

GW Strategic Initiative
GW Research Ecosystem:
Preliminary Review and Evaluation

GW

February 1, 2019

Findings from the Phase I Research Ecosystem Review at GWU

Final Report

February 1, 2019

Submitted to: President Thomas J. LeBlanc

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Executive Summary

Purpose

The purpose of this project is to perform a comprehensive investigation of The George Washington University (GW) Research Ecosystem, its current state and a detailed proposal for the path forward with a goal to establish a world class research infrastructure commensurate with GW's academic mission.

Background

Research being one of President LeBlanc's five new strategic initiatives towards facilitating GW's aspiration for "preeminence as a comprehensive, global, research university", the Faculty Senate Research Committee (FSRC) was tasked with conducting a comprehensive review of the GW Research Ecosystem. Extensive discussion in Spring 2018 led FSRC to concentrate initially on four focus areas:

- 1) Pre-Award Processes
- 2) Post-Award Processes
- 3) Research Integrity & Compliance, and
- 4) Non-Sponsored Research and Scholarship.

In each of these four areas, a working group was formed that consisted of faculty members representing the colleges as well as staff members from the Offices of the Vice President for Research (OVPR) and the Office of the Provost, the latter helping the faculty with the process of enquiry.

As outcome of the first phase, FSRC submits this report that identifies with the help of four working groups a first list of what works well, what doesn't and suggested solutions. After completion of this Phase I, investigation will continue and continuous process of implementation, monitoring and adjustment would start. The Report identified several areas where further investigation is needed. FSRC will provide updates with new findings. Also investigation will be directed towards a number of other areas that include but are not limited to:

- 1) Research Cores,
- 2) Big Data & High Performance Computing and IT support,
- 3) Workforce Development,
- 4) Allocation (Financing & Budgeting, Intramural Funding, Space Allocation) and
- 5) Entrepreneurial Activities & Commercialization.

Research Questions

As part of the Research Strategic Initiative ecosystem review the working groups undertook a review of the processes in each of the focus areas. Each working group was tasked with providing information on the following areas:

- What is working well at each school?
- Critical questions/pain points/issues and proposed solutions.
- Metrics for evaluation of progress.
- Other important information

Each group was led by a senior GW faculty member and a coordinator, and each group was given liberty to decide their methodology of investigation.

Key Findings and Highlights

Each of the four working groups developed specific themes and recommendations listed below. Specific details, action points, and proposed metrics for evaluation for a particular focus area can be found in the section containing its individual report. Here we list the key highlights:

Pre-Award Processes:

Pluses: College and department level pre-award support teams are improving in their responsiveness towards PI's needs. Electronic systems that have workflow monitoring systems (Cayuse) are beneficial to proposal processing (despite critical issues in need of improvement listed below).

Suggested Improvements

- a. Establishing consistency and well defined timelines for the OVPR review process,
- b. Cultivating and retaining well informed pre-award teams with intimate knowledge of different funding agencies,
- c. Clear, consistent and effective communications to the PIs of the requirements (separating important ones from non-essential) of a proposal and the submission process,
- d. Development of a service-oriented culture among the staff.
- e. Institute software that tracks pre-submission workflow and review time to mitigate inefficiencies and database for SRAs to search for previous submissions to similar/related solicitations.

Post-Award Processes:

Pluses: Reporting and communication mechanisms such as the PI Dashboard/GCAS, purchasing systems such as the P-Card and Concur, and electronic compliance are areas working well for post-award mechanisms.

Suggested Improvements

- a. Timely award acceptance and setup (there remain significant and sustained delays),
- b. Ability to more quickly and simply hire personnel (postdocs, GRAs),
- c. Improved functionalities of PI Dashboard (expense projection and real-time monitoring),
- d. Flexibility and increased discretion in allocation and spending of award resources (within the guidelines of the awarding agency), including the allowance of per diems for domestic and international travel.

