November 6, 2003

To: Members and Alternates of the University Senate

From: Susan W. Fisher, Secretary of the Senate

Subject: The University Senate will convene in Regular Meeting at 3:30 p.m., Thursday, November 13, 2003 in room 130 Drinko Hall, 55 West 12th Avenue.

The Program Committee estimates that this meeting will require one hour and twenty-six minutes of Senate time. Please arrange your schedule accordingly.

Page  Approximate Time  Agenda Item

64  1. 1 minutes  Approval of Secretary’s report Number 264.

2. 3 minutes  Report from the Secretary of the University Senate

66  3 20 minutes  Council on Academic Affairs Proposal to create a Department of Neurosurgery (S.D. 2003-03)  David Stetson, Chair Council on Academic Affairs

Robert A. Bornstein, Associate Vice President College of Medicine and Public Health

88  4. 5 minutes  Council on Academic Affairs Proposal to create a Mathematical Biosciences Institute (S.D. 2003-04)  David Stetson, Chair Council on Academic Affairs

111  5. 5 minutes  Council on Academic Affairs Proposal to create a Center for Entrepreneurship (S.D. 2003-05)  David Stetson, Chair Council on Academic Affairs

142  6. 5 minutes  Council on Enrollment and Student Progress Proposal to amend rules 7-19 and 7-20, Elimination of Senior Finals (S.D. 2003-06)  John Parson, Chair Council on Enrollment and Student Progress
144 7. 3 minutes Proposal to amend 3335-11-10, Recreational Sports Committee (S.D. 2003-07)  J. Briggs Cormier, Immediate Past Chair Council on Student Affairs

147 8. 3 minutes Proposal to amend 3335-17-05 through 17-07, Student Government Apportionment (S.D. 2003-08)  J. Briggs Cormier, Immediate Past Chair Council on Student Affairs

9. 15 minutes Report from the President  Karen A. Holbrook, President The Ohio State University

150 10. 0 minutes Receipt of Reports from COAM (S.D. 2003-09), CESP (S.D. 2003-10), and Faculty Hearing Committees (S.D. 2003-11)

11. 3 minutes Report from Steering  Steve Pinsky, Chair University Senate Steering Committee

12. 3 minutes Report from Faculty Council  Grady Chism Chair, Faculty Council

13. 5 minutes Report from IPC  Karen Weise President, Inter-Professional Council

14. New Business

15. Old Business

16. Announcements

17. Adjournment
Memorandum

To: University Senate

From: David L. Stetson, Chair
 Council on Academic Affairs

Date: November 6, 2003

PROPOSAL FROM THE COUNCIL ON ACADEMIC AFFAIRS TO ESTABLISH
THE DEPARTMENT OF NEUROLOGICAL SURGERY, COLLEGE OF MEDICINE
AND PUBLIC HEALTH

WHEREAS neurological surgery is now a division, but with department status will
be able to recruit premier academic neurosurgeons, and thus provide
expanded research programs; enhance the quality of teaching for medical
students, residents, and specialty fellows; and provide expanded training
for students in other health care professions; and

WHEREAS it is increasingly common, nationally, in medical schools, for neurological
surgery to have departmental status; and

WHEREAS the proposal has the strong endorsement of the College of Medicine and
Public Health, and letters of support from other academic units within the
University, and from other universities; and

WHEREAS the proposal was discussed and approved by the reviewing subcommittee
and then the full Council on Academic Affairs on November 5, 2003; and

WHEREAS the Council recognizes that this proposal is an exception to the current
Rule specifying criteria for departmental status, but that the College of
Medicine and Public Health has provided an acceptable rationale and a
commitment to increase the number of tenured faculty to be in
compliance with the Rule; and

WHEREAS given these considerations, the Council proposes that departmental status
be contingent upon the hiring of a department chairperson;

NOW THEREFORE BE IT RESOLVED that the University Senate approve the proposal
to establish the Department of Neurological Surgery, College of Medicine and Public
Health, and respectfully request concurrence from the Board of Trustees.
I am pleased to inform you that the proposal to establish a Department of Neurological Surgery was approved by the Council on Academic Affairs at its meeting on November 5, 2003. Thank you for attending the meeting and responding to questions/comments.

As you are aware, approval was contingent upon the hiring of the department chairperson.

This proposal will now be sent to the University Senate for action on November 13, 2003. Professor David Stetson, Chair of the Council, will present the proposal, but please ensure that someone from the College of Medicine and Public Health will be in attendance to respond to questions/comments, should they arise.

Please note that this represents my formal communication with you about this proposal. You will not receive a separate letter from me. In that regard, please place a copy of this message in your file(s) on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any follow-up comments about this action, do not hesitate to contact me and/or Professor Stetson.

Randy

W. Randy Smith
Vice Provost
Office of Academic Affairs
203 Bricker Hall
190 North Oval Mall
614-292-5881
THE OHIO STATE UNIVERSITY
CAA
Report of Subcommittee A

November 5, 2003

**Issue:** Proposal to establish a Department of Neurological Surgery

**Rationale:** The College of Medicine and Public Health proposes the establishment of a Department of Neurological Surgery. Neurological Surgery is currently a division. COMPH maintains that departmental status plus recruitment of additional faculty will enhance greatly the quality of teaching for medical students, residents, and specialty fellows. COMPH also suggests these benefits: (1) clinical and research programs will provide expanded training opportunities for students in other health care professions such as nursing, allied medical professions, speech and language pathology, (2) the growth of the Department of Neurological Surgery will provide expanded research programs and collaborations that will provide opportunities for undergraduate and graduate students from many colleges, and (3) the number of extramurally funded research programs will increase.

**Timing.** COMPH requests departmental status at this time because of an opportunity to attract one of the premier academic neurosurgeons in the U.S. This candidate will bring a group of at least three researchers with him as well as $500,000 to $1 million in annual extramural research support. According to COMPH administrators, the candidate’s interest in coming to OSU is dependent upon Neurological Surgery attaining departmental status.

**Number of Faculty:** The proposed Department of Neurological Surgery will not meet the university criterion of 10 tenure track faculty members if established. Currently they have 3 tenure track faculty members and that number will increase to 7 when the proposed candidate and his group join the unit. COMPH intends to “aggressively grow” this department and report they already have initiated efforts to recruit beyond this initial group of new faculty. The Dean has indicated his commitment to meet the university criterion in three years. This will require the recruitment of one additional faculty per year for the next three years. COMPH claims the recruitment of this key candidate to chair the department as well as the institutions’ investment of a substantial amount of resources will assist significantly in the recruitment of these additional faculty.

**Funding:** Funding for the department will come from the Dardinger account that was created as a part of a medical liability settlement of $14 million. Two chairs were created for $1.5 million each; one of which is in neurological surgery with a focus on neuro-oncology.

**Additional Information:** The Faculty Council has discussed this proposal and the chair of the Faculty Council expresses his support.
Recommendation of Subcommittee A

To establish a Department of Neurological Surgery contingent on the hiring of the specific individual currently being recruited to chair the new department. In addition, since the department will be established with less than 10 tenure track faculty members, the Office of Academic Affairs should periodically review the progress toward the goal of ten faculty members.
September 5, 2003

Barbara Snyder
Interim Executive Vice President and Provost
203 Bicker Hall
190 North Oval Mall
CAMPUS

Dear Barbara:

Enclosed please find a proposal for establishment of a Department of Neurological Surgery. This is a critically important step in the further development of our academic programs in the neurosciences. As you know, with this action we have the opportunity to recruit a world-class neurosurgical research term, which will immediately impact our research, teaching, and patient care missions. This department will also have positive impacts on colleges outside of the College of Medicine and Public Health. The proposal has been unanimously endorsed by our Faculty Council and Council of Chairs. In addition, I am enclosing letters of support from several departments as well other constituencies.

As you know, there is some time sensitivity, and I would appreciate you bringing this through University governance at the earliest possible opportunity. Please feel free to contact me if you have any questions or require further information.

Thank you for all your help.

Sincerely,

Fred Santillipo, MD, PhD
Senior Vice President for Health Sciences
Dean, College of Medicine and Public Health

FS:sl

Enclosures
October 6, 2003

Barbara J. Snyder
Interim Executive Vice President and Provost
Office of Academic Affairs
203 Bicker Hall
190 North Oval Mall
CAMPUS

Dear Barbara:

I am writing to express my enthusiastic support for the proposal to develop a Department of Neurological Surgery. The creation of this department will have an immediate impact on the neurosciences programs throughout the campus because it will allow us to take advantage of a unique opportunity to recruit one of the leading young investigators in this field, and in turn a cadre of other faculty. The establishment of a Department of Neurological Surgery will have a tremendous positive impact on the quality of the research, educational, and clinical programs in this area. In addition, the presence of a strong program in neurological surgery will have major benefits to other academic programs within and outside the College of Medicine and Public Health.

We recognize that, if this proposal is approved, the new Department will not have the requisite number of tenure track faculty at the time it is established. However, the candidate that will be recruited to become the Chair of the new department will bring with him his entire team of investigators. Furthermore, we are committed to build this department to a level that will surpass the basic university requirements within three years. The achievement of our goals for this recruitment is, in fact, dependent on our ability to build the department to at least this level. We have dedicated a substantial amount of resources to realize this goal, and the Dardinger Fund is specifically targeted to expand this discipline. The establishment of a department will allow us to recruit this group of investigators, and will facilitate our ability to recruit other high caliber tenure track faculty members. We will monitor the recruitment efforts to ensure progress toward meeting the university departmental requirements.

I appreciate the efforts of the University governance in the expeditious processing of this proposal. Please feel free to contact me if you have any questions of if I can provide further information.

Sincerely,

Fred Sanfilippo, MD, PhD
Senior Vice President for Health Sciences
Dean, College of Medicine and Public Health

FS:sl
Cc: Randy Smith, PhD, Robert Bornstein, PhD, Chris Ellison, MD

The most comprehensive health sciences center in America
College of Dentistry / College of Medicine and Public Health / College of Nursing / College of Optometry / College of Pharmacy / College of Veterinary Medicine / School of Allied Health Professions / School of Biomedical Sciences / School of Public Health / Dorothy M. Davis Rice and Long Renwick Institute / The Ohio State University Hospitals / Comprehensive Cancer Center – The Arthur G. James Cancer Hospital and Richard J. Skirvin Research Institute / University Hospitals East / OSU & Madison Behrends Healthcare and Medicine / Primary Care Network / John A. Prior Health Sciences Library

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Proposal for the Establishment of a Department of Neurological Surgery

The Ohio State University

College of Medicine and Public Health
Introductory Statement

This proposal requests the creation of a Department of Neurological Surgery in the College of Medicine and Public Health (COMPH). Currently this is a division within the Department of Surgery. The current program includes a dedicated core of faculty and staff, as well as, the breadth and depth of academic activities, financial resources, and space to support this endeavor. This initiative will create the environment required to attract quality faculty, residents, and investigators to strengthen The Ohio State University COMPH, the Academic Medical Center and the University at large.

The establishment of an academic Department of Neurological Surgery will be an important demonstration of our commitment to the further development of the discipline of Neurological Surgery, and to the neurosciences in general. The existence of a Department of Neurological Surgery will greatly facilitate our ability to recruit high caliber physician-scientist and research faculty. Outstanding faculty will attract other high caliber faculty, as well as outstanding residents and students thus enhancing our academic mission. These high caliber faculty, bring with them substantial research grants which increase the breadth of the college’s research portfolio and help to raise OSU’s national ranking. The increase in research coupled with the higher caliber faculty will add to the visibility and name recognition of OSU and in the process the Academic Medical Center which will attract more patients and provide more training opportunities for students and residents. More patients will increase the cohort which can support basic research and clinical trials which will increase our opportunities to take research outcomes from the bench to the bedside. Being able to convert the increased research into applicable technology will allow us more opportunities to partner with the business community to bring additional resources to the university.

Why Now?

This proposal is presented in the context of a unique opportunity to attract one of the premier academic neurosurgeons in the United States. This candidate will bring with him a group of six researchers and physician-scientist faculty, and $500,000 to $1 million in annual extramural research support. In addition, this group will rapidly generate several additional grant applications. This candidate and his group of accomplished physicians, scientists and investigators have indicated a strong interest and willingness to join our faculty. This group of nationally recognized investigators in addition to the existing faculty will meet the University’s criterion of 10 faculty to establish the department. In addition, further recruitment of academically oriented faculty members are anticipated in the next two years. His research programs will create strong synergies with other research and teaching programs in the Department of Surgery as well as other departments within and outside the COMPH. The recruitment of a nationally recognized leader is an essential factor in our ability to realize the potential impact of this program.

It is clear, however, that our ability to attract this candidate is directly dependent on the existence of a Department of Neurological Surgery. We do have the requisite institutional support and commitment to create this department, and the following data demonstrates the scientific and academic foundations for the creation of a department. Although we have a
dedicated group of faculty in the division, we do not currently have the number of faculty required by university rule for creation of a department. However, the recruitment of this candidate and his research group will provide the necessary critical mass to support a department that will immediately be highly productive and successful.

This proposal derives from, and is in recognition of the need and now available resources to develop a top-tier academic and research program in Neurological Surgery. Neurological Surgery is essential for the missions of the medical center and a top program would positively influence the research and educational opportunities of many of the departments in the COMPH including Neuroscience, Anesthesiology, Internal Medicine including our cancer programs and the Comprehensive Cancer Center, Ophthalmology, Pathology, Physical Medicine and Rehabilitation, Neurology and Radiology. Indeed even the Department of Surgery would substantially benefit with the strengthening of our trauma program and efforts in injury prevention. Recently the medical center received an endowment to support the development of a research program in Neuro-Oncology. A portion of these funds is dedicated to Neurological Surgery and hence the funds are now available to recruit a talented leader in order to develop a top program. It is doubtful whether such an individual could be recruited without departmental status, as most top-tier programs are indeed departments.

The current division has gone through a transition due in large part to the crisis in health care that has impacted high-risk medical specialties. The financial issues affecting academic medicine have undermined the ability of our current faculty to focus sufficiently on academic endeavors. Nevertheless, we have a strong heritage of being a world class academic Neurological Surgery program. Even today, the Hunt-Hess Grading System for aneurysms is still being used in Neurological Surgery diagnoses. This system was developed by Dr. William E. Hunt who was here at OSU from 1953 to 1989. The time is right for us to expand the research that is here, and to re-establish our tradition of excellence and leadership in academic Neurological Surgery. We want to develop new opportunities, and to realize the full potential of our existing strengths. The establishment of this department will provide an opportunity to develop innovative collaborations and to capitalize on the strengths existing throughout the University.

National trends project growth in the scope and importance of the clinical and underlying scientific fields of Neurological Surgery and related services. In 2003, 50% (63 of 126) of medical colleges in the United States encompass the field of Neurological Surgery as separate academic departments (Appendix I). In addition, 62% (59 of 95) of the ACGME approved Neurosurgical residency programs in this country take place in separate clinical departments at hospitals and medical centers. These percentages demonstrate the national standard and clinical importance of Neurological Surgery.
**Breadth of Field**

Neurological Surgery is an exceptionally complex field which demands a broad range of faculty expertise. Research, teaching and clinical activity encompass numerous fields including: pediatric neurological surgery, neurological trauma, peripheral nervous system, vascular and skull based aneurysms, skull base, functional neurological surgery (including movement disorders and epilepsy), cranial nerve surgery, and oncological neurological surgery including gamma knife. Subspecialty training, in the form of post-residency fellowships, is offered in several neurosurgical programs. Establishment of a department would permit a growth of the range of research and training opportunities that could be provided. The greater diversity and number of patients available will enrich the quality of clinical education and promote our ability to participate in clinical trials of pioneering medical technologies and treatments.

Neurological Surgery will be of sufficient size to be an independent and viable unit. The available resources would permit the rapid growth of the academic unit. Although size is probably not the most important criterion, the program must be sufficiently large to provide the vigor and services endemic to an academic unit of the COMPH. Neurological Surgery provides an effective educational experience for medical students, residents, and ancillary health care professionals. Since much of this educational activity is experiential, it is vital that there be a sufficient patient volume to support the clinical education of a large number of medical students, residents and other student groups. The students in the COMPH number approximately 850 across all four classes making us the fourth largest medical school in the United States. The Neurosurgical service is a critical and essential element for the training of students in the COMPH and School of Allied Medical Professions. Neurological Surgery, in collaboration with the Department of Neuroscience’s research programs, attracts a substantial number of medical students and graduate students and enhances the academic mission of the university as well as adds to the fund of medical knowledge. Neurological Surgery also works closely with Neurology, Neuroradiology, and the Neuroscience Department. Neurological Surgery residents routinely spend time on these services and members of these other departments attend Neurological Surgery conferences and participate in active patient care.

**Recognition of Neurological Surgery as a Surgical Specialty**

**National Trend**

Recognizing the need for detailed training and special qualifications for the practice of neurological surgery, representatives of The Society of Neurological Surgeons and the Harvey Cushing Society (now the American Association of Neurological Surgeons) held an informal meeting on March 27, 1939. This group was later enlarged to include representatives from the Section on Nervous and Mental Disease of the AMA, the section on Surgery of the AMA, the American Neurological Association and the American College of Surgeons. It was unanimously decided by this enlarged group that a separate board should be formed for certification in Neurological Surgery. The American Board of Neurological Surgery was approved in 1940 as a new examining board in medical specialties by action of
the Advisory Board of Medical Specialties (reorganized in 1970 as The American Board of Medical Specialties) in collaboration with The Council on Medical Education of the AMA. The broad aim is to encourage the study, improve the practice, elevate the standards, and advance the science of neurological surgery and, thereby, to serve the cause of public health.

College of Medicine and Public Health
Neurological Surgery as a surgical subspecialty began in Columbus, Ohio, with Dr. Harry E. LeFever in 1934 with the establishment of the Neurosurgical Out-Patient Clinic at Starling Loving Hospital. Additional surgeons joined Dr. LeFever in ensuing years with the resulting formation of a combined medical school department of Neurological Surgery, Neurology, and Psychiatry services in 1945. The separate division of Neurological Surgery in the Department of Surgery was created in 1951 with the opening of the then new University Hospital. This Division was lead to national prominence under the leadership of Dr. William E. Hunt (1953-89) followed by Dr. Michael E. Miner (1989-2002).

At the inception of the COMPH, the single department concept for surgery was logical; most divisions consisted of only one or two faculty members and required time for maturation. Several units have evolved into departments at appropriate stages in their growth. The Department of Surgery and more specifically the division of Neurological Surgery now feel that this administrative change is necessary to support continued growth of its education, research, and patient care mission. The faculty feel that future growth and development of Neurological Surgery requires the independence and dedication to Neurological Surgery without the constraints of decisions based on the larger, more diversely structured Department of Surgery. Direct access to College and Medical Center administrative and faculty bodies should more efficiently and successfully allow everyone to fulfill their missions.

Unique Contributions of Neurological Surgery
Neurological Surgery is unique among the surgical specialties. It employs some of the basic techniques of other surgical specialties, but has evolved its own particular attributes due to the specialized areas of concentration, namely the brain, the spinal cord, the peripheral nerves and their coverings. Neurological Surgery has much more in common with Neurology, and Neuroscience than with Surgery and the other surgical specialties. This is very evident in the major role neurological surgery has played in the development of collaborative and multidisciplinary programs in our college.

In the early 1970s, the division of Neurological Surgery under Dr. William E. Hunt received an NIH grant to study the basic science of spinal cord injury. This pulled together Neuroanatomy, Neurophysiology, Neurology, and Neurological Surgery. This collaborative effort led eventually to the development of a Neuroscience Department at Ohio State. The current chairman of the Department of Neuroscience, Dr. Michael Beattie, has a joint appointment in Surgery, the division of Neurological Surgery.

Neurological Surgery was critical in the success of this program in spinal cord injury. This collaborative effort has been ongoing since that time. As a result of this effort, Ohio State Neuroscience is now internationally recognized as a leader in the field of Spinal Cord Injury,
and the model developed for standardization of lesions of the spinal cord was developed here at Ohio State. Dr. Donald Bherman, as a Neurological Surgery resident helped develop this model and ultimately also received a Ph.D. as well as completing his Neurological Surgery residency. In addition, Dr. Bradford Stokes, who holds a joint appointment in the Division of Neurological Surgery, has received an NIH grant to train scientists from around the world in this model. Currently 16 researchers are meeting at The Ohio State University to learn this model and transpose it to their laboratories, thus enhancing the research and development of spinal cord injury treatments. Neurological Surgery still enjoys a close relationship with the Neuroscience Department. The Neuroscience Department is the recipient of a $2,000,000 gift from the estate of Dr. William Hunt and Charlotte Curtis Hunt. The income from this gift is used by the Chairman of the Neuroscience Department to advance the educational goals of the department.

A major reason to support a department is to enhance collaborative research and educational efforts between basic science and clinical departments. There has been a void in this in recent years and now we have an opportunity to make a substantial investment in a leader to rekindle scientific collaboration.

Rationale for Neurological Surgery as a Department

The goal of rapidly developing the discipline of Neurological Surgery at The Ohio State University is best accomplished through creation of an academic department. It is well documented that departmental status facilitates high caliber faculty recruitment, the quantity and quality of research, the numbers of publications and the clinical and educational capabilities of the discipline. The increased clinical revenue supports the research, space, offices and laboratories. The greater diversity of clinical faculty can improve the specialty coverage, inpatient census, and operating room utilization. The increased resources can be used for recruitment and retention of a larger number of faculty. Most importantly, as indicated above, departmental status is a necessity if an outstanding chairman of Neurological Surgery is to be recruited and retained.

The rapid development in medical technology, the change in delivery trends of neurosurgical services, and the evolutionary changes in medical education combine to reveal that Neurological Surgery represents a separate discipline from surgery. Neurological Surgery has sufficiently identifiable characteristics that require an administrative status to participate directly in policies and long-range plans of the medical school and medical center. These characteristics resulted in a national evolution toward departmental status for Neurological Surgery. Today 50% of the Neurological Surgery units in medical schools are departments. The preponderance of prominent and academically successful Neurological Surgery units are departments. Those Divisions that are successful vary from the OSU model. While they are in state schools, salary support is provided and they manage their own hospital, have a large clinical faculty and have no geographic competition. Most Neurological Surgery training programs that are classified as Divisions are small and weak.
The University’s academic plan emphasizes the importance of bio-medical research. Neuroscience research is one of the fastest growing areas of research. Increasingly research models require interdisciplinary teams, and many of the most novel and challenging research issues and questions require neurosurgical expertise. Emerging advances in neuroscience knowledge and technological capacity will revolutionize the treatment and management of many forms of neurological disease in the new two decades. It is essential that we have a strong academic Neurological Surgery program if OSU is to participate in these pioneering research developments.

