

FUNDING OPPs & INFO

For Hajim School Researchers



Aug. 24, 2015

WEBINARS, EVENTS

NSF 15-589 GEN-3 Engineering Research Center Webinar

Monday, August 31, 2015 10:00 – 12:30 EST

Hosting in Lattimore 306A

Synopsis: Presentation and details on the NSF ERC Program. The ERC team will hold a webinar on August 31, 2015, for teams considering responding to the NSF solicitation for Gen-3 Engineering Research Centers (ERC) (NSF 15-589).

During the webinar, key features of ERCs and expectations for ERC proposals will be discussed.

Email Cindy @ cindy.gary@rochester.edu if you plan to attend, refreshments to be served.

<http://www.nsf.gov/pubs/2015/nsf15589/nsf15589.pdf>

Deadline: LOI Required - September 25, 2015; Preliminary Proposal – October 23, 2015 (invited full – June 16, 2016)

Funding: The requested budget for the individual ERC awards starts at \$3,500,000 in year 1 and ramps up in \$250K/year increments to level off at \$4,250,000 by year 4.

Synopsis: Up to 4 awards nationally estimated. Awards may be made as Open Topic ERCs or Nanosystems ERCs (NERC). ERCs integrate engineering research and education with technological innovation to transform national prosperity, health, and security. ERCs create an innovative, inclusive culture in engineering to cultivate new ideas and pursue engineering discovery that achieves a significant science, technology, and societal outcome within the 10-year timeframe of NSF support.

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.)

NSF Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII) webinar content posted

http://www.nsf.gov/events/event_summ.jsp?cntn_id=135599&org=CISE

Deadline: September 30, 2015

Funding: < \$175,000 for 2 years

Synopsis: Program Announcement -

<http://www.nsf.gov/pubs/2015/nsf15569/nsf15569.pdf>

To support new faculty by encouraging research independence immediately upon obtaining one's first academic position after receipt of the PhD. CISE will award grants to initiate the course of one's independent research. Understanding the critical role of establishing that independence early in one's career, it is expected that funds will be used to support untenured faculty or research scientists (or equivalent) in their first two years in an academic position after the PhD. To be eligible, the PI may not yet have received any other grants in the Principal Investigator (PI) role from any institution or agency, including from the CAREER program or any other award post-PhD. Serving as co-PI, Senior Personnel, Post-doctoral Fellow, or other Fellow does not count against this eligibility rule. It is expected that these funds will allow the new CISE Research Initiation Initiative (CRII) PI to support one or more graduate students for up to two years. For PIs at undergraduate institutions, the funds may be used to support undergraduate students.

FUNDING OPPORTUNITIES

VentureWell

Faculty Grants - Courses and Grants Program

<http://venturewell.org/facultygrants/>

Deadline: November 4, 2015

Funding: Up to \$50,000

Synopsis: VentureWell awards faculty grants to colleges and universities for the purpose of strengthening existing curricular programs and/or building new programs in invention, innovation, and entrepreneurship. Through these grant funds, VentureWell supports creative pedagogical approaches that generate student teams (E-Teams) working on technology solutions to real-world problems. Proposals may include plans for creating or improving an individual course, course sequence, minor, major, certificate program, incubator, accelerator, and other co- and extra-curricular programs

VentureWell

Student Grants

<http://venturewell.org/student-grants/>

Deadline: October 7, 2015

Funding: Depends on stage - see below.

Synopsis: Our E-Team Program gives college students the chance to move new tech ideas out of the lab and classroom and into the marketplace. The three-stage

program provides grant funding, experiential workshops, veteran coaching and a potential investment opportunity to help teams manifest their projects' full commercial potential. •Stage 1 provides funding of \$5,000 to attend a three-day workshop on how to better articulate the opportunity for the innovation in the marketplace. Remaining funds may be used to support further development of the project/product. Stage 2 provides additional funding of up to \$20,000. In a second workshop, teams develop their business model hypotheses and plans to test them. Six monthly coaching sessions follow, helping keep teams moving forward. VentureWell's Stage 3 program focuses on helping teams develop a venture development plan to prepare for relationships with investors and strategic partners.

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.

National Science Foundation

Grants for Rapid Response Research (RAPID)

No specific program announcement

Deadline: Open

Funding: Requests may be for up to \$200K and of one year duration

Synopsis: RAPID funding mechanism is used for proposals having a severe urgency with regard to availability of, or access to, data, facilities or specialized equipment, including quick-response research on natural or anthropogenic disasters and similar unanticipated events. **PI(s) must contact the NSF program officer(s) whose expertise is most germane to the proposal topic before submitting a RAPID proposal.** This will facilitate determining whether the proposed work is appropriate for RAPID funding.

