Grant Opportunity Alerts: Issue: ORD-GOA-2014-07

Special Note: NSF Grant Proposal Guide (GPG) Changes for Submission of Grant Applications

Website for Complete Information:

http://www.nsf.gov/pubs/policydocs/pappguide/nsf13001/gpg_sigchanges.jsp GPG Summary of Major Changes:

Significant Changes to Implement the Recommendations of the National Science Board's Report entitled, "National Science Foundation's Merit Review Criteria: Review and Revisions"

Chapter II, Introduction, has been supplemented with information regarding the Foundation's core strategies from the NSF 2011-2016 Strategic Plan. Similar language regarding integration of research and education and integrating diversity previously appeared in Chapter III.A. The language was moved and updated to align with NSF's current strategic plan. The purpose of this change is to help eliminate internal and external confusion regarding whether these two core strategies are additional review criteria, while at the same time, reiterating their importance.

Chapter II.C.1.e, Proposal Certifications, has been updated to include a new Organizational Support Certification to address Section 526 of the *America COMPETES Reauthorization Act (ACRA) of 2010*.

Chapter II.C.2.b, Project Summary, has been revised to omit language regarding the inclusion of separate headings to address the two merit review criteria. In lieu of this approach, FastLane has been modified to display three separate text boxes in which proposers must provide an Overview and address the "Intellectual Merit' and "Broader Impacts" of the proposed activity. Because FastLane will enable the criteria to be separately addressed (still within one page), proposers will no longer need to include separate headings. Proposals that do not separately address the overview and both merit review criteria within the one-page Project Summary will be not be accepted or will be returned without review.

Chapter II.C.2.d, Project Description, has been revised to implement changes related to the Content and Results from Prior NSF Support sections recommended by the National Science Board (NSB). The Content instructions were updated to provide contextual information about proposal preparation and to include revised language related to broader impacts of the proposed activities from the ACRA and the Board's report. In the past, the Project Description needed to include a description of broader impacts as an integral part of the narrative. The Project Description must now contain, as a separate section within the narrative, a discussion of the broader impacts of the proposed activities. This section also was updated to indicate that Intellectual Merit and Broader Impact activities must be described in two separate sections in the summary of Results from Prior NSF Support.

Chapter III, NSF Proposal Processing and Review, has been revised to insert language in the introduction to Chapter III, regarding NSF core strategies. The purpose of this change is to reiterate the importance of integration of research and education and broadening participation as core strategies, as outlined in NSF's strategic plan.

Chapter III.A, Review Criteria, has been renamed Merit Review Principles and Criteria and revised to incorporate recommendations from the NSB. New language has been added on merit review principles, and revised merit review criteria language was inserted. Language regarding evaluation of mentoring plans for postdoctoral researchers has been moved from the GPG Chapter III to the Postdoctoral Mentoring Plan instructions in Chapter II.C.2.j. References to the document containing examples illustrating activities likely to demonstrate broader impacts have been deleted. This was done to eliminate confusion over the document, which was often viewed as a prescriptive list of additional requirements instead of illustrative examples.

Here is a brief list of recent grant opportunities that may of interest to NJIT faculty.

Keywords and Areas Included:

Wells Fargo and the National Fish and Wildlife Foundation (NFWF): Water, and environment resources, community infrastructure

EPA: Air and Radiation Monitoring

NIH: Stem Cell Research, R01, STTR Phase I and II.; Health Related Education, R25;

Brain Research, R24

NSF: Benchmark Computing; BRAP, Interdisciplinary Law and Sciences National Endowment for Humanities: Fellowships, Scholarly Edition and Translational Grant

Wells Fargo and the National Fish and Wildlife Foundation (NFWF)