As the neurosurgeon is system oriented, collaborative programs are developed with surgical and medical specialties alike in the total care of the patient. During the past twelve years, the chairs of the Department of Surgery provided strong support for Neurological Surgery. These individuals realized the needs of the specialty and assisted Neurological Surgery to achieve national stature and prestige. During this evolutionary period, Neurological Surgery has matured. Further growth, however, poses a problem within the confines of the Department of Surgery, and is not realistically possible in the current structure as a division because of the unique needs of the discipline. Departmental status would allow Neurological Surgery more direct representation and interaction with medical center leadership which is essential for the development of health care delivery and specialty product line which are in part keys to the success of the medical center. In addition departmental status would enhance development of educational programs for students and residents in Neurological Surgery and related fields.

**Growth of Neurological Surgery and Departmental Organization**

Once approved as a department, Neurological Surgery would be fully prepared and staffed to function as a tenure-initiating unit. The resources are available through a number of sources within the medical center to permit rapid recruitment of three additional neurosurgeons and three investigators in neurological disease. Additional resources are available to support a management team including one Administrator who will oversee the human resources and finances for the department and a Residency Coordinator. The Chair would have the necessary personnel to create a leadership team to oversee research, educational and clinical activities.

The Residency Coordinator will help manage the neurosurgical training program and coordinate the educational rotations at affiliate institutions. The Neurological Surgery residents rotate to other Central Ohio hospitals including Columbus Children’s Hospital and Riverside Methodist Hospital. Keeping the residents fully informed of educational, clinical, and research opportunities is imperative to a successful program. Involvement of the auxiliary clinical neurosurgeon faculty is vitally important to the OSU Neurological Surgery Residency and departmental status will strengthen our relationship with them and enhance the educational efforts. Currently, the faculty are invited to attend our weekly conferences and Tumor Board as well as lectures by visiting professors at Neurological Surgery Grand Rounds. Other conferences include Basic Neuroscience conference,
Neuroradiological/Neuropathological conference, and Morbidity and Mortality Conference. The level of the conferences would be enhanced as a department and key national figures would be more likely to accept invitations for visiting professorships.

**Impact of a Department of Neurological Surgery**

**Education**

A new department would permit a more meaningful medical student rotation. Fourth year medical students would rotate through the neurosurgical service as an elective for four weeks. During this time, they will be exposed to the breadth of neurosurgical diagnostic and therapeutic interventions. This will be accomplished by having them rotate for one week at a time on the neurosurgical trauma team, neurosurgical cerebrovascular, epilepsy and functional team, neurosurgical tumor and spine team, and the neurosurgical pituitary team. Development of these disciplines can only be achieved if departmental status is granted. During this time, they would spend time on-call with the resident staff, learning the basic evaluation of patients with suspected neurosurgical disease in the emergency room and in the Thursday morning clinic, functioning as a second assistant in emergency and elective neurosurgical cases, and rounding with the resident staff and attending. They would also attend the conferences outlined above. Importantly, the medical students would also attend five one-hour separate teaching sessions provided by sub-specialist members of the department including: 1) Spine disorders; 2) Neuroanatomy; 3) Peripheral nerve disorders; 4) Cerebrovascular disease; 5) CNS Tumors. Development of the department is essential to be able to recruit the physicians necessary to provide the education as outlined for this program. It is anticipated that 20 – 30 students per year would participate in this special elective. In addition, third year medical students rotate on neurosciences. Neurological Surgery is an essential component of that educational experience and will remain so as a department.

**Research**

The research interests of the department will initially focus on areas of current strengths which encompass spine disease and malignant brain tumor genetics, biology, and experimental treatment. The former possesses current strength at OSU within Dr. Beattie's department. Projected areas of research in Neurological Surgery within this area will be in the study of neural stem cell modulation of differentiation, neuroregeneration and transplantation and animal models of spinal cord disorders. The latter will draw from the strengths of the James Cancer Hospital and Comprehensive Cancer Center. Projected areas of research will include experimental therapeutics for brain tumors as well as the genetics of brain tumor progression in animal models of glioma.

As the department expands, we will expect that recruited faculty will provide research expertise in the areas of epilepsy/functional Neurological Surgery and cerebrovascular disorders. Such expertise could be at the level of basic and/or clinical research. The resources are available for this recruitment.
Clinical Service
In addition to the traditional service efforts of an academic discipline, departments in the COMPH also have a clinical mission and mandate. As the principal health care system for the University community, it is imperative that we have a comprehensive ability to care for the neurosurgical needs of our colleagues, students, staff and their families. These groups added together equal approximately 96,000 covered lives. The clinical activity of the Neurological Surgery Department at OSU will encompass provision of 7 day per week, 24 hour per day, diagnostic and therapeutic care for all areas of brain, spine and peripheral nerve neurosurgical disorders. Such care will be provided in both an elective and an emergent fashion. This care will be provided both as a consulting and admitting service. In view of the rapid explosion of neurosurgical sub-specialization, it is envisioned that neurosurgical faculty will each provide particular expertise and excellence in the following areas:

a) Malignant and benign tumors of the brain, spine and peripheral nerves
b) Spinal disorders (including degenerative, traumatic, and vascular) and spinal instrumentation
c) Cerebrovascular disorders
d) Functional and epilepsy
e) Peripheral nerve trauma and entrapments
f) Trauma and Neuro ICU care

The current full-time faculty at OSU possesses expertise in cerebrovascular disorders (Dr. McGregor and Dr. Chang). Therefore, additional expertise in the other areas will be needed. Immediate recruitment of a Chairman, followed within 6-12 months with recruitment of a spine/trauma specialist and/or tumor specialist and/or functional/epilepsy specialist is expected (dependent on the Chairman's area of expertise).

A weekly or bi-monthly or monthly board to improve and coordinate clinical care will be established, in which participation of the appropriate neurosurgical faculty as well as that of other relevant services will be held in the following areas:

a) CNS and peripheral nerve tumors (Services: Neurological Surgery, Neuro-oncology, Radiation oncology, Neuropathology, Neuroradiology). In addition, if peripheral nerve and spine tumors are being discussed, colleagues in Orthopedic and/or Plastic Surgery would be asked/invited to participate. If skull base tumors are being discussed, ENT would be asked/invited to participate.
c) Cerebrovascular disorders (Services: Neurological Surgery, Neuro-Interventional radiology, Stroke Neurology, Vascular Surgery)
d) Functional/Epilepsy (Services: Neurological Surgery, Neurology).
University Guidelines

Our request for departmental status requires that we address University Guidelines. Following is our response to the University's Guidelines for the consideration of the establishment of an academic department.

1. **The discipline should represent an identifiable body of knowledge and academic concern that is not duplicated in other departments of the Institution.**

Neurological Surgery is viewed as a surgical discipline. Neurological Surgery includes the preservation, investigation, and restoration of the form and function of the brain, spine and peripheral nervous system by surgical, medical and physical methods. While the body of neuro-muscular-skeletal knowledge included in this discipline is frequently described as transcending established department boundaries and parts of this knowledge base are the subject of other medical specialties, Neurological Surgery is the only discipline that encompasses the entire organ system with its disorders and variety of treatments.

Although Neurological Surgery is recognized as having interests and responsibilities that transcend current department barriers, the discipline does utilize surgery as one of its most important modalities of treatment. The neurosurgeon is, therefore, vitally interested in and participates actively in surgical education and research. We believe firmly in the concept that any specialty practicing surgery must have a broad basic background in the discipline of surgery and would anticipate continued close collaboration in the conduct of basic surgical education in the COMPH and the affiliated hospitals.

2. **Potential academic programs at both graduate and undergraduate levels.**

The field of Neurological Surgery has a strong and long history of post-graduate Medical education. This history includes medical students, residents, and fellows. The current status outlined below will be greatly enhanced by a department.

**Medical Student Education:**
Students spending a month with the division of Neurological Surgery rate their experience as very favorable and evaluate the faculty as above average teachers compared to other rotations. As the department continues to grow and the members become more in number, the commitment to education of undergraduate medical students will increase as outlined above.

**Neurological Surgery Residency:**
There are currently 95 Neurological Surgery residency programs in the United States accredited by the American Council on Graduate Medical Education. The Ohio State University has offered resident training continuously since 1952, and currently has 10 residents in its training program.
3. A source of faculty members prepared to offer academic work in the academic area concerned.

The division of Neurological Surgery currently has four full-time board certified Neurosurgeons, Dongwoo John Chang, M.D Assistant Professor of Surgery. John M. McGregor, M.D. Assistant Professor-Clinical of Surgery, Carole A. Miller, M.D.(Faculty Emeritus, Interim Division Chief 6/03 to present), and Michael E. Miner, M.D, Professor of Surgery. Auxiliary Clinical faculty (7) in the division are Thomas J. Hawk, M.D.; Edward J. Kosnick, M.D.; Christopher Madden, M.D.; Gunwant S. Mallik, M.D.; Michael J. Meagher, M.D.; Martin Sayers, M.D.; and David Yashon, M.D. Holding dual faculty appointments with one of them in Neurological Surgery (3) are Bradford T. Stokes, Ph.D.(Faculty Emeritus), James King PhD and Michael S. Beattie, Ph.D who serves as the Chairman of the Neuroscience Department.

A search is underway to identify candidates for the new Chair of Neurological Surgery. The top candidate for chair is a physician scientist. He would be able to recruit three full-time faculty with a major focus on clinical activity and three investigators. This would increase the total number of full-time faculty with primary appointments in Neurological Surgery to 10 excluding emeritus faculty.

A Department of Neurological Surgery will allow us to attract and retain a substantial number of faculty of high caliber, thus enhancing our resident recruitment efforts not just in Neurological Surgery, but many other residency programs as well. The departments of Anesthesiology, Internal Medicine, Neurology, Neuroscience, Pathology, Physical Medicine and Rehabilitation and Radiology all have residency and or fellowship programs where the practice clinical experience will be strengthened and enhanced with a stronger Neurological Surgery presence.

Our current divisional status hampers further expansion and recruitment of faculty. Candidates with excellence in research, clinical expertise, or teaching often believe that the institutional commitment for units at less than department status may not be strong. In a national situation where most units are independent, candidates opt for units perceived as more politically strong.

4. An area of academic concern which offers research and/or public service opportunities in addition to formal classroom teaching and has the potential for developing national or international recognition as an academic discipline.

As a department, Neurological Surgery would enthusiastically engage other departments to develop multidisciplinary approaches to the total care of the patient. Partnering with other centers and departments on research endeavors falls as one of our top priorities. Technology transfer from the research lab, to the corporate partner, and ultimately to the consumer are major goals of research.

Neurological Surgery has a long history as an established and growing academic discipline
nationally and internationally. This is exemplified by: 1) the 63 academic departments of Neurological Surgery at major universities nationally (Appendix I), 2) the 95 postgraduate training programs in the US, 3) the existence of the American Board of Neurological Surgery which is recognized by the American Board of Medical Specialties, 4) the 33 national and international societies dedicated to Neurological Surgery education and research (Appendix II), and 5) the 19 peer-reviewed journals dedicated to Neurological Surgery education and research (Appendix III).

5. An area of academic concern which either has or is in the process of developing a student clientele either for the purpose of major programs or as an important “service” discipline to other major programs.

Neurological Surgery is a clinical program not involved in the undergraduate program and does not use the traditional quarter credit hour system. There is a strong professional and post-professional academic program involving medical student (4th year DOC 5 students) and resident education (10 resident per year with 80 work week requirements). The service component of the residency program is essential for the successful clinical care program of the university medical center.

6. The ability to assume primary fiscal responsibility

The budget for the division of Neurological Surgery for each of the last four years has been between $2.5 and $3.7 M which has been fully supported by its clinical income. Expansion of clinical and research activities will result in an immediate doubling of this budget with project growth over the next 5 years. The ability to directly manage departmental personnel and non-personnel expenses and income is essential for the success of the department.

Funding for the department will come from the Dardinger account which was created as a part of a medical liability settlement. Of the $14 million awarded, two Chairs were created for $1.5 million each. One of the Chairs is in Neurological Surgery with a focus on Neuro-oncology. In addition, these funds will be used to develop Neuro-oncology which is not only our responsibility, but an opportunity to recruit top level candidates. Recruitment at this level is impossible without department status. Additional funding lines currently in Neurological Surgery are endowment accounts such as: William E. Hunt & Charlotte Curtis Hunt Professorship Fund in Neurosurgery; William E. Hunt, M.D. Lectureship Fund in Neurosurgery; John Meagher, M.D. Lectureship Fund in Neurosurgery; Lawrence J. Mervis, M.D. Endowed Fund in Neurosurgery; Mary Ann Miner Memorial Fund, LeFever – Neurological Surgery Fund; and the Neurological Surgery Research Fund. From a development campaign standpoint, status as a department of Neurological Surgery will significantly enhance our efforts.
Conclusion

The creation of a Department of Neurological Surgery will provide a platform to recruit a visionary leader in academic Neurological Surgery, and a group of high caliber researchers, teachers and physician-scientists. The resources are in place to launch this academic department which will foster the goals of academic excellence in the COMPH and throughout the University. Establishment of an academic department of Neurological Surgery will have a profound impact on the quality of research, teaching and clinical care. We are certain that the establishment of Neurological Surgery as a department can and will be an integral component in the strategic goals of The Ohio State University College of Medicine and Public Health and Academic Medical Center.
### Appendix I – USA Medical Colleges with Neurological Surgery Departments

<table>
<thead>
<tr>
<th>Medical School</th>
<th>Location</th>
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<tbody>
<tr>
<td>Harvard Medical School (1) *</td>
<td>Mt. Sinai School of Medicine</td>
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<tr>
<td>Johns Hopkins Univ. School of Medicine (2) *</td>
<td>New York Univ. School of Medicine</td>
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<tr>
<td>Washington Univ. School of Medicine (3) *</td>
<td>Oregon Health &amp; Science Univ. School of Medicine</td>
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<tr>
<td>Univ. Pennsylvania School of Medicine (5) *</td>
<td>Penn. State College of Medicine-Hershey</td>
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<tr>
<td>Univ. California-San Francisco (6) *</td>
<td>South Carolina College of Medicine</td>
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<tr>
<td>Columbia Univ. College of Physicians and Surgeons (7)</td>
<td>SUNY Upstate Medical Univ. College of Medicine</td>
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<tr>
<td>Stanford Univ. (8)</td>
<td>Temple Univ. Medical School</td>
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<tr>
<td>Univ. Michigan Medical School (9)</td>
<td>Thomas Jefferson Univ. Jefferson Medical School</td>
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<tr>
<td>Yale Univ. School of Medicine (10)</td>
<td>Tufts Univ. –New England Medical Center Hospitals</td>
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<tr>
<td>Univ. Washington School of Medicine (11)</td>
<td>Tulane Univ. School of Medicine</td>
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<tr>
<td>Baylor College of Medicine (12)</td>
<td>UMDNJ-New Jersey Medical School</td>
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<tr>
<td>Cornell Univ. Medical School (13)</td>
<td>Univ. California-Davis</td>
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<tr>
<td>Vanderbilt Univ. School of Medicine (15)</td>
<td>Univ. Cincinnati College of Medicine</td>
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<tr>
<td>Univ. Texas Southwestern Medical School-Dallas (17)</td>
<td>Univ. Colorado School of Medicine</td>
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<tr>
<td>Univ. Pittsburgh School of Medicine (18)</td>
<td>Univ. Illinois College of Medicine-Peoria</td>
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<tr>
<td>Emory Univ. School of Medicine (19)</td>
<td>Univ. Iowa</td>
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<tr>
<td>Mayo Medical School (20) *</td>
<td>Univ. Louisville School of Medicine</td>
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<tr>
<td>Northwestern Univ. Medical School (21)</td>
<td>Univ. Maryland Medical School</td>
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<td>Case Western Reserve School of Medicine (24)</td>
<td>Univ. Miami School of Medicine</td>
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<tr>
<td>Univ. Florida College of Medicine *</td>
<td>Univ. Minnesota Medical School</td>
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<td>Univ. Texas at Houston Medical School *</td>
<td>Univ. Mississippi School of Medicine</td>
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<td>Univ. Virginia School of Medicine *</td>
<td>Univ. Oklahoma College of Medicine</td>
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<tr>
<td>Albert Einstein College of Medicine</td>
<td>Univ. Rochester School of Medicine and Dentistry</td>
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<tr>
<td>Boston Univ. School of Medicine</td>
<td>Univ. South Florida College of Medicine</td>
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<tr>
<td>Brown Univ. Medical School</td>
<td>Univ. Tennessee College of Medicine</td>
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<tr>
<td>Charles R. Drew College of Medicine-Los Angeles</td>
<td>Univ. Utah School of Medicine</td>
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<tr>
<td>George Washington Univ. School of Medicine</td>
<td>Univ. Wisconsin Medical School</td>
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<td>Georgetown Univ. School of Medicine</td>
<td>Univ. Southern California School of Medicine</td>
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<td>Louisiana State Univ. School of Medicine-New Orleans</td>
<td>Virginia Commonwealth Univ. School of Medicine-Medical College of Virginia</td>
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<tr>
<td>Louisiana State Univ. School of Medicine-Shreveport</td>
<td>Wake Forest Univ. School of Medicine</td>
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<tr>
<td>Medical College of Georgia</td>
<td>West Virginia Univ. School of Medicine</td>
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<td>Medical College of Wisconsin</td>
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* Rank in Top 50 Medical Schools list in United States by US News & World Reports


Shaded cells are Big 10 Conference Schools
Appendix II – Neurosurgical Associations and Societies

**United States of America:**
- American Academy of Neurological Surgery
- American Association of Neurological Surgeons (AANS)
- American Board of Neurological Surgeons
- California Association of Neurological Surgeons
- Congress of Neurological Surgeons
- National Neurotrauma Society
- Neurosurgical Society of America
- Society of Neurological Surgeons
- Society of Neurosurgical Anesthesia and Critical Care

**International:**
- Argentinian Association of Neurosurgery (Asociación Argentina de Neurocirugía)
- Austrian Society of Neurosurgery (Österreichische Gesellschaft für Neurochirurgie)
- Belgian Society of Neurosurgery (Société Belge de Neurochirurgie; Belgische Wetenschappelijke Vereniging voor Neurochirurgie)
- Brazilian Society of Neurosurgery (Sociedade Brasileira de Neurocirurgia)
- Canadian Neurosurgical Society
- Chilean Society of Neurology, Psychiatry and Neurosurgery (Sociedad de Neurología, Psiquiatría y Neurocirugía de Chile)
- Colombian Association of Neurosurgery (Asociación Colombiana de Neurocirugía)
- Croatian Neurosurgical Society
- The Danish Neurosurgical Society (Dansk Neurokirurgisk Selkab)
- German Society of Neurosurgery (Deutschen Gesellschaft für Neurochirurgie)
- Hong Kong Society of Neurosurgery
- Hungarian Neurosurgical Society
- International Society for Pediatric Neurosurgery
- Italian Society of Neurosurgery (Società Italiana di Neurochirurgia)
- Netherlands Society of Neurosurgery (Nederlandse Vereniging van Neurochirurgen)
- Neurosurgery International
- Neurosurgical Society of Australasia
- Portuguese Society of Neurosurgery (Sociedade Portuguesa de Neurocirurgia)
- Romanian Society of Neurosurgery (Societatile Romane de Neurochirurgie)
- Spanish Society of Neurosurgery (Sociedad Española de Neurocirugía)
- Turkish Neurosurgical Society
- World Federation of Neurosurgical Societies (www.wfns.org)
Appendix III – Journals of Neurological Surgery

Neurosurgery
Journal of Neurosurgery
Clinical Neurosurgery
Surgical Neurosurgery
Critical Reviews of Neurosurgery
Yearbook of Neurology and Neurosurgery
Journal of Clinical Neurophysiology
Journal of Spinal Disorders
The Spine Journal
Spine
Spinal Cord
Stereotatic and Functional Neurosurgery
Paraplegia
Pain
Microsurgery
Journal of Neurotrauma
AJNR
British Journal of Neurosurgery
Cerebrovascular Diseases
Memorandum

To: University Senate

From: David L. Stetson, Chair,
      Council on Academic Affairs

Date: October 29, 2003

PROPOSAL FROM THE COUNCIL ON ACADEMIC AFFAIRS TO ESTABLISH
THE MATHEMATICAL BIOSCIENCES INSTITUTE

WHEREAS mathematical modeling of biological processes is becoming increasingly
relevant; and

WHEREAS the Institute will serve as a catalyst for interaction between mathematics
and the biosciences; will involve mathematical scientists and bioscientists
in the solution of fundamental problems in the biosciences; and will
nurture a community of scholars through education and support of
students and researchers in mathematical bioscience; and

WHEREAS the Institute will create a national forum for mathematical bioscience at
The Ohio State University; and

WHEREAS the proposal adheres to the guidelines for the establishment of centers and
institutes and is supported through a grant from the National Science
Foundation; and

WHEREAS the proposal was approved by the University Research Committee, the
Research and Graduate Council, and by the reviewing subcommittee and
then the full Council on Academic Affairs on October 1, 2003.

NOW THEREFORE BE IT RESOLVED that the University Senate approve the proposal
to establish the Mathematical Biosciences Institute, and respectfully request concurrence
from the Board of Trustees.
Avner and Peter:

I am pleased to inform you that the proposal for a Mathematical Biosciences Institute was approved unanimously by the Council on Academic Affairs at its meeting on October 1, 2003. Thank you for attending the meeting and responding to questions and comments.

This proposal will now be sent to the University Senate for action at its meeting on November 13, 2003. I ask that one or both of you attend that meeting. Professor David Stetson, Chair of the Council, will present the proposal, but if questions/comments arise, it is important for you to be in attendance to respond.

Please note that this message represents my formal communication with you about this proposal. You will not receive a separate letter from me. In that regard, please copy this message for your file(s) on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions about this action, please contact me or Professor Stetson (stetson.1@osu.edu).

Congratulations on the successful completion of this important stage of the review process.

Randy

W. Randy Smith
Vice Provost for Curriculum and Institutional Relations
Office of Academic Affairs
203 Bricker Hall
190 North Oval Mall
614-292-5881
To: Council on Academic Affairs  
From: Subcommittee C: Boruch, Daniels (chair), Jackson, Meyer, Randall  
Re: Proposed Mathematical Biosciences Institute  
Date: 31 January 2003

The Mathematical Biosciences Institute (MBI) will serve as a catalyst for interaction between mathematics and the biosciences. In an era where mathematical modelling of biological processes is becoming increasingly relevant, the opportunities for interdisciplinary collaboration are numerous. The mission of the MBI is given as

1. To develop mathematical theories, statistical methods, and computational algorithms for the solution of fundamental problems in the biosciences;
2. To involve mathematical scientists and bioscientists in the solution of these problems; and
3. To nurture a community of scholars through education and support of students and researchers in mathematical bioscience.

