, and celebration of similarities. Over the past couple of years, this office has been instrumental in coordinating a schedule for mandatory diversity training for all MCO faculty and staff as part of the MCO diversity training initiative.

RELATIONSHIPS WITH INTERNAL CONSTITUENCIES

Internal relationships include MCO's relationships with its faculty, staff and students. In all of these cases, the institution has certain expectations of faculty, staff, and students with regard to standards of integrity. Simultaneously, it is only fair that it must make certain commitments to those constituencies that they will be treated with integrity. These expectations and commitments have been codified in institutional policies which, as previously stated are reviewed annually.
MCO Expectations of Faculty and Staff

MCO defines its expectations for the highest standards of ethical behavior of its faculty and staff in numerous institutional policies and during orientation of students and new faculty.

MCO Obligations to Faculty and Staff

MCO informs its faculty and staff of its commitment to treat them with the highest standards of ethical behavior in numerous institutional policies.

MCO Relationships with Students

Each of the four schools within MCO has its own student handbook which defines its policies regarding admission, registration, degree programs, charges, financial support, academic credit, student evaluation, as well as the school's expectations regarding standards of conduct. In each case, these documents serve the same purposes for students that the MCO policies and procedures manual does for faculty and employees. It defines MCO's commitment to the student and MCO's expectations of the student.

Student Complaints

To implement the NCA policy for maintaining a log of student complaints, MCO maintains a log of formal, written, and signed student complaints received by the Provost, Assistant Provost, and deans. The log includes summary information regarding the date and nature of the complaint; steps taken to resolve the complaint; MCO's final decision, including referral to outside agencies; and other external actions initiated by the student and known to MCO.
The log will be made available to the NCA evaluation team at the time of the comprehensive site visit. Only summary information will be included to protect the privacy of complainants and other individuals.

INTERNAL COMMUNICATIONS BETWEEN MCO ADMINISTRATION AND INTERNAL CONSTITUENCIES

MCO administration utilizes a number of forums for open communication with faculty and staff to emphasize and explain its expectations of faculty and staff, and to ensure that faculty and staff are provided appropriate opportunities to air any concerns. The primary open forum for providing two-way open communication with the faculty is the monthly meeting of the Faculty Senate at which the Provost (and sometimes the President) provides a monthly report and fields questions. Similarly, the Provost holds quarterly breakfast meetings for faculty to serve a similar purpose. In addition to these, the President meets with the faculty approximately twice a year in an open forum at which he addresses current issues and answers faculty questions. In addition to these open forums for all faculty members, the dean of each of the four schools has monthly meetings with an executive committee of faculty in their respective schools.

In a similar fashion, MCO's administration holds town hall meetings to which all faculty and staff are invited to hear about current issues and to ask any questions they might have. These monthly town hall meetings are called MCO Forum, and there is a 24-hour hot line that faculty and staff can call to propose topics and/or questions/issues for discussion. Each dean holds regular meetings with their faculty. The Dean of the School of Medicine holds monthly meetings with the clinical and the basic science department chairs. The Chief of Staff and the Executive Director of the Hospital hold their regular meetings with faculty as well. The Vice President for Administration also holds monthly meetings with representatives of the administrative/secretarial staff of each
department to ensure that each department is kept abreast of MCO policies and procedures. In addition to these formal meetings, there are numerous written communications regarding these issues delivered to faculty and staff on paper and via electronic media (e.g., E-mail).

EVALUATION OF INTEGRITY IN INTERNAL RELATIONSHIPS

Although, as in every institution, schools and departments within MCO compete for finite institutional resources to support their programs, this competition has not led to deterioration of internal relationships. One reason for this may be the effective communication of the institutional financial "big picture" by the administration and the "buy in" of the faculty and staff to the concept of everyone contributing to the "common good," rather than "everyone for himself." This is not to say that every school, department, or individual is always pleased with the share of institutional resources they are provided, particularly during times of shrinking resources.

Like most institutions of higher education, MCO has a significant population of international and African-American students and faculty. There have never been major racial or ethnic problems at MCO, but there have been a few incidents that suggested the need for a better mutual understanding. These incidents prompted MCO to take a very aggressive approach to that mutual understanding by hiring an outside contractor to provide cultural diversity competence training to all faculty and staff. This mandatory training provides an eight-hour training session whose goal is to provide all staff and faculty members with a broader appreciation and understanding of those around them. In addition to personal training for MCO faculty and staff, the contractor also provided "train the trainer" training for a number of MCO staff whose role is to serve as trainers in the future. To date approximately one-third of MCO faculty and staff have received this training, but this training will continue,
using MCO trainers, until all faculty and staff have been trained. This and other programs centered in the Office of Multicultural Affairs continue to address the issue of mutual understanding and tolerance.

