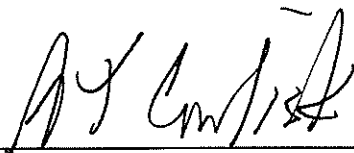


**University Research Committee**  
**Annual Report to the University Senate**  
**2005-2006**

**Respectfully Submitted By:**



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Professor A. Terrence Conlisk  
Committee Chairperson  
May 15, 2006

**University Research Committee  
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**Function of the University Research Committee:**

The University Research Committee (URC) is a joint committee of the University Senate and the Council on Research and Graduate Studies of the Graduate School. The URC is one of the few direct connections between the University Senate and Council on Research and Graduate Studies.

The structure, responsibilities, and organization of the URC are listed in Faculty Rule 3335-4814. The principal responsibility of the URC is to “encourage and stimulate scholarly research and creative activity and foster a close relationship between education and scholarly research.” In addition to its advisory duties for the University Senate and Council on Research and Graduate Studies, the URC advises the Senior Vice President for Research.

The Committee’s 2004-2005 report was presented to the University Senate in April 2005. The information in this report covers URC activities during the period April 2005 through March 2006. Professor Terrence Conlisk, Department of Mechanical Engineering, served as Chair of the URC during the 2005-2006 year. The URC Committee roster for the 2005-2006 is included in the Appendices.

## **University Research Committee Activities** **April 2005 – March 2006**

### **Executive Summary**

The URC examined many issues during the period from April 2005 to March 2006, which is the time period covered by this report. The Committee entertained visits from Deans Freeman and Beck who summarized the main conclusions of their very important committees examining the PhD programs and the role of the Graduate School respectively. The URC submitted responses to both reports. Other activities of the URC included a discussion of Export Controls, stem cell research policies, the research misconduct policy, Institutional Review Boards (IRBs), the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) compliance, communication between the Research Foundation and faculty researchers, funding for interdisciplinary centers and ranking the Targeted Investments in Excellence (TIE) proposals. During the past three years growth in research expenditures exceeded 9%, a very healthy growth, which enabled us to move into the top ten of public universities in research expenditures. Details of our activities are provided below.

### ***May 26<sup>th</sup>, 2005 University Research Committee Meeting***

#### **OSURF Board Member Balloting:**

Professor Clara Bloomfield was elected to fill the upcoming vacancy on The Ohio State University Research Foundation Board of Directors.

#### **Freeman Report on Graduate Education:**

The University Research Committee response to the the Freeman Committee Interim Report was discussed. While time did not allow for further disussion at the May 26<sup>th</sup> meeting by the entire URC, Professor Conlisk stated that the response was well written and contained all of the comments made by URC members at previous committee meetings or via e-mail exchanges. Members of the Subcommittee charged with writing the URC response to the Freeman Committee Report were Scott Pearson, Gordon Aubrecht, Richard Gunther, Nicholas Hall, and William Clark (ex-officio).

#### **Draft Freeman Committee Report Implementation Proposal:**

The draft Freeman Committee Report Implementation Proposal, prepared by Professor Nicholas Hall, was discussed. This draft proposal highlighted concerns about how the Freeman Committee planned to implement their recommendations and proposed a simpler, more flexible system for implementation. In contrast to the Freeman Report, Professor Hall's draft proposal allowed for each college or department to choose one of three tracks for evaluation of its specific doctoral programs. Primary metrics for evaluation would include: national recognized rankings of faculty and/or department quality; value delivered to students and to OSU (as measured by placement on graduation), and the unique value of a program to OSU or to the the State of Ohio.

Secondary metrics would include the metrics identified in the Freeman Report not listed above.

The URC response to the Freeman Committee Interim Report and the Draft Freeman Committee Report Implementation Proposal were submitted to the Freeman Committee and the Beck Committee.

### **Resources for Support of Interdisciplinary Centers:**

Dr. Robert McGrath discussed the institutional research strategy and vision for the future. Ohio State's research funding growth rate has exceeded 9% for the past 3 years. It was important for OSU to figure out what it does well, what direction it wanted to head, and how it could capture a greater market share of the research funding than its competitors. OSU currently ranked sixth in industry funding and could easily move into the top 3. 2005 Third Frontier awards from the State of Ohio totaled \$39.8M (the award required matching funds from industry partners).

