

Grant Opportunity Alerts: Issue: ORD-GOA-2015-12

In This Issue:

Reminders:

Event: Panel Discussion on NSF CAREER Grant Opportunities

Panel Speaker: Dr. Raj Mutharasan, Program Director, NanoBioSensing, NSF

Panelists:

Dr. Treena Arinzeh, Professor, NJIT (NSF CAREER grant recipient)

Dr. Yi Chen, Associate Professor, NJIT (NSF CAREER grant recipient)

Dr. Edgardo Farinas, Associate Professor, NJIT (NSF CAREER grant recipient)

When and Where: 1.00 PM – 3.30 PM, April 8, 2015; 112 Eberhardt Hall

Panel Speaker Bio: Dr. Raj Mutharasan is the Frank A. Fletcher Professor of Chemical and Biological Engineering. Currently he serves as the Program Director of NanoBioSensing at the National Science Foundation. He led Engineering Curriculum Innovation Program – a seven university coalition on engineering education - at Drexel funded by the National Science Foundation during 1995-2004. He is a Fellow of American Institute of Chemical Engineers (2000), Fellow of American Institute for Medical and Biological Engineering (2006) and Fellow of the American Association of Advancement of Science (2011). He serves on the Editorial Board of Applied Biochemistry and Biotechnology, a Springer journal.

Agenda:

1.00 PM - 1.10 PM: Welcome and Introductions

1.10 PM - 1.45 PM: Presentation by Dr. Raj Mutharasan, Program Director, NSF

1.45 PM - 2.15 PM: Panel Discussion

2.15 PM – 3.30 PM: Group Meetings with Faculty

Event: NSF Webinar on The Science of Learning, Technology, Big Data, and Transformation in Education

When: 11.00 AM-12.00 Noon, April 9, 2015

Speaker Bio: Candace Thille is the founding director of the Open Learning Initiative (OLI) at Carnegie Mellon University and at Stanford University. She is a senior research fellow in the Office of the Vice Provost for Teaching and Learning and an assistant professor in the Graduate School of Education at Stanford University. Her focus is in applying the results from research in the science of learning to the design and evaluation of open web-based learning environments and in using those environments to conduct research in human learning. Dr. Thille serves on the board of directors of the Association of American Colleges and Universities; as a fellow of the International Society for Design and Development in Education; on the Assessment 2020 Task Force of the American Board of Internal Medicine; on the advisory council for the Association of American Universities STEM initiative; on the advisory council for the National Science Foundation Directorate for Education and Human Resources. She served on on the working group of the President¹'s Council of Advisors on Science and Technology (PCAST) for the Obama Administration that produced the Engage to Excel report. She served on the U.S. Department of Education working group, co-authoring The 2010 National Education Technology Plan and is currently serving on the working group

to co-author The 2015 National Education Technology Plan. She has a bachelor¹'s degree from the University of California, Berkeley, a masters degree from Carnegie Mellon University, and a doctorate from the University of Pennsylvania.

Abstract: Using intelligent tutoring systems, virtual laboratories, simulations, and frequent opportunities for assessment and feedback, The Open Learning Initiative (OLI) has been creating and evaluating open web-based learning environments for over twelve years. The OLI environments also serve as a laboratory for fundamental research on human learning. In this talk I will discuss how we make use of expertise from the learning sciences to produce high-quality learning environments and how studies of student use inform both the next iteration of the environment and the underlying learning theory. I will present examples from OLI courses, discuss results from several research studies, and describe the second phase of OLI at Stanford University.

To Join the Webinar: Please register at:

<https://nsf.webex.com/nsf/j.php?RGID=ra1991bf582d3d9058a6ed163f7ac99bd> by 11:59pm EST on Wednesday, April 8, 2015. After your registration is accepted, you will receive an email with a URL to join the meeting. Please be sure to join a few minutes before the start of the webinar. This system does not establish a voice connection on your computer; instead, your acceptance message will have a toll-free phone number that you will be prompted to call after joining. Please note that this registration is a manual process; therefore, do not expect an immediate acceptance. In the event the number of requests exceeds the capacity, some requests may have to be denied.

