

Research Committee, End of the Year Report

The committee met 7 times during 2013-2014 academic year, including twice in April. We did not meet in January because of a snow day.

We worked on several issues this year, some of which we took up at multiple meetings.

The issues concerned the following and are discussed in greater detail below:

1. IRB review process
 2. Temperature and humidity issues in animal research labs
 3. Proposals concerning public access to research funded by federal agencies
 4. OVPR Committee's implementation of the Huron Report
 5. Status of the MBRB
 6. Overview of the BEST grant received by Wayne State
 7. Gloria Heppner's report on core facilities and internal funding opportunities
 8. Mentoring of junior faculty in grant writing
 9. Wayne State University's position in research rankings
 10. DCATS budget and savings
 11. Feedback for Battelle Group consultants
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1. Phil Cunningham and Gail Kusch made an appearance in front of the committee in October and provided us with an overview of the IRB review process, discussed forthcoming changes, and addressed questions. Committee members expressed concern about the length of the review process and cumbersome nature of the forms used by WSU's Human Investigation Committee. We received some metrics regarding review times involved in full board approval only. Put differently, no data were presented regarding review times for exempt and expedited protocols. Review times for full board approval in 2012 and 2013 seem to have decreased from 2011 though they are still substantial (30-60 days). Anecdotal evidence suggests they continue to be excessively long for other types of review. We were not convinced, finally, that a compelling rationale exists for continuing to use one cumbersome form for medical and behavioral research.

Taking advantage of Vice President Cunningham's visit with the committee, we also asked about an update concerning the changes in Scientific Misconduct procedures he had promised the Senate in March, 2013. We were told he was still working on a draft.

The Research Committee should continue working with the administration on streamlining the human subjects review process and dramatically improving approval speeds which have a deleterious influence on research productivity of all members of the university community but are especially detrimental to junior faculty and graduate students. It should also invite Vice President Cunningham back to report on the changes in scientific misconduct policy his office has made.

2. Committee member, Patrick Mueller, gave a presentation on temperature and humidity issues in Scott Hall and other animal research labs. It appears that there are significant temperature and humidity fluctuations in animal research labs on campus that adversely affect research findings. Deborah Ashcraft (DLAR) and other Research Committee members confirmed that the problem was pervasive and chronic. While FP&M has been responsive to service calls, the number of problems related to temperature and humidity regulation has been alarming. The committee decided to pass the problem along to the Policy Committee, urging it to discuss a more comprehensive solution. The Policy Committee asked Patrick Mueller to produce more systematic data regarding temperature and humidity fluctuations which he has recently distributed.

As of today, the problem continues and will therefore require attention from the Research Committee next year.

3. Committee member Joshua Neds-Fox gave a report on the White House directive and several proposed policies that would require public access for research funded in part or in whole by federal agencies. The White House directive, coming from the Office of Science and Technology Policy, is already taking effect. Policies under consideration in Congress include Fair Access to Science and Technology Research Act (FASTR) and Public Access to Public Science Act (PAPS). All these policies aim to increase public access by requesting deposit of the accepted, peer-reviewed version of published and federally funded research, typically after an embargo period during which the publishers retain exclusive rights. Each proposal requests that federal agencies coordinate their policies, making it easier for researchers who receive funding from multiple sources to comply. These policies promise to have a number of positive consequences for researchers because they facilitate knowledge sharing, new research, and preservation of federally funded research. A major downside is that PI's will face a much more difficult compliance landscape.
4. Bonnie Stanton and Dan Walz visited with the Committee to discuss the status of the Multidisciplinary Biomedical Research Building (MBRB). Good progress is being made on the construction and the building is scheduled to open to researchers in April, 2015. Investigators from the School of Medicine, Engineering, CLAS, Pharmacy and Health Sciences, Nursing, and Social Work will be engaged in research in the MBRB. At its full occupancy, in about 3-5 years after opening, this visually stunning facility is expected to host about 450-500 people. The initial goal for the building was that about half of the principal investigators housed in it would be new recruits. The building will have permanent occupants, temporary office space, and will be connected to Scott Hall via a campus shuttle.
5. Then Interim Dean Ambika Mathur joined the committee in December to report on Wayne State's receipt of one of ten BEST (Broadening Experiences in Scientific Training) grants recently awarded by NIH. The purpose of these grants is to broaden graduate and postdoctoral training to prepare students for a range of career options in addition to academia. Wayne State will have to cover participating students' tuition and the grant will cover their stipends. As part of their participation in the program, students