The budget for the Office of Research (OR), exclusive of salaries, was approximately \$6.5M. Approximately \$4.6M of that amount comes from the State of Ohio Research Challenge funds. The remaining \$1.9M comes from the OR Special Research Budget. The Special Research Budget is used to support partnerships with colleges for academic enrichment, faculty start-up and retention packages, core research facilities, equipment matching, and matching funds for OSU's major research centers funded by NSF and NIH, as well as other sponsors. The Office of Research made an additional request for \$1.5M/year (to cover FY06 through FY10), giving OR total flexible resources of approximately \$8M/year.

In an effort to respond in a more strategic way to research opportunities, Dr. McGrath proposed that the Office Research would provide \$3M/year for 5 years to support 2-4 interdisciplinary research themes. Colleges would be asked for matching funds to help support new faculty hires, associated start-up packages, graduate students, and equipment purchases. A request would also be made to the President and the Provost for matching funds. Total contributions could reach \$50M to \$100M.

The formation of a Research Vision Committee to identify 2-4 interdisciplinary research themes would be a logical next step. Dr. McGrath requested input on the composition of such a committee from the Deans, College Research Officers, Department Chairs, the President and Provost's Advisory Committee, and the Council on Research and Graduate Studies.

### **Export Controls:**

Todd Guttman, Associate Vice President for Research Compliance, and David Doty, Associate Director of the Engineering Experiment Station, provided an update on export controls. Export controls are the US laws that regulate the distribution of strategically important products, services and information to foreign nationals and foreign countries.

Shipping of equipment and/or providing technologies to foreign nationals or foreign countries subject to export restrictions (either in the US or abroad) is illegal, unless a license is first obtained. It is also illegal to speak to foreign nationals in a laboratory without a license.

The license requirement for dissemination of information does **NOT** apply if one of these three exclusions apply:

1. **Education Exclusion:** An education exclusion applies if a student uses equipment and/or technologies as part of a program of instruction.
2. **Fundamental Research Exclusion:** This exclusion does not apply if a University accepts any contract clause that forbids the participation of foreign nationals, gives the sponsor a right to approve publications resulting from the research, or otherwise operates to restrict participation in research and/or access to and disclosure of research results.
3. **Employment Exclusion:** A license, which may take months to obtain, may be required to ship controlled equipment out of the US. The Research Foundation, Engineering Experiment Station, or Office of Technology Licensing should be notified as soon as possible if a license is required.

Penalties can be administrative (including loss of program and/or pulling back of agency funds from an institution); criminal (fines up to \$1M for the institution and up to 10 years in prison for the individual); or civil (up to \$12K per violation for individuals or the institution).

Starting in July 2005, a new section will be added to the PA005 (Application to Seek Off Campus Funds) form which draws attention to the "red flag" items listed below.

- Does the project involve shipping equipment to a foreign country?
- Does the project involve collaboration with foreign colleagues in foreign countries?
- Does the project involve training foreign nationals in the use of equipment?
- Does the project involve working with a country subject to a US boycott?
- Is the RFP marked "Export Controlled?"
- Is the sponsor demanding pre-approval rights over publications or the participation of foreign national students?

If the answer is "yes" to any of the above questions, contact the Research Foundation, the Office for Technology Licensing, the Engineering Experiment Station (Dave Doty), or the Office of Research (Todd Guttman).

### **Chair of the 2005-2006 University Research Committee:**

Selection of the Chair for the 2005-2006 year took place at this meeting. Professor Conlisk stated that he was willing to serve a second term as Chair. The URC agreed that it would be beneficial to have a chair that served a 2-year term rather than a 1-year term to provide some continuity to the committee. The Committee voted unanimously to have Terry Conlisk serve a second term.

### ***October 18<sup>th</sup>, 2005 University Research Committee Meeting***

#### **Update on the Freeman Committee Final Report:**

Dean Richard Freeman, College of Mathematical and Physical Sciences, spoke about the Freeman Committee Report on Graduate Education. The Freeman Committee was charged with establishing metrics by which the quality of doctoral programs could be assessed. Conclusions made by the Committee included the following:

- The quality of the doctoral programs at OSU varied widely among one another;
- Existing programs were not being reviewed on regular cycles;
- OSU was producing fewer PhDs than its peer institutions and that number was continuing to decline (a large number of students admitted to PhD programs never graduated);
- The current funding model for doctoral programs did not effectively align resources with program quality;
- Funds within the Graduate School and from the Board of Regents could be used to help align funding with program quality.

