Transforming the University of Minnesota through the Enhancement of Interdisciplinary Research

Provost’s Grand Challenges Research Initiative—Phase 2
January 2017

Frequently Asked Questions

The following information is provided to further clarify the two opportunities available through the Grand Challenges Research—Phase 2 opportunities for Twin Cities campus scholars: The Competitive Call for Proposals and the Grand Challenges Research Scholars Collaborative.

The initial deadlines for both opportunities are in March 2017. Please see the submission guidelines for timelines, applications and selection processes, and additional details. For both opportunities, questions not addressed in the guidelines or in the information below can be submitted to gcrsrch@umn.edu for a response.

Competitive Call for Proposals

Co-Principal Investigator (co-PI) and research team eligibility

Must co-PIs be tenure-track faculty?
Two or more individuals must be named as co-PIs in the pre-proposal submission. At least one co-PI must be a tenure-track faculty member. If adequately justified by the specific needs of the proposed project, other co-PIs may hold a regular line or research support position, rather than a tenure-track position. The purpose of this program is to enhance the future interdisciplinary research capacity of the Twin Cities campus research scholars, whether or not tenure-track faculty. Scholars who hold continuing positions and who are committed to that objective are eligible to be co-PIs. Eligibility as a co-PI follows Board of Regents policy.

May the co-PIs be from the same college if the proposed project is broadly interdisciplinary?
Yes. The Twin Cities Campus Strategic Plan Driving Tomorrow calls for steps to be taken to transcend institutional boundaries, in pursuit of movement toward “one university” in which interdisciplinary collaborations flourish without restrictive barriers. In that spirit, the Provost’s Grand Challenges Research initiative intends to support research collaborations that bring together researchers from different colleges. The fundamental objective, however, is to expand the reach of interdisciplinary collaborations, in order to foster innovative ways of thinking about and studying Grand Challenges issues. If that objective can be met through broadly interdisciplinary collaboration within a college, co-PIs may be based in multiple departments within the same college.
Are there eligibility requirements for research project team members?
Research team members must be identified on the cover page of the pre-proposal submission, along with the co-PIs. Teams can include tenure-track faculty members and other categories of research scholars. Co-PIs are encouraged to include post-docs, graduate and undergraduate students, other members of the University’s scholarly community, and external partners in aspects of the proposed work.

Are only Twin Cities campus faculty and researchers eligible to participate in the competitive call for proposals?
Yes, but with a caveat. The Grand Challenges Research initiative, an element of the Twin Cities Campus Strategic Plan, is based on resources drawn from the Twin Cities campus, and hence is limited to the scholars of the campus. If a Twin Cities-based co-PI proposes a worthy project that, in order to be successful, requires participation by others beyond the Twin Cities campus, however, and if that requirement is well justified in the full proposal, then the campus limitation can be relaxed.

Grand Challenges Research—Phase 2 goals

This call appears to intentionally limit the number of scholars who can participate by virtue of funding only a handful of large awards. How does this strategy enhance interdisciplinary research?
The Provost’s Grand Challenges Research initiative is a work in progress as the University explores strategies for optimal support of interdisciplinary research. We are employing a variety of strategies during the early phases of this “experiment” to identify approaches that reduce barriers to interdisciplinary research, determine best practices, and advance culture change within the institution. Indeed, the Grand Challenges Research—Phase 1 opportunity in May 2016 called for proposals across the five Grand Challenges with the possibility of up to $60,000 plus a potential international enhancement award of up to $50,000. We were able to fund 21 of these “exploratory” projects within the five Grand Challenges.

Now, in Phase 2, we are focusing on just two of the five Grand Challenges and investing larger award amounts in fewer projects, ultimately to evaluate processes and outcomes from these different strategies. We have made an assumption, however, that large interdisciplinary projects will likely involve more faculty on the research team than would smaller projects. The goal is not to limit participation but rather to identify best strategies to support research outcomes that notably contribute to solutions and to elevate the capabilities of research scholars and the institution.

This call also appears to limit participation of the breadth of disciplinary expertise across the campus by focusing on only “Assuring Clean Water and Sustainable Ecosystems,” and “Fostering Just and Equitable Communities” rather than all five of the institutionally embraced Grand Challenges. How does this strategy enhance interdisciplinary research?
It is especially important to note that the clean water/sustainable ecosystems and just and equitable communities Grand Challenges provide a broad umbrella for faculty from the full range of disciplines to participate on proposed research teams. We encourage participation from scholars in the arts, humanities, social sciences, physical and biological sciences and engineering, health sciences, and the professions to work on these two Grand Challenges.