Grant Program: Environmental Solutions for Communities

Agency: Wells Fargo and the National Fish and Wildlife Foundation (NFWF) **RFP Website**: http://www.nfwf.org/environmentalsolutions/Pages/2015rfp.aspx **Brief Description:** Wells Fargo and the National Fish and Wildlife Foundation (NFWF) seek to promote sustainable communities through Environmental Solutions for Communities by supporting highly-visible projects that link economic development and community well-being to the stewardship and health of the environment. Approximately \$2,500,000 is available nationwide for 2015 projects. Particular emphasis on urban projects. Collectively, investments under this initiative will promote a sustainable future for communities by:

Supporting sustainable agricultural practices and private lands stewardship;

- · Conserving critical land and water resources and improving local water quality:
- · Restoring and managing natural habitat, species and ecosystems that are important to community livelihoods;
- · Facilitating investments in green infrastructure, renewable energy and energy efficiency; and
- Encouraging broad-based citizen and targeted youth participation in project implementation.

NJIT Contact: For more information and towards submission of a proposal, please contact Eric Blitz in the advancement office.

Awards: Grants range \$25,000 to \$100,000 over 18 months.

Deadline: December 10, 2014.

Environmental Protection Agency

Grant Program: Community-Scale Air Toxics Ambient Monitoring

Agency: EPA; Office of Air Quality Planning & Standards

RFP Website: RFP# EPA-OAR-OAQPS-15-01; http://www.epa.gov/air/pdfs/rfp-epa-oar-oaqps-15-01.pdf

Brief Summary: This notice announces the availability of funds and solicits proposals for projects designed to assist state, local and tribal communities in identifying and profiling air toxics sources, assessing emerging measurement methods, characterizing the degree and extent of local air toxics problems, and tracking progress of air toxics reduction activities.

Awards: Up to \$750,000

Deadline: Jan 5, 2015 Please refer to the announcement, including Section IV, for

additional information on submission methods and due dates.

National Institutes of Health:

Grant Program: Stem Cell-Derived Blood Products for Therapeutic Use (R01)

Agency: NIH

R01 Research Projects

Related Announcements for other programs:

RFA-HL-15-029, R41 Small Business Technology Transfer (STTR) Grant - Phase I only

RFA-HL-15-030, R41/R42 Small Business Technology Transfer (STTR) Grant - Phase J. Ph

Phase I, Phase II, and Fast-Track

RFP Website: http://grants.nih.gov/grants/guide/rfa-files/RFA-HL-15-022.html

Brief Description: Stem cell technology holds the promise of providing a nearly limitless source of safe, immune-matched cells for clinical use. One of the first areas where this promise can be realized is through cell products that lack a nucleus and thus face fewer regulatory hurdles, such as red blood cells and platelets. Considerable progress has been made but scientific questions remain and improved tools to enhance the production are required if translation to clinical use is to be achieved. To this end, this FOA will support research addressing remaining scientific questions to enable and accelerate the use of stem cell-derived blood products as therapeutics. While production of sufficient numbers of cells such as platelets and red cells has been demonstrated using cellular engineering methods, basic research questions related to cell differentiation and maturation remain, which if elucidated, may allow for the development of new ways to efficiently produce clinically-useful stem cell-derived platelets or red blood cells. In addition to this FOA, two companion FOAs (RFA-HL-15-029 and RFA-HL-15-030) will support small business research to develop improved techniques and tools to enhance the production of clinically-relevant, functional stem cell-derived red blood cells or platelets in a more efficient and cost-effective manner.

Awards: An applicant may request a budget with direct costs up to \$300,000 per year, excluding 1st tier subcontractor or consortium facilities and administrative (F&A) costs.

Letter of Intent: January 20, 2015 **Deadline:** February 18, 2015

Grant Program: Short-Term Research Education Program to Increase Diversity in Health-Related Research (R25)

Agency: NIH R25 Education Projects

RFP Website: http://grants.nih.gov/grants/guide/rfa-files/RFA-HL-16-008.html **Brief Description**: The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The goal of this NHLBI R25 program is to support educational activities that enhance the diversity of the biomedical, behavioral, and clinical research workforce in the mission areas of importance to NHLBI. To accomplish the stated goal, this funding opportunity announcement encourages the development of creative educational activities with a primary focus on Research Experiences.