Grant Opportunities Alerts:

Keywords and Areas Included in Funding Opportunities Alerts:

EPA: 2015 EPA Greater Research Opportunities (GRO) Fellowships for Undergraduate Environmental Study

NSF: Service, Manufacturing and Operations Research (SMOR); Update: Big Data Regional Innovation Hub: One Proposal per Organization: Please see Internal Competition Information; Hydrologic sciences

NASA: Update: ROSES 2015: Planetary Data Archiving, Restoration, and Tools

National Endowment for Humanities: Challenge Grants

National Institute of Health: AHRQ Small Research Grant Program (R03), HIV Vaccine Research and Design (HIVRAD) Program (P01)

Environmental Protection Agency (EPA)

Grant Program: 2015 EPA Greater Research Opportunities (GRO) Fellowships for Undergraduate Environmental Study

RFP Website: http://epa.gov/ncer/rfa/2015/2015_gro_undergrad.html

EPA-F2015U-GRO-P1 Natural and Life Sciences

EPA-F2015U-GRO-P2 Environmental Sciences and Interdisciplinary Programs

EPA-F2015U-GRO-P3 Engineering

EPA-F2015U-GRO-P4 Social Sciences
EPA-F2015U-GRO-Q1 Physical Sciences and Earth Sciences
EPA-F2015U-GRO-Q2 Mathematics and Computer Science

Brief Description: The U.S. Environmental Protection Agency (EPA), as part of its Greater Research Opportunities (GRO) Fellowships program, is offering undergraduate fellowships for bachelor level students in environmental fields of study. The deadline for receipt of applications is May 19, 2015, at 11:59:59 PM ET. Subject to availability of funding and other applicable considerations, the Agency plans to award approximately 34 new fellowships. Eligible students will receive support for their junior and senior years of undergraduate study and for an internship at an EPA facility during the summer of their junior year. The fellowship provides up to \$20,700 per academic year of support and \$8,600 of support for a three-month summer internship.

This solicitation provides the opportunity for the submission of applications for projects that may involve human subjects research. Human subjects research supported by the EPA is governed by EPA Regulation 40 CFR Part 26 (Protection of Human Subjects). This includes the Common Rule at subpart A and prohibitions and additional protections for pregnant women and fetuses, nursing women, and children at subparts B, C, and D. Research meeting the regulatory definition of intentional exposure research found in subpart B is prohibited by that subpart in pregnant women, nursing women, and children. Research meeting the regulatory definition of observational research found in subparts C and D is subject to the additional protections found in those subparts for pregnant women and fetuses (subpart C) and children (subpart D). All applications must include a Human Subjects Research Statement (HSRS, as described in Section IV.B. Item 6 of this solicitation), and if the project involves human subjects research, it will be subject to an additional level of review prior to funding decisions being made as described in Sections V.C and V.D of this solicitation. Additional information can be found in Section I.A of the full announcement at

http://epa.gov/ncer/rfa/2015/2015_gro_undergrad.html

Awards: Potential Funding per Fellowship: Up to a total of \$50,000 over a two-year period. Fellows will receive support for their junior and senior years of undergraduate study and for a paid summer internship at an EPA facility between their junior and senior years. Cost sharing is not required.

Letter of Intent: Call the Program Officer

Deadline: Full Proposal Deadline(s): May 19, 2015 Please see the announcement including Section IV for additional submission information at

http://epa.gov/ncer/rfa/2015/2015_gro_undergrad.html

National Science Foundation

Grant Program: Service, Manufacturing and Operations Research (SMOR)

Agency: National Science Foundation NSF PD 15-006Y

RFP Website:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505202&org=NSF&sel_org=NSF&from=fund

Brief Description: The Service, Manufacturing and Operations Research (SMOR) program supports fundamental research leading to the creation of innovative mathematical models, analysis, and algorithms for decision-making related to design, planning, and operation of

service, manufacturing, and other complex systems. Specifically, the program supports two main types of research: (i) innovations in general-purpose methodology related to optimization, stochastic modeling, and decision and game theory; and (ii) research grounded in relevant applications that require the development of novel and customized analytical and computational methodologies. Application areas of interest include supply chains and logistics; risk management; healthcare; environment; energy production and distribution; mechanism design and incentives; production planning, maintenance, process monitoring and quality control; and national security. Of particular interest are methods that incorporate increasingly rich and diverse sources of data to support decision-making.

Awards: Variable

Letter of Intent: Call Diwakar Gupta (703) 292-7902 dgupta@nsf.gov

Deadline: September 1, 2015 - September 15, 2015

Grant Program: Update: Big Data Regional Innovation Hubs (BD Hubs): Accelerating the Big Data Innovation Ecosystem

Agency: National Science Foundation NSF 15-562

RFP Website: <http://www.nsf.gov/pubs/2015/nsf15562/nsf15562.htm>

Brief Description: In March 2012, the Administration announced the National Big Data Research and Development Initiative, which aims to solve some of the Nation's most pressing R&D challenges related to extracting knowledge and insights from large, complex collections of digital data. As part of this initiative, the Administration encouraged multiple stakeholders including federal agencies, private industry, academia, state and local governments, non-profits, and foundations, to develop and participate in Big Data research and innovation projects across the country.