will be exposed to a semester-long immersion (an internship) in their chosen career path. We had a lively discussion with the Dean. Several committee members then met with Dean Mathur at an extra meeting in April to share the committee's suggestions for implementing this grant at the university. Some of the suggestions we have shared with the Dean are attached to this report.

6. Associate Vice President for Research Gloria Heppner reported on OVPR's efforts to address deficiencies in our core facilities following the Huron Group's recommendations. Among other things, the Huron Group recommended we appoint a director for the cores and hire more staff to increase oversight of the core facilities. In the absence of funding, OVPR has not been able to follow this recommendation. In keeping with other recommendations, it has hired its own cost accountant, worked on what constitutes a core, and examined the existing core facilities. OVPR is also in the process of performing a cost analysis of all expenses associated with each existing core and deciding whether it should be filling in the gaps in the cores' funding. All the cores will be audited once a year. Associate Vice President Heppner also updated the committee on the university's internal funding programs.
7. Wayne Lancaster joined the committee at our February meeting to relay his experience of mentoring junior faculty in grant writing. We had a good discussion about the best ways to assist junior faculty in obtaining grants. The committee agreed that instituting an internal review process that would be required for junior faculty members and graduate students would be worthwhile. We continued the discussion at our March meeting. At the conclusion of that meeting, Maik Huttemann graciously agreed to draft a proposal for a Senate resolution that would require internal review of grant proposals by junior faculty. Following many conversations he has had with Medical School and OVPR personnel, it appears the Research Committee will need to have another go at the proposal, perhaps this time including the new Vice President for Research.
8. Committee member Alexey Petrov gave an updated presentation on Wayne State's position in research rankings, following his initial presentation on the subject at the Senate meeting last year. The research rankings are important because they influence recruitment of students, postdocs, and faculty. The available rankings suggest that WSU's position in major aggregate research rankings and research expenditure rankings has been steadily declining. Alexey put forward a number of recommendations (improving the quality of faculty, improving national and international visibility of the university, encouraging the faculty to publish in high-impact journals, asking SPA to provide a weekly compilation of funding opportunities, and having someone take responsibility for tracking WSU's rankings). Alexey will be invited to present his data at one of the upcoming Policy Committee meetings.
9. Bonnie Stanton and Dan Walz met with the committee on April 29, 2014 to give us an update on the DCATS budget and savings.
10. David Cinabro, in his role as chair of the OVPR committee on implementation of the Huron Report, briefed the Research Committee about the work of that committee at our

April meeting. The OVPR committee included both faculty and administrators and was charged by VPR Ratner to respond to the Huron report. Among its broad recommendations, the committee urged that WSU revisit its Research Strategic Plan which was last updated in 2007 and that the School of Medicine in particular enhance and communicate its research strategic plan. In addition, it identified a host of internal challenges and opportunities that should be considered in creating a better research environment at WSU. The specifics of these recommendations are included in David Cinabro's PowerPoint presentation attached to this report.

11. Finally, the committee twice met with Simon Tripp, one of the Battelle Group consultants retained by President Wilson, first in March and then again in April. We used both opportunities to inquire about Battelle's work at the university and offer our insights regarding challenges we face as researchers and suggestions for improving the research environment at WSU.

*Suggestions conveyed to Dean Ambika Mathur following our committee discussion regarding the BEST grant implementation **

We started the meeting with a follow-up discussion of a BEST (Broadening Experiences in Scientific Training) program for which the university has been recently selected.

