

Report of the 2018-2019 Research Oversight Policy Committee (RPOC)

April 9, 2019

Committee membership:

Shalanda Baker (CSSH and School of Law), Jerry Hajjar (COE), David Luzzi (SR Vice Provost for Research), Alex Makriyannis (BCHS), Nick McGruer (COE, Fall Chair), Sheila Puffer (DMSB), Darien Wood (COS, Spring Chair), Rashmi Dyal-Chand (School of Law), SAC liaison

Introduction:

The committee examined several aspects of research policy at Northeastern, with particular focus on four charges from Senate Agenda Committee. These charges, along with the brief findings and recommendations of the committee are given below.

It should be noted that the main emphasis in reports from the RPOC committees was the problems resulting from a reporting structure where the administration and finance of the grants were decoupled. This year's committee was the first to examine the new administrative structure NU-RES.

Charge 1: The RPOC shall collaborate with the Senior Vice Provost for Research and his designees in NU Research Enterprise Services (NU-RES) to develop a set of recommendations regarding (a) enhanced communication and synchronization between the pre- award, finance and compliance areas of the unified Research Administration group, (b) faster response to faculty, particularly in the areas of contracts with corporate sponsors (including subcontracts) and compliance, (c) facilitation of necessary personal interaction while maintaining the efficiency of the mandatory University Prior Approval Form, and (d) development of metrics to monitor effectiveness of pre-award and post-award processes, and present the plan to the Senate by December 2018.

Procedures: The SVPR served as a member of the committee, and RPOC invited Jeff Seo, the new Interim Vice-Provost for Research Administration (VPRA) as a guest to the RPOC meetings to provide regular reports as to the status of the reorganization efforts involving Research Administration and Research Finance, which now both report to the SVP for Research and has been relaunched as "NU-RES" (Research Enterprise Services). The RPOC saw demonstrations of the new "ePAWs" software system and met with developers.

Findings: Initiatives within NU-RES related this charge include

- a) efforts to consolidate and limit the number of email communications between NU-RES and research faculty by examining the universe of standard notifications arising out of NU-RES;
- b) streamlining the review of non-disclosure agreements (NDAs) and industry sponsored research agreements by implementing guidelines around the average number of exchanges between NU-RES and industry sponsors for each type of agreement;

- c) directing the University Approval Form (UAF) to the appropriate local research administrator who may be in a better position to complete the UAF on behalf of the faculty as well as the roll-out of a “how-to” guide to assist in the completion of the UAF; and
- d) the progress to date on the implementation of phase 1 of the Electronic Proposal and Awards Workflow System (ePAWs) which will provide users, including faculty, the ability to track every contract submitted to NU-RES, OGC and Procurement.

Appearing as Attachment A to this report is a slide deck entitled “Recent Process Improvements” presented to the NU community at the NU-RES Open House that took place on November 26, 2018, portions of which was attended by a couple of RPOC members. At one RPOC meeting, representatives from NU-RES provided a demonstration of some of the features that will be available when ePAWs Phase 1 applications becomes fully operational in or around the summer of 2019. Based on the demonstration, we understand that Phase I of the electronic Contract Legal Agreement Workflow system (eCLAWS, which is a dovetail application within the ePAWs Phase I build) will accomplish the following:

- serve as a virtual database of all contracts entered into by the University;
- create a dashboard for each user to easily access features of ePAWs/eCLAWS/eCD
- provide the status of every agreement in real-time including a timeline indicating the date on which each party “touched” the agreement
- and the ability to use a built-in budgeting tool to help prepare a research proposal budget.

NU-RES intends to pilot ePAWs Phase I in the Spring of 2019, and is seeking volunteers to help test the 3 applications, including faculty. For additional context, we are attaching a slide deck outlining the features of ePAWs/eCLAWS/eCD as Attachment B.

Recommendations:

- Efforts should be continued to further streamline the communication between NU-RES and faculty investigators.
- Non-disclosure agreements (NDAs) should generally be classified as low-risk to expedite their approval.
- Future phases of ePAWs should incorporate the ability to track expenditures on existing research accounts.
- Systems should be explored to make invoicing on grants more timely and transparent.

Charge 2: The RPOC shall undertake a study of the current process for university-level seed funding of faculty research with a focus on the priorities, expected outcomes, and actual outcomes, and, if appropriate, make recommendations to enhance this set of processes

Procedures: The RPOC gathered partial data on seed funding but did not have a complete picture from which to draw conclusions.