To augment ongoing activities and to ignite new Big Data public-private partnerships across the Nation, NSF's Directorate for Computer and Information Science and Engineering (CISE) is seeking to establish a National Network of Big Data Regional Innovation Hubs (BD Hubs). Each BD Hub would be a consortium of members from academia, industry, and/or government. This solicitation aims to establish four Hubs across distinct geographic regions of the United States, including the Northeast, Midwest, South, and West, as defined later in the Program Description section. Each BD Hub should focus on key Big Data challenges and opportunities for its region of service. The BD Hubs should aim to support the breadth of interested local stakeholders within their respective regions, while members of a BD Hub should strive to achieve common Big Data goals that would not be possible for the independent members to achieve alone.

To foster collaboration among prospective partners within a region, NSF is sponsoring a series of regional, intensive, one-day workshops (called "charrettes"). One charrette will be held in each geographic region to convene stakeholders, explore Big Data challenges, and aid in the establishment of that consortium. For more information on these charrettes, see the following webpage: <http://www.usenix.org/BDHubs15>. To facilitate discussion among interested parties, a HUBzero community portal has been established at <http://bdhub.info>. Interested parties may leverage this portal to communicate with members within their region or other stakeholders nationwide.

This solicitation is the first of a multi-phase process meant to develop a National Network of BD Hubs. The first phase will set up the governance structure of each BD Hub's consortium of members as well as develop approaches to ensure cross-hub collaboration and sustainability over the long term. The next phase will focus on building out various sectors of particular

interest to each BD Hub (e.g., transportation, smart cities, health, energy, public safety, and education) so as to advance sector innovation in that region. The final phases will focus on connecting the BD Hubs and their regional sectors into a national Big Data innovation ecosystem.

This solicitation is part of NSF's Big Data program, which includes: research and infrastructure development; education and workforce development; and multi-disciplinary collaborative teams and communities that address complex science and engineering grand challenges. Before preparing a proposal in response to this or any other Big Data solicitation, applicants are strongly encouraged to review those solicitations and consult with cognizant NSF program officers to determine appropriateness of fit. For example, this solicitation funds the establishment and coordination of a BD Hubs National Network, but is not meant to be a source of funding for new research. By contrast, the BIGDATA solicitation may be more relevant for research funding.

Awards: Each project will be funded up to a maximum of \$1,250,000 for up to 3 years, subject to the availability of funds.

Cost Sharing Requirements: Inclusion of voluntary committed cost sharing is prohibited.

Letter of Intent: Not Required

Limit on Number of Proposals per Organization: 1

Deadlines: June 24, 2015

Internal Competition:

Please submit an internal pre-proposal (up to five pages) following the instructions describes in the proposal preparation section of the RFP in the following format by April 21, 2015 through College/School Deans. Deans are requested to forward the pre-proposals with their recommendations to the Office of Research by April 27, 2015. Notification on selection will be provided by May 1, 2015.

Internal Pre-proposal Format (5 pages):

Project Summary and List of Participants/Collaborators (1-page)

Project Description (3-pages; following the instructions for proposal submission)

Data Management Plan, Postdoctoral Mentoring Plan and Brief Budget Outline (1 page)

NASA

Grant Program: UPDATE: ROSES 2015: Planetary Data Archiving, Restoration, and Tools

Agency: NNH15ZDA001N-PDART

Research Opportunities in Space and Earth Sciences (ROSES) – 2015; NNH15ZDA001N

RFP Website:

<http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={19148EC8-0C4D-A31F-7F05-AF399BEF99A8}&path=open>

Summary of Solicitations Under ROSES 2015:

<http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={9F1341>

[A9-6D0F-F075-C993-276263B186ED}&path=open&redirectURL=%2Fexternal%2Fsolicitations%2Fsolicitations.do%3Fmethod%3Dopen%26stack%3Dpush](http://nspires.nasaprs.com/external/viewrepositorydocument/cmdocumentid=442206/solicitationId=%7B4477FA89-FA98-1CBC-3678-C7AB00B6E769%7D/viewSolicitationDocument=1/Table%20%202015%20amend3.html)

See Table 2 for Updated Information.

Brief Description: ROSES-2015 is an omnibus NASA Research Announcement. It contains over 50 different proposal opportunities. In the "Announcement Documents" section above, the document 'Summary of Solicitation' describes the common requirements for all ROSES-2015 proposal opportunities; all proposers must satisfy the proposal requirements in the 'Summary of Solicitation'. The documents 'Table 2' contains the list of all proposal opportunities and their due dates. The document 'A.1 Earth Science Research Overview' describes research activities within the NASA science division that is managing the specific proposal opportunity on this page. The document 'A.36 Advancing Collaborative Connections for Earth System Science' describes the specific proposal opportunity on this page. All of these documents are kept up to date and incorporate amendments, clarifications, and corrections in a clearly identifiable manner.