Research Integrity & Compliance:

Pluses: Faculty, staff, and student knowledge and commitment to compliance; robust processes in place to ensure human subjects protections (including electronic IRB and CITI training); Research Updates communications; and lab safety oversight.

Suggested Improvements

- a. Improved clarity, elimination of confusion and clear, concise communications of the rules to Principal Investigators (PI)
- b. Enhanced training of PIs and staff
- c. Shift of GW culture from risk-averse to risk identification and management

Non-Sponsored Research and Scholarship:

Pluses: Clear and rigorous expectations for Appointments Promotion and Tenure, teaching releases, Dean's chair and junior faculty release, startup funding, small internal grants, fellowship funding 'top ups', availability of bridge funding, inter-disciplinary research seminars/brown bags and partnerships with DC local resources.

Suggested Improvements

- a. Increased and more equitable availability of resources (most especially release time, but also merit based salary increase, teaching load, and institutional grants)

- b. Evaluation of both faculty and the university as a whole using metrics that are valid, non-biased, and are based on research significance rather than size of grant funds received for measuring impact
- c. Remove barriers to investment in human aspects of research including salary and release time.

Common Themes and Areas for Investment

There are common themes found among the four working groups. Some of them have also been identified in the recent Culture Survey. These common themes are not mutually exclusive and investments in one area will provide opportunity for improvement in others.

- Communication: Clear communication is needed to ensure efficiency of processing proposals and awards in a timely manner. Clear communication will help to establish a collaborative research enterprise serving all stakeholders including faculty, staff, students, and administration. Effective training session is recommended to be held to communicate each person's respective roles in assuring the needs of the research project can be met in a timely manner.
- Training and Education: Clear communication can be enhanced through investment in training and education of faculty, staff, and research administration. As funding opportunities, policies, and oversight/compliance are constantly being updated it is imperative that all parties are sufficiently trained and provided mechanisms for support when changes do occur.
- Flexibility: Greater flexibility at the faculty, department, and college levels can be granted to more efficiently deploy resources including funds, salary, time, materials, and infrastructure. Flexibility allows nimble, creative, and adaptive approaches to pursuit of research goals without adopting a one size fits all approach to grants/contracts/scholarship/research endeavors. This flexibility will ensure that PIs, departments and colleges have the support and flexibility they need to focus on their research.
- Timeliness and Efficiency: Attention is needed to focus on the importance of timeliness in getting things done. As noted in the working group reports, the amount of faculty time it takes to perform tasks is currently not being systematically measured, thereby constraining the capacity of the research enterprise to make necessary modifications to increase efficiency. The investment in systems that can track performance and workflow of research processing tasks will enhance decision making as well as provide more clear channels of communication.
- Customer service-oriented research administration culture. Central to the realization of a return on investment into the research ecosystem is the fostering of a customer service-oriented research culture.

Limitations

The research ecosystem review is an ongoing process in a cycle of investigation, problem identification, solution implementation, monitoring, evaluation, and adjustment. Therefore, the effort undertaken thus far is only a beginning of an extensive and continuous process. The report is based on the effort undertaken in the period from September 17th 2018 till January 11th 2019. In the interest of time, it focused on four areas, which although critical for the overall research enterprise, are by no means exhaustive. As noted before this is the first phase of the ecosystem review. In the next phase, the focus will be directed to other aspects of the research ecosystem. Even for the four areas focused in the Phase I, further investigations are needed, specifically where best practices for the management and distribution of institutional funds.

Recommendations and Next Steps

Actionable items have been identified in all four working group areas. However, there is a need for GW to be most effective and learn from the efforts and best practices in peer and aspirational institutions. Specifically, in the area of Non-Sponsored Research and Scholarship, we suggest formation of a special task force to examine the best practices of peer institutions. FSRC's deliberations clearly indicated that the proposed activities of the four groups are only the

first phase of the ongoing review process. This Phase I review has identified areas of relative success as well as opportunities for improvement that will serve to enhance the GW research ecosystem. The GW administration can use this information to determine the strategic planning and investments that can be made to maximize the research and scholarship efforts of the university.