

## Grant Opportunity Alerts: Issue: ORD-GOA-2015-13

### **In This Issue: NJIT Open Forum Event and Grant Opportunities Alert**

**Event:** NJIT Open Forum on Research Related Processes and Infrastructure Support

**When and Where:** 11.30 AM to 1.00 PM, May 1, 2015; Room GITC 1100

**Hosts:** Faculty Senate and Office of Research & Development

**Panel Moderator and Host:** Amitabha Bose, Faculty Senate President

**Panelists:**

Henry Mauemeyer, Senior Vice President for Administration and Treasurer

Andrew P. Christ, Vice President for Real Estate Development and Capital Operations

Atam Dhawan, Interim Vice Provost for Research, Office of Research

Dave Ullman, Associate Provost for Information Services

Maria La Lima, Director, Accounts Payable

Ritu Kumar, Payroll Manager

Norman J. Van Houten, Director, Health & Environmental Safety

Kamal Joshi, Assistant Vice President, Human Resources

Jeanie Regencio, Director, Purchasing Department

**Brief Description and Call for Questions:** Representatives from several NJIT offices that impact your research will be present to answer questions and listen to your suggestions in order to improve the efficiency of research related processes and protocols. It will be a moderated forum where representatives from Office of Research, Purchasing, Account Payable, Computing Services, Payroll, Human Resources, Physical Plant and Safety will be joining the panel. The Faculty Senate committee of research, scholarship and creativity is now soliciting your questions and suggestions for the above offices as well as the whole NJIT research infrastructure. Please send all your questions to Jay Meegoda ([Meegoda@NJIT.edu](mailto:Meegoda@NJIT.edu)) before Monday April 20. On Tuesday April 21 Jay Meegoda, Amit Bose and Atam Dhawan will review your questions and send them to corresponding NJIT offices to prepare for the forum. At the forum your questions will be asked by Amit Bose and the panel will respond to your questions. If you are not satisfied with the response, you may ask one follow-up question. For additional information please contact Dr. Jay Meegoda.

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### **Grant Opportunities Alerts:**

Keywords and Areas Included in Funding Opportunities Alerts:

**EPA:** 2015 EPA Graduate Fellowships, Environmental Sciences, Water, Clean Air, Synthetic Biology, Information Science, Optimization of Decision Making Processes

**NSF:** Data Intensive Research in Education

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

**National Endowment for Humanities:** Digital Grants

**National Institute of Health:** The NINDS Human Biomarkers Biospecimen and Data Repository (U24), **The NINDS Human Cell and Data Repository (U24)**, **Interdisciplinary Training in Bioinformatics and Diabetes, Obesity and Metabolic Disease(T32)**, **Predocctoral Training Program in the Neurosciences (T32)**

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## **Environmental Protection Agency (EPA)**

**Grant Program: Emerging Environmental Approaches and Challenges- Environmental Innovation (A1)**

**EPA-2015-STAR-A2: Emerging Environmental Approaches and Challenges- Information Science (A2)**

**EPA-2015-STAR-A3: Emerging Environmental Approaches and Challenges- Synthetic Biology for Environmental Purposes (A3)**

**Air, Climate and Energy- Clean Air (B1)**

**Air, Climate and Energy- Global Change (B2)**

**Air, Climate and Energy- Green Energy/Natural Resources Production and Use (B3)**

**Chemical Safety for Sustainability- Adverse Impacts from Exposures to Endocrine Disrupting Compounds (C1)**

**Chemical Safety for Sustainability- Environmental Health and Safety of Engineered Nanomaterials (C2)**

**Chemical Safety for Sustainability- Computational Chemistry for Predictive Toxicology (C3)**

**Safe and Sustainable Water Resources- Drinking Water (E1)**

**Safe and Sustainable Water Resources- Water Quality-Coastal and Estuarine Processes (E2)**

**Safe and Sustainable Water Resources- Water Quality-Hydrogeology and Surface Water (E3)**

**Sustainable and Healthy Communities- Multidisciplinary Approaches To Optimize Decision Outcomes (F1)**

**Agency: Environmental Protection Agency EPA-2015-STAR-A1-A3, B1-B3, C1-C3, E1-E3, F1**

**RFP Website:** [http://www.epa.gov/ncer/rfa/2015/2015\\_star\\_gradfellow.html#fon](http://www.epa.gov/ncer/rfa/2015/2015_star_gradfellow.html#fon)

**Brief Description:** The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program, is offering Graduate Fellowships for master's and doctoral level students in environmental fields of study. The deadline for submission of applications is May 26, 2015 at 11:59:59 PM. Subject to availability of funding and other applicable considerations, the Agency plans to award approximately 55 new fellowships in the Fall of 2015. The Fellowship Program provides up to \$44,000 per year of support per fellowship. Master's level students may receive a maximum of two years of support (\$88,000). Doctoral students may be supported for a maximum of three years (\$132,000), usable over a period of five years.

