

IEC Subcommittee Report

Theme 1: Exceptional Research, Innovation, and Creativity

Section 1: Aggregate Summary Statement

To what extent does the institution map to the goals and sub-goals of the strategic plan? Are there clear strengths and/or clear gaps?

We believe WSU maps well, with some exceptions, between its research vision and the goals of the Strategic Plan. We are encouraged by continual R&D expenditure *growth* as shown in the NSF housed Higher Education Research & Development (HERD) Survey, increasing every year from FY04 to FY13 (latest) and our continual growth in federal R&D expenditures (FY07-FY13 – Top FY13 federal agencies: USDA, HHS/NIH, NSF, DOE, DOD). The R&D expenditure data from industry sponsors, however, show an up and down pattern, and the data from State R&D expenditures show a decline.

Although there are examples of successful *hires* within various Units (e.g., recent hires in VCEA and activities going on at WSU Spokane), there is a lack of consistency in hiring plans across Units. The Vice President for Research and Economic Development is working with the Provost to ensure that hiring plans reflect plans to hire in areas of current and emerging research strengths needed for success on the Grand Challenges as articulated in the 120-Day Study. Other issues under the consideration of this Subcommittee include: budgeting (e.g., no institutional pool of funds—startup issues, a lack of endowed chairs, etc.); different factors for each location (e.g., urban campuses may have less resources, distinctive needs); and *hiring faculty focused on teaching loads versus hiring based on research needs*.

The VPR gave an update on “*condo computing*,” one of Dr. Keane’s priorities. Efforts in this area have been productive. The current status of *research/instrumentation cores* (new equipment, equipment upgrades, technical expertise and administrative support), however, is lacking. Namely, there has been no central office responsible for oversight of research cores, particularly on business practices and capital support. The VPR has appointed Andrea Lazarus to prepare WSU Research Instrumentation Core business plans to get comparable information for efficient implementation and practices moving forward. There is also a lack of a consistent small instrumentation plans across relevant Units (one 120-Day Study recommendation is to specifically address small infrastructure needs and make recommendations for targeted investments).

The 120-Day Study provides for 19 recommendations and nearly 70 sub-recommendations that the VPR’s Office is implementing a Work Breakdown Structure to implement with all of its key partners. Furthermore, the 120-Day Study has outlined five Grand Challenges that will be crucial to:

- Focus WSU’s ambitions and limited resources on critical research challenges with the potential to produce broad-based societal impacts;
- Meet stakeholders’ expectations regarding research relevance, and inspire their interest and support;
- Tap into the increasing focus of government and private foundation funding on multidisciplinary projects (recent sponsors include the Paul G. Allen Foundation, the John Templeton Foundation, and the Bill and Melinda Gates Foundation);
- Focus faculty and non-faculty hiring in areas with the greatest impact for WSU and the communities we serve.

This Subcommittee is also discussing how to more appropriately incorporate the creativity element of Theme 1 and has been tasked with ensuring the team is inclusive and representative.

Best practices to feature?

- Implement the 120-Day Study, including the development of the Grand Challenges (see bullets above).
- Office of Research and Economic Development reorganization to meet researcher needs:
 - Increased staffing for Research Advancement, to support the submission of more and higher quality grant proposals (Geeta Dutta)
 - Implementation of management structure for Research Instrumentation Cores (Andrea Lazarus)
 - Implementation of Research Operations and Faculty Support unit (Dan Nordquist)
- Restructure the research operation and streamline related procedures and policies, shifting to a more entrepreneurial culture that has the potential to pay significant future dividends. Really, are we doing this? I'd take this out or remove it. Not sure what it means.
- Replace the Proposal Management Unit with Research Advancement to upgrade the support for the development of higher quality and quantity of external proposals), including improved technical and red team reviews of outgoing proposals.
- Hire consultants to assist with the research roadmap and professional networking of WSU (e.g., Lewis Burke Associates, Academic Leadership Associates, etc.).
- Implement cluster hiring in areas of needed strength.
- Take the appropriate time and approach to hire the **best** faculty member for the identified needs, including faculty that align with a long-term vision and with a focus on research, rather than filling an immediate instructional need only.
- Implementation of external reviews of research infrastructure and major internal proposals.
- Take an organized, systematic approach to ensure the effective implementation of research cores.
- Create Grand Challenge teams, including external consultants, to implement those Grand Challenges activities.
- Establish and sustain productive strategic collaborations with National Labs, research universities, and other research oriented entities (e.g., USDA/ARS).