Recommendations for improving the quality of Ohio State's programs included moving control over the doctoral programs to the Graduate School so that the Graduate School could set admissions standards and control the number of admissions per year. In addition, "terminal" master's degree programs and programs that served as stepping stones to doctoral programs needed to be identified.

Long-term recommendations included reviewing programs on regular cycles (3-6 years), moving away from a program based on credit hours to one based on graduation success and quality, and reviewing of current funding mechanisms.

#### **Research Accomplishments and Celebration:**

Robert McGrath shared with the Committee plans for a "Research Accomplishments Celebration" that was being planned for winter quarter (tentatively February 2006). The celebration would recognize Ohio State's top ten ranking among public universities in research expenditures. OSU faculty and students would be thanked for their role in helping OSU move up in the rankings.

OSU moved into 10<sup>th</sup> place among public universities, up from 13<sup>th</sup> place, and into 15<sup>th</sup> place among all research universities, public and private, up from 18<sup>th</sup> place. These rankings are based on research expenditures for fiscal year 2003. According to Dr.

McGrath, OSU outpaced many of its peer institutions including Massachusetts Institute of Technology, the University of California Davis, and Texas A&M.

Last year, Ohio State passed the half billion-dollar mark in total research awards. In FY 2005, total awards rose to \$552.7 million, an increase of 4.7 percent. Ohio State ranks sixth in the country among all universities for industry-sponsored research.

#### **Targeted Investments in Excellence:**

Robert McGrath talked to the group about the research aspects of the Provost's Targeted Investments in Excellence (TIE) program. Deans from each college were asked to identify departments or programs (existing programs or new programs) that have the potential to achieve world-wide recognition and impact the university's academic stature. Once identified, plans needed to be developed to move those departments/programs to the top of their fields. \$50 million would be invested in a small number of these plans over the next 5 years. Proposals were due to the Provost's Office in early January 2006.

#### **Issue 1 – Jobs for Ohio:**

On November 8<sup>th</sup>, Ohio voters were asked to vote on Issue 1 – the “Jobs for Ohio” ballot issue. This was a 2 billion program to improve Ohio's ability to create and compete for jobs. Two-thirds of the funds from Issue 1 would be used by local governments for projects that preserve the infrastructure, ensure public health and safety, and create jobs to improve the economic welfare of Ohioans. Issue 1 would provide \$150M in grants to local governments to prepare “job ready sites” and \$500M in grants for continuation of Third Frontier investments.

#### **Biomedical Research and Commercialization Program Request for Proposals (RFP):**

The Biomedical Research and Commercialization Program provides grants to support biomedical and biotechnology research leading to commercialization and long-term improvements to the health of Ohioans. Projects are to be collaborations among Ohio higher education institutions, non-profit research organizations, and Ohio companies in the areas of human genetics and genomics, structural biology, biomedical engineering, computational biology, plant biology and environmental biology. This is a limited submission. The submission deadline was December 14, 2005.

#### **Wright Centers of Innovation in BioSciences RFP:**

The Wright Centers of Innovation in BioSciences RFP was intended to accelerate the pace of biomedical and biotechnology research in Ohio by awarding funds for large scale centers of research and commercialization in the fields of human genetics and genomics, structural biology, biomedical engineering, computational biology, environmental biology and/or plant biology. This is a limited submission. Two proposals from OSU would be moving forward for the Wright Centers of Innovation in BioSciences RFP – one on Particle Therapy and the other on Personalized Health Care. The submission deadline was December 14, 2005.

### **Non-Biomedical Wright Center RFP:**

A decision to issue another round of non-biomedical Wright Center RFPs would be made after the results of the Issue I vote were known.