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 7 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://www.epa.gov/ncer/rfa/2015/2015\\_star\\_gradfellow.html#SUMMARY](http://www.epa.gov/ncer/rfa/2015/2015_star_gradfellow.html#SUMMARY)

**Awards:** Anticipated Type of Award: Fellowship

Estimated Number of Awards: Approximately 55 awards.

Anticipated Funding Amount: Approximately \$7.2 million total for all awards

Potential Funding per Fellowship: \$44,000 per year per fellowship. Master's level students may receive support for a maximum of two years for a total of up to \$88,000. Doctoral students may be supported for a maximum of three years for a total of up to \$132,000, usable over a period of five years. Cost sharing is not required.

If recommended to receive a fellowship, you should be contacted no later than August 1, 2015 and should subsequently receive your official notification of award by Fall 2015, for the fall term. Please note that this schedule may be changed without notification due to factors that were not anticipated at the time of announcement. The earliest anticipated start date for these awards is September 1, 2015.

**Letter of Intent:** Call the Program Officer

**Eligibility:** Students must attend a fully accredited U.S. college or university (located in the U.S. or its territories) for their graduate studies. Students must also be citizens of the U.S. or its territories or possessions, or be lawfully admitted to the U.S. for permanent residence.

Resident aliens must have their green card at the time of application to be eligible. Do not provide the green card number with your application; however, you may be asked to provide it at a later time to verify eligibility with the U.S. Citizenship and Immigration Service of the Department of Homeland Security.

**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](http://epa.gov/ncer/rfa/2015/2015_gro_undergrad.html)

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## **National Science Foundation**

### **Grant Program: Building Community and Capacity in Data Intensive Research in Education (BCC-EHR)**

**Agency:** National Science Foundation NSF 15-563

**RFP Website:** <http://www.nsf.gov/pubs/2015/nsf15563/nsf15563.htm>

**Brief Description:** As part of NSF's Cyberinfrastructure Framework for 21st Century Science and Engineering (CIF21) activity, the Directorate for Education and Human Resources (EHR) seeks to enable research communities to develop visions, teams, and capabilities dedicated to creating new, large-scale, next-generation data resources and relevant analytic techniques to advance fundamental research for EHR areas of research. Successful proposals will outline activities that will have significant impacts across multiple fields by enabling new types of data-intensive research. Investigators should think broadly and create a vision that extends intellectually across multiple disciplines and that includes—but is not necessarily limited to—EHR areas of research.

**Awards:** Standard Awards

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

**Letter of Intent:** Not Required

**Deadlines:** September 1, 2015

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## **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={9F1341A9-6D0F-F075-C993-276263B186ED}&path=open&redirectURL=%2Fexternal%2Fsolicitations%2Fsolicitations.do%3Fmethod%3Dopen%26stack%3Dpush>

**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-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

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## **National Endowment for Humanities**

### **Grant Program: Digital Projects for the Public**

**Agency:** National Endowment for Humanities

**RFP Website:** <http://www.neh.gov/grants/public/digital-projects-the-public>

**Brief Description:** Digital Projects for the Public grants support projects that significantly contribute to the public's engagement with the humanities.

Digital platforms—such as websites, mobile applications and tours, interactive touch screens and kiosks, games, and virtual environments—can reach diverse audiences and bring the humanities to life for the American people. The program offers three levels of support for digital projects: grants for Discovery projects (early-stage planning work), Prototyping projects (proof-of-concept development work), and Production projects (end-stage production and distribution work). While projects can take many forms, shapes, and sizes, your request should be for an exclusively digital project or for a digital component of a larger project.

All Digital Projects for the Public projects should

- deepen public understanding of significant humanities stories and ideas;
- incorporate sound humanities scholarship;
- involve humanities scholars in all phases of development and production;
- include appropriate digital media professionals;
- reach a broad public through a realistic plan for development, marketing, and distribution;
- create appealing digital formats for the general public; and
- demonstrate the capacity to sustain themselves.

All projects should also demonstrate the potential to attract a broad, general, nonspecialist audience, either online or in person at venues such as museums, libraries or other cultural institutions. Applicants may choose to identify particular communities and groups, including students, to whom a project may have particular appeal.