We focused on all five Grand Challenges embraced by the campus during the Grand Challenges Research—Phase 1 call. Proposal submissions clustered under the five Grand Challenges were of high quality. Given the multiple dimensions being addressed in each Grand Challenge through the projects funded in Phase 1, however, there are fewer opportunities for cross fertilization. For the next phases of
the Grand Challenges Research initiative, we will pair only two challenges per call to help ensure a more specific focus of scholarship. Each of the five Grand Challenges will be the focus of attention either next year or the year after. Those who choose not to participate in the challenges of clean water or just and equitable communities may engage in subsequent years when the other three Grand Challenges will be highlighted—Advancing Health through Tailored Solutions, Enhancing Individual and Community Capacity for a Changing World, and Feeding the World Sustainably.

Proposal submission questions

May a scholar submit more than one pre-proposal?
Yes, absolutely. There are no limitations on the number of collaborative interdisciplinary pre-proposals in which a researcher proposes to participate.

Is March 20 a firm deadline for pre-proposals?
Yes, and we will move into the review process immediately in order to maintain our schedule for award announcements in September 2017. Please recall that this is an iterative process. Following a preliminary review, invitations for full proposals will be extended in May 2017 to those who described particularly promising research ideas in their pre-proposals. The iterative process is envisioned as a way to provide review comments that will benefit PIs in shaping a final full proposal. The deadline for invited full proposals will be July 5, 2017.

Will there be support for faculty salaries?
The grants are intended to enhance the interdisciplinary capacity of the University to address Grand Challenges, rather than as a salary supplement to enable faculty to complete an existing writing or creative project. Accordingly, the expectation is that most of the funds will be used for research support and capacity enhancement, rather than salary for faculty members or other research positions. If some portion of the funding is required for faculty salary for the success of the proposed research, however, and if that requirement is well justified in the proposal, it is permitted. Please note, however, that we encourage the inclusion of graduate and undergraduate students on research teams. Student appointments should be incorporated into project budgets.

Why is a budget not required at the pre-proposal stage?
A well-defined budget is an essential component of a successful research project, and is required of those who are invited, following review of pre-proposals, to submit a full proposal. At the pre-proposal stage, we require only the level of funding that you are requesting for the project. The amount is an estimate, since it may change during the iterative process of review and discussion. The overarching focus of your pre-proposal should be on the potential of your research idea to have a substantial impact on the Grand Challenge and to strengthen the position of the University as a leader in addressing aspects of the Grand Challenge.

I am interested in submitting a pre-proposal specifically for the Institute on the Environment (IonE) funding opportunity relating to water. Where do I submit my pre-proposal?
As with all Grand Challenges Research-Phase 2 opportunities, submit your pre-proposal to gcrsrch@umn.edu. Please clearly state that you are seeking support specifically through the Institute on the Environment related to Assuring Clean Water and Sustainable Ecosystems. Pre-proposals for Grand Challenges interdisciplinary research, including for the IonE opportunity, are due March 20, 2017. Note that the Institute has established criteria that are in addition to the Grand Challenges Research pre-proposal criteria. Please see the Guidelines for the Grand Challenges Research Proposals for details. All pre-proposals will be accepted and reviewed through the same process.
We are pleased with the institutional collaborations that are aligning a number of University units to support interdisciplinary opportunities for faculty, research staff, and students. Partner units come together as a step toward our overarching vision of advancing our institution as “One University.” Aligned with the overall objective of the Grand Challenges research program, the IonE aims to grow and build research teams so that they have a capacity to contribute to similar problems in the future. The Institute and its collaborating units seek to enhance recognition of the University as a leading institution for significant, cutting-edge work on sustainability topics, including water sustainability.

**May proposals be focused centrally on curricular development?**

A hope underlying the Grand Challenges research initiative is that the supported research will have positive spin-offs for curricular innovation, both programatically and in the form of new courses for the Grand Challenges curriculum. Identifying such curricular spin-offs in the pre-proposal is appropriate. These grants, however, are expressly to support research collaborations, and so should not focus primarily on curricular development.

**Criteria for awarding grants**

**How will my pre-proposal be evaluated?**

As stated in the guidelines for submission, pre-proposals will be evaluated on:

- Potential of the research to have a substantial impact on the Grand Challenge and to position the University to play a leadership role with respect to the Challenge,
- Scholarly strength and interdisciplinary scope of the proposed team,
- Likely impact on shaping change in the University, and
- Potential to leverage substantial external funding.