## ***January 24<sup>th</sup>, 2006 University Research Committee Meeting***

### **Beck Committee Report on the Graduate School:**

Dean Paul Beck, College of Social and Behavioral Sciences spoke about Part I of the Graduate Committee Report (released November 2005) which addressed the structure of the Graduate School. The question to be answered in Part I of the report was whether the Graduate School should remain a freestanding model where the dean of the Graduate School reported directly to the Provost and had oversight for graduate education or should the Graduate School merge with the Office of Research.

The committee found no compelling reason to change the current structure and recommended that the dean of the Graduate School and the Senior Vice President for Research remain as separate positions. Both were full-time administrative positions with very important, but different responsibilities. They concluded that one individual would not be able to give both research and graduate education the attention that they required. Because research and graduate education are intertwined in so many ways, the committee reinforced the need for effective communication between the two offices and with the entire university.

Dean Beck commented on the role of graduate education as envisioned by the Committee. The Committee strongly felt that the university could not compromise its master's education programs, and more importantly, its PhD education programs. Part II of the report would address issues that included a proposal to increase fellowship money, centralized admissions processes, tuition waivers, oversight of graduate education, as well as other administrative issues. Dean Beck stated that it was difficult to track fellowship money because the fellowship process is decentralized at many universities.

Dean Beck also pointed out that OSU does not hold the deans and department chairs responsible for the quality of their graduate programs. A separation existed between the Graduate School and the departments/colleges. Oftentimes, communications from the Graduate School never reached the departments/colleges that were primarily responsible for the funding of graduate education.

### **Stem Cell Policy:**

There has been considerable debate over the use of embryonic stem cells in research. Two bills were before the legislature that placed restrictions on stem cell use. Doug Kniss, Senior Associate Vice President for Research reported that he has spoken on this topic at many different venues. Doug said that his efforts, along with efforts of other scientists, appeared to be impacting the passage of these bills.



An Oversight Committee will be implemented at the university to monitor stem cell research. Doug Kniss and Todd Guttman, Associate Vice President for Research Compliance are in the process of drafting a stem cell policy for the university, which follows the guidelines set forth by the National Academies of Science. In addition, Doug and Todd have been reviewing the policies that are in place at other institutions. A draft of the policy should be available by spring quarter.

#### **Research Misconduct Policy:**

Todd Guttman and Jennifer Moseley, Conflict of Interest Coordinator, reported that while research misconduct at the university is not common, the number of allegations of misconduct was quite large. They reported that the federal Office of Research Integrity revised their rules and instituted changes affecting applicability, limitations, definitions, and burden of proof. To avoid being in institutional noncompliance, Ohio State must revise its policies to mirror the federal regulations.

Todd and Jennifer asked the University Research Committee to appoint a Subcommittee to review Ohio State's policy. This Subcommittee would be responsible for preparing a report to be reviewed by the URC at its spring quarter meeting.

Terry Conlisk appointed Richard McCreery, Dale Vandre, and Christopher Alvarez-Breckenridge to serve on the Subcommittee. Richard McCreery will serve as the Subcommittee Chair.

Final recommendations on the Research Misconduct Policy made by the URC would be presented to the University Senate, President's Cabinet, and the Council of Deans, etc.

#### **Compliance/IRB/AAALAC:**

During the last Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) site visit, OSU was criticized extensively for its lack of centralized control and policy. Bob McGrath expected that the university would either be put on probation or lose its accreditation altogether. He said that it was imperative that the university work to quickly remedy all of its noncompliant practices. A letter was sent to AAALAC International in December outlining the steps that OSU planned to take to reach compliance.

On another front, the university plans to submit an application to the Association for the Accreditation of Human Research Protection Programs Inc. (AAHRPP) in the spring. Responding to increased public concern for protecting research participants, AAHRPP "seeks not only to ensure compliance with federal regulations, but also to raise the bar in human research protection by helping institutions reach performance standards that surpass the threshold of state and federal requirements." AAHRPP uses an accreditation process based on self-assessment, peer review, and education. AAHRPP accreditation will help bring best practices to the university. Currently, the Institutional Review Board (IRB) has 3500 active human subjects research protocols and less than ½ percent of these protocols are found to be noncompliant.

### **Provost's Targeted Investments in Excellence – Status Report:**

The Provost received 44 Targeted Investments in Excellence (TIE) proposals. To date, the President's Cabinet, the Council of Deans, the President's and Provost's Advisory Committee and the Senate Steering Committee have reviewed the TIE proposals. Funding in the amount of \$10M/year will be awarded over a 5-year period.