The subcommittee met with Professors Peter March and Avner Friedman on 30 October 2002 to discuss the proposal. At that time, we noted that the Faculty Rule on centers requires the existence of a local oversight committee. The proponents revised the proposal accordingly, and Subcommittee C now recommends the approval of the proposal.

We note:

- The governance structure of the proposed center is sound and includes faculty oversight as well as external oversight.
- The center’s initial funding (a $10M NSF grant) is solid, and there are no space issues.
- The proposal includes a comprehensive set of quantitative, qualitative, and indirect evaluation metrics.
- Letters in support of the proposal have been received from all relevant university units, as well as several external agencies.
MEMORANDUM

To: W. Randy Smith, Vice Provost for Curriculum and Institutional Relations
   Office of Academic Affairs

From: Gerald S. Frankel
       Professor of Materials Science and Engineering
       Director, Fontana Corrosion Center
       Chairman, University Research Committee

Subject: Mathematical Biosciences Institute

The proposal for the creation of the Mathematical Biosciences Institute (MBI) was discussed at the May 28, 2003 meeting of the University Research Committee (URC). Professor Peter March from the Department of Mathematics gave a short presentation about the Institute and then addressed the questions and concerns of the committee members. This memo describes the opinions of the URC.

The director and other PIs are to be congratulated on their success in setting up and getting funding for such an exciting program. In many ways, the MBI sets a standard for interdisciplinary research. Many invaluable points of connection certainly will be established between the two disciplines as a result of the MBI.

The role of the URC in the process to establish a center is to evaluate the research aspects of the proposal. The structure of the MBI was developed based on guidelines established by NSF for Mathematical Institutes. Apparently the NSF model focuses on post-doc training, to the exclusion of graduate students. The URC finds it regrettable that none of the funds, even those from OSU, have been set aside to support graduate students. There is no doubt that graduate students would benefit from involvement in the exciting research that has been initiated and will continue in the MBI.

The URC urges the director and associate directors to consider the MBI to be more than just the NSF-funded grant. As the program is leveraged into other sponsored research projects, PIs should be encouraged to include graduate student support. Other projects that develop from MBI interactions can legitimately be considered to be part of the MBI. This will become important in generating support to sustain the operation of the Institute, as discussed below. It should be a priority of the Institute and its leaders to involve both undergraduate and graduate students in
research opportunities. It is exactly those students who will eventually obviate the need for this Institute, by becoming the founding members of a new discipline.

The URC is encouraged by the model for recovery of indirect charges that was described by Professor March. We have expressed in the past our concern regarding the mechanism for support of interdisciplinary centers in the new budgetary process. It is our hope that the deans of the various colleges participating in the MBI and other interdisciplinary centers will realize that they need to adopt such models to ensure the livelihood of these critical activities.

In conclusion, the URC expects that the Mathematical Biosciences Institute will become internationally recognized as a leading interdisciplinary activity, and will develop models that will eventually shape research in the biosciences and our lives.

cc: University Research Committee
Professor Avner Friedman
Professor Peter March
Professor Dennis Pearl
Professor Andrej Rotter
Professor Douglas Wolfe
PROPOSAL FOR ESTABLISHMENT OF AN INSTITUTE FOR
MATHEMATICAL BIOSCIENCES AT THE OHIO STATE UNIVERSITY

SUBMITTED TO THE COUNCIL ON ACADEMIC AFFAIRS

AVNER FRIEDMAN, PETER MARCH, DENNIS PEARL, DAVID TERMAN,
AND DOUGLAS WOLFE
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PROPOSAL FOR ESTABLISHMENT OF AN INSTITUTE FOR 
MATHEMATICAL BIOSCIENCES AT THE OHIO STATE UNIVERSITY 
AVNER FRIEDMAN, PETER MARCH, DENNIS PEARL, DAVID TERNER, 
AND DOUGLAS WOLFE

I. PROCEDURES
A. Submit proposals to establish academic centers to the Council on Aca-
demic Affairs. The chair of CAA and the provost's designee will deter-
mine that proposals are complete and ready for formal consideration.
B. If the proposed center has a research and/or graduate education com-
ponent, the proposal will be sent to the Council on Research and 
Graduate Studies for comment. The university research committee will 
study the relevant issues and will present them to CRGS. Opportunity 
will be provided to revise the proposal to address comments received 
from CRGS and/or URC.
C. CAA deliberation begins at this point. CAA is the first step in the ap-
proval process; CAA recommends to the Senate, which recommends to 
the Board of Trustees, which is empowered to establish academic 
centers.

II. RATIONALE
A. Describe the specific goals and purposes of the center. Explain how the 
University will benefit from the center and which missions of the Univ-
erity (teaching, research, service) will be served, and in approximately 
what proportions.
B. Why is a center necessary? Explain why the goals of the proposed cen-
ter cannot be met within existing academic units. Describe the inter-
disciplinary nature of the center.

The proposal to establish the Mathematical Biosciences Institute (MBI) is a multi-
disciplinary initiative that has developed over the course of several years of collaboration 
and discussion to facilitate interaction between the mathematical sciences (which includes 
mathematics, statistics, and computations) and the biosciences (which includes the 
biological sciences, medical sciences, and environmental sciences which relate to the living 
world). The proposed institute will be devoted to the mathematical biosciences, which 
includes all areas of research in bioscience where participation of the mathematical 
sciences is expected to lead to important progress.

Recent years have witnessed unprecedented progress in the biosciences. Society is eager 
to see basic research quickly translated into longer and better quality of life through 
deeper understanding of disease mechanisms and better medical treatment. Accordingly, 
many topics from bioscience have been given high priority on the national agenda. Behind 
the headlines lie astonishing advances in basic science and technology. These technologies
have rapidly generated massive sets of loosely structured data and enabled researchers to elucidate basic biomedical mechanisms and pathways. This explosion of experimental results has challenged researchers' abilities to synthesize the data and draw knowledge from them. In response to this challenge, physical, statistical, and mathematical models have been developed which provide quantitative descriptions of important biological and medical processes.

There is now an enormous compilation of data in the biosciences which must be organized and analyzed appropriately via mathematical and statistical modeling. Historically, there have been two approaches to modeling. The first is a comprehensive approach which incorporated most of the known details in a huge coupled system of equations. The second is the phenomenological approach in which the simplest of mathematical caricatures is set down. In the first case, the advantage of completeness is offset by the intractability of the model and the inability to accurately stipulate or estimate the model's many parameters. In the second case, the advantage of analytical tractability is offset by its weaker correspondence with reality. We seek to bridge the comprehensive and phenomenological approaches by reduction of the model, keeping crucial ingredients of the system and neglecting others, based on a thorough understanding of the biology. The success of this strategy depends crucially upon computation and comparison with experiment; specifically, how well the model explains existing data, suggests new experiments, and predicts outcomes.

Thus, the emergence of models, and the existence of large data sets that require quantitative analysis, coupled with strong public support for accelerated progress in the biosciences, presents a great opportunity for the mathematical sciences. But to successfully exploit this opportunity, a number of challenges must first be met.

→ Need to learn the scientist's language: In order to contribute to the solution of problems in the biosciences, mathematicians and statisticians must first learn some science. In particular, they must learn the bioscientist's language before they can understand the problems clearly enough to bring the power of the mathematical sciences to bear. The continuing rapid pace of research in the biosciences precludes most active biomedical researchers from devoting substantial effort to learning additional mathematics. Thus, the nature of the enterprise requires that work be carried out in highly interdisciplinary teams working across the boundaries of mathematics and science.

→ Need to develop new mathematical/statistical models and techniques: While we can expect that established methods in mathematical science will be of immediate use, the quantitative analysis of fundamental problems in bioscience will undoubtedly require new ideas and new techniques. Similar observations apply to diverse research areas across the
biosciences ranging from the study of basic structures in the brain to the expression regulation, and control of genes. Modeling these systems in ways which are scientifically relevant yet amenable to analysis will require skillful approximations and new techniques.

→ Need to increase the community's size: There already exist several mathematical bioscience research groups in departments of mathematics, statistics, and biology as well as biostatistics centers and medical research facilities around the country. In addition, individual topics from mathematical bioscience have been featured in the programs of some of the existing mathematical institutes in the United States. Nevertheless, the current size of the mathematical bioscience community is relatively small compared to the demands of bioscience. Therefore, there is a need to encourage an influx of mathematicians and statisticians into mathematical bioscience and to nurture a new generation of researchers more systematically than before.

These challenges, and the opportunity offered by increased interaction with the biosciences, call for a significantly stronger and more coordinated response by the mathematical science community than has previously occurred. The leadership of a national institute devoted to mathematical biosciences is needed to respond successfully to these challenges. The Ohio State University, as world-class institution in education and research with programs in mathematics, statistics, biological and physical sciences, medicine, and environmental studies, has the resources to accomplish this multidisciplinary challenge. The MBI will create a national forum at OSU for mathematical bioscience which can reinforce and nurture existing research efforts and catalyze growth in this important emerging area by conducting vigorous programs of research and education. The mission of the MBI includes the following elements: (a) to develop mathematical theories, statistical methods, and computational algorithms for the solution of fundamental problems in the biosciences; (b) to involve mathematical scientists and bioscientists in the solution of these problems; and (c) to nurture a community of scholars through education and support of students and researchers in mathematical bioscience. To actively promote this mission and to achieve these goals, the MBI will establish emphasis year programs, current topic workshops, educational programs, and sponsored research programs (see Appendix A).

Furthermore, such increased interaction with the biosciences, catalyzed by the MBI, will bring clear benefits to the wider mathematical science community and put The Ohio State University in the national and international forefront. By undertaking to work on pressing scientific problems, mathematical scientists forge, in the short term, connections to scientific communities which are at least an order of magnitude larger in terms of people and resources. In doing so, they participate in a scientific enterprise addressing concerns which have high priority on the national agenda. In the longer term, new problems, new ideas, and new intuitions will flow back to mathematical science to stimulate research.
This has been the pattern in the relationship between mathematical and physical sciences over the last century. We strongly believe a similar, mutually beneficial pattern will become firmly established between mathematical and biological sciences in the new century.

III. MEMBERSHIP/INVOLVEMENT

A. What will be the roles of faculty, staff, and students in the center? How will graduate students (if any) be supported?

Faculty will fulfill a number of roles in the center, including administrative, governance, mentoring, and teaching functions.

Staff will serve in administrative, clerical, and accounting support; in tasks requiring technical writing; and in system administration and web maintenance. The specific positions include: one full-time Program Manager (currently filled by Kimberly Holle, MS, LSW, CCDC-I); one full-time Office Associate (currently in the process of soliciting applications); one full-time Program Assistant to the Program Manager (currently filled by Matthew Thompson, BS); one full-time System Administrator (currently filled by Christopher Cenoby, BS); and one full-time Program Assistant who will do technical writing and web maintenance (currently filled by Stella Cornett, BA).

Graduate students will participate as postdoctoral fellows, and will either be fully funded by the MBI or will have split funding by the MBI and a company, institute, or bioscience department (who will get 50 percent time effort of the postdoc in return).

B. What are the criteria for selecting the center’s charter faculty and staff?

List and append (in Appendix B) short CVs (emphasizing center-related activities) for faculty expressing an interest in associating with the center. Indicate the percentage of time each charter member will devote to the center. Chairpersons of faculty planning to participate in the proposed center should approve of faculty involvement in writing.

Avner Friedman, Ph.D. - Principal Investigator and Institute Director (full-time). Professor Friedman’s duties include:

- In consultation with the Local Scientific Advisory Committee and the Board of Governors, to assemble each year a group of organizers and work with them to develop an emphasis year proposal to be presented to the Board.
- Continue working with the organizers to identify long-term senior visitors and workshop organizers and to work with the workshop organizers, and send the letters of invitation to all participants.
- Forming a committee each year consisting of members of the organizing committee and the Directors, to select the postdoctoral fellows.
- Visiting industry to solicit ideas, develop relations and Corporate Membership, and seek support for sponsored postdoctoral fellows and workshops.
- Seeking support from government agencies (other than NSF/DMS), write proposals, solicit funds from private foundations.
- Visiting departments of mathematical sciences and biomedical sciences around the country to develop the Institutional Partners Program.
- Negotiating with the home institutions of the long-term senior visitors to arrange for: the MBI to pay only for their replacement teaching, while the senior visitors continue to receive salary and benefits from his/her institution.
- Supervising the educational programs, the public outreach, the publications (newsletters and proceeding volumes), annual report, and oversee the general management of the Institute.
- Reporting regularly to the NSF regarding the budget and all MBI operations.

Dennis Pearl, Ph.D. - Co-Principal Investigator and Associate Director. Professor Pearl's duties include:
- Supervising the summer education program.
- Arranging for the mentors for the postdoctoral fellows.
- Providing scientific advice to the Director and helping to strengthen contacts with the biostatistics community.
- Joining the Director on visits to industry.
- Substituting for the Director during MBI activities when the Director is out of town.
- Participating in meetings with the Board of Governors and with the Local Scientific Advisory Committee.
- Supervising the evaluation process.

Andrey Ritter, Ph.D. - Associate Director. Professor Ritter's duties include:
- Providing scientific advice to the Director and helping to strengthen contacts with the bioscience community.
- Providing advice to the Director on the Current Topics workshops.
- Supervising the bioscientists postdoctoral mentoring.
- Joining the Director on visits to industry.
- Participating in meetings with the Board of Governors and with the Local Scientific Advisory Committee.

David Terman, Ph.D. - Co-Principal Investigator. Professor Terman's duties include:
- Helping in proposal development for the emphasis year programs.
- Providing scientific advice to the Director.
- Mentoring MBI postdoctoral fellows.
- Helping to strengthen contacts with experimentalists in the bioscience departments at The Ohio State University.

Peter March, Ph.D. - Co-Principal Investigator and Chair of the Department of Mathematics at The Ohio State University. Professor March's duties include:
- Meeting regularly with the Director and Associate Directors to coordinate, increase, and strengthen the support and participation of the Department of Mathematics in the activities of the MBI.
- Helping to coordinate, increase, and strengthen the support of the MBI by the University administration and the biosciences departments.
- Selecting appropriate faculty to receive release time to participate in MBI activities.

Douglas Wolfe, Ph.D. - Co-Principal Investigator and Chair of the Department of Statistics at The Ohio State University. Professor Wolfe's duties include:
- Meeting regularly with the Director and Associate Directors to coordinate, increase, and strengthen the support and participation of the Department of Statistics in the activities of the MBI.
- Helping to coordinate, increase, and strengthen the support of the MBI by the University administration and the biosciences departments.
- Selecting appropriate faculty to receive release time to participate in MBI activities.

C. Who will be the interim center director and what criteria led to that choice?
If the interim director will not become the permanent director, what criteria will be used to select the permanent director? If a permanent director has been identified, describe his or her qualifications. Append CVs for the interim and/or permanent director.

Avner Friedman, Ph.D., will serve as the interim and the permanent director of the MBI. Professor Friedman developed and served as the director for the Institute for Mathematics and its Applications at the University of Minnesota from 1987 - 1997, one of the nation's innovative department-based centers for mathematical biosciences. Professor Friedman has the practical experience required to fulfill the following duties as Director of the MBI: leadership and promotion of the Institute's mission and goals, continuous consultation with the mathematical science and bioscience communities, scientific program development, resources development, and liaison with industry. Please see Appendix C for Professor Friedman's complete vita.
IV. Administration

A. Propose a pattern of administration for the center. Organizational charts may be helpful.

External Oversight Committee: Board of Governors - The Board of Governors is responsible for both the scientific programs and the management of the Institute and is comprised of a broad representation of professionals from the mathematical sciences and biosciences who will serve for 3-year terms. Their scientific programming responsibilities include suggesting emphasis year programs and current topic workshops, helping the Director in identifying organizers, providing guidance during proposal development, and approving emphasis year proposals. Their management responsibilities include oversight of the MBI budget, oversight of resource development, and assessment of all MBI operations (including the performance of the Director and the Associate Directors).
- Dr. Bradley Efron - Professor of Statistics, Stanford University
- Dr. Bernadine Healy - President and CEO, American Red Cross
- Dr. Gregory A. Mack - Environmental Monitoring, Characterization & Assessment, Battelle Memorial Institute
- Dr. Sharon Nunes - IBM Computational Biology Center
- Dr. Alan Perelson - Head, Theoretical Biology and Biophysics Group, Los Alamos National Laboratory
- Dr. Ross Prentice - Head, Fred Hutchinson Cancer Research Center
- Dr. Michael Reed - Professor of Mathematics, Duke University
- Dr. John Rinzel - Professor of Neural Science and Mathematics, Courant Institute at New York University
- Dr. Stephen Ruberg - Director, Clinical Data Technology and Services, Eli Lilly and Company
- Dr. John D. Taulbee - Director, Epidemiology & Biometrics Division, The Proctor & Gamble Company
- Dr. John Tyson - Professor of Biology, Virginia Polytechnic Institute
- Dr. Michael S. Waterman - Professor of Mathematics, Biological Sciences and Computer Science at University of Southern California

Internal Oversight Committee - This committee will meet regularly with the Director, as it deems appropriate, to oversee the scientific and management activities of the MBI.
- Professor Peter March, Chair - Department of Mathematics
- Professor Douglas A. Wolfe, Chair - Department of Statistics
- Professor Brian H. Smith - Department of Entomology

Director: The Director reports to the Board of Governors and will provide them with an annual report on the scientific programs, management, and fiscal affairs of the MBI. The
Director will also provide the Board of Governors with the proposals for the emphasis year programs and proposed ideas for future programs (including current topic workshops). The Director provides the scientific leadership for the MBI, promotes the institution’s mission and goals, and is responsible for the overall management and resource development of the institute.

- Avner Friedman, Ph.D.

**Associate Directors** - The two Associate Directors report to the Director and the Board of Governors. They will provide scientific advice and support to the Director, coordinate the summer education and outreach programs, coordinate the mathematical scientists and bioscientists as mentors, coordinate the evaluation process, and visit bioscience laboratories in the public and private sectors in order to initiate and nurture interactions with the institute.

- Dennis Pearl, Ph.D.
- Andrey Rotter, Ph.D.

**Local Scientific Advisory Committee** - The LSAC reports to the Director and the Associate Directors. It consists of distinguished members of OSU faculty mostly from the biosciences. It helps the Director and the Associate Directors in networking and liaison with the local bioscience community and the bioscience community at large; in identifying local mentors; and in identifying local lab experience for postdocs and other MBI visitors.

- Dr. Jessie Au - Pharmacology
- Dr. Michael Beattie - Neuroscience
- Dr. Albert de la Chapelle - Human Cancer Genetics
- Dr. Mauro Ferrari - Biomedical Engineering Center
- Dr. Martin Feinberg - Chemical Engineering
- Dr. Paul Fuerst - Evolution, Ecology, and Organismal Biology
- Dr. Fernand Hayot - Physics
- Dr. Charles R. Hille - Molecular and Cellular Biochemistry
- Dr. Lee Johnson - Molecular Genetics
- Dr. Stanley Lemeshow - Biostatistics
- Dr. Charles Orosz - Surgery
- Dr. Dennis Pearl - Statistics
- Dr. John Reeves - Microbiology
- Dr. Andrey Rotter - Pharmacology
- Dr. David Terman - Mathematics
- Dr. Wolfgang Sadee - Pharmacology
- Dr. Joel Saltz - Biomedical Informatics
- Dr. Deliang Wang - Computer and Information Science
Emphasis Year Organizing Committee - This committee reports to the Director. It consists of approximately six mathematical scientists and bioscientists who work with the Director to develop emphasis year proposals. This committee also works with the Director to appoint members to the Emphasis Year External Scientific Advisory Committee.

2002-2003
- Dr. Catherine Carr - University of Maryland
- Dr. Bard Ermentrout - University of Pittsburgh
- Dr. John Miller - Montana State University
- Dr. John Rinzel - Courant Institute and Center for Neural Science at New York University
- Dr. David Tann - Lucent Technology
- Dr. David Terman - Department of Mathematics, The Ohio State University

2003-2004 (proposed)
- Dr. Jessie Au - Pharmacology, The Ohio State University
- Dr. Marek Kimmel - Rice University
- Dr. Denise Kirschner, University of Michigan
- Dr. James Sneyd - Massey University
- Dr. John Tyson - Virginia Polytechnic Institute

Emphasis Year External Scientific Advisory Committee - This committee reports to the Director. It includes a broad range of scientists, particularly experimentalists, who will provide input and suggestions for the evolving emphasis year proposals to ensure breadth and relevance and who will help motivate the participation of life scientists in the emphasis year activities. The composition of this committee will change annually; members are appointed by the Director in consultation with the Emphasis Year Organizing Committee.

2002-2003
- Dr. Emery N. Brown - Anesthesia & CC, Massachusetts General Hospital
- Dr. Barry W. Conners - Professor of BioMed Neuroscience, Brown University
- Dr. David Kleinfield - Professor of Physics, University of California at San Diego
- Dr. Nancy Kopell - Professor of Mathematics, Boston University
- Dr. Gilles Laurent - Professor of Biology, CalTech
- Dr. Steve Lisberger - Professor of Physiology, University of California at San Diego
- Dr. Miguel Nicolelis - Professor of Neurobiology, Duke University
- Dr. Robert Shapley - Center for Neural Science, New York University
- Dr. Shibab A. Shermans - Electrical Engineering, University of Maryland
- Dr. Jeff Smith - Laboratory of Neural Control, National Institutes of Health
- Dr. Jonathan Victor - Department of Neurology & Neuroscience, Cornell University
- Dr. Charles Wilson - Professor of Biology, University of Texas at San Antonio
2003-2004 (proposed)
- Dr. James Breach - Princeton University
- Dr. John Chan - Albert Einstein
- Dr. Fred Cross - Rockefeller University
- Dr. Zbigniew Darzynkiewicz - New York Medical College
- Dr. Victor Di Rita - University of Michigan
- Dr. Gordon Fain - University of California at Los Angeles
- Dr. JoAnne Flynn - University of Pittsburgh
- Dr. Albert Goldbeter - Belgium
- Dr. Daniel Kashland - University at California at Berkeley
- Dr. Michael Sanderson - University of Massachusetts
- Dr. Elias F. Stanley - National Institutes of Health
- Dr. Daniel Trachten - New York University
- Dr. John Weinstein - NCI

B. Describe the proposed responsibilities of the center director.

Avner Friedman, Ph.D. - Principal Investigator and Institute Director (full-time). Professor Friedman's duties include:
- In consultation with the Local Scientific Advisory Committee and the Board of Governors, to assemble each year a group of organizers and work with them to develop an emphasis year proposal to be presented to the Board.
- Continue working with the organizers to identify long-term senior visitors and workshop organizers and to work with the workshop organizers, and send the letters of invitation to all participants.
- Forming a committee each year consisting of members of the organizing committee and the Directors, to select the postdoctoral fellows.
- Visiting industry to solicit ideas, develop relations and Corporate Memberships, and seek support for sponsored postdoctoral fellows and workshops.
- Seeking support from government agencies (other than NSF/DMS), write proposals, solicit funds from private foundations.
- Visiting departments of mathematical sciences and biomedical sciences around the country to develop the Institutional Partners program.
- Negotiating with the home institutions of the long-term senior visitors to arrange for the MBI to pay only for their replacement teaching, while the senior visitors continue to receive salary and benefits from his/her institution.
- Supervising the educational programs, the public outreach, the publications (newsletters and proceeding volumes), annual report, and oversee the general management of the Institute.
- Reporting regularly to the NSF regarding the budget and all MBI operations.
C. Suggest a composition and function of the Oversight Committee. (D)

External Oversight Committee: Board of Governors - The Board of Governors is responsible for both the scientific programs and the management of the Institute and is comprised of a broad representation of professionals from the mathematical sciences and biosciences who will serve for 3-year terms. Their scientific programming responsibilities include suggesting emphasis year programs and current topic workshops, helping the Director in identifying organizers, providing guidance during proposal development, and approving emphasis year proposals. Their management responsibilities include oversight of the MBI budget, oversight of resource development, and assessment of all MBI operations (including the performance of the Director and the Associate Directors).

