## Ad Hoc University Research Committee Report

### 2017.11.21

## Charge

On October 2, 2017, the Faculty Senate Executive Committee created an Ad Hoc University Research Committee with the following charge:
"The committee shall recommend an inclusive statement of the university's research mission. The committee shall examine the "External Review of the Office of the Vice President for Research Wright State University" (360-Review) report to assess the recommendations contained therein. The committee shall, within the above context, recommend action items based on the 360-Review report under the following categories and propose metrics gauging performance relative to the stated mission.

Categories for consideration include but are not be limited to:

- Governance and faculty collaboration, especially with respect to affiliated entities
- Synergy between the research enterprise and graduate programs
- Student support, student engagement, academic alignment
- Investment strategies: new initiatives, faculty, staff, infrastructure
- Industry/sponsor relationships, especially AFRL, NIH, and NSF
- Intellectual property, commercialization, technology transfer
- Contractual pass-through funds and "earmarked" state and federal funds
- Compliance, especially with respect to internal review boards and controlled unclassified information

The committee shall strive to deliver its report as an agenda item by
21 November 2017, or at the latest, before the last senate EC meeting of the fall semester on 4 December 2017."

## Membership

| Fred Garber | Chair |
| :--- | :--- |
| Madhavi Kadakia | BSOM |
| Derek Doran | CECS |
| Tara Hill | CEHS |
| Valerie Stoker | COLA |
| Sherrill Smith | CONH |
| Scott Watamaniuk | COSM |
| Giovanna Follo | LAKE |
| Anand Jeyaraj | RSCOB |
| Jeff Cigrang | SOPP |

The Ad Hoc University Research Committee is pleased to submit its recommendations to the Faculty Senate.

## Summary

Faculty across the university are broadly concerned about the decline of research productivity and perceived shift in emphasis and investment from on-campus programs to affiliate-driven programs. This committee herein offers recommendations that aim to increase transparency and accountability, raise awareness of opportunities, encourage and enable collaboration, and foster cultures and mechanisms to capture future solicitations and a wider diversity of opportunities. The recommendations include activities that initiate focused discussion (in committee, with faculty, and with administration) that will lead to specific solutions, implementation, and assessment plans.

It must be noted that the implementation of any solution to improve research productivity and support across the university, and its continuous assessment, will be complicated and require visionary leadership motivated to realize the creative and scholarly aspirations of our diverse constituencies. The following recommendations will thus not be effective or sustainable unless administration genuinely appreciates the intrinsic, not just financial or economic, value of scholarship. Administration must also be willing to support, rather than hinder, faculty who face the unique challenges of doing scholarship in their discipline.

In particular, the committee recommends:

- A clear articulation of the university research mission that provides sufficient context and guidance to impact policies, procedures, and investments;
- Mechanisms and events designed to inform, invite, and integrate broad participation in preparing for solicitations;
- Instituting continuous assessment of the entire research enterprise to ensure transparency, accountability and alignment with the university mission;
- Rethinking our strategies for graduate student support to better serve the needs of our students, the programs they serve, and the university mission;
- Establish competitive investments in new research activities with accountability in returns measured in additional awards, additional collaborations, additional students \& faculty, publications, etc.;
- Examining ways to remove institutional hindrances and inefficiencies experienced by too many faculty, particularly in the areas of compliance, commercialization, the flow of information in collaborative assemblies, and the lack of institutional financial support for research endeavors.

These are discussed particularly in what follows.

## Recommendations:

1. Research Mission Statement:

The Committee recommends the Wright State University Mission Statement (in regard to the research and scholarship mission) be amended to read (grayed out items unchanged):

We will:

- build a solid foundation for student success at all levels through high-quality, innovative programs;
- conduct scholarly research and creative endeavors that impact quality of life;
- make new discoveries, develop new societal, historical, and cultural viewpoints, and create artistic expressions in an innovative and supportive research environment that promotes scholarly endeavors and the advancement of society across all academic and clinical disciplines;
- engage in meaningful community service;
- drive the economic revitalization of our region and our state and empower all of our students, faculty, staff, and alumni to develop professionally, intellectually, and personally.