MCO has been very fortunate during the past 10 years in that there have been very few instances that have required the institution to respond to violations of ethical behavior on the part of any of our internal constituencies. In the few cases where violations did occur, institutional response was both rapid and effective. Perhaps the biggest test of our institutional ability to respond to such violations came in 1992 when the National Institutes of Health informed MCO of a suspected act of plagiarism committed by a very distinguished MCO department chair in a National Institutes of Health research grant application. Later, administrators were told that this was the most complex plagiarism case that the Public Health Services Office of Research Integrity had ever handled. The MCO Misconduct Committee followed the Academic and Scientific Misconduct Policy (02-003) to the letter in processing this case through an inquiry and subsequently an investigation. The Office of Research Integrity not only accepted the results of the MCO investigation, but also invited faculty members to a National Institutes of Health conference on plagiarism cases to present this case as an example for other institutions to follow.

The only concern regarding this case, which was expressed by a number of faculty members, was that MCO did not disclose fully the details of this case after its conclusion. Although this became a moot point in this particular case, since the policy of Office of Research Integrity is to publish a summary of each concluded case in the Federal Register, those individuals felt that the MCO community would have benefited from making the details public internally. Not only would faculty and staff have been shown evidence that the process worked and was fair, but it would have served as a good case study that may serve as a deterrent to others who also might find themselves tempted to take a short cut in the future in preparing manuscripts and grant proposals.
On the few occasions where other institutional policies have been tested in the handling of individual lapses on issues of ethics or integrity, those policies have also functioned very well and proved effective. In every instance, the issue has been dealt with expeditiously, while ensuring that the rights of the individual accused were protected by carefully following MCO policy to ensure that due process was not compromised.

RELATIONSHIPS WITH EXTERNAL CONSTITUENCIES

External relationships include MCO's relationships with prospective faculty, staff and students during the recruiting/application process and with the public at large. Other relationships are established through MCO's public relations efforts with other educational and healthcare institution news organizations, and with businesses via contracts for MCO to provide research and other services to those businesses and to license MCO technology to the private sector for further development and commercialization.

RECRUITMENT OF NEW FACULTY

Although individual faculty recruitment is initiated at the departmental or school level after approval of the position by the Provost, the Office of Faculty Affairs, which for faculty positions serves in the same capacity as Human Resources for non-faculty positions, provides guidance for the recruitment process. In its recruitment of faculty, MCO adheres to all laws and regulations regarding equal opportunity employment and affirmative action. Announcements of open faculty positions are placed in appropriate publications for the type of position being filled. For the recruitment of chairmen and deans, every effort is made to advertise open positions in publications and in mailings where they would be seen by underrepresented minorities who may be qualified candidates for the open position. MCO has stated its commitment to increase the number of underrepresented minorities on its faculty. Along this same line,
within the past few years, a number of females have been appointed to positions of leadership.

**RECRUITMENT OF STUDENTS**

Although recent court decisions have not upheld the requirement for affirmative action in student recruitment, MCO is committed to increasing the number of qualified underrepresented minority students in all schools. To this end, MCO's recruitment efforts, although focused on student quality first, still place a priority on ensuring that the recruitment message reaches underrepresented minority students, and that those students are treated fairly in the application/admission process. One of the primary means of attracting and retaining qualified underrepresented minority students is to sustain a campus environment that ensures all students a friendly and supportive place to study. This was one of the goals of the aforementioned diversity competence training of faculty and staff.

The Office of Multicultural Affairs also plays a significant role in sustaining this supportive environment by sponsoring campus events to raise awareness of and to celebrate cultural differences among MCO's faculty, staff, and students. For example, the Office of Multicultural Affairs sponsors an annual event called Culturescape that reaches out to educate students, faculty and staff on diverse issues.

**MCO PUBLIC RELATIONS**

MCO's local and regional public relations efforts are coordinated by the Office of Communications under the Vice President for Institutional Advancement, which is responsible for the accuracy of the content of all messages. MCO utilizes all available media for distribution of its public messages including television, printed media, Internet, billboards and radio. Although many of MCO's public relations messages advertise its health care enterprise to
potential patients and referring physicians, they also include many items directed to employees (e.g., "Pulse" a monthly campus newspaper and Monitor, an on-line news and information service), alumni, and the community at large. Special publications featuring specific aspects of MCO's programmatic accomplishments are also distributed from time to time. One example is the publication titled, "Unlocking the Mysteries" that featured the research accomplishments of a number of MCO scientists.

In addition to institutional public relations campaigns, departments, schools and programs also utilize printed media, web sites, and other means to provide program-specific information that is available to the public. For example, each of the Ph.D. programs in the Graduate School have developed a brochure describing its program, as well as the overall graduate studies program at MCO. Similar information also is provided by each graduate program on web sites available to the public.

