

FUNDING OPPs & INFO

For Hajim School Researchers



Jan. 4, 2016

EVENTS, WEBINARS

2016 NSF CAREER Proposal Writing Workshop

Sponsored by the NSF Division of Civil, Mechanical and Manufacturing Innovation, the 2016 NSF CAREER Proposal Writing Workshop will be held on March 21-22, 2016 in St. Louis, Mo.

Details: Apply to attend the Workshop by January 5, 2016, at the 2016 NSF CAREER Proposal Writing Workshop website.

<http://aries.imse.ksu.edu/nsf/NSF2016/main.htm>

NOTE: I am organizing an NSF CAREER bootcamp to be held this spring for junior faculty on campus – details will be coming later in January.

Webinar:

Meet the Experts in NIH Peer Review for R01 Grant Applicants event November 8 can be found at:

<http://public.csr.nih.gov/Pages/csrwebinar.aspx>

This weekly message from Cindy Gary, Assistant Dean for Grants and Contracts, highlights research funding opportunities and announcements that are particularly relevant to Hajim School faculty, staff and students. If you have any questions, please contact cindy.gary@rochester.edu or call 253-5173.)

FUNDING OPPORTUNITIES

INTERNAL FUNDING

2016-17 University Research Awards.

<http://www.rochester.edu/research/university-research-awards.html>

Deadline: February 1, 2016

In addition to the typical UR faculty membership, an application may be submitted by a UR faculty member (as the first-named, Lead Investigator) for a collaboration with faculty outside of the University of Rochester, as long as matching funds can be guaranteed from the US institution(s) in which non-UR faculty member(s) hold their primary appointment(s). International collaborations also may be entertained with the same criteria, some of which may be in-kind support, if demonstrated before the submission review.

Questions about the awards and completed applications should be directed to Adele Coelho, Faculty Outreach Coordinator in the Offices of the Provost and Senior Vice President for Research, at adele.coelho@rochester.edu.

PumpPrimer II: intramural funding program for Arts, Science and Engineering researchers

<https://www.rochester.edu/college/pumpprimer/>

Deadline: February 1, 2016

The increasingly competitive environment for extramural funding increases the need for proof of concept and/or pilot data in proposals and decreases funding of high-risk proposals. To help faculty secure extramural funding for bold new research directions

- Typical budgets will be \$1-20K. In rare instances, budgets as large as \$50K may be awarded.
- Cost-sharing with departmental resources is encouraged.

Applicants for both PumpPrimer I and II are expected to submit a proposal for external funding within 18 months of the allocation of intramural support. Both PumpPrimer mechanisms and Researcher Mobility Travel grants will require a brief final survey and final report to help us evaluate the effectiveness of this program. Questions, email me at cindy.gary@rochester.edu

NOTE: The following awards accept applications on an ongoing basis:

PumpPrimer I: Multi-institutional and/or multi-investigator research projects.

Increasingly, federal agencies are interested in research that brings together experts with complementary skills to address grand challenges. We encourage faculty to take on such large-scale initiatives because they benefit multiple AS&E faculty, increase the quality and stability of our research infrastructure, and increase our national and international visibility. The Dean's office may provide:

- Teaching relief for the faculty member who champions the project.
- Administrative support from our office for proposal preparation.
- Travel up to \$5K for planning proposals that bring together multi-institutional researchers.

Researcher Mobility Travel Grants: International Research Collaboration

- Provide up to \$5K to conduct overseas research visits (one to three months).
- Support for faculty research and expanding international collaborative networks.

Environmental Health Sciences Center (EHSC) has funds to support a limited number of meritorious Pilot Projects

<https://www.urmc.rochester.edu/environmental-health-sciences/pilot-projects-program.aspx>

Deadline: January 29, 2016

Funding: Up to \$30,000

Synopsis: theme of the EHSC, namely "Environmental Agents as Modulators of Human Disease and Dysfunction". We are especially interested in receiving proposals addressing how the environment modifies stem cell function, affects early life origins of adult diseases, and disrupts host/pathogen interactions.

EXTERNAL FUNDING

National Science Foundation

EARly-concept Grants for Exploratory Research (EAGER)

No specific program announcement

Deadline: Open

Funding: Requests may be for up to \$300K and of up to two years duration

Synopsis: EAGER funding mechanism may be used to support exploratory work in its early stages on untested, but potentially transformative, research ideas or approaches. This work may be considered especially "high risk-high payoff" in the sense that it, for example, involves radically different approaches, applies new expertise, or engages novel disciplinary or interdisciplinary perspectives. These exploratory proposals also may be submitted directly to an NSF program, but the EAGER mechanism should not be used for projects that are appropriate for submission as "regular" (i.e., non-EAGER) NSF proposals. PI(s) must contact the NSF program officer(s) whose expertise is most germane to the proposal topic prior to submission of an EAGER proposal. This will aid in determining the appropriateness of the work for consideration under the EAGER mechanism; this suitability must be assessed early in the process.