- Dr. Bradley Efron - Professor of Statistics, Stanford University
- Dr. Bernadine Healy - President and CEO, American Red Cross
- Dr. Gregory A. Mack - Environmental Monitoring, Characterization & Assessment, Battelle Memorial Institute
- Dr. Sharon Nunes - IBM Computational Biology Center
- Dr. Alan Perelson - Head, Theoretical Biology and Biophysics Group, Los Alamos National Laboratory
- Dr. Ross Prentice - Head, Fred Hutchinson Cancer Research Center
- Dr. Michael Reed - Professor of Mathematics, Duke University
- Dr. John Rinzel - Professor of Neural Science and Mathematics, Courant Institute at New York University
- Dr. Stephen Ruberg - Director, Clinical Data Technology and Services, Eli Lilly and Company
- Dr. John D. Taulbee - Director, Epidemiology & Biometrics Division, The Proctor & Gamble Company
- Dr. John Tyson - Professor of Biology, Virginia Polytechnic Institute
- Dr. Michael S. Waterman - Professor of Mathematics, Biological Sciences and Computer Science at University of Southern California

Internal Oversight Committee - This committee will meet regularly with the Director, as it deems appropriate, to oversee the scientific and management activities of the MBI.

- Professor Peter March, Chair - Department of Mathematics
- Professor Douglas A. Wolfe, Chair - Department of Statistics
- Professor Brian H. Smith - Department of Entomology

D. Suggest and justify a "reporting line." To which dean, group of deans, or vice president should the center director report? (C, 6)

The MBI Director will report to the Vice President for Research, C. Bradley Moore.
V. INITIAL BUDGET AND FUNDING SOURCES

A. What is the projected timetable for establishing the center?

The MBI is scheduled to open and be fully operational in Autumn Quarter, 2002. Currently, staff are being hired. The Program Manager, two Program Assistants, and one Systems Manager positions have been filled and applications are being solicited for the Office Associate position. Seven postdoctoral fellowships (5 regular and 2 sponsored postdocs) have been offered and accepted; their contracts begin in August, 2002.

B. Itemize the expected budget for the first year of operation. Identify funding sources, and one-time and recurring costs. What existing or new equipment, space, and facilities are needed to launch the center? Where will the center be housed?

Please see Appendix D for: (a) an separate itemized budget for each of the first five years of operation for the MBI; (b) a summary budget reflecting the initial five years of operation for the MBI; and (c) a spreadsheet detailing the total amount of external and internal funding generated to date by the MBI.

The MBI is currently being given office space on the 4th floor of the Math Tower. Renovation of the second floor of the Math Building and part of the 2nd floor of Cocks Hill is currently underway for completion by the end of July, 2002. All functions of the MBI will be housed in that renovated area for at least 4-5 years. Please see Appendix E for a schematic of the proposed renovations. Eventually, once the Botany and Zoology Building undergoes renovation, the MBI will be given permanent space there.

C. What are the possibilities for external funding of the center’s research activities and/or operation? If proposals are being prepared, state submission deadlines and funding agencies.

External funding has already been sought and awarded for MBI operations, including a $10 million grant from the National Science Foundation. Please refer to Appendix D for a detailed accounting of all external and internal funding generated to date.

Future Growth and Resource Development: The Director and Associate Directors will be in continuous contact with the mathematical and bioscience communities in order to identify areas of opportunity in the mathematical biosciences. In order for the MBI programs to have sustained strong impact, the Director and Associate Directors will lead a multi-component fund raising drive. They will build strong Institute Partner and Corporate Member programs. As the mathematical bioscience community grows, the Director and
Associate Directors will visit industry to develop relationships and strengthen sponsored postdoc programs.

The Director and Associate Directors will also seek support from government agencies (excluding NSF-DMS) and from private foundations. Our goal is that within the first 3 years, the total NSF-DMS support will be matched by support from all other sources. This increase in budget will allow the MBI to double the number of long-term and short-term visitors, to significantly increase the community of mathematical bioscientists, and to accelerate the pace of research.

→ Sponsored Postdoctoral Fellows: The MBI expects to have a substantial portion of its postdocs sponsored by a company, institute, or bioscience department. Each sponsor pays 50 percent of the postdoc compensation, benefits, and overhead, and gets 50 percent of the postdoc in return. The sponsored postdocs are appointed for 2-year periods. At this time, five sponsors have committed to contribute $30,000 per year for each of the first 2 years.

→ Institute Partners: The goal of the Institute Partner (IP) program is to encourage scientific activity and growth of mathematical bioscience at partner institutions. The program will subsidize the travel and local expenses of IP faculty, postdocs, and students to participate in research and education programs at the MBI. Each IP institution will commit from a minimum of $1,000 per year to a maximum of $5,000 per year to the MBI. These funds will be credited to the IP's account; IP funds may roll over from year to year. If authorized by the IP's chair, travel and local expenses of up to twice the balance in the IP's account will be paid in full with 50 percent debited from the IP account and 50 percent debited from the MBI's account. We expect the number of participating institutions to total 20 within the first 3 years of MBI operation.

→ Corporate Members: The MBI will develop industrial memberships among pharmaceutical and bioengineering companies. Membership fees are set (tentatively) at $5,000 per year. Our goal is to have three new companies join each year as Corporate Members, beginning the second year of MBI operation. The Director of the MBI will visit the companies and, working with them, identify problems and topics of interest to them where mathematical sciences can be helpful. The Corporate Member program includes the following incentives: (a) Industrial Advisory Committee to propose and review new programs; (b) regular visits by the Director and Associate Directors of the MBI to identify topics of interest to the corporations; and (c) Corporate Member scientists will be invited to present their problems to MBI audiences and to participate in MBI programs and workshops.
D. How will direct costs generated of collaborative proposals be credited to participating unit?

University policies on indirect costs will be followed.

VI. EVALUATION

Propose specific criteria and benchmarks against which one can measure the successes and failures of the center in meeting the goals described in Section I.A (above). The center will be reviewed after no later than 8 years following establishment and at 4-year intervals thereafter, the review to include input from peers at centers and institutions external to The Ohio State University. Where appropriate, reviews of centers will be coordinated with reviews of departments, schools, colleges, or other academic units or programs. A performance analysis based on these proposed criteria and benchmarks should appear in the director’s annual report and in the review reports, and will be a major factor in making a recommendation for the continuation or termination of the center. (6, I)

Three kinds of evaluation monitoring the performance of the MBI will be conducted in order to assure excellence in provision of programming and services and to identify areas for improvement.

Qualitative measures of evaluation will include:
- Postdocs and long-term visitors will be asked to write reports summarizing their activities and to make suggestions for improvements.
- Workshop organizers will be asked to write reports addressing whether the goals of the workshop were met, what the main benefits were, what the future directions are that emerged from the workshop, and suggestions for improvement.

Quantitative measures of evaluation will include (see Appendix F for copies of the surveys):
- Surveys completed by the postdocs and long-term visitors assessing whether the goals of the program were met.
- Surveys completed by the workshop participants assessing whether the goals of the program were met.
- Surveys completed by the participants of the Summer Programs assessing whether the goals of the program were met.
Indirect objective measures of evaluation will include tracking the following information:
- The number of participants, self-funded
- The number of research publications, both while visiting the MBI and later publications that resulted from visits to the MBI
- The number of Institute Partners
- The number of Corporate Members
- The number of sponsored postdoctoral fellowships
- The amount of external funding (outside DMS and OSU)
- The amount of networking — how many collaborations and teams emerged as a result of MBI activities (follow-up interview by e-mail and the web 2-3 years beyond their MBI experience)
- The number of enhanced course offerings in mathematical biosciences (follow-up interview)
- The number of undergraduates who attended the Summer Program that go on to graduate school in mathematical biosciences
- The number of graduates who attended the Summer Program that go into research/postdocs in mathematical biosciences
- The number of high school teachers who attended the Summer Program who use MBI materials in curriculum extra-curricular activities
- The number of times material is downloaded from the MBI website

VII. LETTERS OF SUPPORT FOR THE CENTER PROPOSAL
Include specific commitments to the center, e.g., space, equipment, personnel, and funds.
A. From the Council on Research and Graduate Studies, if the center has a research and/or graduate education component.
B. From interested department chairpersons, deans, and/or other units of the University with activities overlapping those of the proposed center, especially units that might commit or receive funds should the center be created.
C. From a group of external reviewers, some nominated by faculty proposing the center, others to be chosen by the Office of Research. The center proposal should include a list of potential external reviews, with names, addresses, and phone numbers.
D. From interested parties outside of the University (e.g., business, health, governmental, educational, or community interests) including external funding sources, as appropriate.
E. From directors of centers with similar emphases at other universities, to document the effectiveness of such centers.
Copies of all letters (indicating addresses and phone numbers) are included in Appendix G.

General support:
- Peter March, Chair of the Department of Mathematics at OSU
- Bob Gold, Dean of the College of Mathematics and Physical Sciences at OSU
- Jil Morelli, Assistant Vice President/University Architect at OSU
- Al Stulz, Director of High Performance Computing at the Ohio Supercomputer Center
- Ed Ray, Executive Vice President and Provost at OSU
- C. Bradley Moore, Vice President for Research at OSU
- Fred Sanfilippo, Dean of the College of Medicine at OSU
- Doug Wolfe, Chair of the Statistics Department at OSU
- Richard Ned Lewow, Director of the Mesonch Center at OSU
- Michael Davis, Director of the Mathematical Research Institute at OSU
- Michael R. Grever, Chair of the Department of Internal Medicine at OSU

Support for Postdoctoral Fellowships:
- Gregory A. Mack, Vice President & Produce Line Manager at Battelle Environmental Sciences
- Fred A. Wright for Albert de la Chapelle, MD, Human Cancer Genetics at OSU
- Michael S. Beattie, Interim Chair for Department of Neuroscience at OSU
- John J. Enyart, Professor in Department of Neuroscience at OSU

Support as Institute Partners:
- James C. Alexander, Chair of the Department of Mathematics at Case Western Reserve University
- Joanna Mitro, Interim Head of the Department of Mathematical Sciences at the University of Cincinnati
- Max Gunzburger, Chair of Mathematics at Iowa State University
- Michael H. Rowe, Professor in Department of Biological Sciences at Ohio University
- Bard Ermentrout, Professor in Department of Mathematics at University of Pittsburgh
- Emmanuele DiBenedetto, the Biomath Institute at Vanderbilt University
Memorandum

To: University Senate
From: David L. Stetson, Chair,
      Council on Academic Affairs
Date: October 29, 2003

PROPOSAL FROM THE COUNCIL ON ACADEMIC AFFAIRS TO ESTABLISH THE CENTER FOR ENTREPRENEURSHIP.

WHEREAS interest in entrepreneurship in colleges of business has grown dramatically over the last decade and there are entrepreneurship centers at most major colleges of business throughout the world; and

WHEREAS this center will be distinctive by virtue of its emphasis on entrepreneurial research in addition to providing entrepreneurial service and teaching; and

WHEREAS the proposal adheres to the guidelines for the establishment of centers and institutes, and is supported through external funds generated by its Board of Advisors; and

WHEREAS as requested, a Memorandum of Understanding was established relating to the Board of Advisors and will be revisited, and if necessary revised, when members of the Board change; and

WHEREAS the proposal was approved by the University Research Committee, the Research and Graduate Council, and by the reviewing subcommittee and then the full Council on Academic Affairs on October 1, 2003.

NOW THEREFORE BE IT RESOLVED that the University Senate approve the proposal to establish the Center for Entrepreneurship in the Fisher College of Business, and respectfully request concurrence from the Board of Trustees.
I am pleased to inform you that the proposal to establish a Center for Entrepreneurship was approved unanimously by the Council on Academic Affairs at its meeting on October 1, 2003. Thank you for attending the meeting and responding to questions/comments.

This proposal will be sent to the University Senate for action at its meeting on November 13, 2003. Please ensure that someone associated with this proposal will be in attendance. Professor David Stetson, Chair of the Council, will present the proposal, but we will need College representatives there to respond to any detailed questions or comments.

Consistent with your College's long-range plans for the Center - that are evident in your proposal and that you articulated clearly at the meeting - and given the discussion that then occurred about the interdisciplinary nature of entrepreneurship, the Council suggests that you contact academic units whose faculty have research and teaching interests in entrepreneurship and might be interested in being affiliated with the Center. Included are faculty in the College of Social and Behavioral Sciences, the College of Food, Agricultural and Environmental Sciences, the College of Medicine and Public Health, and the College of Human Ecology.

Please note that this message represents my formal communication with you about this proposal. You will not receive a separate letter from me. In that regard, please make a copy of this message for your file(s) and I will do the same for the file in the Office of Academic Affairs.

If you have any questions or comments about this action please contact me or Professor Stetson.

Congratulations on the successful completion of this important stage of the review process.

Randy

W. Randy Smith
Vice Provost for Curriculum and Institutional Relations
Office of Academic Affairs
203 Bricker Hall
190 North Oval Mall
614-292-5881
Smith, Randy

From: Mangum, Stephen [mangum_1@cob.osu.edu]
Sent: Friday, September 26, 2003 3:11 PM
To: smith.70@osu.edu
Subject: CAA Response

Randy,

Thank you for the feedback from Subcommittee A of CAA which you shared with me today. In response to their concerns, the Fisher College of Business agrees and I certify that the MOU related to the Center for Entrepreneurship will be revisited and, if necessary, revised whenever the parties to the MOU leave the university or change their roles within the university.

Stephen Mangum
Senior Associate Dean for Academic Programs
Fisher College of Business
Ohio State University
614-292-2565
614-292-1313 (fax)

10/1/2003
Conflict of Interest Management Agreement

This Conflict of Interest Management Agreement is entered into by and between The Ohio State University on behalf of its Fisher College of Business (collectively "OSU") and Richard Langdale.

The proposed Fisher College of Business Center for Entrepreneurship, ("the Center") will educate students concerning the unique aspects of entrepreneurial commercial activities, provide advisory services to students and business entities owned or created by students, and conduct other programs to promote the development of entrepreneurial business opportunities. These programs will include a Business Plan Competition, ("the Competition"), the Ideas to Business Program (the "Program"), and other similar educational activities.

In order to avoid any real or perceived conflicts of interest arising out of Mr. Landgate’s involvement with the Center, the Parties agree as follows:

1. Center activities will be directed by an Executive Committee, which will consist of the following individuals:
   a) Richard Langdale, Volunteer Executive Director,
   b) Professor Jay Barney, Academic Director,
   c) Jon Iveson, Director of Development and Operations.

2. Mr. Langdale will not be an employee of the university and will not receive compensation of any kind from the university for the services that he will provide in connection with the Center.

3. Professor Barney, in consultation with the Executive Committee, shall be responsible for all academic issues relating to Center operations.

4. Mr. Iveson, in consultation with the Executive Committee, shall be responsible for day-to-day operational issues for the Center.

5. Dr. Joseph Alutto, Dean of the Fisher College of Business, shall bear the ultimate responsibility for all academic and operational issues relating to the Center and for ensuring that all parties comply with the terms of this agreement.

Conflict of Interest Management Agreement, 1
6. Mr. Langdale understands and agrees that he, his business associates or any business entity with which he is affiliated may not:

a) hold any direct or indirect financial interest in an entity participating in the Competition, the Program, or other Center programs, or otherwise receiving services of any kind from the Center, ("a Participating Entity");

b) discuss the possibility of a future investment or other business relationship in a Participating Entity, with a student or other person involved with such entity;

c) provide information about a Participating Entity to his business associates or any other person.

7. Mr. Langdale, his business associates, or any business entity with which he is affiliated may hold a financial interest or enter into a business relationship with Participating Entities only after they have formally severed all ties with the Center.

a) Prior to initiating contact with an entity that has severed all ties with the Center, Mr. Langdale shall advise Dean Alutto of his intention to do so;

b) Entities that have entered into a business relationship with Mr. Langdale, or his business associates or any business entity with which he is affiliated are not eligible to participate in any ongoing or future Center programs or to receive advisory services from the Center.

8. Entities that have entered into a business relationship with Mr. Langdale, or his business associates or any business entity with which he is affiliated may enter into contractual relationships with the university for the purpose of developing and commercializing university-owned technology. University faculty, staff and students holding an interest in these entities must comply with University Rule No. 3335-12-07, (Rules Governing Faculty and Staff Participation in Companies Commercializing University Research) as well as other university rules and state laws relating to ethics, conflicts of interest and private consulting.

9. In order to avoid even the appearance of a conflict of interest, Mr. Langdale understands and agrees that he may not participate, directly or indirectly, in discussions or negotiations between the university and entities referenced in Paragraph 8, above.

Rich Langdale, Volunteer Executive Director

Dean Joe Alutto, Fisher College of Business

Date

Date

Conflict of Interest Management Agreement, 2

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MEMORANDUM

TO: Council on Academic Affairs, Drs. R. Smith and D. Stetson

FROM: Subcommittee B

RE: College of Business Center for Entrepreneurship Proposal

1. Recommendation: The Subcommittee met on 8/20/2003 to review again the subject proposal, considering the input too on-hand from the University Research Committee. All issues were not satisfactorily addressed, and the Committee does not recommend adoption of the proposal as submitted, until or unless one of two additional actions is taken:
   a. The submitted Memorandum of Understanding (MoU) is re-written in more general terms to apply to any and all individuals who will occupy the indicated positions, or
   b. A separate agreement is submitted indicating that this MoU will be executed each and every time any of the signatories leaves or changes roles.

2. Background / History: On 4/15/02, Dr. Smith sent us the subject proposal for review. On 5/20/02 we sent our list of comments to Dr. Magnum for his consideration. The Committee then met with him and Dr. Alvarez on 6/14/02 to discuss their response to our questions, all of which they adequately addressed. We were then informed on 8/20/03 that the University Research Committee had not only concurred in our concern about the potential for conflicts of interest but had insisted that this issue get addressed. The additions were reviewed that same day, leading to the recommendation above, that this proposal not be approved until or unless additional action was taken to modify the proposed MoU.

3. Considerations: The Committee wanted to be sure that any perceived conflicts of interest were adequately addressed and that the University was not in a position to be accused of providing unfair competitive advantage to those actively participating or financially supporting in the Center. There was also some concern that the Center work more provide advice to potential entrepreneurs. While the addition of the MoU is a gigantic step forward, it is written to only include the current proposed participants and has no provision for applying to others in the future. This removes the immediate concern but that would immediately resurface as soon as any of the people signing the MoU leaves or changes roles.

4. Resolution: The Center is not designed to seed new businesses, but to equip prospective entrepreneurs with an understanding of what will be required to take
an idea into the marketplace: how to develop a business plan that might satisfy lenders or attract investors, and then what will be needed to successfully execute such plans and manage business growth. There is a growing body of research on what makes entrepreneurship succeed or fail, with the objective of developing empirically supported theories of entrepreneurship rather than just accumulating a body of case study literature on successes. Also, financial sponsors do not contribute to prioritization of funded research projects, and the results of these projects are publicly available to any requester, so there is no bias or favoritism either in guiding the activities of this Center nor in benefiting from the Center's work. While there was no basis for conflicts of interest that we could determine in our initial review, we applaud the University's Research Committee for taking action to assure there were no appearances of conflict of interest as well. However, we do fault the proposed MoU for being specifically targeted to only the current participants. If it is to be effective in the long run, it either needs to be re-written in more general terms or the College must formally agree, in writing, to re-execute this MoU when and as appropriate.
October 7, 2002

To: Randy Smith, Vice Provost
From: Steve Mengum
RE: Proposed Center for Entrepreneurship

As per your request, this memo summarizes the actions to be taken by the Fisher College of Business and its proposed Center for Entrepreneurship, consistent with the concerns brought to our attention by the University Research Committee. The actions summarized below result reflect very informative interactions with the Office of Legal Affairs, Mr. Todd Gutman and Mr. John Biancamano, in particular.

Actions to be taken:

a. Mr. Langdale will not receive any financial compensation for his involvement with the Center.

b. Mr. Langdale’s affiliation with the Center will carry the title of Voluntary Executive Director to indicate that he is donating his time to this initiative.

c. In his capacity as Voluntary Executive Director, Mr. Langdale will work closely with the Center’s Academic Director (currently Professor Jay Barney), the Dean of the Fisher College, and Mr. Jon Iveson, the Center’s Director of Development and Operations. Issues related to the overall strategy of the Center and the strategic deployment of financial and human resources are determined in meetings between the Center’s Executive Team (currently Barney, Langdale, Iveson), the Chair of the Department of Management and Human Resources, and the Dean. Responsibility and accountability for day to day Center operations rests with the Center’s Executive Team, assisted by FCOB support units such as the College’s Fiscal Office.

d. The Office of Legal Affairs will work with the Fisher College to create agreement templates to be signed by Mr. Langdale and also by members of the Board of Advisors described in the Center proposal. These templates will describe responsibilities and accepted practice consistent with Ohio law pertaining to ethics and conflict of interest.

e. Among the items to be included in these documents will be agreement that no party associated with the Center will have any existing financial interest in any entity entering the Center sponsored business plan competition or otherwise receiving services from the Center for Entrepreneurship.

f. The Office of Legal Affairs will assist in the production of a document to be signed by any entity prior to receiving services from the Center. This document will spell out services to be provided and conditions under which services are delivered.

g. Once an entity ceases to receive Center services and thereby ends its Center affiliation, Board of Advisor members and Mr. Langdale are free to invest in or otherwise do business with these entities within the boundaries of Ohio law.
MEMORANDUM

To: W. Randy Smith, Vice Provost for Curriculum and Institutional Relations
   Office of Academic Affairs

From: Gerald S. Frankel
   Professor of Materials Science and Engineering
   Director, Fontana Corrosion Center
   Chairman, University Research Committee

Subject: Center for Entrepreneurship

The proposal for the creation of a Center for Entrepreneurship was discussed at the May 22, 2002 meeting of the University Research Committee (URC). Professors Stephen Mangum and Sharon Alvarez from the Department of Management and Human Resources in the Fisher College of Business (FCOB) were present in support of the proposal. They made a short presentation to the committee and then addressed the questions and concerns of the committee members. This memo describes the opinions of the URC.