The over-arching goal of this NHLBI R25 program is to support educational activities that enhance the diversity of the biomedical, behavioral and clinical research workforce by providing research training and research opportunities to undergraduate and health professional students. To accomplish the stated goal, this FOA will support creative educational activities with a primary focus on:

- Research Experiences:
- The objective is to expose undergraduate college and health professional students from underrepresented backgrounds in the biomedical and behavioral sciences to research training opportunities in mission areas of the NHLBI.

- For undergraduate students: to provide hands-on research to learn to balance collaborative and individual work, to better understand scientific publications, to discover their passion for research, and continue on to graduate and other health profession careers.
- For medical, dental, nursing and other health professionals: to become acquainted with the important role of health professionals in the biomedical research enterprise, and to enhance knowledge, interest, and entrance into basic biomedical, translational, or applied clinical research as a career.

Award: Although the size of the award may vary within the scope of the research education program proposed, it is generally expected that applications will stay within the following budgetary guidelines: the institutional annual direct costs should typically not exceed \$330,104.

Deadline: February 18, 2015; September 18, 2015 (resubmissions only); February 18, 2016; September 19, 2016 (resubmissions only); February 18, 2017; September 18, 2017 (resubmissions only), 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: BRAIN Initiative: Planning for Next Generation Human Brain Imaging (R24)

Agency: NIH, Multiple Institutes, R24 Resource-Related Research Projects **RFP Website:** http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-15-200.html **Brief Description:** This funding opportunity announcement (FOA), in support of the NIH Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative, aims to support planning activities and the initial stages of development of entirely new or next generation brain imaging technologies and methods that will lead to transformative advances in our understanding of the human brain.

Awards: \$300,000

Letter of Intent: February 18, 2015

Deadline: March 18, 2015, by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on March 18, 2015.

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: Benchmarks of Realistic Scientific Application Performance of Large-Scale Computing Systems (BRAP)

Agency: National Science Foundation NSF 15-7685

RFP Website: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505151

Brief Description:

NSF is interested in supporting activities by the NSF Cyberinfrastructure community in the analysis of existing benchmarks, and in the development of new benchmarks, that measure real-world performance and effectiveness of large-scale computing systems for science and engineering discovery. Research, development, and use of performance benchmarks in high-performance computing (HPC) has been active for over 20 years, as evidenced by the development of LINPACK and the emergence of the TOP500 list in the early 1990s, followed by the development of the HPC Challenge Benchmark and the current HPCG effort (http://tiny.cc/hpcg). There have been efforts to provide benchmarks that include real applications, such as the SPEC High Performance Computing Benchmarks

(http://spec.org/benchmarks.html#hpg), the Blue Waters SPP suite (http://www.ncsa.illinois.edu/assets/pdf/news/BW1year_apps.pdf), and the NERSC SSP (https://www.nersc.gov/users/computational-systems/nersc-8system-cori/nersc-8-procurement/trinity-nersc-8-rfp/nersc-8-trinitybenchmarks/ssp/). Recent efforts have sought to broaden the set of relevant benchmarks to more effectively cover performance under different application environments such as data-intensive analysis (e.g., Graph 500). Energy efficiency has also emerged in recent years as a relevant and increasingly important area of measurement and profiling for HPC systems (e.g., Green 500). In addition to HPC, the Big Data community has gained interest in benchmarking; reference approaches to measuring and characterizing system performance for large-scale data analysis hardware and software systems remains an area of research, development, and community discussion (e.g., on the Big Data Top 100). Industry and academe have convened an ongoing series of workshops and meetings on the topic of Big Data benchmarking (http://clds.ucsd.edu/bdbc/workshops). Given the emergence of inference-based computing, the growing role of data analysis, changes in scientific workflow due to dynamic availability of sensor and instrument data, the expanding use of large-scale computing in all scientific disciplines, the growing role of clouds, and a diversity of architectural approaches, NSF sees a timely opportunity to engage the community in benchmarking analysis and development activities. NSF welcomes benchmarking proposals in the following general areas: (1) the analysis, evaluation, and assessment of the effectiveness of one or more existing benchmarks used in industry and academe today: (2) the development (including algorithm development and prototype implementation) and experimental use of one or more new benchmarks; or (3) workshops and community engagement events to advance discussion, dissemination, and community building around benchmarks. Proposals focused in areas 1 and 2 must include some work in area 3. Industry engagement is encouraged. Proposals should describe aspects of the targeted systems and run-time environments, including relevant scales, types of platforms, and I/O processing, and