NSF & SRC

Energy-Efficient Computing: from Devices to Architectures (E2CDA) - A Joint Initiative between NSF and SRC (16-526)

<http://www.nsf.gov/pubs/2016/nsf16526/nsf16526.htm>

Deadline: March 28, 2016

Funding: approximately 2-4 multidisciplinary collaborative (Type I) projects, each ranging from \$800,000 to \$1,600,000 per year for three 3 years, and 2-4 individual or small (Type II) projects, each ranging from \$100,000 to \$200,000 per year for 1 to 3 years, will be supported

Synopsis: An investigator may participate as PI or co-PI on no more than one proposal submitted in response to this solicitation. Type I = collaborative, Type II = small/individual

Collaborative, multi-disciplinary proposals that address one or both of the following research paths are solicited: (1) disruptive system architectures, circuit microarchitectures, and attendant device and interconnect technology aimed at achieving the highest level of computational energy efficiency for general purpose computing systems; and (2) revolutionary device concepts and associated circuits and architectures that will greatly extend the practical engineering limits of energy-efficient computation. Further details on these research thrusts are described in the Program Description section of this solicitation. All proposals should aim for scalability sufficient to address application platforms from mobile devices to data centers, as well as extensible solutions that will sustain the long-term vitality of the information technology ecosystem.

National Science Foundation

STEM + Computing Partnerships (STEM+C) 16-527

<http://www.nsf.gov/pubs/2016/nsf16527/nsf16527.pdf>

Deadline: March 28, 2016

Funding: NSF expects to make 20-25 awards in Track 1 and 10-12 awards in Track 2, subject to the availability of funds.

Track 1 Project Types- Integration of Computing in STEM Education. 1. Exploratory Integration (EI): (up to \$1,250,000); maximum duration three years; 2. Design and Development (DD): (up to \$2,500,000); maximum duration three years; 3. Field-Building Conferences and Workshops (CW): (up to \$250,000); maximum duration two years.

Track 2 Project Types - Computing Education Knowledge and Capacity Building. 1. Research on Education and Broadening Participation Projects (EBP): (up to \$600,000 maximum); duration three years; 2. CS 10K (CS10K): (up to \$1,000,000); duration three years.

Synopsis: STEM+C invites creative and innovative proposals that address emerging challenges in the learning and teaching of STEM and computing. The program offers proposers two tracks: (1) Integration of Computing in STEM Education and (2) Computing Education Knowledge and Capacity Building.

The STEM+Computing Partnerships program seeks to significantly enhance the learning and teaching of science, technology, engineering, mathematics (STEM), and computing by K-12 students and teachers through research on, and development of, courses, curriculum, course materials, pedagogies, instructional strategies, models, or pedagogical environments that innovatively integrate computing into one or more other STEM disciplines, or integrate STEM content into the teaching and learning of computing.

National Science Foundation

Science of Learning: Collaborative Networks (SL-CN) 16-528

<http://www.nsf.gov/pubs/2016/nsf16528/nsf16528.pdf>

Funding: maximum award size of \$750,000 over 3 years. 13 awards under this solicitation anticipated

Deadline: Letter of Intent Deadline (Required): March 1, 2016; Full Proposal Deadline Date: April 4, 2016

Synopsis: Solicitation invites proposals for the creation of new research networks to address important integrative questions in the science of learning. Each network must identify an integrative research goal involving convergence of evidence from the diverse disciplinary approaches represented by participants in the network. The proposed research must substantially advance understanding of learning in more than a

single discipline. Networks may focus on advancing basic research through experiments and theory, as well as translating findings from basic research on learning to applications in order to benefit society and further inform fundamental theories of learning. This solicitation is for proposals that do not fit into existing NSF programs, by virtue of the emphasis on inter disciplinary in service of knowledge consilience and integration.

National Science Foundation

Innovations at the Nexus of Food, Energy and Water Systems (INFEWS)

URL: <http://www.nsf.gov/pubs/2016/nsf16524/nsf16524.htm>

Related URL from Dear Colleague letter Div. Chemistry:

<http://www.nsf.gov/pubs/2015/nsf15108/nsf15108.jsp>

(NSF aims to specifically focus on advancing knowledge of the nitrogen and phosphorus cycles; the production and use of fertilizers for food production; and the detection, separation, and reclamation/recycling of nitrogen- and phosphorus-containing species in and from complex aqueous environments.)

Deadline: March 22, 2016

Funding: Projects may be submitted to Tracks 1, 2 or 3 as Category 1 projects (greater than \$1,000,000 to no more than \$3,000,000) or Category 2 projects (less than or equal to \$1,000,000). Track 4 project submissions will only be considered as Category 2 effort.