2. Governance and faculty collaboration:
a) The committee recommends the assembly of a body with appropriate expertise and a diverse Faculty representation to work with the OVPR to specify and implement a central service research interface with support functions including:

- An online knowledge directory containing current and previous awards and submissions and with search attributions including: investigator, college or unit, technical area, effort synopsis, funding agency, agency program, and allocation proportions for collaborative efforts and affiliated units;
- A means for interested WSU researchers to connect with current and previous awardees and proposers by technology area and by specific award type such as: NSF CAREER, REU, and I/UCRC awards; DoD MURI, DURIP, IDIQ, and SBIR awards, etc.; and by funding source, including local and regional private sector organizations;
- An online knowledge directory of the research expertise of faculty;
- An online portal for interested WSU researchers to access advance notifications of likely future solicitation cycles and a means to facilitate proposal planning and team forming for responses to major awards and opportunities (e.g., Dayton Development Coalition);
- A means to communicate "Call for Teaming" collaborations to interested WSU researchers well in advance of known solicitation cycles;
- An electronic forum, e.g., blog site, where interested WSU researchers can informally share information on research interests, projects in planning states, and interest in cross-disciplinary collaborations;
- An inventory dashboard/database of major shareable equipment, indicating what unit or person is responsible for maintaining the facility (including WSRI/WSARC). The inventory should include information on means of access to potential users, information on a reasonable "user fee" structure to help recapture the costs, and the option to request, from OVPR or elsewhere, a "use grant" for interested WSU researchers to obtain preliminary results in support of a research proposal.
b) The committee recommends that the OVPR offer regular "Solicitation Summits" to enhance the visibility of future research solicitations likely to evoke responses from WSU and affiliated entities with the objectives of:
- Promoting the research enterprise and nurturing collaboration (particularly between WSU faculty and WSRI principals);
- Promoting an "online portal" of the various projects/opportunities at WSARC;
- Create a culture of collaborative research development with visionary efforts and investments necessary to achieve likelihoods of initial and sustained successes in future large and multidisciplinary programs.
c) The committee recommends the assembly of a body with appropriate expertise and a diverse Faculty representation to work with the OVPR to designate the entire research enterprise (including affiliate units) as an HLC "co-curricular" program and integrate the process within the broader assessment of the University.

HLC Criteria that address co-curricular areas include:
Criterion Three: Teaching and Learning: Quality, Resources, and Support.
3.C.6. Staff members providing student support services, such as tutoring, financial aid advising, academic advising, and co-curricular activities, are appropriately qualified, trained, and supported in their professional development.
3.E.1. Co-curricular programs are suited to the institution's mission and contribute to the educational experience of its students.
Criterion Four: Teaching and Learning: Evaluation and Improvement.
4.B.2. The institution assesses achievement of the learning outcomes that it claims for its curricular and co-curricular programs.
4.B.3. The institution uses the information gained from assessment to improve student learning.
4.B.4. The institution's processes and methodologies to assess student learning reflect good practices, including the substantial participation of faculty and other instructional staff members.

Further, the committee recommends the consideration of the following metrics for inclusion in the assessment process: total funding, total F\&A generated, faculty involvement, distributions of awards/faculty and funding/faculty, scholarship/faculty, support of junior faculty, students supported/funding generated, time-to-degree for supported students, leveraged program growth, efficiency measures for IRB, compliance, Tech Transfer, and commercialization processes.
d) To realize the transparency and accountability of affiliated research entities, the committee recommends that by Fall, 2018, all research-affiliated entities produce, maintain, and make available to the WSU community documents that clearly articulate:

- the mission of these units and their relationship to the mission of the university;
- the detailed longitudinal financial details of each entity from their date of inception to the present;
- the use of any university facilities or administrative services, and the compensation for these;
- procedures and policies for collaborating with Wright State academic researchers as a priority;
- procedures to inform and involve Wright State academic researchers in oversight of the entity and in responses to solicitations;
- plans to expand the research portfolio to programs beyond science and technology so as to engage faculty across the university;
- plans to offer forums to promote transparency, share strategies, and encourage collaboration with academic-unit researchers.

3. Student support, student engagement, academic alignment:

The committee recommends the assembly of a body with appropriate expertise and a diverse Faculty representation to work with the OVPR to develop a comprehensive, flexible strategy for graduate student support and engagement. The committee suggests the consideration of the following model components:

- Strategies to provide faculty with predictable, long-term support for full time PhD students on campus. This may include:
- GTA positions centrally funded and allocated to academic units according to instructional and research needs. That is, allocate GTAs to support quality instruction and to support continuity for full-time PhD students.
- Strategic investments into the disciplines to support graduate student initiatives and research, with measures of accountability tailored to the discipline relative to the instructional and research mission and return-on-investment;
- Reduction of scholarships in favor of centrally-funded Assistantship appointments (when appropriate) combined with an appropriate cost-share for tuition waivers.;
- Incorporation of graduate staff assistants (GSA) to fill appropriate staffing positions in academic or business units. GSA positions would carry a tuition waiver and hourly rate consummate to the technical skills required for the position and the experience of the GSA. GSA can realize cost savings to the business unit while supporting graduate students. (Note: this could be especially attractive for international students.)
- A charge for the Dean of the Graduate School to become an advocate for graduate student interests to university administration. Advocacy may include arguing against new policy inhibiting graduate student support in the university, listening and responding to graduate student concerns in the small and large, crafting new polices that protect graduate student interests across faculty advisors and departments, creating common sense health coverage options and policy, and championing the importance of our graduate student population to the research and instruction mission of the university. The charge may have the Dean of the Graduate School consider unique advocacy plans for research-focused, revenue-generating, international, and other graduate student constituents.
- Targeted investments to enhance the successes of junior faculty and generally increase faculty involvement in supporting graduate students, especially in departments offering PhD degrees.
- Allowances for small awards and agency/company restrictions on F\&A and tuition charges to provide GRA positions that would otherwise not be possible.
- Flexible reduced registration requirements or definitions of "full-time" relative to status in program.

4. Investment strategies: new initiatives, faculty, staff, infrastructure:

The committee recommends the assembly of a body with appropriate expertise and a diverse Faculty representation to assist the OVPR in developing a comprehensive, flexible strategy for:

- The distribution of recovered F\&A: Facilities; The strategy should recognize the necessary apportionments of "Facilities" including university infrastructure, special equipment acquisition and expenses incurred for maintenance and repair, and special supplies.
- The distribution of recovered F\&A: Administration; Likewise, the strategy should recognize the necessary apportionments of research "Administration" including services provided by the university, the academic units, and the research program.
- Establishing a "seed fund" investment model for creating new high ROI externally-funded programs, eventually reaching the level of $\$ 1 \mathrm{M}$ annually, competitively awarded well in advance of a targeted solicitation cycle. Each award should be accompanied by mandatory regular advisement and evaluation of an appropriate internal evaluation/mentoring team. The awards will be selected to maximize expected return on investment and will seek to build a wide diversity of sustainable programs.
- Establishing a robust "scholarship fund" model for creating or maintaining high-impact scholarship across the university, eventually reaching the level of $\$ 300,000$ annually. The awards will be made on the basis of the proposed projects' merits as assessed by an inter-disciplinary team of qualified faculty. Provisions should be in place to ensure that projects in a variety of fields, but emphasizing those where external funding is limited, receive funding. Provisions should also be made to cover a range of research-related costs. For instance, faculty working in book fields, such as the liberal arts, have certain expenses associated with publishing that are routinely covered by most universities (e.g., payment for permissions, indexers, map-makers, etc.)
- Draw from best practices to maximize financial support at various stages of development and for the wide variety of research being undertaken by WSU faculty.
- Streamlining the inter-university material transfer process
- Establishing a protocol for University support for undergraduate experiential learning and research.

5. Intellectual property, commercialization, technology transfer:

The committee recommends the assembly of a body with appropriate expertise and a diverse Faculty representation to assist the OVPR in developing a comprehensive, flexible strategy for:

- Creating common-sense, flexible, and amicable models for sharing IP with research collaborators;
- Creating simple options for faculty to forego claims to IP, possibly in conjunction with a fixed percentage surcharge;
- Restricting IP sharing ONLY in rare cases where the expected return-on-investment exceeds the real savings of removing all collaborative obstacles;
- Eliminating team-forming delays caused by IP negotiations by adopting standard, industry-favored teaming models.
- Creating a searchable database of WSU IP development and sharing, including costs of supporting offices, fees, and time-of-negotiation statistics.


## 6. Compliance, especially with respect to internal review boards and controlled unclassified information:

The committee recommends the assembly of a body with appropriate expertise and a diverse Faculty representation to assist the OVPR in developing IRB compliance with attention to:
a) Building and maintaining a dedicated and certified group of experienced, full-time staff in numbers sufficient to meet agency norms for timely and proper IRB compliance, to continually evaluate IRB processes to enhance efficiency and transparency, and to seek out best practices from high-performing IRB-centric institutions;
b) Establishing an IRB FAQ section or Blog on the RSP website addressing common errors in IRB submissions and as well as policy updates, guidelines, timeline for approval statistics for minimal risk and exempt protocols, etc;
c) Distributing a quarterly report to academic units of IRB submission throughput identifying average time from submission to review to approval (identify IRB office processing times as well as PI time to respond to modifications);
d) Providing continuous training for IRB reviewers/committee members;
e) Providing samples/templates of new/required sections of grant proposals (e.g authentication of Resources section) to PIs.
And CUI compliance with attention to:
a) Creating a Faculty review board to establish and monitor the efficiencies of processes aimed at compliance;
b) Creating a CUI FAQ section or Blog on the RSP website containing policy updates, guidelines, and procedures.