should describe the new information about the targeted systems that can be expected to emerge from the project. Describe the scientific applicability characteristics of the targeted systems, and the relevance of the new information that will be learned about these systems to realistic use in the proposed applications. Because the act of measuring a quantity often leads to efforts to improve that quantity, proposals should justify the choice of characteristic(s) being measured, such as sustained performance, throughput, productivity, energy efficiency, time to solution, etc., including an application perspective in this justification. Describe the scope of the interested research community, within and/or beyond NSF; the likelihood that that community will accept the proposed benchmark as a useful measure; and the practicality and feasibility of the benchmark as a tool for that community. Describe how the proposed measurements might create incentives for vendors to design systems that will serve the application area(s). Authors should also address the issues of evolution and sustainability of the benchmarks in future generations, and the usefulness of the benchmarks in contributing to NSF's future efforts to acquire systems that best serve the research community. Proposals should include a project plan with milestones. For proposals addressing Big Data benchmarks, NSF encourages proposers to consider the characteristics and topics described in guidance for the Fifth Workshop on Big Data Benchmarking (http://clds.ucsd.edu/wbdb2014.de).

Awards: Up to \$500,000

Deadline:

due by 5 p.m. proposer's local time):

February 02, 2015

Grant Program: Law and Social Sciences: Interdisciplinary Fellowships and Awards

Agency: National Science Foundation **NSF Publication 15-514**

RFP Website: http://www.nsf.gov/pubs/2015/nsf15514/nsf15514.htm

Brief Description: The Law & Social Sciences Program considers proposals that address social scientific studies of law and law-like systems of rules. The Program is inherently interdisciplinary and multi-methodological. Successful proposals describe research that advances scientific theory and understanding of the connections between law or legal processes and human behavior. Social scientific studies of law often approach law as dynamic, made in multiple arenas, with the participation of multiple actors. Fields of study include many disciplines, and often address problems including though not limited to: Crime, Violence and Punishment Economic Issues Governance Legal Decision Making Legal Mobilization and Conceptions of Justice Litigation and the Legal Profession LSS provides the following modes of support: Standard Research Grants and Grants for Collaborative Research Doctoral Dissertation Research Improvement Grants Interdisciplinary Postdoctoral Fellowships Workshop and Conference Awards LSS also participates in a number of specialized funding opportunities through NSF's crosscutting

and cross-directorate activities, including, for example: Faculty Early Career Development (CAREER) Program Research Experiences for Undergraduates (REU) Research at Undergraduate Institutions (RUI) Grants for Rapid Response Research (RAPID) Early-concept Grants for Exploratory Research (EAGER) For information about these and other programs, please visit the Cross-cutting and NSF-wide Active Funding Opportunities homepage.

Awards: Standard Awards

Due Date:

February 04, 2015

Dissertation Research, Standard and Collaborative Research and Interdisciplinary Postdoctoral Fellowships

August 03, 2015

August 1, Annually Thereafter

Standard and Collaborative Research and Interdisciplinary Postdoctoral Fellowships January 15, 2016

January 15, Annually Thereafter

Dissertation Research, Standard and Collaborative Research and Interdisciplinary Postdoctoral Fellowships

Grant Program: Science, Technology, and Society Agency: National Science Foundation **NSF 15-506**