The proposal makes a strong case for the establishment of this center. Centers focusing on entrepreneurship have been set up at many business schools across the country. Certainly, the economy in central Ohio would benefit by the creation of new start-up companies and new jobs, an expected consequence of certain activities of this center, such as executive training. Furthermore, the Colorado Model for funding minimizes the financial risk to the University, as most of the funding will be provided by donations made by the external members of the Board of Advisors. The Davis chair, which will likely be linked to this center in the future, is already funded and in place.

The URC is encouraged by the plans to differentiate this center from others at universities through research activities. The charter faculty in the FCOB comprise a set of individuals that is well poised to make significant contributions to the emerging field of entrepreneurship. This field is just moving from a descriptive, phenomenological basis to a more formalized conceptual and theoretical basis. Other centers are focused more on outreach and training. There appears to be a real opportunity for OSU to develop a national reputation in the theory of entrepreneurship.

During the course of our discussion, some questions were raised regarding the potential for conflicts of interest, or the appearance of such conflicts. These conflicts of interest have implications for research, which creates concerns for the URC. The Committee spent a
considerable amount of time discussing these concerns and decided to seek advice from Todd Guttman, Assistant VP and Regulatory Counsel for the Office of Research, and an expert on such matters. On May 29, Keith Alley, Ron Glaser and I met with Mr. Guttman to discuss the issues involved. He indicated that there were several aspects of potential conflicts, which will be described presently.

Mr. Richard Langdale, the proposed Executive Director, and to a lesser extent the Board of Advisors, will contribute funds to support the operations of the Center. The proposal notes that Mr. Langdale may receive a salary for his work, but he will contribute the salary to the Center and, thus, will not be an employee of the University. Nonetheless, Mr. Langdale and the Board members will, in their positions, be agents of the University, and therefore bound by the State ethics laws prohibiting improper personal gain. In order to avoid actual conflicts of interest, or the appearance of conflicts, the URC recommends that the Center for Entrepreneurship work closely with the Office of Legal Affairs to define the Executive Director's and the Board of Advisors' responsibilities and obligations to the University and to assure that any actions they take on behalf of the Center comply with State of Ohio ethics laws.

The Board membership fees will provide funds to support a range of activities, including research. As mentioned, the URC fully supports the proposed research activities. However, the URC advises that the Center structure any fee-for-service research and development activities undertaken on behalf of private outside companies as formal sponsored research agreements between the company and the Ohio State University Research Foundation under terms customary in the business, including indirect costs. The URC similarly advises that the Center work with the Office of Business & Finance to ensure that other, non-research, fee-based services offered by the Center to outside companies that utilize OSU facilities, equipment, services or staff are provided in accordance with the University’s Rules for Entrepreneurial Activities.

Finally, the URC notes the plan to provide support to MBA students, giving them the chance to be involved in outreach and consultation services with local companies. As stipulated in the Ohio State University Graduate School Handbook, graduate students pursuing a degree that requires a thesis or dissertation must be notified prior to beginning research projects involving confidential and/or proprietary business information that such research might be restricted from use in a thesis or dissertation. The URC recommends that the Center work closely with the Graduate School in structuring outreach programs that involve graduate students.

Because no further URC meetings are scheduled for this academic year, the contents of this letter were circulated to the members of the URC by email, and an email vote was taken. The Committee voted unanimously to approve the formation of the proposed Center for Entrepreneurship, with the stipulation that the concerns listed above must be addressed.

In conclusion, the URC hopes that the Center for Entrepreneurship will flourish and grow into a vibrant and nationally recognized leader in the field.

cc: University Research Committee
Professor Stephen Mangum
Professor Sharon Alvarez
December 20, 2001

Council on Academic Affairs
C/o Professor W. Randy Smith
Vice Provost, Academic Affairs
Bricker Hall
Campus

Dear Randy:

As per our conversation, attached you will please find the complete proposal for a Center for Entrepreneurship in the Fisher College of Business.

Enthusiasm for this center is high in the college and in the business community. We are confident that the Center will be a point of distinctiveness and pride for the College and for the University.

We stand ready to assist in any way in the timely treatment of this proposal. Feel free to call upon us whenever needed.

Sincerely,

Steve Mangum
Senior Associate Dean
Proposal for a Center for Entrepreneurship
Fisher College of Business
The Ohio State University

December 2001

I. Procedure

A. Submit proposals to establish academic centers to the Council on Academic Affairs. The chair of CAA and the provost's designee will determine that proposals are complete and ready for formal considerations.

B. If the proposal has a research and or graduate education component, the proposal will be sent to the Council on Research and Graduate Studies for comment. The university research committee will study the relevant issues and will present them to CRGS. Opportunity will be provided to revise the proposal to address comments received from CRGS and or URC.

C. CAA deliberation begins at this point. CAA is the first step in the approval process. CAA recommends to the Senate, which recommends to the Board of Trustees, which is empowered to establish academic centers.

II. Rationale

A. Describe the specific goals and purposes of the center. Explain how the university will benefit from the center and which missions of the university (teaching, research, service) will be served, and in approximately what proportions.

Interest in entrepreneurship in colleges of business has grown dramatically over the last decade. There are entrepreneurship centers at most major colleges of business throughout the world and almost all colleges of business offer entrepreneurship courses in their curriculum and have student internships in entrepreneurial firms.

Despite these trends, entrepreneurial scholarship has failed to keep pace with growing interest in entrepreneurial phenomena. This field of study lacks a theoretical base used consistently to explain, predict, and empirically examine entrepreneurial phenomena. Instead, most of the work in the field borrows piecemeal from other disciplines or is purely descriptive in nature. Other functional areas in business schools--
including finance, marketing, and organizational behavior—began their histories in much the same way, with practitioners telling “war stories” about their experiences in firms. However, beginning in the early 1960s and over time, each one of these fields has become more rigorous and increasingly theory based. And, as this has occurred, the implications for management practice flowing from these fields of inquiry have increased.

Unless the field of entrepreneurship continues its move beyond descriptive studies, the field’s legitimacy, and perhaps even its survival in top colleges of business, will be at stake. The first purpose of the proposed center is to facilitate development of theoretical perspectives which can be used to ground entrepreneurial scholarship. The Fisher College of Business has a fine selection of highly regarded, research active faculty with strong interest in a variety of substantive issues and a variety of conceptual perspectives germane to entrepreneurship scholarship. The proposed center is the vehicle for bringing these interests together in an organized fashion to push forward knowledge creation on the frontier of entrepreneurship research.

Second, while many centers of entrepreneurship have a focus on teaching undergraduate and MBA students, facilitating internships, and interfacing with practitioners in business and community development, with few exceptions (such as Harvard and Babson), emphasis on high quality executive education focused on the needs of entrepreneurs in growing entrepreneurial firms is lacking. From current research we know that founders and entrepreneurs in emerging firms have difficulty transitioning from early firm stages to more growth oriented firm stages. The faculty at the Fisher College of Business is particularly suited to address this set of issues. Soon to be
completed conference center facilities, a the vibrant local entrepreneurship community of central Ohio provide the setting, and a quality faculty experienced in executive education are key elements that are in place. Creation of a center with strong, experienced academic and executive leadership in the entrepreneurship field is the remaining critical element to accomplishment in this effort. Therefore, a second purpose of the center is executive education for entrepreneurial leaders in firms that have advanced beyond the start-up stage and are in a more advanced stage of development.

Combining research strength with high-caliber executive education will distinguish a center of entrepreneurship at the Fisher College of Business from other centers of entrepreneurship and create a basis for competitive advantage. While the Center for Entrepreneurship at The Fisher College of Business will value teaching, facilitate internships, and promote business development, and these will all be important aspects of the daily activities of the center, at its core the Center for Entrepreneurship will focus on entrepreneurship research through the development of appropriate theory, and the delivery of high-quality executive education for entrepreneurial leaders.

In its faculty research and in its executive education programming, the Center will focus its attention on understanding how people take advantage of resource opportunities to emerge as successful companies, how people in successful emerging companies direct resources toward goal accomplishment and growth, and how people are most effectively utilized in successful emerging companies. That is, the focus will be on three major determinants of entrepreneurship success: opportunity recognition, entrepreneurial firm strategy, and people. More specifically, among interesting issues for inquiry and education are the following:
Opportunity Recognition: Is opportunity a result of industry structure or is it the result of individual initiative? Are entrepreneurs born or can they be trained? If entrepreneurs can be trained, what skills do they need and are those skills different for the non-founders of these emerging companies? How are these skills best developed? Who is responsible for developing these skills? What training approaches work best? What role should the government play? Should there be tax incentives? Should infant industries receive some form of protection or government stimulation? Should retraining programs allocate funds for entrepreneurship training?

Entrepreneurial Firm Strategy: How do entrepreneurial firms manage knowledge and the commercialization of new knowledge? How do emerging companies develop and manage unique competencies that take them beyond the formation stage? What resources do entrepreneurial organizations need to gain and sustain a competitive advantage? How do emerging companies manage growth? What skill bundles do effective leaders in emerging companies need during different stages of firm development? How do new firms overcome the hazards of organizing? How do entrepreneurial firms use alliances to gain capabilities and sustain growth?

People: What kind of employee is valued at entrepreneurial firms? How do colleges of business train these employees? Are there other sources available to train potential entrepreneurs and how do these sources interact with colleges of business? How do successful emerging companies attract and retain talented employees? How do people maintain a work/life balance in emerging companies? What are effective entrepreneurial teams and are there specific skills needed by these teams? What reward systems are most effective in emerging companies?
In effect, the primary focus of the Center will be on faculty scholarship and outreach on a regional, state, and international level through the primary vehicle of executive education. Faculty scholarship will allow the Center to build a national reputation in the area of entrepreneurship research through publication and conference presentation. In turn, outreach to entrepreneurs is critical for economic development and is recognized as such in Ohio Department of Economic Development priorities. Indeed, the College anticipates the Center working with regional, state, and national organizations in attempting to increase the success rates of entrepreneurs and to encourage others to adopt entrepreneurial strategies for creating economic value.

Center activities will have a direct impact on FCOB regular degree students at undergraduate and graduate levels. The Fisher College has developed a culture and external reputation for integrating faculty scholarship in its degree programs, using such a strategy as a means of providing truly differentiating value added. As faculty extend their research on entrepreneurship issues we expect to see this reflected in their normal teaching, transferring knowledge about entrepreneurial dynamics throughout our programs. We expect to see an increase in our academic programming in entrepreneurship at both the undergraduate and master’s levels through enriched course content and through an expansion of our course offerings in the entrepreneurship area. The success of the Center and the visibility of FCOB entrepreneurship interested faculty will result in increased enrollments in entrepreneurship specializations. Increased interaction with successful entrepreneurs will produce increased participation of these individuals in regular degree program offerings as well as in extracurricular events, providing a level of enrichment students need and appreciate.
B. Why is a center necessary? Explain why the goals of the proposed center cannot be met within existing academic units. Describe the interdisciplinary nature of the center.

The Center for Entrepreneurship is designed to act as a catalyst and facilitator for multiple activities including faculty research, outreach to the community of entrepreneurs and their support structure, and teaching of entrepreneurial firm executives in non-credit programs. Center designation is important since this initiative will be heavily dependent on sources outside the university for funding. Experience has shown that corporations and individuals are more likely to give funding to units clearly focused on their areas of primary interest and desire to see a clear administrative vehicle that can be used as an entry point to the College and the University. The center designation thus serves an internal purpose in providing an organizational node for administrative purposes while also serving an external purpose in providing a clear vehicle to which commitments can be made. As stated previously, existence of a center and strong, focused efforts by academic and executive directors of considerable note and renown are key to producing synergies between practitioners and research-oriented faculty.

The Center for Entrepreneurship envisioned here is in some ways very different from the typical center proposal that comes before the Council on Academic Affairs and the Senate for consideration. It involves a single college. The goals of the proposed Center can be met within the Fisher College of Business, assuming creation of the Center. This Center will facilitate the creation and dissemination of knowledge of the entrepreneurial phenomena through faculty research and executive education in a cross business disciplines fashion. Again, this Center involves a single college within the
university. As such its governance structure is fairly simplistic for there is little need in
this case for coordination across multiple entities across college boundaries.

The core of the Center for Entrepreneurship will be comprised of scholars in the
Department of Management and Human Resources of the Fisher College of Business,
though the center will also draw upon faculty in other FCOB departments (e.g., finance
and marketing). The potential exists for involvement and affiliation by faculty in other
parts of the university (i.e., psychology and economics) but such is not a specific goal or
objective of the Center.

III. Membership Involvement

A. What will be the roles of faculty, staff, and students in the center? How will
graduated students (if any) be supported?

The defining activities of the Center will be those of entrepreneurial scholarship
in terms of faculty research/theory development in the field of entrepreneurship and
executive education activities directed at entrepreneurs beyond the start up phase of their
organizations. The intellectual core of Center programming will be developed by faculty
associated with the Center. In addition, selected faculty will be critically involved in the
delivery of educational content in the executive classroom. Staff will provide technical
support to these activities. Professional staff, primarily in the form of the Center’s
executive director, will be heavily engaged in community outreach activities, in arranging
and managing student internship relationships, and in providing basic consultation
services to individual entrepreneurs and potential entrepreneurs approaching the Center
for information and assistance. Initial student involvement is expected to take the form
of a limited number of graduate assistantships to MBA students supporting outreach and
consultation services to the entrepreneurial community. Faculty research, sponsored by the center, will likely involve Ph.D. students as graduate research assistants.

B. What are the criteria for selecting the center’s charter faculty and staff. List and append short CV’s (e.g. 2 pages, emphasizing center-related activities) for faculty expressing interest in associating with the center. Indicate the percentage of time each charter member will devote to the center.

Chairpersons of faculty planning to participate in the proposed center should approve of faculty involvement in writing.

Faculty with research interest in entrepreneurship and associated areas are invited to affiliate with the Center, upon the recommendation of the Center’s academic director.

It is anticipated that no faculty member, other than the academic director, will have any formal percentage time appointment or commitment to the Center. Faculty involvement in the Center will be on the basis of voluntary participation in Center events and in commitments related to Center funding of faculty research projects.

Charter faculty associated with the Center are those who have done prior work in the field of entrepreneurship or in areas consistent with the Center’s stated mission and who have expressed an interest in affiliation. Charter faculty include:

Professor Sharon Alvarez
Professor Jay Barney
Professor Roger Blackwell
Professor Bob Heneman
Professor Jean Helwege
Professor Michael Leiblein
Professor Jeff Reuer
Professor Judy Tansky
Professor Rao Unnava
Professor Karen Wruck

It is anticipated that the list of affiliated faculty will expand as knowledge of the Center’s formation increases. With the exception of the interim academic director (eventually replaced by a permanent director), no faculty member will formally be
devoting any portion of his/her workload initially to the Center. The Center will be an agent for leveraging faculty research capability rather than being a draw on their time. In the case of the interim director, one third of her time is directed to Center activity during this start-up phase. Vitae for the charter faculty associated with the Center are attached (Appendix A), as are letters of support from chairs of the three departments in which these faculty reside (Appendix B).

C. Who will be the interim center director and what criteria led to that choice? If the interim director will not become the permanent director, what criteria will be used to select the permanent director? If a permanent director has been identified, describe his or her qualifications. Append CVs or resumes for the interim and permanent director.

The academic director will be a senior scholar with a proven track record in the field of entrepreneurship research and holder of the Davis Chair in Free Enterprise. The Fisher College is currently engaged in a national search for this individual (Appendix C). An interim academic director, Professor Sharon Alvarez, will be appointed to serve until such time as the Davis Chair is filled. Professor Alvarez is academically trained in the field of entrepreneurship and is very well connected with both the practitioner and academic entrepreneurship communities. She is regarded both internally and in consultation with entrepreneurship center directors elsewhere as being the most appropriate individual to serve as interim director in anticipation of the Davis Chair hire later this academic year. During this interim appointment, Professor Alvarez will draw on the advice and expertise of a senior colleague in the strategy and entrepreneurship area, Professor Jay Barney, holder of the Bank One Chair in Strategy. Professor Barney currently serves as the academic director of the College’s MBA program.
IV. Administration

A. Propose a pattern of administration for the center.

B. Describe the proposed responsibilities of the center director.

C. Suggest a composition and function of the Oversight Committee.

D. Suggest and justify a "reporting line". To which dean, group of deans, or vice president should the center director report?

The Center for Entrepreneurship will be led by an academic director and an executive director. A board of advisors will serve an important role in advising and shaping the on-going direction of the Center. The Center will be responsible to the Dean of the Fisher College of Business. The academic director, supported by the executive director, will report to the Dean.

The academic director will be a senior scholar with a proven track record in the field of entrepreneurship research and will be the holder of the Davis Chair in Free Enterprise. The academic director will provide direction and leadership to the scholarly activities of the Center. This individual will be directly involved in setting the tone and direction of research sponsored by the Center, planning academic conferences, training Ph.D. students, and participating in curriculum development activities and course delivery in both executive education and in academic degree programs. In consultation and collaboration with the executive director, the academic director will be responsible for the allocation of center funds and determination of the strategic direction of the Center.

The executive director of the Center will be Rich Langdale, one of Columbus' leading entrepreneurs (Appendix D). The role of the administrative director of the center will include responsibility for student internships, interface with the external business
community and a growing community of entrepreneurs, the recruitment and coordination of an outside board of advisors, and the day-to-day management of Center activities. Within the structure of the Fisher College of Business and within the university, the executive director will report to the academic director of the Center.

It is fairly typical in entrepreneurship centers around the country to have two directors, one from practice and one from academia. It has in fact been termed "the Colorado model" and the majority of centers in the country have adopted the model. One reason for this structural characteristic is that such centers generally have large amounts of community interface and it does not make sense to spend large amounts of faculty time on such interface. Typical situations include starting and monitoring an internship program, assisting the public who want feedback on business plans or business ideas, running business plan competitions, arranging guest speakers for classes, working with development staff to increase the funding base of the center, attending chamber of commerce meetings on behalf of the center, attending venture capital network meetings, and generally screening calls and requests from the community for faculty time.

Within the "Colorado Model," most executive directors are wealthy entrepreneurs who no longer need to work and who are very well respected in their communities. Typically these directors provide initial funds to the center and additional funds along the way. They frequently give back at least a portion of their salary to the center, frequently donating this to a student scholarship fund. Their many contacts in the community are such that they are very successful in generating outside funding for the center without burdening development staff. Rich Langdale meets each of the above qualifications. The major thing that differentiates him from executive directors at other major centers is that
he is significantly younger than most – business success having come to him relatively early in life.

A board of advisors will assist the academic and executive directors in accomplishing the Center mission. They will advise the Center directors on trends in entrepreneurship practice, factors impacting the establishment and growth of enterprises, business funding availability in the community, and help define informational and research needs of the business practitioner community. They will have significant responsibility for facilitating student internships in their places of business and in giving feedback on whether curriculum is on target. The board of advisors will consist of approximately 20 people. Ten board members will be representatives from the entrepreneurship community. These charter board members will be asked to help establish the financial basis center by making a financial commitment of $25,000 each per year of service on the board. If the Center is unsuccessful in achieving the desired $230,000 level of annual financial support from its board of advisors, Mr. Langdale has committed to “making up the difference.” A believer in incentives, Mr. Langdale has agreed to match dollar for dollar advisory board commitments beyond a $125,000 level. In other words, taking the extreme, should the $230,000 goal be reached without Mr. Langdale’s financial involvement, he will donate an additional $125,000 to Center operations – a $375,000 total commitment from the board of advisors.

It is very common in entrepreneurship centers for advisory board members to make financial contributions to the center. For example, the center at MIT has an operating budget of $1.6 million, which comes almost exclusively from the board (each member pays $50,000 annually) and the community. The board member receives
prestige by being on the board, is among the first asked to be judges in business plan competitions, is heavily involved with presentations to and interactions with students. External members of the board of advisors have access to all conferences, meetings, and research reports held or generated under Center auspices. There are no services that are explicitly or implicitly promised or provided to board members in return for their $25,000 annual donation. These board members donate in recognition of the honor of being appointed to the board and out of an altruistic desire to "give back to the community" by influencing the development of future entrepreneurs.

The remaining six members of the board of advisors are: the Dean of the Fisher College of Business or his designee, the Davis Chairholder, Professors Roger Blackwell and Bud Lalone of the Fisher College, two FCOB faculty members appointed by the Dean (with preference given to entrepreneurship faculty), the chair of the Department of Management and Human Resources, and a member of the College’s external affairs and development staff, two MBA students and one undergraduate student.

In addition to oversight provided by the Center’s Board of Advisors and the Dean’s office, the College’s Executive Committee serves as an Oversight Committee monitoring and evaluating the performance of the Center for Entrepreneurship. More detail on oversight mechanisms is found in the section on evaluation below.

Initial Budget and Funding Sources

A. What is the projected timetable for establishing the center?

We intend to announce the intention for a proposed Center for Entrepreneurship on December 1, 2001. This event will include announcement of initial funding for the proposed center. We intend to progress toward formal university recognition of the
Center as soon thereafter as possible -- immediately following approval of the Center by CAA, the Senate, and the Trustees. During the initial phase from December 1st until formal approval takes place, we plan to undertake center-like operations under some temporary designation for there is much to be done and great enthusiasm for what is possible.

B. Itemize the expected budget for the first year of operation. Identify funding sources, and one-time and recurring costs. What existing or new equipment, space, and facilities are needed to launch the center? Where will the center be housed?

Initial funding for the Center comes from commitments from the Central Ohio entrepreneurship community, guaranteed by Mr. Rich Langdale, and from College resources. The College seeks $250,000 annually in donations from the entrepreneurship community. Should donations not reach this level initially or as quickly as anticipated, Mr. Rich Langdale, a very successful Columbus based entrepreneur, has committed to provide the Center with up to $250,000 in operating funds in each of the first two years, with an intent to provide funding at a similar level for three years beyond that depending on results. In addition, assuming initial success, Mr. Langedale is committed to building an endowment for the Center, potentially reaching the level of 5 million dollars over the first five years of the Center’s existence. There has been considerable interest in supporting the Center with both funding and involvement. Our main difficulty to date has been that of convincing possible supporters that it is necessary to go slowly until official approvals are received.