Please refer to the guidelines for your two-page pre-proposal submission for the six questions that you should address in your pre-proposal idea description.

**Who will review idea proposals and full proposals and make final selections?**

Proposals will be reviewed by a panel of scholars drawn from disciplines that inform the potential for research in clean water, just and equitable communities, or the intersection of the two Grand Challenges. We will ensure that each pre-proposal and full proposal are read and evaluated by scholars who understand the proposed topic, the proposed research approach(es), and the institutional commitment to fostering new mechanisms to enhance interdisciplinary research. This interdisciplinary panel of distinguished scholars are well versed in the development of the Twin Cities Campus Strategic Plan and the Grand Challenges Research initiative as well.

As appropriate, additional internal and/or external reviewers may be engaged. The iterative review process will inform recommendations for funding of selected proposals. Collegiate deans will discuss the recommendations and Provost Hanson will make the final funding awards. The funded projects will be announced in September 2017, and funds will be available immediately thereafter.

**What is the process for feedback on submitted proposals?**

Written comments will be provided to all co-PIs whose proposals are not selected for funding. Ideally, written comments will be helpful to those who wish to pursue the proposed work through other mechanisms. The PIs of funded projects will be invited to engage with the Grand Challenges Research initiative team and its partners prior to launching their projects.
Must research scholar applicants be tenure track faculty?
Yes, the expectation is that research scholar applicants for the collaborative will be members of the tenure-track faculty. All faculty members are encouraged to apply, young scholars as well as mid-career and senior faculty. The purpose of this program is to enhance the future interdisciplinary research capacity of the Twin Cities campus research faculty who are committed to that objective and will benefit from this special opportunity. Should this mechanism to enhance interdisciplinary research prove successful, the Grand Challenges Research Scholar Collaborative initiative could potentially be expanded in the future to include those other than tenure-track faculty.

Are only Twin Cities campus faculty eligible to be nominated or self-nominate for the Research Scholar Collaborative?
Yes, the nomination process is exclusive in this respect. The Provost’s Grand Challenges Research initiative, which advances the research goals of the Twin Cities Campus Strategic Plan, is based on resources drawn from the Twin Cities campus, and hence limited to the researchers on this campus. Finalists for participation in the collaborative, however, will be asked to identify other disciplines—or researchers—that would be beneficial to involve in the planning of a high risk/high reward major initiative on behalf of the full collaborative. These additional individuals could consist of a broader configuration, including other University of Minnesota faculty members, non-tenure-track researchers (those holding a regular line or research support position), and external partners.

The Research Scholar Collaborative initiative appears to limit participation to only those faculty focusing on “Assuring Clean Water and Sustainable Ecosystems,” and “Fostering Just and Equitable Communities” rather than all five Grand Challenges. How does this strategy enhance interdisciplinary research?
The clean water/sustainable ecosystems and just and equitable communities Grand Challenges provide a broad umbrella for faculty from the full range of disciplines and professionals to participate in the collaborative as Grand Challenges Research Scholars while encouraging research advancement with a focus. For example, Assuring Clean Water and Sustainable Ecosystems can include aspects of climate change, policy, resilient communities and cities, the earth’s great waterways, cultural contexts of interactions with rivers, lakes, and seas, industry and energy, human health, biodiversity, equity and access, and food production, among other wide-ranging topics. Fostering Just and Equitable Communities can include educational and economic opportunities, reducing violence, fostering human and civil rights, policy, institutions and practices, social fabric, cultural vitality, community infrastructure, health, climate change, environmental degradation, diversity and inclusion, and confronting racism and bigotry, among others. Additionally, there are multiple points of intersection across the two Grand Challenges that present unique interdisciplinary opportunities for members of the collaborative.

Application process

What is the process if I want to nominate a colleague for the Research Scholar Collaborative?
We welcome both nominations by others and self-nominations by Wednesday, March 1, 2017; the name, title, and contact information of your nominee should be sent to gcrsrch@umn.edu. There is no difference in the weighting of the two types of nomination. No letters of nomination are required from the nominator. The first step in nominating a colleague is to inform the individual of your desire and...
make sure that they are interested in being nominated. This is important because the nominated individual is wholly responsible for writing and submitting his or her two-page statement of interest by the Monday, April 3, 2017 deadline.