### ***March 3<sup>rd</sup>, 2006 University Research Committee Meeting***

#### **Response to the Beck Committee Report on the Graduate School:**

The University Research Committee plans to organize a response to the recently released Beck Committee Report on Graduate Education. A Subcommittee was formed to draft the URC response. Members of this Subcommittee are Patricia West (Chair), Enam Chowdhury, Terry Conlisk, and Pheoris West.

The Subcommittee was charged with preparing a report to present at the next URC meeting. The final URC response will be distributed to Dean Beck, the University Senate and the Provost.

#### **Effective Project Management – A Shared Responsibility:**

Dave Doty spoke to the URC about a number of compliance issues affecting the university. The university will be making changes in how existing policies are tracked. Many of our peer institutions have received heavy fines for issues of non-compliance.

Time and Effort Reporting is an example of one area that is being affected by tighter controls. Time and effort on federal grants always had to be certified. New standards require that the person completing the certification have actual first-hand knowledge of the hours worked by each employee on a sponsored project.

Anne Moffat discussed how effective project management is a shared responsibility between the Research Foundation and the faculty/investigators. Anne stressed that the Research Foundation relies heavily on input from colleges, units, and support staff. The Research Foundation, in particular, was looking to the University Research Committee for advice on ways to effectively communicate policy changes being implemented to faculty/investigators. The Research Foundation and the URC will work together to determine the best way to roll out new programs.

It was pointed out that many of the problems arising in project management can be alleviated by improved communication between faculty researchers and the Research Foundation. The following suggestions were made as possible ways of improving communications between the Research Foundation and faculty:

- Add a secure communications "tab" to the existing Research Foundation website specifically for faculty researchers. This would be a place where researchers could look to find the most updated information.

- Make email communications more effective – more to the point and less wordy. Direct emails only to the appropriate people rather than sending out mass emails to people that do not need to receive them. “Email fatigue” seems to be a big problem among faculty.
- Channel more effective communications through the College Research Officers (CROs). Stress to CROs that their faculty rely on them for up-to-date information.
- Establish a Principal Investigator Advisory Committee to work with the Research Foundation. The formation of such a committee would allow faculty with active projects to work with the Research Foundation to improve its performance and develop mechanisms for continuous improvement in faculty awareness of Research Foundation procedures.

#### **Update from the Research Misconduct Policy Subcommittee:**

The Research Misconduct Subcommittee will be meeting soon with Jennifer Moseley and Todd Guttman. The members of the Research Misconduct Policy Subcommittee are Richard McCreery (Chair), Dale Vandre, and Christopher Alvarez-Breckenridge. Carole Anderson suggested that the URC Subcommittee coordinate their efforts with herself and Lamar Murphy in the Graduate School. They are both working on the Graduate School Policy on Academic Misconduct.

#### **Ranking of Targeted Investments in Excellence Proposals:**

The URC was asked by Tony Mughan from the Senate Steering Committee to rank the Targeted Investments in Excellence (TIE) proposals. The Provost asked for responses to be submitted to her by March 17<sup>th</sup>. The URC will send their top 6 ranked TIE proposals to the Senate Steering Committee.

The Provost asked those groups reviewing the proposals to consider who should be funded, identify the initiatives that should move forward even if no funding were available, and determine which proposals, if any, might jeopardize existing programs in place at the university. Additional criteria to consider included excellence, costs, viability, metrics, sustainability, quality of the core faculty, the external environment (will external funding be generated), the spillover factor (how could other areas in the University be enhanced), etc.

The final URC rankings were submitted to the University Senate on Monday, March 13, 2006.

#### **Complaints Concerning the Institutional Review Board (IRB):**

Dick Gunther expressed concerns over faculty complaints regarding the IRBs, particularly in the areas of survey research. He said faculty members are turning down grants so that they don't have to work with the university's IRBs.

Doug Kniss responded to Dick Gunther's concerns. He acknowledged that problems do exist, but he stated that the IRBs are responding to increased scrutiny from federal regulators. There is a new “culture of compliance” that is affecting the university. The

Office of Research is aware of faculty concerns with the IRB and is working to remedy existing problems.