The Fisher College of Business, as part of a standard start up agreement, provides new centers with space free of charge for a two-year period. The expectation set is that beyond the initial period, any center must cover all of its costs (space included) plus be a
net contributor to college operations in order for its existence to continue. This understanding exists with the principals of the Center for Entrepreneurship as well. The College is also contributing resources to fund the search for the Davis Chairholder, who will become the Center’s Academic Director. In that sense, the College is also committing funds from the Davis endowment to support this activity. In addition, while the Center is covering costs related to buying down the interim director’s assigned teaching load (2/9ths of the base, nine-month salary), the College is contributing a significant portion of the faculty member’s service load to this Center (an additional 1/9th of the base salary) as well as the benefit costs of both the academic and executive director positions, and an administrative assistant. College contribution to Center activities will grow significantly in the second year of operation, with the recruitment of the Davis Chairholder. The Center is expected over time to cover these and all other costs with its own revenue generation initiatives in order to justify continued operations.

The projected budget for the initial year of operations is summarized below. A couple of items are noteworthy. First, it is the intent of Mr. Langdale to donate or otherwise cover, at least initially, his time and that of his administrative assistant. Consequently, the dollars listed in the initial budget as center contributions to the salaries of the executive director and administrative assistant will be freed up to supplement items such as the speaker series and significant expand the resources initially allocated to research funding. Similarly, the donation of this time will free the College of the related benefit expense, reducing the size of the college subsidy to the Center in its infancy.

Faculty research sponsored by the Center will be determined on a competitive basis. A call for proposals and a deadline will be issued annually. Written proposals will
be required and will be evaluated by a committee of senior faculty affiliated with the Center. The Center will also support faculty and Ph.D. students who have papers accepted at major entrepreneurship conferences such as the Babson Conference.

It is anticipated that over time, revenues from executive education programming in entrepreneurship will be an increasingly important contributor to the Center’s resource base. An initial executive education initiative is the planning of an educational series for the Young Professionals Organization here in Central Ohio. A commitment from them exists to attend the first offering in this series. The first offering will be a five-day session on entrepreneurship topics. Assuming a successful initial experience, the plan is to offer this twice a year. Net revenues from such programming, in combination with outside funding sources, will permit the Center to be more aggressive in funding faculty research consistent with the Center’s mission. Since Executive Education net revenues are not expected in the first year, these are not included in the outlined first year budget.

C. What are the possibilities for external funding of the center’s research activities and/or operation? If proposals are being prepared, state submission deadlines and funding agencies.

D. How will indirect costs generated by collaborative proposals be credited to participating units?

There are a number of foundations and other entities that potentially will provide external funding of the Center’s research and other activities. One such example is the Kauffman Foundation. The Kauffman Foundation, located in Kansas City, actively supports entrepreneurship education nationwide. Among its funding initiatives is that of supporting the creation of entrepreneurship centers at the nation’s universities and colleges. Similarly, the Foundation actively supports student internships by providing matching funds in the amount of the salary that the student receives in the
entrepreneurship internship. This source of funding is also reflected in the initial budget outlined above.

The Kauffman Foundation is also financially supporting current research and outreach projects of Fisher faculty. As an example, Professors Rob Heneman and Judy Tansky have received funding for two grants from The Kauffman Center for Entrepreneurial Leadership. These grants are to study human resource management practices in small and medium sized entrepreneurial companies. Based on this research, to date, they have presented a paper at the 20th Annual Babson College-Kauffman Foundation Entrepreneurship Research Conference, have published a paper in *Entrepreneurship Theory and Practice*, and a book chapter to come out in a JAI volume on "Research in Entrepreneurship and Human Resource Management."

In addition, they recently received a $70,000 grant from The Kauffman Center to sponsor an invited conference on "Managing People in Entrepreneurial Companies, What are the Issues?" The conference will be held at The Ohio State University, Fisher College of Business, in February of 2003. The Society for Human Resource Management has also expressed interest in sponsoring the conference. Based on this partnership with Kauffman, Professors Heneman and Tansky have also been working with MSRise in Washington D.C. and have obtained partial funding for a book on the topic of emerging firms and human resource management.

The Kauffman Foundation is not alone in its interest in entrepreneurship. While additional funding of center and faculty research activities through Kauffman can certainly be anticipated, financial support from other foundations and organizations is also anticipated as the Center becomes established.
VI. Evaluation

Propose specific criteria and benchmarks against which one can measure the successes and failures of the center in meeting the goals described in this proposal.

The Center, through its academic and executive directors, will prepare an annual report summarizing activities and evaluating accomplishments relative to stated goals and objectives. The report will also include an income statement and detailed information on Center expenditures vis-a-vis goals. The annual report will be presented to the Board of Advisors and receive their endorsement. The report will then be submitted to the Dean’s office. The Dean will involve the College’s Executive Committee as appropriate. The Center will be reviewed every fourth year through a process that will focus on external comparisons of performance against stated goals. For example, in addition to the internal processes mentioned above, the fourth-year review will include a benchmarking of Center activities to leading centers nationwide. The Center leadership will seek assessment and evaluative information from national benchmark centers through an external review team. This review may or may not include an on-campus visitation phase, depending on needs and concerns at the time of the review.

Among the specific performance measures which will be used in evaluating Center performance to inform decision making as to whether Center operations should continue, are the following:

a. amount of research dollars made available to faculty,

b. impact of sponsored research in terms of publication quantity and quality, incorporation of materials into academic programs and curriculum development,
c. dollar volume of executive education programming, the net margin on such programming, satisfaction ratings from executive education participants,
d. amount of private and foundation financial support of Center operations,
e. feedback from business community, other centers nationwide, and relevant governmental entities on the impact of Center operations;
f. the quantity and quality of student internships and placements derived from Center contacts; and
g. the overall benefit/cost assessment of the Center – the success of the Center is generating positive net margin on its operations, both quantitatively and qualitatively.

Appendices:
A. Faculty Vitae
B. Letters of Support from Department Chairs
C. Davis Chair Position Announcement
D. Rich Langdale Vitae
E. Support letters from other OSU Colleges
F. Support letters from representative entrepreneurship centers at other universities
## 2001-2002 Budget

<table>
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<tr>
<th>Item</th>
<th>Total Cost</th>
<th>Center Contribution</th>
<th>Fisher College Contribution</th>
<th>Kauffman Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interim Academic Program Director (3/9 salary plus benefits)</td>
<td>40,676</td>
<td>22,000</td>
<td>10,777 plus benefits of 7,899</td>
<td></td>
</tr>
<tr>
<td>Executive Director</td>
<td>106,760</td>
<td>85,000</td>
<td>benefits of 21,760</td>
<td></td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>69,080</td>
<td>30,000</td>
<td>benefits of 14,080</td>
<td>25,000</td>
</tr>
<tr>
<td>Student Internships</td>
<td>30,000</td>
<td>15,000</td>
<td></td>
<td>15,000</td>
</tr>
<tr>
<td>Community Relations</td>
<td>5,000</td>
<td>5,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recruitment of Davis Chair</td>
<td>10,000</td>
<td></td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>MBA Students</td>
<td>8,000</td>
<td></td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td>Research Funds</td>
<td>50,000</td>
<td>50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Space</td>
<td></td>
<td></td>
<td></td>
<td>5 Years</td>
</tr>
<tr>
<td>Speaker Series</td>
<td>15,000</td>
<td>5,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc</td>
<td>30,000</td>
<td>30,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>354,516</td>
<td>250,000</td>
<td>64,516 plus space</td>
<td>40,000</td>
</tr>
</tbody>
</table>

Benefit rate of 24.1% for faculty and 25.6% for A&P.
WHEREAS the recommendation to move commencement from Friday to Sunday has earned strong support from faculty, staff, and administrators on the relevant committees that have devoted extensive discussion to this topic;

WHEREAS the prospect of scheduling commencement on Sunday rather than Friday was proposed with clarity and endorsed with broad enthusiasm by key student organizations at both undergraduate and graduate levels;

WHEREAS the shift of commencement to Sunday will make the elimination of early examinations for graduating students feasible pending a change in University Rules 3335-7-19 (Course examinations) and 3335-7-20 (Schedules for final examinations); and

WHEREAS the Council on Enrollment and Student Progress, as the de facto calendar committee of the The Ohio State University, brings forth this recommendation;

NOW BE IT THEREFORE RESOLVED that the University Senate approve the proposed changes to Faculty Rules 3335-7-19 and 3335-7-20 and respectfully requests the concurrence of the Board of Trustees, said proposal to be effective upon approval by the Board of Trustees.
3335-7-19 Course examinations.

At the close of each course as defined in rule 3335-7-01 of the Administrative Code, an examination will be given on the student's capabilities relative to the stated course objectives, the method of examining to be determined by the instructor or supervisor of the course. Examinations in laboratory and seminar courses shall be optional with the instructor concerned. Examinations for graduating students shall be given at a time near the end of each course, preferably during the last week of classes.

3335-7-20 Schedules for final examinations.

(A) Examinations for classes taught on the regional campuses and for classes whose enrollment is exclusively of students registered in the colleges of dentistry, law, medicine and public health, optometry, pharmacy, and veterinary medicine will be scheduled by the offices of the regional campuses and of the colleges respectively. All examination schedules prepared outside the office of the university registrar shall, before publication, be cleared with the office of the university registrar which shall have the power to resolve all conflicts.

(B) Examinations for graduating students shall be arranged by individual instructors so that final grades for the affected students may be submitted to the office of the university registrar by the deadlines established by that office.

(C) All other final examinations shall be centrally scheduled by the office of the university registrar. The official examination schedules shall be strictly adhered to by all instructors. Any deviation must first be approved by the appropriate university official (department chair, regional campus dean and director, or college dean) in consultation with the office of the university registrar, which shall have the power to resolve all conflicts. Final grades for graduating students must be submitted electronically to the office of the university registrar by the deadlines established by that office.

(D) In performing its scheduling function the office of the university registrar shall limit individual examinations to two-hour duration and the total examination period to no more than five days. (B/T 8/1/97)
PROPOSAL FOR AMENDMENT OF FACULTY RULE 3335-11-10, "RECREATIONAL SPORTS COMMITTEE;" SPONSORED BY THE UNIVERSITY RECREATIONAL SPORTS COMMITTEE.

WHEREAS the Recreational Sports Committee has been operating under the name University Recreational Sports Committee; and

WHEREAS the Director of the Department of Physical Facilities has the title of the Associate Vice President for the Department of Physical Facilities;

NOW BE IT THEREFORE RESOLVED that the University Senate approve the proposed changes to Faculty Rules 3335-11-10 and respectfully requests the concurrence of the Board of Trustees, said proposal to be effective upon approval by the Board of Trustees.
University Recreational sports committee.

(A) Membership.

The recreational sports committee shall consist of twenty-one members:

1. Two faculty members appointed by the faculty council. The term of service is two years.

2. Nine students:
   a. Two graduate students selected by the council of graduate students. The term of service is two years.
   b. One professional student selected by the inter-professional council. The term of service is one year.
   c. Six undergraduate students selected by the undergraduate student government. The term of service is two years.

3. Two staff members selected by the university staff advisory committee. The term of service is two years.

4. Seven administrators, ex officio, non-voting, or their designees:
   a. The vice president for student affairs.
   b. The senior vice president for business and finance.
   c. The director of the department of recreational sports.
   d. The director of the department of physical facilities. The associate vice president for the department of physical facilities.
   e. The director of the department of athletics.
   f. The director of the school of physical activity and educational services.
   g. The director of the student wellness center.

5. One non-voting staff member from the department of recreational sports to act as the secretary for the committee. The term of service is one year.

(B) Duties and responsibilities.

1. Initiate recommendations and review proposals with regard to policies that may affect the recreational sports facilities and programs.

2. Make recommendations to the director of recreational sports regarding the usage priority for recreational sports facilities space, co-operative recreational sports ventures, and adjustments to agreements specified in the 1998 Larkins hall “Project Memorandum of Understanding.”

3. Collect feedback on recreational sports issues in order to evaluate the quality of recreational sports facilities maintenance, daily operations, and programs, recommending changes as appropriate.

4. Annually review and revise the long-term maintenance plan for recreational sports facilities.
(5) Reviewing all budgets and expenditures of the department of recreational sports and the appropriate portions of budgets and expenditures of all general funds, student affairs funds, college of education funds, and department of athletics funds that contribute to recreational facilities operations and programs.

(6) Deciding the future of the Larkins hall construction debt service portion of the student recreation fee once the debt service has been retired.

(7) Recommending the disbursement of windfall dollars such as donor gifts, corporate sponsorship and advertising revenue upon review of established recreational sports facilities funding proformas.

(8) Recommending intra-departmental fees for non-recreational sports use of space designed and funded for recreational sports.

(9) Serve as a channel of communication for information regarding recreational sports among the office of business and finance, the department of physical facilities, the college of education, the school of physical activity and educational services, the department of athletics, the council on student affairs, the athletic council, the undergraduate student government, the council of graduate students, the inter-professional council, faculty council, and the university staff advisory committee.

(10) Report annually to the council on student affairs.

(C) Organization.

(1) The chair shall be elected from among the student membership of the committee.

(2) The committee shall establish operating procedures to conduct, in an orderly fashion, the functions of the committee. (B/T 7/11/2003)
PROPOSAL FOR AMENDMENT OF FACULTY RULES 3335-17-05
“APPORTIONMENT OF GRADUATE STUDENT MEMBERS;” 3335-17-06
“APPORTIONMENT OF PROFESSIONAL STUDENT MEMBERS;” AND 3335-17-07
“APPORTIONMENT OF UNDERGRADUATE STUDENT MEMBERS.”
SPONSORED BY CGS, IPC AND USG.

WHEREAS Faculty Rules 3335-17-02 and -03 assert that the primary responsibility for
administering and supervising Senate elections for graduate student, professional student, and
undergraduate student members of the University Senate rests with the Council of Graduate
Students, the Inter-Professional Council, and the Undergraduate Student Government
respectively; and

WHEREAS Faculty Rules 3335-17-05, -06, and -07 articulate apportionment for the graduate
student, professional student, and undergraduate student members of the University Senate
respectively and must be amended when the student governments change their organizational
structure; and

WHEREAS the more appropriate location for rules governing the distribution of student
members of the University Senate are the respective bylaws of the Council of Graduate Students,
the Inter-Professional Council, and the Undergraduate Student Government,

NOW BE IT THEREFORE RESOLVED that the University Senate approve the proposed
changes to Faculty Rules 3335-17-05, -06, and -07 and respectfully requests the concurrence of
the Board of Trustees, said proposal to be effective upon approval by the Board of Trustees.
3335-17-05 Apportionment of graduate student members

(A) Ten graduate student members shall be apportioned as follows: one to be elected from each of the following graduate areas: elected by the Council of Graduate Students in accordance with its bylaws so as to ensure a diverse representation of graduate programs.

- Administrative sciences
- Agricultural sciences
- The arts
- Biological sciences
- Education
- Engineering sciences
- Humanities
- Mathematical and physical sciences
- Professional biological sciences
- Social and behavioral sciences

(B) For the purpose of voting for the graduate student delegation to the University Senate in a Senate election, each graduate student elector shall be a delegate in the Council of Graduate Students.

3335-17-06 Apportionment of professional student members.

(A) Six professional student members shall be apportioned as follows: one to represent each of the following graduate professional colleges, with five selected randomly from the elected six by the Inter-Professional Council to serve as senators and the sixth to serve as a designated alternate, with the additional stipulation that the designated alternate may not be from the same college as the designated alternate of the previous year: elected by the Inter-Professional Council Senate in accordance with its bylaws so as to ensure a diverse representation of professional colleges.

- Dentistry
- Law
- Medicine and Public Health
- Optometry
- Pharmacy
- Veterinary Medicine

(B) For the purpose of voting for the professional student delegation to the University Senate in a Senate election, each professional student elector shall be a senator in the Inter-Professional Council an elector only in his or her academic unit.
3335-17-07 Apportionment of undergraduate student members.

(A) Twenty-six undergraduate student members shall be apportioned as follows: elected by the Undergraduate Student Government Senate in accordance with its bylaws so as to ensure a diverse representation of student interests.

(1) Ten students, one to represent each of the following academic constituencies:

- Food, agricultural and environmental sciences (one representative)
- Arts and humanities (one representative)
- Biological, mathematical and physical sciences (one representative)
- Business (one representative)
- Education (one representative)
- Engineering (one representative)
- Allied medicine (one representative)
- Social and behavioral sciences (one representative)
- Social work and human ecology (one representative)
- Educational exploration program—EXP (one representative)

(2) Ten students, representing the following living area constituencies:

- University district (four representatives)
- Commuters (two representatives)
- Greek community (one representative)
- Campus residence halls (three representatives)

(3) Four students, one to represent each of the following regional campus constituencies:

- OSU-Lima campus
- OSU-Mansfield campus
- OSU-Marion campus
- OSU-Newark campus

(4) The diversity senator.

(5) The vice president of the undergraduate student government.

(B) For the purpose of voting for the undergraduate student delegation to the University Senate in a Senate election, each undergraduate student elector shall be a Senator in the Undergraduate Student Government Senate an elector in his or her academic or regional constituency, his or her living area constituency and for the diversity senator.
The University’s Code of Student Conduct defines academic misconduct as “any activity that tends to compromise the academic integrity of the university, or subvert the educational process” (Faculty Rule 3335-23-04[A]). The Committee on Academic Misconduct (COAM) is charged with maintaining the University’s academic integrity by investigating and adjudicating “all reported cases of student academic misconduct, with the exception of cases in a professional college having a published honor code, and [in instances where a student has violated the University’s Code of Student Conduct, deciding] upon suitable disciplinary action” (University Rule 3335-5-487[B]).

COAM is composed of 18 faculty members, seven graduate students (appointed by CGS), and seven undergraduate students (appointed by USG). The work of COAM is facilitated by the Coordinator who (1) notifies students of allegations of academic misconduct, (2) consults with students and faculty regarding allegations of academic misconduct, (3) schedules hearings to resolve allegations of academic misconduct, and (4) notifies students and faculty of the outcomes of these hearings. The Coordinator also serves as a hearing officer in instances where students elect to have allegations of academic misconduct resolved as an administrative decision.

Every student accused of academic misconduct has the right to a hearing before a panel of COAM. A panel consists of at least four members of COAM, and the rules require that every panel have both faculty and student representatives. The panel serves as an impartial hearing body that hears evidence and determines (1) if a student has violated the University’s Code of Student Conduct and (2) an appropriate sanction in cases where students are found “in violation.” If a student agrees with the allegations of academic misconduct, he/she may elect to have the allegations resolved as an administrative decision. For an administrative decision, a student must admit in writing to the allegations of academic misconduct and waive his/her right to a panel hearing. The Coordinator then determines the sanction(s) for the misconduct.
I. NOTEWORTHY CHANGES IN COAM

Several noteworthy changes occurred in the past year. Ms. Katherine Kisker, Coordinator of COAM for the past ten years and a faculty member in the College of Nursing for 35 years, retired December 31, 2002. On January 1, 2003, Dr. Peter Pappas replaced Ms. Kisker. Prior to replacing Ms. Kisker, Dr. Pappas was a faculty member in the College of Biological Sciences for 27 years and Chairperson of the Department of Zoology for nine years. While a member of the faculty, Dr. Pappas served on COAM for over 10 years and on the University Judicial Panel for over 6 years.

COAM now has its own web site (oaa.ohio-state.edu/coam/home.html). The web site includes general information about COAM and academic misconduct, links to COAM’s procedures and rules and the University’s Code of Student Conduct, and an extensive list of FAQ’s (frequently asked questions) regarding academic misconduct. This web site should be a very useful resource for both faculty and students.

II. SUMMARY OF CASES RESOLVED

During the previous (2001-2002) academic year, COAM heard 331 cases of alleged academic misconduct. During the current (2002-2003) academic year, COAM heard 371 cases, an increase of 40 cases (12%). Of the cases resolved during the past year, 62 students (17%) were found “not in violation” and 309 students (83%) were found “in violation” (Table 1). Males and females represented 61% and 39%, respectively, of the cases heard (Table 2).

<table>
<thead>
<tr>
<th>Total Cases</th>
<th>Not in Violation</th>
<th>In Violation</th>
<th>In Violation (% of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>371</td>
<td>62</td>
<td>309</td>
<td>83%</td>
</tr>
</tbody>
</table>

Table 1
Committee on Academic Misconduct
Total Cases Processed and Their Outcomes
2002-2003 Academic Year
### Table 2
Committee on Academic Misconduct
Distribution of Cases Based on Student Gender
2002-2003 Academic Year

<table>
<thead>
<tr>
<th>Gender</th>
<th>Not in Violation</th>
<th>In Violation</th>
<th>Total</th>
<th>In Violation (% of Total for Gender)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>27</td>
<td>116</td>
<td>143</td>
<td>81%</td>
</tr>
<tr>
<td>(39% of 371)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>35</td>
<td>193</td>
<td>228</td>
<td>85%</td>
</tr>
<tr>
<td>(61% of 371)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>62</td>
<td>309</td>
<td>371</td>
<td>83%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(% of Total Cases)</td>
</tr>
</tbody>
</table>

### III. SUMMARY OF ACADEMIC MISCONDUCT CHARGES

When allegations of academic misconduct arise, a student often does not know or understand what he/she has allegedly done wrong. Since COAM desires that the hearing process also be an educational process, the Coordinator charges the student with violating the Code using terminology that explains the nature of the behavior that lead to the allegations. As list of the charges used by COAM and the number of students found “in violation” of each charge are provided in Table 3. As in previous years, plagiarism, collusion (unauthorized collaboration), and copying the work of another student were the most common types of academic misconduct.