RELATIONSHIPS WITH OTHER ACADEMIC INSTITUTIONS AND HEALTH CARE FACILITIES

MCO relationships with other academic and healthcare institutions occur both at the institutional level and at the individual faculty level on both formal and informal bases. At the institutional level, MCO has formal academic relationships with Bowling Green State University, a public institution approximately 25 miles south of Toledo, and the University of Toledo, a public institution just a few miles from MCO. These formal relationships include collaborative degree programs in undergraduate nursing and allied health disciplines where students receive their undergraduate degrees from Bowling Green State University or the University of Toledo. MCO does not offer undergraduate degrees, but undergraduate students take specialty courses and serve clerkships at MCO and its hospitals and clinics. In addition, Bowling Green State University, MCO and the University of Toledo collaborate in a
joint degree program leading to a Master in Public Health degree. To coordinate these programs, the provosts and the appropriate deans from the three schools meet periodically.

Other collaborative degree programs, (e.g., biomedical engineering) which take advantage of specific strengths of MCO, Bowling Green State University and the University of Toledo, also are being developed, but as yet have not been implemented. In all cases, these collaborative and joint degree programs have been approved by the Ohio Board of Regents and are the subjects of contracts between the institutions involved. Contracts for academic relationships such as those described above are initiated and controlled at the Provost level, but otherwise follow the same contract approval process previously described, involving MCO Liability Control and legal review.

Another form of formal relationship between MCO, Bowling Green State University, and the University of Toledo is represented by the Cooperative Enrollment Agreement which allows enrollment of students at each of the three schools. In addition to agreements with the University of Toledo and Bowling Green State University, recently, the MCO School of Medicine has entered into formal agreements with Miami University of Ohio and John Carroll University to provide early admission to medical school for outstanding students at those institutions.

MCO also contracts with local and regional healthcare facilities to provide clinical training to MCO medical and other health care students. All of these contracts are initiated in the office of the Provost/Executive Vice President and contain provisions allowing MCO complete control of all academic aspects of the arrangement. Many of these contracts are via the federal Area Health Education consortium program, but MCO also has individual relationships with many facilities. The most prominent of these academic agreements is with
Mercy Health Partners, and has resulted in the relocation of MCO's pediatric subspecialty faculty to Mercy Children's Hospital, which is located on the campus of St. Vincent Mercy Medical Center in downtown Toledo. This agreement, like those mentioned earlier, provides MCO complete control of the academic aspects of the relationship.

On an informal basis, the administrations of MCO, Bowling Green State University and the University of Toledo, as well as other public institutions in Ohio, constantly work together to initiate, improve and sustain research and other collaborations among these institutions. These informal collaborations involve sharing expensive scientific instrumentation and improving the inter-institutional environment to promote collaborative scientific ventures crossing institutional lines. These may lead to more successful competition for funding at the national level. Although scientific collaboration is based on scientist-to-scientist interaction, rather than institutional interaction, it is felt that the administrations of these institutions can make essential contributions by identifying means to inform scientists from one institution of the interests and capabilities of those at another, and by ensuring that institutional administrative barriers to such collaboration are minimized.

At the individual faculty level, MCO faculty are involved in scholarly collaborations with individuals at nearby institutions, other academic institutions all over the United States, and internationally. Many of these collaborations are informal and are initiated by individual scholarly interactions which both parties identify as strengthening their own independent scholarly activity. In such cases, the institutional involvement in the collaboration is minimal, with each institution being responsible only for the activities of its own faculty. One important and ever increasing role of the respective institutions in such collaboration involves protection of intellectual property that must be exchanged by the collaborators. Often for-profit entities and some academic institutions require recipients of such intellectual property to accept extremely
onerous terms. These terms extend far beyond the specific material being transferred to anything that may result from its use, as to severely impede collaboration. MCO has adopted the recently published National Institutes of Health guidelines on such transfers of MCO intellectual property to all academic institutions and other non-profit entities.

While providing what we believe to be adequate protection of MCO’s rights in such property, material transfer agreements adhering to these National Institutes of Health guidelines do not include such “reach through” terms and make it much easier for the non-MCO collaborator’s institution to agree quickly to the transfer and thus facilitate the collaboration. In this same regard, MCO was one of the very early signatory institutions to the Uniform Biological Materials Transfer Agreement, originally proposed by the National Institutes of Health and coordinated by the Association of University Technology Managers. This “master” agreement allows for transfer of material between signatory institutions to be controlled by a simple letter agreement.