It was observed that we do not have a system to train people for alternatives to academia and that we can't provide training for disciplines for which we do not have expertise.

It was further suggested that WSU should have a placement bureau that would serve to help trainees identify potential employers in the different workforce venues. The bureau should also track graduates as a metric of BEST success.

It was discussed that the university as a whole likely DOES have the collective expertise to provide training for a wider variety of career options. Departmental collaboration needs to be increased in order to offer additional courses for students interested in alternatives to academia. Importantly, we can utilize required cognate/elective courses within programs to provide training or internships so that BEST does not add courses to already very full curricula.

WSU already has a dual degree system where students can choose a major and minor (or certificate training) in different areas. This system could be leveraged to train and credential students for the post-WSU training workforce. For example, certificate or dual-degree training could be provided in areas of business, management, teaching, writing or policy that would compliment basic science training.

Students interested in alternative careers need to be identified early so they may be oriented as to the menu of pathways available.

Contacts with the industry need to be cultivated in order to facilitate student placement in alternative careers.

It was observed and discussed that most academicians receive very little or no training in the areas of teaching methods, pedagogy or other aspects of student learning. Although the foundation of the BEST program appears to be rooted in directing students away from academic or research or teaching careers, it would not be inappropriate to provide training in these areas to better prepare our students for the post-training workforce.

Incentives might be necessary to encourage faculty to support graduate students not interested in academic research careers. There is a concern that many faculty members

might not be interested or willing to engage students (with already scarce resources) whose post-training workforce aspirations are not research related.

* Thanks to Andrew Fribley for putting this together

Improving Research at Wayne State

**Professor David Cinabro (chair), Professor Rafi Fridman,
Dr. Gloria Heppner, Professor Rodger MacArthur,
Professor Jeff Potoff,
Gail Ryan, Professor Steve Salley, Dean Bonnie Stanton,
Professor Arthur Suits, Dean Cheryl Waites**

- * Charge by VPR Ratner to respond to the Huron Consulting Operational Review of Research Administration (http://research.wayne.edu/about/continuous_improvements_initiatives/wsu_research_assessment_final.pdf) of September 2012.
- * The focus of that report is on SPA and Research Cores, but...
- * “We recommend that WSU revisit the Research Strategic Plan which was last updated in 2007 and that the School of Medicine in particular enhance and communicate its research strategic plan.”