RFP Website: http://www.nsf.gov/pubs/2015/nsf15506/nsf15506.htm

Brief Description: The Science, Technology, and Society (STS) program supports research that uses historical, philosophical, and social scientific methods to investigate the intellectual, material, and social facets of the scientific, technological, engineering and mathematical (STEM) disciplines. It encompasses a broad spectrum of STS topics including interdisciplinary studies of ethics, equity, governance, and policy issues that are closely related to STEM disciplines, including medical science. The program's review process is approximately six months. It includes appraisal of proposals by ad hoc reviewers selected for their expertise and by an advisory panel that meets twice a year. The deadlines for the submission of proposals are February 2nd for proposals to be funded as early as July, and August 3rd for proposals to be funded in or after January. There is one exception: Doctoral Dissertation Improvement Grant proposals will have only one deadline per year, August 3rd. The Program encourages potential investigators with questions as to whether their proposal fits the goals of the program to contact one of the program officers.

Awards: Standard Awards

Due Date:

(due by 5 p.m. proposer's local time):

February 02, 2015

February 2, Annually Thereafter

National Endowment for the Humanities

Grant Program: National Endowment for the Humanities

Agency: National Endowment for the Humanities

RFP Website: http://www.neh.gov/grants/research/scholarly-editions-and-

translations-grants

Brief Description: Scholarly Editions and Translations grants support the preparation of editions and translations of pre-existing texts and documents of value to the humanities that are currently inaccessible or available in inadequate editions. Typically, the texts and documents are significant literary, philosophical, and historical materials; but other types of work, such as musical notation, are also eligible. Projects must be undertaken by a team of at least one editor or translator and one other staff member. These grants support full-time or part-time activities for periods of one to three years.

Applicants should demonstrate familiarity with the best practices recommended by the <u>Association for Documentary Editing</u> or the <u>Modern Language Association</u> <u>Committee on Scholarly Editions</u>. Translation projects should also explain the approach adopted for the particular work to be translated. Editions and translations produced with NEH support contain scholarly and critical apparatus appropriate to the subject matter and format of the edition. This usually means introductions and annotations that provide essential information about the form, transmission, and historical and intellectual context of the texts and documents involved.

Awards: Up to \$300,000

Submission Deadline: December 9, 2014

CIMIT

Program: Point of Care Technology Research Center in Primary Care

Agency: CIMIT

RFP Website: http://www.cimit.org/grants-poctrn.html

Brief Description: CIMIT Announces 2015 National Award Competition for the Point-of-Care Technology Research Network (POCTRN) in Primary Care The Point of Care Technology Research Center in Primary Care seeks collaborative research projects to develop novel Point of Care technologies aimed at improving patient care in primary care settings. Applications must present practical solutions

to unmet needs relevant to primary care practice with an ultimate goal of improving healthcare outcomes and efficiency in the delivery of primary care. If successful, projects should be viable candidates for commercial development.

As the number of primary care providers diminishes and the need for primary care increases, the fundamental unmet need is to increase the ability of providers to care for more patients without decreasing the quality of care given and without unduly burdening the providers, patients or their families.

In general, two POC technology-enabled pathways to increase primary care capacity are:

- 1) To introduce point-of-care technologies that eliminate unnecessary steps and re- work to increase the efficiency of operations.
- 2) To offload selected testing and self-monitoring capabilities to the home or community settings for patient self-management.

Seeking collaborative research projects aimed at improving patient care, devices, procedures, diagnosis, and the delivery of healthcare in primary care settings through the development of point-of-care technologies

Pre-Proposals: Pre-proposals must be submitted through the CIMIT on-line system at https://cimitconnect.induct.no and are due no later than 11:59pm EST on Monday, February 16, 2015. See" How to Apply for Point-of-Care Technology Award-Pre-Proposals" http://www.cimit.org/grants-poctrn.html

Full Proposals: Invited full proposals must be received by 11:59pm EST **Monday, April 27th, 2015**.

Contact: Steve Schachter, MD, Chief Academic Officer

Email: CIMITGrants@partners.org