Individual MCO faculty also collaborate with colleagues at other academic institutions via a formal process of subcontracting scholarly, usually research, work for which a faculty member at one institution (the prime awardee) has been awarded a grant or contract to a colleague at another institution (the subcontractor.) In this case, even though the collaboration is on a scientist-to-scientist basis, since grants/contracts are made to institutions, not to individuals, the collaboration requires a contract between the two institutions, primarily to move money to support the research from the prime awardee to the Subcontractor. All incoming and outgoing subcontracts for sponsored projects are negotiated, executed and controlled by MCO Research and Grants Administration in accordance with the MCO sponsored projects policy (03-001) and the MCO policy on contract review and approval (03-008).
MCO RELATIONSHIP WITH GOVERNMENT ENTITIES

As an Ohio public institution, MCO is directly responsible to the Ohio Board of Regents, and through this body to the Ohio legislative and executive branches of government. As a public institution, MCO must conduct its business in compliance with Ohio laws and regulations governing public entities. MCO interacts with Ohio governmental agencies that provide support of MCO programs through grants and contracts. In these relationships, there is very little difference from MCO's relationship with other agencies, either federal governmental or corporate, which sponsor specific projects at MCO. All such grant/contract relationships are coordinated by MCO Research and Grants Administration, which ensures that MCO complies with all agency policies and regulations in the conduct of the project(s).

In addition to its interactions with Ohio governmental agencies, MCO has numerous interactions with federal governmental agencies to support both educational and research programs. Examples of educational program support include grants for student financial aid from the Department of Education, as well as grants for program development from the Health Resources and Service Administration. MCO's major interaction with federal agencies is via federal support of MCO research programs through grants and contracts. All such grant/contract relationships also are coordinated by MCO Research and Grants Administration.

Finally, MCO's health care delivery services have obvious relationships with state and federal governmental agencies through Medicaid and Medicare programs, which provide reimbursement for health care provided in MCO facilities and by its health care professionals.
MCO RELATIONSHIPS WITH CORPORATE ENTITIES

In addition to typical relationships in which MCO interacts with corporations which supply goods and services to the institution, MCO frequently serves as a contractor to corporate entities for MCO to perform research of value to the corporation. In addition, MCO enters into licensing contracts with corporations that wish to further develop and commercialize technology developed at MCO. Contracts from corporate entities to support research at MCO are negotiated and controlled by Research and Grants Administration, which takes great care to preserve the academic freedom of MCO faculty investigators involved in this research.

Corporate culture, by necessity, requires that for a company to maintain its edge over its competitors, it must maintain the exclusivity of what it considers to be its intellectual property, including information obtained via research, while academic culture holds that freedom of exchange of information and materials is essential. More often than not, these cultures clash in contract negotiations between corporations and academic institutions trying to arrange company sponsored research at an academic institution. In this case, Research and Grants Administration is responsible for negotiating contracts that provide the corporate sponsor what it requires, while at the same time adequately preserving the open exchange and freedom to publish, which is held so dear by the academic culture. Providing potential sponsors the exclusivity and confidentiality they require in a public institution is even more difficult, because of the Ohio Open Records Act.

MCO also enters into contracts with corporations to license MCO technology to companies for further development and commercialization. Most research at MCO is of a very basic nature, and the results of that research are years away from a commercial market. MCO's business is research, not product development and commercialization. Thus, MCO licenses its inventions and discoveries very early to companies that are in the business of product
development and commercialization. Research and Grants Administration is the MCO entity delegated by the Board of Trustees and the President to initiate and control these license agreements on behalf of the college.

An Intellectual Property Committee made up of MCO faculty members advise this office on matters associated with patenting and licensing. License agreements are constructed to protect the financial interests of MCO and individual inventors. They typically impose upon the licensee the requirements to pay royalties associated with net sales of any products which are commercialized based on MCO technology, reporting requirements and due diligence requirements, ensuring that the licensee actively pursues product development so the invention can serve the public good. After payment of out-of-pocket expenses (e.g., legal fees), net royalties from a discovery/invention received by MCO are shared 50:50 with the individual faculty/staff who invented/discovered the technology.

Although most licensable technology developed at MCO is the product of corporate sponsored research and is thus optioned to the sponsor as a term of the research agreement, some MCO technology has been developed during the course of research supported by federal (e.g., National Institutes of Health) grants or contracts. Since the 1980 passage of the Bayh-Doyle Act (37 CFR 401), institutions have been able to claim ownership of inventions and, with certain restrictions (e.g., reporting requirements, and grant of a non-exclusive license to the US government), license them to for-profit entities. Inventions developed with federal funds are handled by MCO in strict compliance with the Bayh-Dole Act.
Strengths

- The adequate control and oversight of MCO’s relationships with its external constituencies ensures that those relationships are conducted in a responsible and ethical manner.

Challenges

- Staying abreast of statutory and regulatory changes.
- Adequately communicating changes in federal regulations governing research and other scholarly activities to faculty investigators.