*** Committee charged by VPR Ratner in December of 2012. From her presentation to us:**



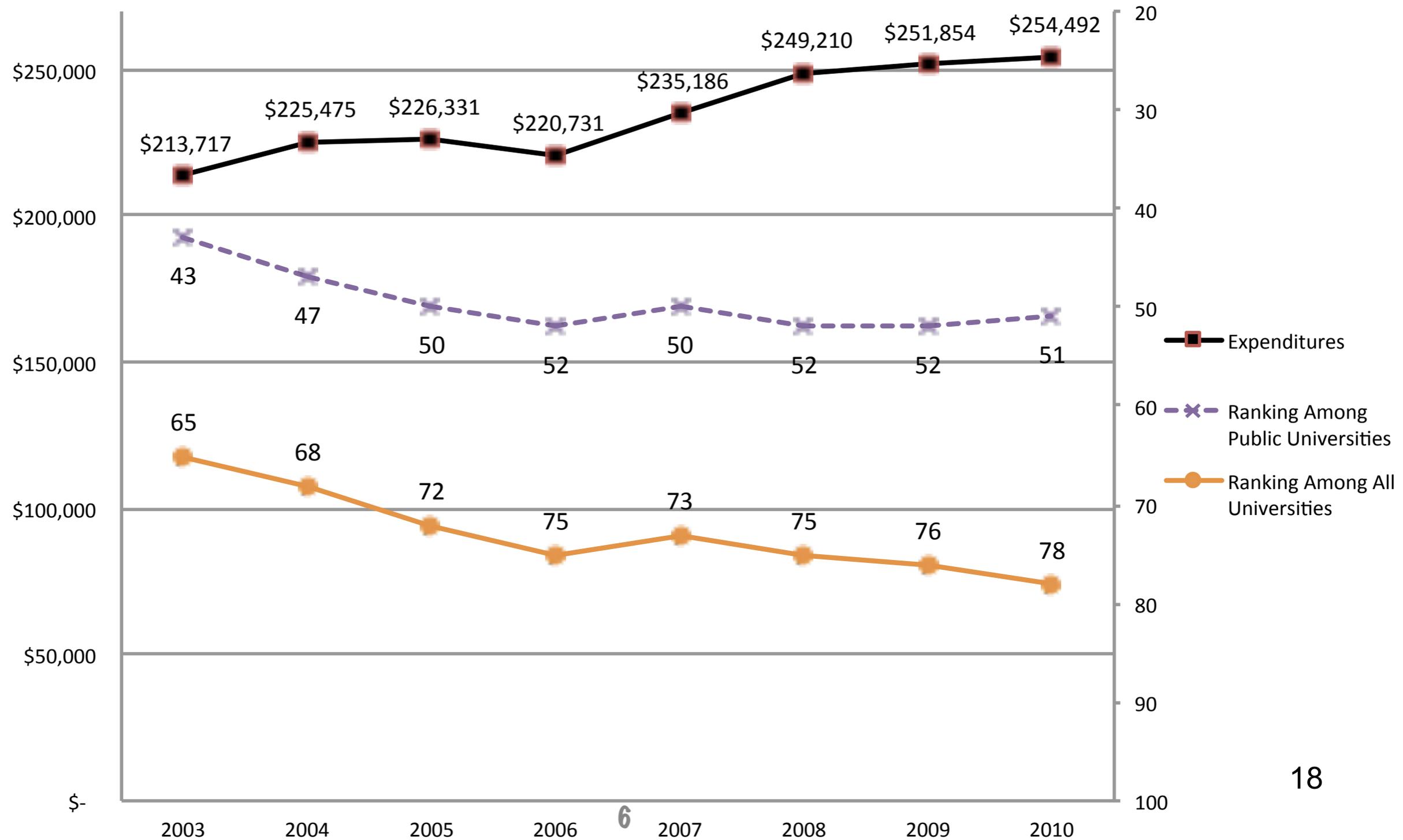
Committee Overview

- Huron Consulting Research Report Recommendations
 - SPA, Core Facilities, Research Observations
- Addressing SPA recommendations in progress
- Addressing Core Facilities in progress
 - Liaison with Core Facilities Committee
- Research observations are more complex and require broader approach
 - Overarching question is how we can be a better research university

- Under-reliance on a systems/integrative view of desired university outcomes
 - Often leads to poor alignment among initiatives, investments
 - Leads to perceived tension between teaching and research, access and excellence, student and faculty needs
 - Either incomplete realization or incomplete articulation of research foundation for the curriculum
- “Points” of excellence rather than “centers” of excellence
 - Lack of critical mass reflecting excellence means we are often not competitive, multidisciplinary; hiring disconnected across university
 - Often poor alignment of areas of strength (e.g., research excellence and community/K-12 initiatives or graduate programs)

- Inadequate support for faculty in effective teaching of students who are often underprepared
 - Related to workload as well as academic issues
 - Greater effectiveness in teaching adds time for research and integration with teaching
 - Builds stronger student skills so can participate more deeply in research
- Need enhanced undergraduate research program connected to retention efforts
- Often less-than-ideal services or insufficient infrastructure to support students and/or faculty
- Insufficient staff training and/or opportunities for professional development
- Revenue

Dollars x 1,000 Expenditures and Rank Among Public Universities vs All Universities



*** Things also said in the Policy Committee White Paper of August 2013:**

- * “...the University develop a plan for increasing the number of (research) faculty and--in disciplines that are generally supported by outside research funds—the level of external funding each obtains.”**
- * “...additional funding be provided for core facilities...”**
- * “...encouragement needs to be provided for applications involving multi-investigator and translational grants...”**
- * “Clinical research funding is also in jeopardy at the SOM. It is not clear that the SOM is adequately prepared to support its clinical research enterprise, let alone consider successfully competing for translation collaborative-science grants.”**