Students are often found “in violation” of more than one charge. For example, “Submission of work not performed in a course” might also be a violation of “Failure to comply with course/program policies and/or requirements.” Thus, the total numbers of charges for which students were found “in violation” [432] exceeds the actual number of students found “in violation” [309].
<table>
<thead>
<tr>
<th>Charge</th>
<th>Number of Charges “In Violation”</th>
<th>% of All “In Violation”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plagiarism</td>
<td>118</td>
<td>38.1%</td>
</tr>
<tr>
<td>Collusion</td>
<td>112</td>
<td>36.2%</td>
</tr>
<tr>
<td>Copying or attempting to copy the work of another student in an unauthorized manner and misrepresenting it or attempting to misrepresent it as one’s own work</td>
<td>96</td>
<td>31.1%</td>
</tr>
<tr>
<td>Submission of work not performed in a course</td>
<td>33</td>
<td>10.7%</td>
</tr>
<tr>
<td>Failure to comply with course/program policies and/or requirements</td>
<td>17</td>
<td>5.5%</td>
</tr>
<tr>
<td>Alteration and resubmission of course materials in an attempt to change the earned credit or grade</td>
<td>14</td>
<td>4.5%</td>
</tr>
<tr>
<td>Forgery</td>
<td>13</td>
<td>4.2%</td>
</tr>
<tr>
<td>Possession and/or use of unauthorized materials during an examination or other course activity</td>
<td>12</td>
<td>3.9%</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>3.6%</td>
</tr>
<tr>
<td>Acting as a substitute (“ringer”) for another student during an examination or other course activity</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>Requesting that another student take your place during an examination or other course activity</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>Engaging in activities that place other students at an unfair advantage, such as taking, hiding or altering resource material, or manipulating a grading system</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>Totals</td>
<td>432</td>
<td></td>
</tr>
</tbody>
</table>

(The right column presents the percentage of students found “In Violation” of each charge relative to the total number of students found “In Violation” (i.e., ([number of students]/[309]*100). Since students might be found “in violation” of multiple charges, the total for this column exceeds 100%).)
IV. SUMMARY OF CASES BASED ON STUDENT’S COLLEGE OF ENROLLMENT AND REFEREEING DEPARTMENT

Virtually every enrollment unit on campus was represented in the cases heard by COAM (Table 4), but three enrollment units (College of Engineering, Undergraduate Student Academic Services, College of Business), when combined, accounted for over 50% of all cases.

<table>
<thead>
<tr>
<th>Enrollment Unit</th>
<th>Cases</th>
<th>Cases (% of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Technical Institute</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>School of Allied Medical Professions</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>School of Architecture</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Colleges of the Arts &amp; Sciences</td>
<td>10</td>
<td>2.7%</td>
</tr>
<tr>
<td>College of Art</td>
<td>6</td>
<td>1.6%</td>
</tr>
<tr>
<td>College of Biological Sciences</td>
<td>26</td>
<td>7.0%</td>
</tr>
<tr>
<td>College of Business</td>
<td>56</td>
<td>15.1%</td>
</tr>
<tr>
<td>Continuing Education</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>College of Education</td>
<td>6</td>
<td>1.6%</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>71</td>
<td>19.1%</td>
</tr>
<tr>
<td>College of Food, Agricultural, and Environmental Sciences</td>
<td>9</td>
<td>2.4%</td>
</tr>
<tr>
<td>Graduate School (M)</td>
<td>12</td>
<td>3.2%</td>
</tr>
<tr>
<td>Graduate School (P)</td>
<td>13</td>
<td>3.5%</td>
</tr>
<tr>
<td>College of Human Ecology</td>
<td>25</td>
<td>6.7%</td>
</tr>
<tr>
<td>College of Humanities</td>
<td>10</td>
<td>2.7%</td>
</tr>
<tr>
<td>College of Mathematical &amp; Physical Sciences</td>
<td>8</td>
<td>2.2%</td>
</tr>
<tr>
<td>School of Music</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>Enrollment Unit</td>
<td>Cases</td>
<td>Cases (% of Total)</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-------</td>
<td>--------------------</td>
</tr>
<tr>
<td>College of Nursing</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>College of Pharmacy</td>
<td>5</td>
<td>1.3%</td>
</tr>
<tr>
<td>College of Social and Behavioral Sciences</td>
<td>37</td>
<td>10.0%</td>
</tr>
<tr>
<td>Undergraduate Student Academic Services (USS)</td>
<td>68</td>
<td>18.3%</td>
</tr>
<tr>
<td>Totals</td>
<td>371</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The cases heard by COAM the past year originated from over 60 departments across the campus (Table 5), with cases from Chemistry (10.0% of all cases), Computer and Information Science (10.0%), History (9.2%), Biology (6.7%), Management Sciences (5.7%), and English (4.6%) accounting for nearly 50% of the cases.

Table 5.
Committee on Academic Misconduct
Distribution of Cases Based on Referring Department
2002-2003 Academic Year

<table>
<thead>
<tr>
<th>Referring Department</th>
<th>Cases</th>
<th>Cases (% of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp;MIS [Accounting and Management Information Systems]</td>
<td>8</td>
<td>2.2%</td>
</tr>
<tr>
<td>AED ECON [Agricultural, Environmental, and Developmental Economics]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>AFAM&amp;AST [African American and African Studies]</td>
<td>3</td>
<td>0.8%</td>
</tr>
<tr>
<td>ANTHROP [Anthropology]</td>
<td>5</td>
<td>1.3%</td>
</tr>
<tr>
<td>ASTRON [Astronomy]</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>BIOLOGY</td>
<td>25</td>
<td>6.7%</td>
</tr>
<tr>
<td>BUS-FIN [Business Administration-Finance]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>BUS-MGT [Business Administration-Management Sciences]</td>
<td>21</td>
<td>5.7%</td>
</tr>
<tr>
<td>CHEM [Chemistry]</td>
<td>37</td>
<td>10.0%</td>
</tr>
<tr>
<td>CIVIL EN [Civil Engineering]</td>
<td>5</td>
<td>1.3%</td>
</tr>
<tr>
<td>Referring Department</td>
<td>Cases</td>
<td>Cases (% of Total)</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------</td>
<td>--------------------</td>
</tr>
<tr>
<td>CLASSICS</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>COMP STD [Comparative Studies in the Humanities]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>CPTR/INF [Computer and Information Science]</td>
<td>37</td>
<td>10.0%</td>
</tr>
<tr>
<td>DANCE</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>ECON [Economics]</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>EDU P&amp;L [Education-Educational Policy and Leadership]</td>
<td>4</td>
<td>1.1%</td>
</tr>
<tr>
<td>EDU PAES [Education-Physical Activity and Education Services]</td>
<td>4</td>
<td>1.1%</td>
</tr>
<tr>
<td>EDU T&amp;L [Education-Teaching and Learning]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>EEOB [Evolution, Ecology, and Organismal Biology]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>ELEC ENG [Electrical Engineering]</td>
<td>3</td>
<td>0.8%</td>
</tr>
<tr>
<td>ENGINEER [Engineering]</td>
<td>9</td>
<td>2.4%</td>
</tr>
<tr>
<td>ENGLISH</td>
<td>17</td>
<td>4.6%</td>
</tr>
<tr>
<td>ENTOMOL [Entomology]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>FM RES M [Family Resource Management]</td>
<td>5</td>
<td>1.3%</td>
</tr>
<tr>
<td>FRENCH</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>GEOG [Geography]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>GERMAN</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>HDFS [Human Development and Family Science]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>HISTORY</td>
<td>34</td>
<td>9.2%</td>
</tr>
<tr>
<td>IND DSGN [Industrial, Interior, and Visual Communication Design]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>IND ENG [Industrial and Systems Engineering]</td>
<td>10</td>
<td>2.7%</td>
</tr>
<tr>
<td>ITALIAN</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>JCOM [Journalism and Communication]</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>LARCH [Landscape Architecture]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>LINGUIST [Linguistics]</td>
<td>3</td>
<td>0.8%</td>
</tr>
<tr>
<td>MATH [Mathematics]</td>
<td>5</td>
<td>1.3%</td>
</tr>
<tr>
<td>MATSC&amp;EN [Materials Science and Engineering]</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>MBA [Masters of Business Administration]</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>MECH ENG [Mechanical Engineering]</td>
<td>12</td>
<td>3.2%</td>
</tr>
<tr>
<td>Referring Department</td>
<td>Cases</td>
<td>Cases (% of Total)</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------</td>
<td>--------------------</td>
</tr>
<tr>
<td>MED TECH [Medical Technology]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>MICROBIOL [Microbiology]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>MOL GEN [Molecular Genetics]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>MUSIC</td>
<td>6</td>
<td>1.6%</td>
</tr>
<tr>
<td>NAVAL SC [Naval Science]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>NURSING</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>OTHER</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>PHARMACY</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>PHILOS [Philosophy]</td>
<td>4</td>
<td>1.1%</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>8</td>
<td>2.2%</td>
</tr>
<tr>
<td>PLNT BIO [Plant Biology]</td>
<td>4</td>
<td>1.1%</td>
</tr>
<tr>
<td>POLIT SC [Political Science]</td>
<td>13</td>
<td>3.5%</td>
</tr>
<tr>
<td>PSYCH [Psychology]</td>
<td>4</td>
<td>1.1%</td>
</tr>
<tr>
<td>SOC WORK [Social Work]</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>SOCIOL [Sociology]</td>
<td>10</td>
<td>2.7%</td>
</tr>
<tr>
<td>SPANISH</td>
<td>8</td>
<td>2.2%</td>
</tr>
<tr>
<td>STAT [Statistics]</td>
<td>8</td>
<td>2.2%</td>
</tr>
<tr>
<td>THEATRE</td>
<td>7</td>
<td>1.9%</td>
</tr>
<tr>
<td>TXTL&amp;CLO [Textiles and Clothing]</td>
<td>6</td>
<td>1.6%</td>
</tr>
<tr>
<td>WOM STDS [Women's Studies]</td>
<td>5</td>
<td>1.3%</td>
</tr>
<tr>
<td>YIDDISH</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>Totals</td>
<td>371</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
V. SUMMARY OF CASES BASED ON STUDENT’S RANK AND COURSE LEVEL

Nearly 50% of the cases heard by COAM during the past year were the result of allegations of misconduct in 100-level courses. Progressively fewer cases resulted from allegations in progressively higher-level courses (Table 6).

Table 6.
Committee on Academic Misconduct
Distribution of Cases Based on Course Level (Number)
2002-2003 Academic Year

<table>
<thead>
<tr>
<th>Course Level</th>
<th>Cases</th>
<th>Cases (% of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>100</td>
<td>179</td>
<td>48.2%</td>
</tr>
<tr>
<td>200</td>
<td>58</td>
<td>15.6%</td>
</tr>
<tr>
<td>300</td>
<td>46</td>
<td>12.4%</td>
</tr>
<tr>
<td>400</td>
<td>7</td>
<td>1.9%</td>
</tr>
<tr>
<td>500</td>
<td>29</td>
<td>7.8%</td>
</tr>
<tr>
<td>600</td>
<td>25</td>
<td>6.7%</td>
</tr>
<tr>
<td>700</td>
<td>20</td>
<td>5.4%</td>
</tr>
<tr>
<td>800</td>
<td>4</td>
<td>1.1%</td>
</tr>
<tr>
<td>900</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0.5%</td>
</tr>
<tr>
<td>Totals</td>
<td>371</td>
<td>100%</td>
</tr>
</tbody>
</table>
Although 100-level courses accounted for nearly 50% of the allegations of academic misconduct, the “rate” (i.e., number of allegations based on student enrollment) was actually higher in 300-level courses (0.86 allegations/1000 students enrolled) than in 100-level courses (0.79 allegations/1000 students enrolled) (Figure 1).

As summarized in Table 7, students in progressively higher class ranks tended to be charged with academic misconduct in progressively higher level courses.
For example, almost all cases involving rank 1 students (75 of 80 = 94%) occurred in 100 and 200-level courses, while nearly half of the cases involving rank 4 students (51 of 103 = 49.6%) occurred in courses at the 400-level and above. Also notable is the observation that rank 4 students accounted for more cases (103) than any other student rank.

Table 7.
Committee on Academic Misconduct
Distribution of Cases Based on Student Rank and Course Level
2002-2003 Academic Year

<table>
<thead>
<tr>
<th>Course Level</th>
<th>Class Rank</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>100</td>
<td>61</td>
<td>59</td>
</tr>
<tr>
<td>200</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>300</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>400</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>500</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>600</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>700</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>80</td>
<td>87</td>
</tr>
</tbody>
</table>

(The above table includes data for only rank 1, 2, 3, and 4 students, so the total number of cases in this table [337] is less than the total number of cases for students of all ranks [371].)
Figure 2 summarizes the distribution of cases among different course levels when calculated as a percentage of the total students within each class rank. This figure demonstrates clearly that a majority of allegations involving rank 100 students (76.3%) occurred in 100-level courses. What is even more surprising, however, is that the highest percentage (27.2%) of allegations involving rank 4 students also occurred in 100-level courses.

Figure 2.
Distribution of Cases by Course Level and Student’s Class Rank
2002-2003 Academic Year
VI. Summary of Disciplinary and Grade Sanctions

When COAM finds that a student has violated the University’s Code of Student Conduct, COAM imposes sanctions. The sanction always includes a disciplinary component; in a majority of cases, the sanction also includes a grade-related component.

The disciplinary sanctions imposed by COAM and the numbers of cases involved are summarized in Table 7. As these data demonstrate, most students found in violation of the Code of Student Conduct received a sanction of “probation.” Of the students who were suspended, all but one had a previous violation of the Code. All of the students who were dismissed had two previous violations of the Code.

### Table 7.
Committee on Academic Misconduct
Summary of Disciplinary Sanctions
2002-2003 Academic Year

<table>
<thead>
<tr>
<th>Sanction</th>
<th>Cases</th>
<th>Cases (% of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reprimand</td>
<td>20</td>
<td>6.5%</td>
</tr>
<tr>
<td>Probation</td>
<td>274</td>
<td>88.7%</td>
</tr>
<tr>
<td>Suspension</td>
<td>11</td>
<td>3.6%</td>
</tr>
<tr>
<td>Dismissal</td>
<td>4</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>309</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

(Of the 371 cases heard during the 2002-2003 Academic Year, 309 resulted in a finding of “In Violation,” and only these resulted in a disciplinary sanction.)

The grade sanctions imposed by COAM and the numbers of cases involved are summarized in Table 8. As these data demonstrate, the sanctions of “authorize a 0 on the assignment” and “authorize a final grade of “E” in the course” were used most commonly and with approximately equal frequencies.
Table 8.
Committee on Academic Misconduct
Summary of Grade Sanctions
2002-2003 Academic Year

<table>
<thead>
<tr>
<th>Grade Sanction</th>
<th>No. of Sanctions</th>
<th>Cases (% of Total Cases)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>41</td>
<td>13.3%</td>
</tr>
<tr>
<td>Lower Assignment Grade</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>&quot;0&quot; on Assignment</td>
<td>130</td>
<td>42.1%</td>
</tr>
<tr>
<td>Lower Final Course Grade</td>
<td>42</td>
<td>13.6%</td>
</tr>
<tr>
<td>&quot;E&quot; in Course</td>
<td>123</td>
<td>39.8%</td>
</tr>
<tr>
<td>Total</td>
<td>337</td>
<td></td>
</tr>
</tbody>
</table>

(Of the 371 cases heard during the 2002-2003 Academic Year, 309 resulted in a finding of “In Violation.” The number of grade sanctions [337] exceeds 309 because some students received more than one grade sanction [e.g., authorization for a “0” on the assignment plus lowering the final grade]. The data in the right column represent the percentage of students that received the indicated sanction. These data were calculated using the total cases found “In Violation” [309] not the total number of sanctions, so the total for this column exceeds 100%.)

As noted above, when a student is found “in violation” of the University’s Code of Student Conduct, COAM imposes both disciplinary and grade-related sanctions. Thus, by using various combinations of these two sanctions, COAM can impose sanctions that are commensurate with the severity of the academic misconduct. **Table 9** contains a summary of all of the combinations of disciplinary and grade-related sanctions imposed by COAM during the past year.
<table>
<thead>
<tr>
<th>Disciplinary Sanction</th>
<th>Grade Sanction</th>
<th>RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Formal Reprimand</td>
<td>None (NGA) (see footnote)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “O” on assignment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “A-” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “E” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “O” on the assignment, plus a reduction in the</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>student’s final grade by one full letter grade</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “B” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>final grade by one full letter grade</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “D” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “E” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>final grade by one full letter grade</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “D” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “E” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>final grade by one full letter grade</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “D” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “E” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>final grade by one full letter grade</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “D” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “E” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>final grade by one full letter grade</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “D” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “E” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>final grade by one full letter grade</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “D” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “E” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>final grade by one full letter grade</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “D” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “E” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>final grade by one full letter grade</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “D” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a final grade of “E” in the course</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>final grade by one full letter grade</td>
<td>1</td>
</tr>
<tr>
<td>Disciplinary Sanction</td>
<td>Grade Sanction</td>
<td>1</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>Disciplinary Probation (4 quarters)</td>
<td>Authorize a final grade of “D” in the course</td>
<td>1</td>
</tr>
<tr>
<td>Disciplinary Probation (4 quarters)</td>
<td>Authorize a final grade of “E” in the course</td>
<td>9</td>
</tr>
<tr>
<td>Disciplinary Probation (4 quarters)</td>
<td>None (D)</td>
<td>1</td>
</tr>
<tr>
<td>Disciplinary Probation (4 quarters)</td>
<td>Authorize a grade of “0” on the assignment</td>
<td>3</td>
</tr>
<tr>
<td>Disciplinary Probation (4 quarters)</td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s final grade by one full letter grade</td>
<td>5</td>
</tr>
<tr>
<td>Disciplinary Probation (4 quarters)</td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s final grade by two full letter grades</td>
<td>2</td>
</tr>
<tr>
<td>Disciplinary Probation (4 quarters)</td>
<td>Authorize a final grade of “D” in the course</td>
<td></td>
</tr>
<tr>
<td>Disciplinary Probation (6 quarters)</td>
<td>None (D)</td>
<td></td>
</tr>
<tr>
<td>Disciplinary Probation (6 quarters)</td>
<td>None (NA)</td>
<td>1</td>
</tr>
<tr>
<td>Disciplinary Probation (7 quarters)</td>
<td>None (D)</td>
<td></td>
</tr>
<tr>
<td>Disciplinary Probation (until graduation)</td>
<td>None (D)</td>
<td></td>
</tr>
<tr>
<td>Disciplinary Probation (until graduation)</td>
<td>None (NA)</td>
<td>1</td>
</tr>
<tr>
<td>Disciplinary Probation (until graduation)</td>
<td>None (NGA)</td>
<td>1</td>
</tr>
<tr>
<td>Disciplinary Probation (until graduation)</td>
<td>Authorize a grade of “E” on the assignment</td>
<td>3</td>
</tr>
<tr>
<td>Disciplinary Probation (until graduation)</td>
<td>Authorize a grade of “0” on the assignment</td>
<td></td>
</tr>
<tr>
<td>Disciplinary Probation (until graduation)</td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s final grade by one full letter grade</td>
<td>1</td>
</tr>
<tr>
<td>Disciplinary Probation (until graduation)</td>
<td>Authorize a grade of “0” on the assignment, plus a reduction in the student’s final grade by two full letter grades</td>
<td></td>
</tr>
<tr>
<td>Disciplinary Probation (until graduation)</td>
<td>Authorize a reduction in the student’s final course grade by one full letter grade</td>
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<tr>
<td>Disciplinary Sanction</td>
<td>Grade Sanction</td>
<td>1</td>
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<tr>
<td></td>
<td>Authorize a final grade of &quot;C&quot; in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the course</td>
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<tr>
<td></td>
<td>Authorize a final grade of &quot;D&quot; in</td>
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</tr>
<tr>
<td></td>
<td>the course</td>
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<tr>
<td></td>
<td>Authorize a final grade of &quot;E&quot; in</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>the course</td>
<td></td>
</tr>
<tr>
<td>Suspension (1 quarter)</td>
<td>None (NA)</td>
<td></td>
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<tr>
<td></td>
<td>Authorize a final grade of &quot;E&quot; in</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>the course</td>
<td></td>
</tr>
<tr>
<td>Suspension (2 quarters)</td>
<td>None (D)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Authorize a grade of &quot;0&quot; on the</td>
<td></td>
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<tr>
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<td>assignment</td>
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<tr>
<td>Suspension (4 quarters)</td>
<td>Authorize a final grade of &quot;E&quot; in</td>
<td></td>
</tr>
<tr>
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<td>the course</td>
<td></td>
</tr>
<tr>
<td>Dismissal</td>
<td>None (NA)</td>
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</tr>
<tr>
<td></td>
<td>Authorize a final grade of &quot;E&quot; in</td>
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</tr>
<tr>
<td></td>
<td>the course</td>
<td></td>
</tr>
<tr>
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</tr>
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<td>Not in Violation</td>
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</tr>
<tr>
<td>Totals</td>
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<td>80</td>
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</table>

(1) "NGA" = no grade authorization (i.e., the panel did not feel that the misconduct warranted a change in the student’s grade); “D” = student dropped course before the allegations of misconduct were resolved; “NA” = not applicable (the student was not enrolled in a formal course, so a grade sanction was not applicable).
VII. SUMMARY

Academic misconduct has been and continues to be a problem at The Ohio State University. There was a 12% increase in cases this year compared to last year, and a 58% increase in cases compared to just 5 years ago. Moreover, the cases forwarded to COAM probably reflect only a fraction of the incidents of misconduct that actually occur. As in past years, plagiarism, collusion, and copying were the most common forms of misconduct this year.

COAM is well aware of and appreciates the fact that faculty members often spend significant amounts of time and effort in maintaining the academic integrity of their courses. In support of faculty members’ efforts, COAM follows carefully its established rules and procedures to ensure that students earn their degrees through honest work and effort.

The Committee and, in particular, the Committee’s Coordinator are available to serve as an educational resource to any member of the academic community. To this end, during the last half of the current academic year, the Coordinator visited 28 departments on campus and answered questions about COAM and academic misconduct.
Report to the University Senate

Council on Enrollment and Student Progress: AY 2002-03

Introduction: Role and Responsibilities (see Faculty Rule 3335-5-486)

The Council on Enrollment and Student Progress, [hereafter CESP], is a standing committee of the University Senate, and as such, addresses issues related to enrollment planning for the university and all its students. Particularly for undergraduate students, the council considers initiatives that affect recruitment, admissions, financial aid, registration, and student retention. In addition, CESP reckons with proposals and situations related to the university calendar, student records, and graduation.

The council is made up of fifteen voting members, including nine regular faculty and six students. It traditionally maintains close ties and serves as a conduit for regular communication with key personnel in the offices of Financial Aid, Undergraduate Admissions and First Year Experience, Undergraduate Studies, the Registrar, Minority Affairs, and Institutional Planning and Research. Individuals from these offices attend meetings and contribute invaluable data, counsel, and support. During the 2002-03 academic year, council meetings were scheduled five times each quarter, and met on the first and third Tuesday of the month, October through May.

Key Initiatives and Accomplishments in 2002-03

CESP, having devoted considerable effort over several years, achieved three goals in AY 2002-03 that will have a broad, positive impact on the university. These include:

1) Moving the day of commencement during autumn, winter and spring quarters from Friday to Sunday, effective Autumn, 2003. Recognizing the amount of work required to expedite this substantive change, particularly by the Office of Commencement and Special Events, college offices, University Registrar, and many other offices across campus, the council's resolution was presented to the University Senate on June 5, 2003. It requires changes in University Faculty Rules 3335-7-19 and 3335-7-20.