Since the IRB approval is essential for most human subject research project the URC moved forward with establishing an IRB Subcommittee to address faculty concerns. The members of the IRB Subcommittee are Gordon Aubrecht, Dick Gunther, Lydia Medeiros, Dale Vandre and Doug Kniss. The Subcommittee was charged with engaging a broad spectrum of faculty from the BioSciences, Cancer, and Social and Behavioral Sciences IRBs to assess best practices and to address unique concerns within each of these three IRBs.

**Center Proposals:**

Randy Smith from the Office of Academic Affairs forwarded 3 Center Proposals to the URC for review. Feedback will be forwarded to Randy Smith by the end of June.

Acknowledgement: Thanks should go to Beth Haas of the Office of research who compiled this report.

**Appendix**  
**2005-2006 University Research Committee Roster**

**Christopher Alvarez-Breckenridge**  
College of Medicine and Public Health  
Council of Graduate Students

**Carole A. Anderson (Ex-Officio)**  
Vice Provost for Academic Policy and Faculty Resources and  
Interim Dean, Graduate School

**Gordon J. Aubrecht**  
College of Mathematical and Physical Sciences  
Department of Physics  
Faculty Council-Regional Campus

**Loren E. Babcock**  
College of Mathematical and Physical Sciences  
Department of Geological Sciences  
Faculty Council

**David A. Berntsen**  
College of Optometry  
Council of Graduate Students

**Kathleen A. Boris-Lawrie**  
College of Veterinary Medicine  
Department of Veterinary Biosciences  
Council on Research & Graduate Studies

**Enam Chowdhury**  
College of Mathematical and Physical Sciences  
Department of Physics  
Graduate School (Post Doc)

**A. Terrence Conlisk, Committee Chairperson**  
College of Engineering  
Department of Mechanical Engineering  
Faculty Council

**David B. Doty (Ex-Officio)**  
The Ohio State University Research Foundation  
Interim Executive Director

**Brian McSpadden Gardner**  
College of Food, Agriculture, & Environmental Sciences  
Department of Plant Pathology  
Council on Research & Graduate Studies

**Richard P. Gunther**

College of Social and Behavioral Sciences  
Department of Political Science  
Faculty Council

**Todd G. Guttman (Ex-Officio)**

Office of Research  
Associate Vice President for Research Compliance

**Beth Haas**

Office of Research  
URC Committee Support

**Douglas A. Kniss (Ex-Officio)**

Office of Research  
Senior Associate Vice President

**Dean P. Lacy**

College of Social and Behavioral Sciences  
Department of Political Science  
Council on Research & Graduate Studies

**Richard L. McCreery**

College of Mathematical and Physical Sciences  
Department of Chemistry  
Council on Research & Graduate Studies

**Lydia C. Medeiros**

College of Human Ecology  
Department of Human Nutrition & Food Management  
Council on Research & Graduate Studies

**Robert T. McGrath (Ex-Officio)**

Office of Research  
Senior Vice President for Research

**Eric A. Samuels**

College of Social and Behavioral Sciences  
Department of Political Science  
Undergraduate Student Government

**Mark A. Seeger**

College of Biological Sciences  
Department of Molecular Genetics  
Council on Research & Graduate Studies

**Wenjing Shang**

College of Food, Agriculture and Environmental Sciences  
Department of Agricultural, Environmental, and Developmental Economics  
Council of Graduate Students

**Philip L. Smith**  
College of Education  
School of Educational Policy & Leadership  
Council on Research & Graduate Studies

**Richard E. Torrance**  
College of Humanities  
Department of East Asian Languages & Literatures  
Faculty Council

**Dale D. Vandre**  
College of Medicine and Public Health  
Department of Physiology and Cell Biology  
Faculty Council

**Patricia M. West**  
Fisher College of Business  
Department of Marketing and Logistics  
Council on Research & Graduate Studies

**Pheoris West**  
College of the Arts  
Department of Art  
Council on Research & Graduate Studies

**Luke A. Wilson**  
College of Humanities  
Department of English  
Council on Research & Graduate Studies

**Corrie D. Ziegler**  
College of Optometry  
Inter-Professional Council

Vacant  
Research Scientist