Ideas Lab: Measuring "Big G" Challenge

<http://www.nsf.gov/pubs/2015/nsf15591/nsf15591.pdf>

Deadline: Preliminary Proposal Deadline Date: September 21, 2015. Invited

Full Proposal Deadline Date: January 14, 2016

Funding: ~\$400,000 per award

Synopsis: Ideas Lab on "Measuring Big G" Ideas Labs are intensive meetings focused on finding innovative solutions to grand challenge problems. The ultimate aim of this Ideas Lab organized by the Physics Division of the Mathematical and Physical Sciences Directorate at the National Science Foundation (NSF), in collaboration with experts in the field, is to facilitate the development of new experiments designed to measure Newton's gravitational constant G with relative uncertainties approaching or surpassing one part in 100,000. Lab will include inputs from a variety of sources and will aim to develop collaborative research projects. Following the Ideas

Lab, proposals may be submitted by teams selected to submit a full proposal. Those selected teams will receive further instructions.

NSF/DOE Partnership in Basic Plasma Science and Engineering (15-601)

http://www.nsf.gov/pubs/2015/nsf15601/nsf15601.htm?WT.mc_id=USNSF_25&WT.mc_ev=click

Deadline: November 19, 2015

Funding: \$25,000 to \$250,000 per year with a duration of up to three years,

Synopsis: Prospective PIs funded in the prior NSF/DOE Partnership in Basic Plasma Science and Engineering desiring renewed support should submit to this solicitation. The foci of the initiative are to generate an understanding of the fundamental physics principles governing the collective interactions of large numbers of charged particles, as well as issues of plasma science and engineering that can have impact in other areas or disciplines in which improved basic understanding of the plasma state is needed. Some specific areas include: Chaos, Turbulence and Self-Organization in Plasmas; Strongly Coupled Coulomb Systems in Plasmas; Dusty Plasmas, Non-neutral Plasmas, Flows and Magnetic Fields in Plasmas, their Interaction and Interpenetration; Intense Field Matter Interactions in Plasmas; Advanced Methods for Plasma Modeling and Simulation; Plasma Diagnostics; Control of Plasma Processes; Study, Design, and Optimization of Plasma Reactors for Chemical Production; Plasma Surface Interactions, Plasma Modification, Synthesis and Processing of Materials; Atmospheric Pressure Plasmas, Microplasmas, and Plasmas in Environmental Science and Technology.

National Science Foundation

Advances in Biological Informatics (ABI)

15-582

<http://www.nsf.gov/pubs/2015/nsf15582/nsf15582.pdf>

Deadline: September 22, 2015

Funding: ~\$500,000 per award.

Synopsis: Encourages new approaches to the analysis and dissemination of biological knowledge for the benefit of both the scientific community and the broader public. The ABI program is especially interested in the development of informatics tools and resources that have the potential to advance- or transform- research in biology supported by the Directorate for Biological Sciences at the NSF. The ABI program accepts three major types of proposals: **Innovation awards** that seek to pioneer new approaches to the application of informatics to biological problems, **Development awards** that seek to provide robust cyberinfrastructure that will enable transformative biological research, and **Sustaining awards** that seek to support ongoing operations and maintenance of existing cyberinfrastructure that is critical for continued advancement of priority biological research.

National Science Foundation

Secure and Trustworthy Cyberspace (SaTC) 15-575

<http://www.nsf.gov/pubs/2015/nsf15575/nsf15575.pdf>

Deadlines: : Medium Projects- September 16, 2015; Large Projects - September 24, 2015; Small Projects - November 18, 2015; CYBERSECURITY EDUCATION Projects – December 16, 2015

Funding: Small projects: up to \$500,000 in total budget, with durations of up to three years; Medium projects: \$500,001 to \$1,200,000 in total budget, with durations of up to four years; Large projects: \$1,200,001 to \$3,000,000 in total budget, with durations of up to five years

Synopsis: The Secure and Trustworthy Cyberspace (SaTC) program welcomes proposals that address cybersecurity from: a Trustworthy Computing Systems (TWC) perspective and/or a Social, Behavioral and Economic Sciences (SBE) perspective; the Secure, Trustworthy, Assured and Resilient Semiconductors and Systems (STARSS) perspective; or the Transition to Practice (TTP) perspective. In addition, the SaTC program seeks proposals focusing entirely on Cybersecurity Education with total budgets limited to \$300,000 and durations of up to two years.