What is the process if I want to nominate myself for the Research Scholar Collaborative?
We welcome your self-nomination by Wednesday, March 1, 2017. Please indicate your interest via email to gcrsrch@umn.edu with your name, title, and contact information. There is no difference in the weighting of your self-nomination or a nomination by a colleague. You will be responsible for writing and submitting your two-page statement of interest by the Monday, April 3, 2017 deadline. Please refer to the detailed guidelines for details.

Should I let my department head/chair know about my interest in applying for the Research Scholar Collaborative?
Yes. A letter of support from your department head/chair is required along with the submission of your two-page statement of interest by April 3. It is in your best interests, as well as those of your department, college, the Grand Challenges Research Scholar Collaborative, and the institution overall to anchor your potential selection with the endorsement of your department head/chair.

How are Research Scholar applicants reviewed?
Statements of interest will be reviewed by a panel of scholars drawn from disciplines that inform the potential for the applicant’s interdisciplinary contributions in clean water, just and equitable communities, or the intersection of the two Grand Challenges—both as an individual with a commitment to interdisciplinary work and as a member of the collaborative. We will ensure that each statement of interest is read and evaluated by scholars who understand the proposed topic, the proposed interdisciplinary configuration for addressing that topic, and the institutional commitment to fostering new mechanisms to enhance interdisciplinary research. This interdisciplinary panel of distinguished scholars are well versed in the development of the Twin Cities Campus Strategic Plan and the Grand Challenges Research Initiative as well.

As appropriate, additional internal and/or external reviewers may be engaged. Following peer review of statements of interest, promising candidates are invited for interviews during the months of April, May, and June, based on scheduling availability. The two-stage review process will inform recommendations for the appointment of Grand Challenges Research Scholars. Collegiate deans will discuss the recommendations, and Provost Hanson will make the final appointments in September 2017 for the 2018–19 academic year.

Can my special interests and expertise be accommodated by the collaborative?
We envisioned that all Research Scholar appointees will be able to pursue their interests and research strengths through the Grand Challenges Research Scholars Collaborative. More specifically, we offer distinctions for scholars who may choose to focus, in greater depth, on international or community engagement aspects of clean water and/or just and equitable communities. In partnership with the Global Programs and Strategy Alliance, we will name one or more of the appointed collaborative scholars whose work has an especially strong international focus as a Grand Challenges Research Global Scholar. The release time for the collaborative’s Grand Challenges Research Global Scholar will be supported financially by the Global Programs and Strategy Alliance. Similarly, in partnership with the Office for Public Engagement, we will name one or more of the appointed collaborative scholars who conduct their work through reciprocal, high-impact, community-engaged partnerships with local or regional external entities as a Grand Challenges Research Community-Engaged Scholar. The release time for the collaborative’s Grand Challenges Research Community-Engaged Scholar will be supported financially by the Office for Public Engagement.
**Why are applications due in Spring 2017 if the Grand Challenges Research Scholar Collaborative does not launch until the 2018–19 academic year?**

Supporting a Grand Challenges Research Scholar Collaborative—a first-ever opportunity for University of Minnesota faculty—is a significant undertaking that involves multiple institutional partners and potentially several departments and colleges. The scholars have two responsibilities: (1) To pursue their professional development through a concentrated investment of time with an interdisciplinary cohort, exploring new research directions and strategies; and (2) to develop, in collaboration with other members of the cohort, a plan of action for exciting major initiatives on one of the two Grand Challenges, or their intersection.

These are weighty responsibilities that require a commitment of up to 50 percent of the scholar’s time. Sufficient lead time must be allowed to consider how the scholar’s teaching, service, and other responsibilities to the department and college will be accommodated, in conjunction with the department head/chair and others. The appointment of scholars in September 2017 gives the scholar and his or her department sufficient time to prepare for the 2018–19 academic year appointment.

**What is the physical location of the collaborative?**

The Grand Challenges Research team is pleased to be working in partnership with the Institute for Advanced Study, the Institute on the Environment, and the Interdisciplinary Center for the Study of Global Change to facilitate and support the interdisciplinary work of the collaborative, both as individual research scholars and as a collective. The three partners supporting the collaborative contribute physical office, meeting and work space, and an existing, stimulating intellectual environment. The partners also provide logistical support to the collaborative and its scholars, in conjunction with the Grand Challenges Research initiative team. The specific location, work space, and other details will be provided to each Research Scholar well in advance of the 2018–19 academic year.

Inquiries that are not addressed in the information above or by the detailed guidelines for either the Grand Challenges Research Proposal process or the Grand Challenges Research Scholar Collaborative process can be sent to gcrsrch@umn.edu for response.