Findings: There are no significant findings to report.

Recommendations:

- The topic of seed funding should be addressed by next year's RPOC.

Charge 3: The RPOC shall undertake a study of the current mechanisms to foster faculty-mentored undergraduate research, and, if appropriate, make recommendations to enhance this set of processes.

Procedures: Two members of the Research Policy Oversight Committee (Prof. Jerry Hajjar and Prof. Darien Wood) interacted with personnel from the Provost's and Chancellor's offices to acquire information about university-level initiatives, in particular the Acting Senior Vice Provost for Undergraduate Education and Experiential Learning (K. Ziemer) and the Director of the Office of Undergraduate Research and Fellowships (J. Iacono). The members also made queries to each of the colleges to gauge the level of support provided through the Colleges for undergraduates to pursue research with faculty.

Findings: The Office of Undergraduate Research and Fellowships (URF) offers over 200 undergraduate research-related awards each year to undergraduate students and their faculty advisors. The range of the awards typically are approximately \$1,000 to \$5,000 each. A total of approximately \$385,000 is typically awarded from the Provost's office, and an additional \$50,000 is awarded through the Honors Program. A document in Attachment C provides a summary of initiatives from the URF.

The URF has been expanding the scope of what is deemed research so as to include all colleges at the university. Examples of this include:

- o Creative endeavors are considered.
- o Arrangements are feasible in addition to typical one-on-one partnerships between a student and a faculty advisor, such as group projects or service research projects with community partners.

The URF would like to be able to track how many students are conducting undergraduate research, but this is proving to be challenging. In January 2019, they launched a series of new courses and would like to encourage students to register for these in semesters where they are conducting research. The courses will typically not be charged tuition.

While we did not succeed in gathering comprehensive data from all Colleges, we found that Colleges and departments also have initiatives related to undergraduate research, including funding for undergraduate research within the units, as well as programs to help undergraduates learn about research opportunities from the faculty. These targeted efforts supplement the central resources and programs of the URF.

Recommendations:

- The RPOC can work with URF to spread the word to faculty and students to encourage them to register for the new courses to track research activity.
- The URF will consider the pros and cons of establishing a centralized database of opportunities to match students and faculty; perhaps this can be broken down by department.

Charge 4: In collaboration with the Provost's Office, the RPOC shall review research policies specific to NU hubs outside Boston, including policies to incentivize faculty to carry out research at non-Boston hubs.

Procedures: RPOC members Professor Sheila Puffer and Professor Shalanda Baker requested a meeting with key members of the NU senior leadership team to obtain information about the current status and plans for academic research to be conducted on the Northeastern satellite campuses. A one-hour meeting held on December 7, 2018 was attended by the two RPOC members as well as Provost James Bean, Philomena Mantella, David Luzzi, and Jeff Seo. The findings from that meeting are described below.

Findings:

1. Provost Bean explained that the university has the longer-term goal of encouraging academic research to be conducted on all satellite campuses in addition to the Boston campus. This goal fits with the objective of unifying all campuses into one cohesive system. The vision of Northeastern using its global network to become a Global Research University is described in more detail in Attachment D.
2. Provost Bean emphasized that the satellite campuses were originally established as teaching campuses and thus were not designed to accommodate research activities, particularly science labs. The campuses range from 8,000 to 30,000 square feet. All faculty are hired by the Colleges and consist of part-time, adjuncts, professors of practice, and non-tenured full-time faculty. There are five full-time computer science faculty at the Seattle campus. That campus is currently the only satellite location where some academic research is currently underway, with some NU computer science faculty having developed research relationships with faculty at the University of Washington. The San Francisco/San Jose campuses have one computer science and some DMSB faculty. Computer Science is seeking to expand across all campuses. Bouve has a nursing program in Charlotte, as well as programs in London.
3. Provost Bean stated that he encourages tenured faculty members to spend a semester at a satellite campus and envisions opportunities for faculty rotation across campuses. Syracuse University already does faculty rotations in Europe. NU's College of Computer Science encourages faculty to rotate to Seattle, and a couple of dozen CSSH faculty have expressed interest in going to London. At the San Francisco campus there is one computer science faculty member who is working 20 percent for NU and 80 percent for Google. There are plans to hire more faculty in the Bay Area with such split

appointments. Provost Bean, David Luzzi, and Philly Mantella are comfortable with letting research activity develop organically throughout the campus network and collect feedback from early participants. It may become clear over time which locations are optimal for various types of research. For instance, the Provost noted that the Burlington campus is ideal for conducting research in a secure environment, but that that location has sometimes been overlooked. Likewise, biotech research is best done at the Boston campus.