National Science Foundation

Information and Intelligent Systems (IIS): Core Programs 15-574

<http://www.nsf.gov/pubs/2015/nsf15574/nsf15574.pdf>

Deadlines: Medium Projects- September 16, 2015; Large Projects - September 24, 2015; Small Projects - November 18, 2015

Funding: Small Projects - up to \$500,000 total budget with durations up to three years; Medium Projects - \$500,001 to \$1,200,000 total budget with durations up to four years; and Large Projects - \$1,200,001 to \$3,000,000 total budget with durations up to five years.

Synopsis: IIS supports research and education projects that develop new knowledge in three core programs: The Cyber-Human Systems (CHS) program; The Information Integration and Informatics (III) program; and The Robust Intelligence (RI) program.

National Science Foundation

Computing and Communication Foundations (CCF): Core Programs 15-573

<http://www.nsf.gov/pubs/2015/nsf15573/nsf15573.pdf>

Deadlines: Medium Projects - September 16, 2015; Large Projects -September 24, 2015; Small Projects - November 18, 2015

Funding: : Small Projects - up to \$500,000 total budget with durations up to three years; Medium Projects - \$500,001 to \$1,200,000 total budget with durations up to four years; and Large Projects - \$1,200,001 to \$3,000,000 total budget with durations up to five years.

Synopsis: Develop new knowledge in three core programs: The Algorithmic Foundations (AF) program; The Communications and Information Foundations (CIF) program; and The Software and Hardware Foundations (SHF) program.

National Science Foundation

Computer and Network Systems (CNS): Core Programs 15-572

<http://www.nsf.gov/pubs/2015/nsf15572/nsf15572.pdf>

Deadlines: Medium Projects - September 16, 2015; Large Projects -September 24, 2015; Small Projects - November 18, 2015

Funding: Small Projects - up to \$500,000 total budget with durations up to three years; Medium Projects - \$500,001 to \$1,200,000 total budget with durations up to four years; and Large Projects - \$1,200,001 to \$3,000,000 total budget with durations up to five years.

Synopsis: new knowledge in two core programs: Computer Systems Research (CSR) program; and Networking Technology and Systems (NeTS) program.

National Science Foundation

Division of Civil, Mechanical and Manufacturing Innovation

Unsolicited Proposals - September 15, 2015

Geotechnical Engineering and Materials (GEM) – PD-1636

Engineering and Systems Design (ESD) - PD 14-1464

Service, Manufacturing and Operations Research (SMOR) - PD 15-006Y

NanoManufacturing (NM) - PD 14-1788

Mechanics of Materials and Structures (MOMS) - PD 15-1630

Materials Engineering and Processing (MEP) - PD 13-8092

Civil Infrastructure Systems (CIS) - PD 15-1631

Manufacturing Machines and Equipment (MME) - PD 15-1468
Structural and Architectural Engineering (SAE) - PD 15-1637
Design of Engineering Material Systems (DEMS) - PD 12-8086
Biomechanics and Mechanobiology (BMMB) - PD 14-7479
Engineering for Natural Hazards (ENH) - PD 15-7396
Dynamics, Control and Systems Diagnostics (DCSD) - PD 15-7569

Division of Materials Research

Unsolicited Proposals – October 31, 2015

<http://www.nsf.gov/div/index.jsp?div=DMR>

Biomaterials (BMAT) - PD 06-7623

Ceramics (CER) - PD 15-1774

Condensed Matter and Materials Theory (CMMT) - 09-1765

Condensed Matter Physics (CMP) - 03-1710

Electronic and Photonic Materials (EPM) - PD 03-1775

Metals and Metallic Nanostructures (MMN) - 09-1771

Polymers (POL) - 03-1773

Solid State and Materials Chemistry (SSMC) - PD 10-1762

INFORMATION OF INTEREST

National Science Foundation

Dear Colleague Letter: Special Guidelines for Submitting Collaborative Proposals under the NSF/ENG/ECCS - U.S.-Israel BSF International Opportunity

15-098

http://www.nsf.gov/pubs/2015/nsf15098/nsf15098.jsp?WT.mc_id=USNSF_25&WT.mc_ev=click

Deadline: November 1, 2015

Synopsis: Division of Electrical, Communications and Cyber Systems (ECCS) in the Directorate for Engineering (ENG) of the National Science Foundation and the United States-Israel Binational Science Foundation are pleased to announce a U.S.-Israel collaborative research opportunity. The goal is to help reduce some of the current barriers to working internationally. NSF/ENG/ECCS and BSF will address these issues by allowing U.S. and Israeli researchers to submit a single collaborative proposal that will undergo a single review process. Proposals submitted to the NSF should be made by U.S. organizations only (the Israeli collaborator does not appear as a formal co-PI on the application). However, in the proposal, the nature of the collaboration and the role of the Israeli partner(s) must be described.