Table 2: ROSES 2015 List:

[http://nspires.nasaprs.com/external/viewrepositorydocument/cmdocumentid=442206/solicitationId=%7B4477FA89-FA98-1CBC-3678-](http://nspires.nasaprs.com/external/viewrepositorydocument/cmdocumentid=442206/solicitationId=%7B4477FA89-FA98-1CBC-3678-C7AB00B6E769%7D/viewSolicitationDocument=1/Table%20%202015%20amend3.html)

[C7AB00B6E769%7D/viewSolicitationDocument=1/Table%20%202015%20amend3.html](http://nspires.nasaprs.com/external/viewrepositorydocument/cmdocumentid=442206/solicitationId=%7B4477FA89-FA98-1CBC-3678-C7AB00B6E769%7D/viewSolicitationDocument=1/Table%20%202015%20amend3.html)

This National Aeronautics and Space Administration (NASA) Research Announcement (NRA), entitled Research Opportunities in Space and Earth Sciences (ROSES)–2015, solicits basic and applied research in support of NASA's Science Mission Directorate (SMD). ROSES is an omnibus with many individual program elements, each with its own due dates and topics and all together these cover all aspects of basic and applied supporting research and technology in space and Earth sciences, including, but not limited to: theory, modeling, and analysis of SMD science data; aircraft, scientific balloon, sounding rocket, International Space Station (ISS), CubeSat and suborbital reusable launch vehicle investigations; development of experiment techniques suitable for future SMD space missions; development of concepts for future SMD space missions; development of advanced technologies relevant to SMD missions; development of techniques for and the laboratory analysis of both extraterrestrial samples returned by spacecraft, as well as terrestrial samples that support or otherwise help verify observations from SMD Earth system science missions; determination of atomic and composition parameters needed to analyze space data, as well as returned samples from the Earth or space; Earth surface observations and field campaigns that support SMD science missions; development of integrated Earth system models; development of systems for applying Earth science research data to societal needs; and development of applied information systems applicable to SMD objectives and data.

Awards: Awards range from under \$100K per year for focused, limited efforts (e.g., data analysis) to more than \$1M per year for extensive activities (e.g., development of science experiment hardware).

Letter of Intent: Step 1, NOI: May 15, 2015

Deadline: Full Proposal Deadline(s): Full Proposal Due: July 17, 2015

National Endowment for Humanities

Grant Program: Challenge Grants

Agency: National Endowment for Humanities

RFP Website: <http://www.neh.gov/grants/preservation/research-and-development>

Brief Description: The mission of the NEH Office of Challenge Grants is to advance knowledge and understanding in the humanities by strengthening the institutional base of humanities teaching, scholarly research, public programming, and other humanities activities. Challenge grants are capacity-building grants, intended to support significant humanities activities of high intellectual quality and to help institutions secure long-term support for their humanities programs.

Through these grants many organizations and institutions have been able to increase their humanities capacity and secure the permanent support of an endowment. Grants may be used to establish or enhance endowments or spend-down funds that generate expendable earnings to support and enhance ongoing program activities. Challenge grants may also provide capital directly supporting the procurement of long-lasting objects, such as acquisitions for archives and collections, the purchase of equipment, and the construction or renovation of facilities needed for humanities activities. Funds spent directly must be shown to bring long-term benefits to the institution and to the humanities more broadly. Grantee institutions may also expend up to 10 percent of total grant funds (federal funds plus matching funds) to defray costs of fundraising to meet the NEH challenge. Because of the matching requirement, these NEH grants also strengthen the humanities by encouraging nonfederal sources of support. Applications are welcome from colleges and universities, museums, public libraries, research institutions, historical societies and historic sites, scholarly associations, state humanities councils, and other nonprofit humanities entities. Programs that involve collaboration among multiple institutions are eligible as well, but one institution must serve as the lead agent and formal applicant of record.