*** Committee met 7 times from December 2012 to June of 2013.**

Date	Guests	Topics
12 Dec 2012	Hilary Ratner	Charge Presentation, Initial Discussion
13 Jan 2013	-	Brainstorming
13 Feb 2013	Jim Rigby Farshad Fotouhi	Chemistry Best Practices, University Supported Graduate Students Initial Outline Comments
20 Mar 2013	Margaret Winters, Robert Harris Susan Miller, Heidi Coats	Faculty Hiring, Development Support of Research
18 Apr 2013	Terry Margolis	Development Support of Research, SPA Huron Response
22 May 2013	Peter Litchenberg Wei-Zen Wei	IOG and MPSI Best Practices, KCI Best Practices, Research Cores
19 Jun 2013	Bengt Arnetz Marcus Dickson Bob Sokol Peter Hoffmann Karen Myhr Matt Ouellett	Research Culture Center for STEM Teaching

- * Report draft in August 2013.
- * Extensively rewritten during Fall 2013
- * Presented to VPR in January 2014
- * After minor revisions accepted and made public in March 2014
- * http://research.wayne.edu/about/continuous_improvements_initiatives/huronresponse_2014.pdf

Reverse the Decline in Research Activity at the School of Medicine

- * University level examination of why we are not investing in the research enterprise at the School of Medicine (not hiring research faculty, clinical research allowed to die, decaying research infrastructure...) and explore University level solutions
 - * Problem is beyond the VPR
 - * Problem is also likely beyond the SOM
- * Reorganization to encourage interdisciplinary efforts
 - * Organization of SOM is “reductionist” while modern biomedical research is “emergent”
 - * Stories from unit heads on the difficulties in assembling interdisciplinary teams and the travails of faculty trying to do such research

Allocate our Research Resources more Efficiently

- * Identify the most promising areas of research for support and faculty recruitment
 - * Current funding
 - * Funding availability
 - * Unique to Wayne State
 - * Connection to Detroit
 - * Support the current effort by new President

- * Re-engage faculty who have become inactive
 - * Well thought out incentive program
- * Benchmark support staff levels internally and to peers to optimize allocation
- * Rationalization of University support for graduate students
- * Rational treatment of start-up spending (3 year limit?)
- * Strategic plan for investment in research facilities

More Support from Development for Research

- * Development support for student research at both the graduate and undergraduate levels
- * Increase endowed chairs by as much as possible, at least 50%, over the next 10 years
- * Any direct support for research from development would be welcome

Standardize Best Practices

- * Unit heads need to have research plans that are benchmarked to peers and aspirational targets
- * Training on research misconduct
- * Take the tenure process more seriously
- * Careful mentoring of new faculty

- * All grant requests should be reviewed internally before submission**
- * Identify, promulgate, support best practices for recruiting graduate students**
- * Unit heads should be held responsible for the performance of their units as compared to their benchmarked plans**

Research Cores

- * Primarily from Gloria Heppner
- * Develop and strengthen the Core Services Committee
- * Hire a Core Director under the VPR
- * Improve individual core advisory committees
- * Clarify responsibilities for cores that charge
- * Cores should follow Federal and University rules

- * **Figure out the actual costs associated with the cores**
- * **Improve the decision making for cores**
- * **Develop clear and consistent policies on external charges for core services**
- * **Improve visibility and marketing of cores**
- * **Explore external partnerships for shared core services**
- * **Communicate our commitment to support and invest in the cores**
- * **Find ways to support faculty who use core services elsewhere**

SPA

- * Primarily from Gail Ryan
- * Improved staff training
- * SPA field trips to understand research activities
- * User group for feedback and monitoring
- * Improve the Research Dashboard
- * Improve business processes
- * Add a CLAS Grant and Contract Administrator for units not large enough to have one of their own