To what extent are areas providing metrics to assess their progress?

The metrics from the Strategic Plan Theme 1 are currently measured by Institutional Research with support from the Budget Office and OGRD. Implementing the new WSU annual review/faculty profile/data collection system will better allow WSU to track these data elements as well. The Provost's Office is creating a broad and representative Task Force to look at a particular product to obtain faculty buy-in.

Is there a difference of emphasis among types of areas (e.g. colleges/service units/locations)?

Yes. For example, there are various levels of R&D expenditures and activity across the WSU system. In addition, there are significant differences in research support (research development, proposal development, grant administration) across Colleges and Campuses. Also, urban campuses may not have the resources to cluster hire that many of the Pullman Units may have. When it comes to infrastructure, resources, and expertise to increase research, scholarly productivity, and building on current and emerging research and international reputation, some differences may be based on various Unit disciplines and needs. It will be important, however, to globally incorporate the 120-Day study recommendations and Grand Challenges across the WSU system.

Does the subcommittee have recommendations that can help the institution address these goals and sub-goals more cohesively and consistently?

The Theme 1 Subcommittee is working through the sub-goals, one at a time, and mapping relevant recommendations from the Office of Research and Economic Development 120-Day Study and the Lewis-Burke

Roadmap to the WSU Strategic Plan's sub-goals for WSU growth in these areas. For instance, attracting, retaining, and developing high-quality research faculty system-wide is a major emphasis of the 120-Day Study. Moving forward, this is particularly associated with hiring high-quality faculty connected to the WSU Grand Challenges.

VPR Keane and key members of his team should continue collaborating with External Affairs and Government Relations and the five Grand Challenges Faculty Leadership teams in integrating the Lewis-Burke Roadmap with the initiatives to advance the WSU research enterprise and improve success in securing federal grants. Academic Leadership Associates, LLC and Decker, Garman, Sullivan & Associates, LLC, should continue providing counsel and consultative services to WSU. These resources, along with other initiatives to advance the research enterprise, help inform the development and administration of the Implementation Plan for the 120-Day Research Study recommendations and organizing around the five Grand Challenges.

Section 2: Suggested Metrics

What targets seem to represent a realistic benchmark for annual and five-year progress?

Institutional Research has already created reasonable benchmark targets for metrics concerning Theme 1 sub-goals of the WSU 2014-2019 Strategic Plan.

Should these be measured against past performance or against peers (which)?

Both; peer discussion is already happening at the IEC Steering Committee level as well.

Section 3: Activity Report

What activities has the subcommittee undertaken to promote awareness and communication about the strategic plan and the IEC efforts among WSU units and employees?

IEC Theme 1 Subcommittee members have been asked (via email blasts, IEC subcommittee meetings, etc.) to promote awareness of the Strategic Plan and the IEC efforts (Theme 1 Subcommittee meetings have been held on 4/3/15, 5/6/15, 5/29/15, 7/27/15). Furthermore, the completion of the 120-Day Study and the official rollout of the Grand Challenges in mid-September will continue to provide a significant avenue to increase awareness of the WSU research enterprise.

What activities does the subcommittee plan or recommend for the future at an institutional (steering committee) level, and how can the subcommittee help support suggested initiatives?

Here are some activities that this Subcommittee has recommended, so far, based on institutional needs and priorities, leadership direction, the 120-Day Study feedback, etc.:

- Finalizing the replacement of WORQS
- Finalizing Provost guidelines for unit strategic and hiring plans
- Reallocation of F&A distribution
- Institutional help needed in implementing 120 Day Study recommendations, including but not limited to:
 - General research infrastructure (i.e., people and capital, including business processes and support)
 - Grand Challenge implementation

Further details are included in the 120-Day Study Implementation Plan, the Lewis Burke Roadmap, and additional Office of Research and Economic Development activities.