4. Provost Bean emphasized the need to protect junior faculty in the tenure process when considering research opportunities at various campuses. He also underscored the need to develop non-tenure track research faculty to be hired in Burlington and potentially other locations to do grant-funded work.
5. David Luzzi noted that an additional advantage of having research opportunities spread across the network is that it allows access to talent pools. For instance, since the unemployment rate of professionals in Boston is virtually zero percent, that gap can be filled with researchers in other locations. For instance, hypothetically, it might be easier to hire a finance research services expert in Charlotte than in Boston and the system might be administered from that satellite campus.
6. David Luzzi explained that research at satellite campuses would be funded through the Boston campus.
7. David Luzzi emphasized the importance of putting in place a systematic review and communication process across the network. Such a process is feasible now that Research Services is going digital.
8. David Luzzi discussed the potential of Principal Investigator eligibility regarding who would be allowed to submit grants. For instance, some research, especially in computer science, is sponsored by industry. Also, if research for Bouve is conducted at the Toronto or Charlotte campuses, then the Institutional Research Board (IRB) should be located there. Jeff Seo suggested that NU researchers might partner with a commercial IRB that is knowledgeable about local requirements, and pay that organization for its services. Shalanda Baker noted that there is a national standard for IRB. She believes there is a case to be made that the IRB team at NU can be made more robust to support research activities at the other campuses.
9. David Luzzi noted that Faculty Affairs needs to be involved when faculty members want to keep their benefits while at other campuses. This is the case for a computer science industry faculty member currently going through that process.
10. Provost Bean noted the need to collect relevant policies. For instance, Sara Wadia-Fascetti and Ken Henderson have gathered policies for the experiential PhD program currently operating with GlaxoSmithKline.

11. David Luzzi noted the special requirements for campuses outside the United States. For instance, he was meeting with Canadian government officials in Ottawa on December 10, 2018, to set up the Canadian manifestation of Northeastern in order for the Toronto campus to be recognized as a Canadian institution. That status would then make the university eligible for Canadian government funding to conduct research in Canada, such as with the Department of National Defense. Additionally, Northeastern's Institute for Cybersecurity is approaching the Royal Bank of Canada for funding. A faculty member might be located on the Boston campus conducting research with a post doc located in Toronto. Similarly, Luzzi noted that the university is seeking to have the London campus recognized as a UK university.
12. Philly Mantella explained that all the deans of the satellite campuses report to her and run their own operations. They do not, however, have any academic oversight or decision making in that domain. As noted earlier, the Colleges make decisions about academic programs. An important role for the satellite campuses is to be catalysts for generating co-ops, b2b opportunities, connecting researchers to the broader Northeastern network.

Provost Bean elaborated that each campus is a cost center and there is an NU tax structure to rent space for events. In December 2018 the taxes were cut in half. Philly Mantella added that the idea is to encourage opportunities to be creative and benefit from efficiencies, such as splitting costs with deans across the campuses. Provost Bean noted that all facilities are leased by design, with the 8,000 square-foot San Jose campus being rent free thanks to the space having been provided by an alumnus

Recommendations:

- Deans of Colleges and Unit heads in the Boston hub make faculty aware of opportunities for research and related collaboration with NU hubs outside Boston.
- Deans of Colleges and Unit heads in the Boston hub make efforts to invite colleagues from NU hubs outside of Boston to College and Unit meetings to discuss research efforts and related endeavors at NU hubs outside of Boston.
- The Provost explore the development of research incentive programs to incentivize collaboration between: (a) Boston hub faculty and faculty at NU hubs outside of Boston, and (b) across NU hub faculty situated at different NU hubs outside of Boston.

Attachments:

- A. "Recent Process Improvements" presented to the NU community at the NU-RES Open House that took place on November 26, 2018
- B. Slide deck outlining the features of ePAWs/eCLAWs/eCD
- C. One-sheet summary of services and support provided by the Office of Undergraduate Research and Fellowships

D. "How Northeastern Will Become A Global Research University Through Enabling Its Global Network", a two-page vision statement from the Provost's office