2) Replacing the practice of specially arranged "senior finals" with final exams for graduating seniors scheduled by the registrar's office during exam week. It requires changes in University Faculty Rules 3335-7-19 and 3335-7-20; and

3) Implementing year-round competitive admission standards to narrow the "success gap" between well-prepared students entering autumn quarter and those entering at other times. (Current data indicate that 31 percent of freshmen who enter in winter quarter and 18 percent of those entering in spring graduate within six years, compared to 56 percent of those admitted in autumn.) The University Board of Trustees voted on October 4, 2002 to apply year-round competitive admission standards beginning autumn 2003 to improve the university’s academic profile and retention and graduation rates. These goals are central themes in the Academic Plan.

Beyond these prominent changes, CESP accomplished several related tasks that occupied the attention of council members throughout the past year:
A) CESP reaffirmed diversity as a core value at OSU and accordingly devoted strong effort in continuing the work of its minority student retention subcommittee, chaired by Professor Philip Beckley. While minority enrollment and six-year graduation rates have reached all-time high levels, retention remains a concern. The subcommittee presented a set of proposed action steps to improve the rate at which minority students remain enrolled until graduation.

B) Progress reports from the Faculty Committee on Admissions by its chair, Professor Ben Givens and Assistant Vice President Mabel Freeman, kept the council apprised of newsworthy accomplishments and related concerns. The stated goal of the undergraduate admissions office for New First Quarter Students (NFQS) in autumn 2002 was 5,850. Remarkably, a total of 5,888 NFQS enrolled. Of continuing interest is the gradual improvement in the quality of each successive entering class. In autumn, 2002, the class of NFQS matched the previous year's average ACT score of 25.2 and is the most diverse in OSU history. FCA voted to require the written portion of the ACT for the class entering in autumn, 2006.

C) The annual report from the University Registrar, Brad Myers, detailed a set of functions, priorities, and accomplishments in the past year. These include implementation of the searchable online Master Schedule and Course Bulletin, the fulfillment of online grade posting and class rosters, and the expansion of DARS, the Degree Audit System, essential to verifying student records for Sunday commencement.

D) Tally Hart, Director of Financial Aid, brought to CESP concerns about student indebtedness and its impact on retention and graduation. Having testified to the U.S. Senate Banking Committee, Hart described efforts in the Office of Student Financial Aid to provide credit counseling and FYE seminars in money management. Information was presented about efforts to identify and provide attractive financial aid packages to very high ability students who have high levels of need.

E) CESP sent to President Holbrook a letter informing her of faculty concerns regarding the shortened summer term (nine weeks) that occurs in two out of every seven years. Summer, 2003 was such a year; noting that the next occurrence would be in 2009, CESP committed itself to evaluating the whole calendar to recommend appropriate changes that would better meet the instructional needs of the university.

F) The council voted to increase its voting membership by one individual appointed by the University Staff Advisory Committee (USAC). This will require a change in the Faculty Rules; such a proposal will be forwarded to the senate in AY 2003-04.

G) A report from student government President Eddie Pauline provided the council with helpful information about the benefits of increased student/faculty interaction on student engagement and retention.

Respectfully submitted,

Timothy Gerber, Professor of Music
CESP Chair, 2002-03
Annual Report of the Faculty Hearing Committee

The committee heard only three cases this past year. However, one was a de-tenuring hearing that consumed a lot of faculty time. The other two were appeals of denial of promotion and tenure where the candidates had strong support within their TIU’s, but were rejected by their college. A fourth case involving an appeal of denial of a request for review for non-mandatory promotion was carried over to the current year. Several issues arose from these cases.

In the de-tenuring case, it is very clear that this should have been resolved locally. The Chair recommends that the university require the use of a mediator before these cases proceed from the TIU. The ultimate resolution of this case, after hundreds of hours of faculty time, was the same as could have been obtained at the local level if appropriate communication between the parties had occurred. In addition to this point, there was a number of disturbing issues that arose during the process:

1. The administration did not exercise the leadership needed to reach a settlement when presented with the opportunity even though there was agreement that a settlement was in the best interest of the university.
2. The administration appeared to take lightly the standards of proof that would be required to de-tenure a faculty member.
3. The assertion from the panel that the university did not adequately prove its case and that the appeal should be upheld was rejected by the President. The response to the panel explaining the rationale for rejecting the panel's recommendation lacked rigor in its analysis.

Fortunately, negotiations at the Board of Trustees produced an outcome that was satisfactory to all parties.

The tenure appeal cases are more examples of a problem cited in numerous previous reports from the committee. The problem relates to de novo reviews at the college level that override local decisions and impose new standards at the sixth year review. In spite of some progress in this area, there is need to more clearly define the criteria that should be met before the college or university level committees can override a TIU's decision. In the two cases heard this year, the panels recommended re-review and this was agreed to by OAA. The re-review is currently in progress.

Grady W. Chism, Chair
Faculty Hearing Committee 2002-2003
This is a time of profound change for higher education across the nation as we adjust to the demands of a knowledge-based economy and a global marketplace; diminished state budgets accompanied by the challenges of cost and affordability; demands for accountability; competition among institutions on all levels; new responsibilities for faculty; assaults on college athletics; and an unrelenting demand for quality. In this uncertain climate, I was privileged to join an institution that understood its mission and goals for the future, its connection to the economy, and its standing among the nation’s research universities. We are also a university that is aware of our great potential and unlimited opportunity.

**PROGRESS ON THE ACADEMIC PLAN**

That vision and understanding resulted from the work of hundreds of Ohio State faculty, staff, and administrators who participated in a comprehensive strategic planning process that, in the end, produced the Academic Plan. The strength of the Academic Plan today is the sustained commitment of faculty, staff, students, and our Board of Trustees to its goals. It is exceptionally rare for an institution the size of Ohio State to share a unity of vision—and this is our great advantage.

The Academic Plan is the University’s agenda to enhance our academic quality, diversity, and stature as a world-class research university. It is imperative, therefore, that each year we pause to assess our progress and then move forward with informed action toward our goals, recognizing that in our fiscally constrained, publicly scrutinized environment, intentional change will be necessary if we are to control our own destiny.

My goal in this address today is to review the progress we have made in each of the six basic strategies described in the Academic Plan, identify challenges, and to outline what lies ahead of us during this academic year.

**The first Academic Plan strategy is to build a world-class faculty.**

This year we welcomed 166 new faculty members among all the colleges. The largest number joined as assistant professors but we have also added three new chaired or named professors, four Eminent Scholars, several new department chairs and directors. We have new deans of the colleges of MAPS, Pharmacy, Public Health, as well as the Mansfield and Lima campuses. New Vice Presidents of Government Relations, University Relations, and Development have joined the administration.

Compensation is prerequisite to retaining our current faculty and to recruiting new colleagues. No initiative has received more attention than our efforts to move compensation to competitive levels. Although we made some progress last year in a
difficult fiscal environment, faculty salaries continue to remain below the average of our benchmark peers. Last year was the first year of a multi-year compensation initiative to reach the benchmark average, and while Ohio State’s faculty salaries did increase by an average of 4.8%—more than 2% above market—our overall average faculty salaries still remain 4.4% below the average for our benchmark peers. This was, nonetheless, an improvement from a year ago. Staff salaries increased by an average of 4.6% but staff salaries, too, remain well below competitor’s levels.

We must remain committed to our compensation goals over the next several years. Reaching the benchmark average in four years, however, will require significantly more than 1% progress per year and may necessitate hard decisions among competing priorities.

Through Senate action, the cap on clinical faculty was removed allowing the College of Medicine and Public Health to add faculty who can focus specifically on the clinical training of medical students, thereby freeing tenure track professors to spend more time on research and other activities.

I will support a similar proposal for a research faculty track that will be coming before the Senate in the next two months. These faculty researchers will help us enhance the magnitude and success of our research enterprise.

The second strategy of the Academic Plan is to develop academic programs that define Ohio State as the nation’s leading public land-grant university. Last year we launched a major initiative to create the Federation of the Colleges of the Arts and Sciences, a coalition of five strong and important colleges that awards 50% of the undergraduate degrees, houses 70% of the honors students and forms the core of a great research university. The advantages of the Federation enumerated in a white paper include the development of interdisciplinary majors, minors, courses, and research projects, and other opportunities for collaboration in hiring, streamlining administrative functions, and improving the counseling and advising of students.

One of our most noteworthy efforts has been the drive to enhance Ohio State’s position as a national leader in biomedical and life sciences research. These are areas that engage programs of at least 14 of our 18 colleges and provide enormous opportunities for collaboration across campus—with the physical and social sciences, engineering, and with humanities and arts as well—and to compete for federal, private, and state funding.

Our athletic program enjoyed a successful year, with Ohio State finishing third in the Director’s Cup, our highest ranking ever. It was achieved on the basis of a national championship in football and top-ten rankings in men’s gymnastics and lacrosse and women’s fencing, golf, lacrosse, rowing, and baseball. A record 411 student athletes (48%) achieved GPAs of 3.0 or better. We led the Big Ten Conference with 250 student-athletes named to Academic All-Conference teams. The review team for NCAA recertification was strongly positive about our athletes and our athletic programs.
The third strategy of our Academic Plan is to enhance the quality of the teaching and learning environment.
Ohio State is presently involved in a significant number of construction and renovation projects that are transforming our campuses and enhancing facilities for academics, research, student activities, housing, and clinical services. The Aronoff Biological Sciences Laboratory and Veterinary Medicine Administration Building both opened this fall; the Knowlton School of Architecture, The Peter L. and Clara M. Scott Laboratory in Mechanical Engineering, the Physics Buildings, and the Richard M. Ross Heart Hospital are well underway; construction and renovation of an expanded Larkins Recreational facility are in progress, and we have broken ground on a new Biomedical Research Tower that will nearly double our square footage for biomedical research. There is extensive remodeling of Page, Jennings, and Hagerty Halls and the largest ever renovation project—the William Oxley Thompson Library—is in the design phase. The library is the heart of the campus and will be restored to its original magnificence and incorporate state-of-the-art functions.

A new student services building is planned at the Marion Campus, and we will cut the ribbon on the Gib Reese High Technology classroom building next week in Newark. The first new residence halls to be built on the Columbus campus since 1969 opened this fall, and student housing needs are being addressed on all of the regional campuses. The traffic disruptions you have noticed signal new bridges to campus and the beginning of the long awaited retail, living, and office space of the South Campus Gateway Project. And, we’re investing in technology in classrooms all across the University to enhance teaching and learning experiences. An E-Learning and Strategy and Implementation Plan has been developed that includes distance learning opportunities for students on campus and around the world. Campus appearance has been improved with new plants, flowers, and attention to maintenance. The quality of the physical environment connects with a positive atmosphere for learning and engenders pride in our campus.

Our alumni and friends have helped make these improvements possible through their support, which this year increased by 9% over the previous year with a record number of 102,777 donors.

Important steps have also been taken to enhance and better serve the student body—a fourth strategy of the Academic Plan.
Last fall we instituted selective admissions for all four quarters on the Columbus campus and better integrated the regional campuses and Columbus State Community College in our admissions process.

Our recruitment and enrollment management efforts are working effectively. This fall we welcomed the most academically accomplished and diverse freshman class in Ohio State history, a class that includes about 130 National Merit, National Achievement, and National Hispanic Scholars and 250 high school valedictorians. More than a third come from the top 10% of their high school classes. The average ACT score is a record high of 25.4, but we are not content with these numbers. Our goal is to recruit an entering class
with a median ACT score of 26 by 2006 and 27 by 2008. The latter score equates to the top 10% of all students taking the ACT. Reaching these goals will require a significant investment of additional funds for recruitment and scholarships.

While the statistics of our entering undergraduate students are impressive and continually improve, it is the accomplishments of the students while they are here that tell the story. Last spring 595 freshmen were inducted into Phi Eta Sigma and Phi Lambda Delta honorary societies on the basis of their academic accomplishments; numerous upperclass and graduating students earned prestigious Truman, Goldwater, Udall, Mellon, NSF and Defense fellowships and scholarships, and were accepted by some of our nation’s most revered graduate and professional schools, including Ohio State, for postgraduate work.

We have increased accessibility to classes through data management and direct funding for high demand courses, expanded our successful First-Year Experience program, and met our goal of establishing ten Scholars programs, which help us recruit well-prepared students. The student retention rate for the freshmen year is 87%, up from 78% seven years ago.

This winter a two-year pilot program will be launched through the Colleges of the Arts and Sciences to develop 40 new freshman seminars designed to give students, in classes of 20 or fewer, an early exposure to research concepts and ideas under the tutelage of some of our most distinguished faculty. Sixty more seminars will be added next year.

Undergraduate research has continued to flourish in all colleges and more than 240 students presented their work at the Denman Forum, a 60% increase over the previous year. Some of those students also displayed their work at the State House. I was enormously impressed with the quality of their presentations.

Attracting the very best graduate students to Ohio State is also fundamental to our mission. Last spring, nearly half a million dollars was awarded to the Graduate School to increase the number of fellowships available for recruiting outstanding students. We will set aside new money to support interdisciplinary research by graduate students and will work to increase health coverage as resources allow.

Creating a diverse university community is the fifth strategy in the Academic Plan. More than 70 women and minority faculty members joined Ohio State this fall as new assistant professors, and nine more women and 13 minority faculty members were hired as associate professors or above, thus meeting our goal of attracting at least five to ten women and five to ten minority faculty at a senior level each year. As important as it is to recruit new faculty, our efforts must be equally directed to retention and advancement of those who are here. The Cohort Project, under the direction of The Women’s Place, is creating a greater sense of community and is gathering data on effective retention strategies.

The Kirwan Institute for the Study of Race and Ethnicity was formally opened, and has already hosted one national conference. Students held an open discussion with
administrators and faculty before the Michigan decision was reached in the Supreme Court, and Ohio State has already responded to the Court’s favorable ruling by modifying our undergraduate application process to solicit more individualized information from prospective students about their backgrounds and talents. We are steadfast in our goal to recruit and retain a student body that reflects the diversity of society and contributes to a rich educational experience for all.

Ohio State remains one of the top three non-minority institutions in the nation in awarding doctorates to African Americans. And the Fisher College of Business ranks second in the nation for having the largest percentage of African-American students in its MBA program.

A significant investment of continuing funds will be available to expand our efforts in recruitment and in awarding financial aid to further enhance the diversity of our student body. But money alone does not make the difference; it is also opportunity, a welcoming and positive environment, the presence of role models and mentors, and special efforts to enhance retention and success.

The President’s and Provost’s Diversity lecture series has been expanded in number of presentations and includes cultural and artistic events as well.

**The final major strategy stated in The Academic Plan is to help build Ohio’s future.** As we succeed in pursuing the five previous strategies, we are not only building Ohio State, but also Ohio’s future. The focus of this sixth strategy is on our efforts to enhance economic development, which to a great extent is based on our research programs, and on our outreach activities.

Faculty have been highly successful in research, increasing the total amount of sponsored research by 80% over the last five years, now reaching a level of $426MM, ranking us 17th in the nation among public universities and 32nd among all universities. We are fifth nationally in the amount of research funded by industry and are pleased that more than 800 awards from the private sector sponsored undergraduate research projects last year. Large awards from the state have been received for a new Wright Center of Innovation for Biomedical Imaging, a Wright Capital project in Engineering, and for five Hayes Investment Fund grants.

The newly staffed Office of Technology Licensing has become more visible and active in mining and protecting intellectual property of faculty for purposes of licensing, expanding research agreements and commercialization, and in some cases even by developing startup companies through Ohio State’s research park, Scitech. This year, a new company was launched through a partnership of Ohio State, the British Technology Group and the Industrial Technical Research Institute in Taiwan to commercialize novel flat-panel technology developed in the department of Physics.

Ohio State is actively involved with the Columbus Chamber of Commerce in leading the Life Sciences Initiative and participating in the Creative Services Initiative. We are
fortunate to continue building strong interactions with Battelle in the biomedical sciences, arts and sciences, pre-collegiate education, engineering science and technology programs, and in the area of homeland security. Ohio State and Battelle have begun to investigate seriously the possibility of a bold and viable business plan for a live, learn, create, and work community that could include academic and research programs co-located with private industry, government labs, and residential sites.

Funded research and technology transfer receive wide public acclaim because the numbers translate into jobs and imported dollars; but I feel strongly that research and scholarship in the humanities, arts, and other fields also add to the quality, excellence, and reputation of a great research university. Ohio State has such premier programs, and I have invested new resources to assure these programs are a priority.

Ohio State touches people of all ages through outreach programs that impact hundreds of thousands of people across the state. Extension, of course, provides enormous value to the citizens of Ohio, but all academic units and all of our campuses have programs and initiatives that advance the economy, help prepare pre-collegiate students for college, provide health care services to low-income Ohioans, and enhance learning and re-learning for older adults.

A faculty committee has reviewed our outreach and engagement program and, along with the University Leadership Team, has joined me in the belief that a freestanding vice presidency for outreach and engagement will be better able to coordinate and publicize our vast array of outreach activities, provide leadership for central initiatives, greatly expand the target audience, provide central support and oversight for service learning courses and develop new revenue streams as we connect Ohio State’s academic excellence with societal needs.

**CHALLENGES**

I have highlighted our successes and enormous opportunity to advance academically and before I describe our leadership agenda, I would like to mention some of the significant challenges we will have to meet head on and overcome through hard work, focus, and effective advocacy.

We will continue to face economic hardships and will need to be more vigilant in conserving resources, controlling expenses, and investing strategically in the programs that best promote our success and excellence. We need to discontinue programs that are under-producing and streamline administrative functions in order to assure that our students are not short-changed in their education. We will need to generate more of our own resources whenever possible and constantly persuade friends that Ohio State is worthy of their generosity.

Increasing demands will be placed on us for accountability at the state and federal levels and by students and their parents who believe the cost of education—even public
education—is becoming unaffordable. We will continue to provide more financial aid, as we have, if tuition is increased so that no qualified student is unable to attend Ohio State for financial reasons.

Safety for our students on and off campus is a serious issue that we will continue to address with our students and their families and with other campus and neighborhood partners and city officials. The Task Force on Celebratory Rioting is already engaged in implementing strategies in the neighborhoods adjacent to campus.

We will work to strengthen shared governance with the faculty and staff and enhance our partnership with undergraduate, graduate, and professional student governments in developing a shared agenda to meet our mutual goals for this great institution.

**Leadership’s Agenda**

This summer, a leadership team of the cabinet, the Council of Deans, selected directors, and faculty leaders focused their attention on a single question “How can Ohio State BecomeDistinctive as a Research University?” The two operative words were “distinctive” and “research.” We identified three overarching goals designed to capture and focus more specifically on strategies within the Academic Plan. Let me summarize the key elements:

- pursue cutting-edge, interdisciplinary research for short- and long-term societal benefits,
- provide distinctive educational experiences and opportunities for undergraduates, and
- develop a 21st century model of outreach and engagement.

The leadership team also recognized that business-as-usual is not the path to distinction. To be successful, we need an enabling culture that emphasizes high performance; we need sufficient resources to incentivize and reward change whether by reallocating faculty time or by removing financial barriers that inhibit success; and we need to exploit technology across campus to leverage the power of our most important resource—human capital.

Let me briefly address each of these areas where we will pursue distinction.

First, pursue cutting-edge, interdisciplinary research for short- and long-term societal benefits. Success in interdisciplinary research demands strong disciplinary expertise, but the most intractable problems in society will be solved through application of the collective skills and knowledge of individuals with different perspectives. Because of the breadth and depth of faculty expertise at Ohio State, we have a remarkable advantage in forming interdisciplinary teams and programs to compete for major resources, such as the program project and center grants characteristic of the Comprehensive Cancer Center and other health science programs. The Third Frontier Project offers unprecedented
opportunities to match Ohio State’s research goals with those of the state. Issue One on the November ballot is critical to the success of the Third Frontier.

Interdisciplinary programs are common all across campus on various scales ranging from large organizations such as the Mathematical Biosciences Institute to multi-investigator projects. We will invest $1 million this year to jump-start new multidisciplinary centers or projects that have the potential to become self-sustaining from new external resources and will provide support to aid in the preparation of proposals. The NIH, the nation’s largest single source of funds for university research, has announced a new $2.1 billion set-aside fund for innovative, high-risk interdisciplinary research to solve a range of complex health problems. The Director of the NIH describes this as a funding approach needed “to change strategy and culture.” Ohio State is prepared to do both.

I have established three funds through the Office of Research to make competitive awards in the arts, humanities, and social sciences for projects that benefit the university and for which external funding is not available; to support interdisciplinary research by our graduate students; and to help faculty on regional campuses design and carry out projects that meet the three leadership goals in research, student initiatives, and outreach.

A second area of distinction for Ohio State will be our ability to offer more and inventive opportunities for active learning by undergraduates within and outside the classroom—through service-learning courses, scholar programs, and living-learning opportunities, and internships and co-ops that provide career experience as part of the academic program. Internships are offered by many colleges, including the arts and sciences, that provide experiences for as many as 2,000 students. Our 650 student activities offer a multitude of opportunities for students to develop skills of leadership, organization, and collaboration.

No other college or university in Ohio offers undergraduate students the vast opportunities to conduct research with renowned faculty and in top facilities that Ohio State offers. Research has become an essential part of an undergraduate education. It helps students create knowledge as they learn and to work closely with faculty and graduate students. Colleges and departments are being asked to offer research experiences for undergraduates in every discipline.

Our student focused-initiatives for the coming year will also include:

- a $3.7 million annual investment in technology that supports faculty teaching and student learning,
- student housing as an institutional priority to enhance academic achievement, retention, and timely graduation, and
- curricular reform to improve the path and time to degree.

Finally, the third area of distinction we will pursue is the 21st century model of outreach and engagement—or public scholarship. This is part of our land-grant mission and already an area of great strength at Ohio State. It encompasses the efforts of thousands of
our students, faculty, and staff members. We must better coordinate our outreach efforts
to match Ohio State’s expertise with the most important needs of our community and our
state, expand partnerships with public and private organizations to enhance our work and
institute measures to assess our outcomes. A Vice Presidential Office devoted to
Outreach and Engagement will help us achieve our outreach goals and generate new
revenue streams so that these activities become self-sustaining.

I closed my Investiture address with the statement that I believe even more strongly
today. I feel I have been given a wonderful gift only a privileged few are offered—the
opportunity to work with outstanding faculty, students, staff, trustees, administrative
colleagues, alumni, and friends, to learn something new every single day—a phenomenon
that will always exist—for all of us—for as certainly as we think we understand the many
aspects of Ohio State, they will surely have changed in this dynamic environment.

I look forward to working with the Senate, faculty, student government, USAC, and
administrative colleagues as we pursue our ambitious agenda for excellence. Thank you
for the support and advice I have received over the past year, and thank you for the work
you do to help make Ohio State a university of true distinction. We have a very
promising future and much work to do together.

Thank you.