\$16,000,000 to \$22,000,000 for **Track 1**, FEW System Modeling;

\$9,000,000 to \$15,000,000 for **Track 2**, Visualization and Decision Support for Cyber-Human-Physical Systems at the FEW Nexus;

\$12,000,000 to \$18,000,000 for **Track 3**, Research to Enable Innovative Solutions; and

\$1,000,000 to \$4,000,000 for **Track 4**, Education and Workforce Development.

Synopsis: The overarching goal of INFEWS is to catalyze the well-integrated interdisciplinary research efforts to transform scientific understanding of the FEW nexus in order to improve system function and management, address system stress, increase resilience, and ensure sustainability. The NSF INFEWS initiative is designed specifically to attain the following goals:

1. Significantly advance our understanding of the food-energy-water system through quantitative and computational modeling, including support for relevant cyberinfrastructure;
2. Develop real-time, cyber-enabled interfaces that improve understanding of the behavior of FEW systems and increase decision support capability;
3. Enable research that will lead to innovative system and technological solutions to critical FEW problems; and
4. Grow the scientific workforce capable of studying and managing the FEW system, through education and other professional development opportunities.

National Science Foundation

Advancing Informal STEM Learning (AISL) 15-593

URL: <http://www.nsf.gov/pubs/2015/nsf15593/nsf15593.htm?amp>

Deadline: November 08, 2016

Funding: (1) Collaborative Planning projects: up to \$150,000 with duration of one year; (2) Exploratory Pathways projects: up to \$300,000 with duration up to two years; (3) Research in Service to Practice projects: from \$300,000 to \$2,000,000 with a duration from two to five years; (4) Innovations in Development projects: \$500,000 to \$3,000,000 with duration from two to five years; (5) Broad Implementation projects from \$500,000 to \$3,000,000 with a duration from two to five years; (6) Conference projects up to \$250,000 with a duration of up to two years; and (7) up to one Informal STEM Learning Resource Center award up to \$5 million with a duration of five years

Synopsis: AISL program seeks to advance new approaches to and evidence-based understanding of the design and development of STEM learning opportunities for the public in informal environments; provide multiple pathways for broadening access to and engagement in STEM learning experiences; and advance innovative research on and assessment of STEM learning in informal environments. The AISL program supports seven types of projects: (1) Collaborative Planning, (2) Exploratory Pathways, (3) Research in Service to Practice, (4) Innovations in Development, (5) Broad Implementation, (6) Conferences, and (7) Informal STEM Learning Resource Center (FY 2016 only).

*** pre-recorded webinar presentation is attached below intended for individuals serving as reviewers on review panels of the Advancing Informal STEM Learning program – can assist with best practice/ideas for proposals**

http://www.nsf.gov/events/event_summ.jsp?cntn_id=137293&WT.mc_id=USNSF_13&WT.mc_ev=click

Dear Colleague Letter: Leveraging GLOBE to Increase Student Engagement and Diversity 16-031

http://www.nsf.gov/pubs/2016/nsf16031/nsf16031.jsp?WT.mc_id=USNSF_25&WT.mc_ev=click

Deadline: Open but see specific program deadlines below

Synopsis: Global Learning and Observations to Benefit the Environment (GLOBE) program (www.globe.gov/) is an international science and education program providing students, educators, and the public with the opportunity to participate in protocol-driven data collection and the scientific process, while also contributing meaningfully to our understanding of the Earth system and global environment. In 2016, NSF is initiating an activity to broaden participation in the sciences: INCLUDES (Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science). As an INCLUDES pilot activity, NSF invites submission of funding requests that will increase the capacity for using, as well as use of, the extensive resources of the GLOBE program, by addressing the requirements identified above. submissions should follow the guidelines provided in the NSF Grant Proposal Guide (GPG) (see http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg).

Proposers may submit relevant requests through any of the following mechanisms:

-New proposals submitted for consideration by either the Discovery Research Pre K-12 (DRK-12) program or Advancing Informal STEM Learning (AISL) program, managed within the HER Directorate.

The DRK-12 solicitation [NSF 15-592] is available at:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=500047 . The next deadline for DRK-12 proposals is December 5, 2016.

The A ISL solicitation [NSF 15-593] is available at:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504793. The next deadline for A ISL proposals is November 8, 2016.

-Requests for supplemental funding for awards previously funded through the DRK-12 program that will remain active through the end of Fiscal Year 2016.

-The Early-concept Grants for Exploratory Research (EAGER) proposals submitted for consideration by the Directorate for Geosciences, Office of the Assistant Director. The EAGER funding mechanism may be used to support exploratory work in its early stages on untested, but potentially transformative, research ideas or approaches.

***The GLOBE Implementation Office will be offering two GLOBE "Boot Camps" during March and April, 2016, for prospective Principal Investigators who are interested in learning more about GLOBE. GLOBE Boot Camps are available at: <http://www.globe.gov/get-trained/> workshops.**

Principal Investigators considering submission of a proposal or supplemental funding request in response to this opportunity are strongly encouraged to contact Lina Patino (lpatino@nsf.gov; 703-292-5047)