Awards: Variable

Letter of Intent: Not required

Deadline: May 5, 2015

National Institutes of Health

Grant Program: AHRQ Small Research Grant Program (R03)

Agency: Agency for Healthcare Research and Quality (AHRQ) NIH PAR-15-147

RFP Website: <http://grants.nih.gov/grants/guide/pa-files/PA-15-147.html>

Brief Description: Small research (R03) grants provide flexibility for initiating studies which are generally for preliminary or short-term projects. These grants are non-renewable. Some examples of the types of projects that R03 research supports include:

- Pilot or feasibility studies
- Secondary analysis of existing data
- Small, self-contained research projects
- Development of research methodology
- Development of new research technology

The AHRQ small grant is a mechanism for supporting discrete, well-defined projects that realistically can be completed within two years (or less) within the budget constraints of the mechanism. Because the research strategy section of the application is limited to 6 pages, an R03 grant application may not contain the same level of detail as that found in an R01 application. Accordingly, appropriate justification for the proposed work can be provided through literature citations, data from other sources, or from investigator-generated data.

Preliminary data are not required, particularly in applications proposing pilot or feasibility studies.

The Small Research Grant (R03) is an award made by AHRQ to an institution/organization to support a discrete health services research project. The R03 research strategy proposed by the applicant institution/organization must be related to the mission and research interests of AHRQ. Although the PD/PI writes the grant application and is responsible for conducting and supervising the research, the actual applicant is the research institution/organization.

AHRQ Mission and Research Areas of Interest:

The AHRQ mission is to produce evidence to make health care safer, higher quality, more accessible, equitable and affordable, and to work with HHS and other partners to make sure that the evidence is understood and used. Within this mission, AHRQ's specific priority areas of focus are:

- Improve health care quality by accelerating implementation of Patient Centered Outcomes Research (PCOR)
- Make health care safer
- Increase accessibility by evaluating expansions of insurance coverage
- Improve health care affordability, efficiency and cost transparency

These areas, relevant to Small Research Grant (R03) applications submitted to AHRQ, are articulated at (<http://www.ahrq.gov/funding/policies/foaguidance/index.html>). Contacting an AHRQ staff member may help focus the research plan based on an understanding of the AHRQ mission and research priorities. AHRQ staff contacts can be found at <http://www.ahrq.gov/funding/priorities-contacts/contacts/index.html>.

Applicants are strongly encouraged to address health services research issues critical to AHRQ priority populations, including: individuals living in inner city and rural (including frontier) areas; low-income and minority groups; women, children, and the elderly; and individuals with special health care needs, including those with disabilities and those who need chronic or end-of-life health care.

Awards: The budget limit on small project grant applications is \$100,000 total costs (i.e., direct costs plus Facilities and Administrative (F&A) costs) for the entire project period, regardless of the length of the proposed project period.

Applications requesting more than \$100,000 in total costs for the entire project period will not be reviewed.

Letter of Intent: Not Required

Full Proposal Deadline: [Standard dates](#) apply, by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.

Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.

Grant Program: HIV Vaccine Research and Design (HIVRAD) Program (P01)

Agency: NIH PAR-15-164

National Institute of Allergy and Infectious Diseases (NIAID)

RFP Website: <http://grants.nih.gov/grants/guide/pa-files/PAR-15-164.html>

Brief Description: The HIV Vaccine Research and Design (HIVRAD) program is designed to fund projects that further address hypotheses crucial to the design of an efficacious HIV/AIDS prophylactic vaccine. Applications for five years of support should include plans that have advanced past the exploratory stage and include preliminary data. Less fully developed applications can request less than 5 years of support to establish feasibility. Applications

aimed at developing or optimizing a specific vaccine platform should lay out a research pathway with clear decision points. Extensive modeling of vaccine concepts in non-human primates may be included.

Clinical studies involving human subjects or vaccine research focused solely on therapeutic applications are not considered appropriate and will not be funded under this FOA. For information on programs that support therapeutic vaccine development, please contact program staff.

Applications may address, but need not be limited to:

- Approaches to elicit durable and broadly neutralizing antibodies against HIV and/or SIV
- Identifying correlates of vaccine-induced immune protection to HIV/AIDS
- HIV structural studies as they relate to designing HIV immunogens
- Improved animal model systems (and challenge viruses) to address vaccine efficacy
- Approaches to increase the immunogenicity of HIV antigens (e.g., novel adjuvants)
- How vaccine design can better address the heterogeneity of HIV
- Developing or improving viral or bacterial vaccine vectors
- Determining how immune cells can be mobilized to the portal of infection
- Investigations into the role of glycan structures on immunogenicity, antigenicity and infectivity
- Investigations into innate immunity to alter the outcome of infection

Awards: NIH intends to fund an estimate of 1-3 awards, corresponding to a total of \$5M, for fiscal year 2016. Future year amounts will depend on annual appropriations.

Letter of Intent: June 15, 2015

Full Proposal Deadline: July 15, 2015; July 15, 2016; July 14, 2017, by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.

Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.
