

Task Force on Supporting Research, Creativity and Collaborative Innovation

Work Group 3: Provost's Seed Fund for Interdisciplinary Research

Working Group #3 of the Task Force on Research was charged with recommending “a process that would support a request for proposals for a large fund of \$1 million from the Provost’s office to promote exploration across boundaries,” potentially including “transdisciplinary projects, social impact projects, projects that bring together undergraduates, graduate students and faculty,” among others.

The working group met twice (December 17 and January 11), and members of the working group attended listening sessions convened by other working groups with the Divisions of Science, Humanities, and Social Sciences and Dean Dorothy Hodgson. **At the outset, the group determined that our goal should be to devise an internal research seed grant program that served the entire university.** In the interests of not multiplying demands on faculty and staff, we did not undertake our own comprehensive survey of faculty, staff, and students to determine what they would want to see in such a grant program, and instead collected and compared the wealth of models that already exist among R1 universities, while (as noted above) attending listening sessions and studying surveys organized by Working Groups #1 and #2.

We considered models for such programs from several institutions (Indiana U’s [Grand Challenges program](#) and [Collaborative Research Grants](#), UMichigan’s [M3 program](#), UC Davis’s [Big Ideas program](#), UVA’s [Strategic Investment Fund](#), UCLA’s [Grand Challenges program](#)), a Fall 2016 Educational Advisory Board presentation on “Sustainably Sourcing Big Ideas,” and a [Feb 2018 report](#) on a multi-university workshop on university-led grand challenges. We also reviewed the report of the 2013 Task Force on Faculty, Scholarship and Research and the “Examples of new interdisciplinary and applied science initiatives” section from the Division of Science’s 2017 self-reflection essay. All materials were stored and edited in a shared Google Drive folder.

Several, potentially co-existing ideas for an internal grant program, separate from the existing Provost’s Research Grants, emerged over the course of our discussions. The attached draft internal RFP (Appendix 1) is one possibility, reflecting a general consensus around the **following recommendations:**

1. The program should encourage creative and innovative inquiry in all fields and disciplines of the academy. The goal of the program is to stimulate and develop programs of inquiry and research that bring together Brandeis investigators from **multiple disciplines, and ideally multiple departments, centers, and schools**, or bring Brandeis investigators together with external partners (hospitals, industry, government, or non-governmental community and social service organizations) to address pressing questions in the field and in the world. Proposed programs should **leverage and integrate institutional strengths and centers of excellence**, while leading both the institution and the world into **new areas of inquiry and insight**. They should have the potential to distinguish Brandeis as a leader among research universities.
2. Proposals should focus on transforming knowledge and scholarship. We should not insist on impact on the community or social justice – this would discourage many applications. We can encourage public policy dimensions/ impact, particularly to encourage Arts & Sciences/ Heller cross-collaboration, and also welcome statements of community impact, but should not make it a requirement.
3. Projects could target a specific result or outcome, requiring several disciplines and types of expertise to achieve a fairly focused goal (like a technology project), or could be more exploratory, like an interdisciplinary seminar addressing shared questions around a broad theme (like “toleration” or “translation”), in the fashion of Mellon Foundation Sawyer Seminars or the interdisciplinary research groups supported by the Mandel Scholion Research Center at Hebrew University.
4. While positioning a research group to secure external funding should be an important measure of success, the RFP should not insist on “sustainability” or on “a plan to become self-sufficient (externally supported) within x years” but rather on outcomes and products, which may include grant proposals and external funding. Outputs might include: external grant applications or funding; new collaborations/ MOUs with external academic or community partners; an interdisciplinary conference leading to a publication or publication series; a new interdisciplinary program.
5. There should be a minimum project budget, to encourage big thinking. We could specify a minimum amount (\$100k or \$200k), or simply say we plan to make up to five grants from the \$1m fund. Given the differences between disciplines in the nature and costs of research; the interest in not prematurely constricting thinking—maybe we get a great \$500k proposal; and the opportunity that the

process will afford to match separate projects and investigators with one another; we recommend the latter.

6. To avoid discouraging faculty who have great interdisciplinary ideas but do not yet have partners in other programs, the RFP should not insist on application as an interdisciplinary team (for instance, specifying a minimum number of applicants from a minimum number of units, like Michigan does), but should require applicants to specify the areas of Brandeis research and expertise that would be connected by the proposed project.
7. **PI eligibility** should be defined such that proposals are rooted in the institution's long-term commitments and investments.
8. Projects should have a **2-3-yr. period of performance**, to encourage careful use of funds and impact and discourage hoarding.
9. Brandeis should give program organizers/ PIs on successful proposals course relief appropriate to the scale of the project.
10. In addition to giving course relief to ultimately successful PI's, the Provost may want to consider giving PI's who make it through initial triage some kind of compensation or course relief for developing proposals. We would not want this to divert funds from project funding.
11. The process of soliciting, winnowing, and developing proposals will be as important as the actual awards made. We recommend an initial RFI that would elicit many, brief (one-page?) proposals, which would (perhaps after minor triage) be posted on an internal program website, coded with thematic keywords, for comment, conversation and contact. The website itself will constitute an important promotional tool for Brandeis Research and a way to excite both internal and external audiences. We would then hold one or more "pitch" or "speed-dating" sessions in the expectation that some groups will amalgamate and teams will form.
12. This means that the Provost will need to fund dedicated staff (part-time) to run the program. This is important and complex enough to warrant significant, dedicated staff effort.
13. Outreach to all faculty will be essential. Members of the working group should schedule meetings with each school and division to present the program and answer questions.

14. We hope the university will use the new grant program as an opportunity to engage a major donor or two or three--someone pegged as a potential champion of the research enterprise in the upcoming campaign, perhaps trustees--asking them to put up matching funds to create a \$3m fund, while formally involving them in the process.

Other possibilities for structuring an internal research grant program might include:

- A “repechage” fund for proposals that were denied funding explicitly because they were judged by peers to be too risky or creative. We might budget about \$200k - \$400k to fund 1 or 2 proposals that were declined funding on their first try because reviewers found them too original, risky, or transformative. Applicants would submit both the proposal and the reviews to support their case, and the purpose of the award is to test a great idea that is ahead of its time but would, with favorable preliminary results, become a strong and substantial sponsored project.
- A creativity (or re-energizing or redirecting) fund for faculty who wish to (or need to) substantially reorient their research trajectory (\$300k-\$500k). The growing length of the academic career makes it likely that an active scholar will shift problem focus two or three times before retirement. It is in the university’s interest to make such shifts as smooth and effective as possible. This fund could also promote interdisciplinary collaboration.
- A fund specifically promoting “big data”-driven research in the Arts, Humanities, Sciences and Social Sciences, including Business and Social Policy, by supporting postdoctoral fellows, jointly mentored by two faculty members: one in the computational or physical sciences and one in another discipline. The demand for data scientists capable of helping current faculty move their research in this direction has emerged in many of the listening sessions and conversations we have had. Sacha Nelson and Jordan Pollack describe a possible program in an attached document (Appendix 2).

As noted above, these ideas are not necessarily mutually exclusive, particularly if the available funds expand and/or are renewed.