**Awards:** Up to \$400,000

**Letter of Intent:** Not required

**Deadline:** June 10, 2015

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## **National Institutes of Health**

### **Grant Program: The NINDS Human Biomarkers Biospecimen and Data Repository (U24)**

**Agency: NIH RFA-NS-15-010**

**RFP Website:** <http://grants.nih.gov/grants/guide/rfa-files/RFA-NS-15-010.html>

**Brief Description:** The NINDS has established several biomarkers programs and supports individual grants in this area. In order to further support and provide infrastructure for these efforts, the NINDS has established a human biomarkers specimen collection. The NINDS biomarkers biospecimen collections currently underway or recently completed include Parkinson's Disease (PD), Huntington's Disease (HD), Traumatic Brain Injury (TBI) via the [Federal Interagency Traumatic Brain Injury Research \(FITBIR\)](#), and others. [The Parkinson's Disease Biomarkers Program \(PDBP\)](#) was established in 2012 to advance the discovery of PD diagnostic and progression biomarkers to allow better neuroprotective agent trials. The [BioFIND](#) project, sponsored by the Michael J. Fox Foundation with biobanking collaboratively supported by the NINDS, is a cross-sectional study to collect samples for discovery projects in PD biomarkers. The [PREDICT-HD](#) project, a collaborative project between NINDS and the CHDI Foundation, is a longitudinal natural history study seeking to identify the earliest clinical and biological changes in a prodromal HD patient population. FITBIR is an interagency infrastructure system that includes a data management system for the curation and sharing of data across projects as well as a biospecimen collection. All of these extant collections will become part of the new repository funded under this FOA.

Considering the considerable potential of biomarkers to provide information about disease diagnosis, progression, and treatment, it is likely that additional biomarkers efforts in these and/or other neurological disorders will follow in future years. The recipient of this award is expected to coordinate with future banking projects so that an appropriate budget can be included by those investigators in their planned project to allow appropriate banking with the repository. NINDS will work to help assure that future projects are aware of the need to include such items in their grant application budgets.

A successful application will have strengths in three major areas of emphasis: 1) Administration/Project Management, 2) Research and Resource Activities, and 3) Data Management. NINDS will use annual milestones to make go/no go funding decisions. The administrative structure should provide leadership and program management skills to the entire project. The overall program should be designed to insure effective sharing of linked data and biosamples so that stakeholders including academic and industry scientists, research subjects, and the public will be served by the resource. As a cooperative agreement, this activity will receive extensive input from the NINDS.

The Research and Resource activity requires a team with a track record of academic excellence in the field of biomarkers, especially, an understanding of protocol harmonization, analyte standards, and quality control and assurance. The Research and Resource team must be poised to continue the collection and maintenance of neurological biomarkers data and specimens using standardized protocols and guidelines (examples include those being used by the [PDBP](#) (see "toolbox"), and those outlined in the literature, while keeping abreast of standards as they evolve. Additionally, the team should be able to nimbly suggest and adopt new standardization and quality control methods (once agreed upon in collaboration with NINDS and other stakeholders). Raw and analyzed data should be made widely available via the project website if the associated projects do not themselves host a website for this activity.

A web-based portal for this project will need to be developed and launched by the recipient of this award, within the first month after award, and updated in an ongoing way to reflect growth of the project. Inventory management, sample tracking, and publication monitoring will be essential required activities of this project. Data management and web-based activities will include creating and curating a searchable database with detailed pre-analytic quality control (QC) and protocol information on a sample by sample basis (such as site details, time between collection, shipping, freezing or other processing, needle bore sizes, centrifugation, etc). This activity will require coordination and data integration with other data management resources (such as the Parkinson's Disease Biomarkers Data Management resource, ([PDBP DMR](#)), the Federal Interagency Traumatic Brain Injury Research Informatics system ([FITBIR](#)), and the [PREDICT-HD](#) data management system, among others. The data management team must be able to smoothly interact and coordinate data sharing activities with multiple other entities including global research teams collecting or requesting samples and data.

**Awards:** up to \$1.5 million

**Letter of Intent:** May 9, 2015

**Full Proposal Deadline:** June 9, 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 this date.

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.

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**Grant Program: The NINDS Human Cell and Data Repository (U24)**

**Agency:** NIH RFA-NS-15-009

**RFP Website:** <http://grants.nih.gov/grants/guide/rfa-files/RFA-NS-15-009.html>

**Brief Description:** Activities required under this FOA include:

- Maintenance and distribution of current fibroblast and iPSC lines available through the NINDS Repository;
- *De novo* derivation, quality assessment and distribution of new iPSC lines using a standardized non-integrating protocol for derivation. Quality assessment standards should include, but are not limited to those outlined in [NOT-NS-14-032](#);
- Establishment of master and distribution banks for iPSC lines derived by extramurally funded investigators, where the iPSC lines meet banking standards established by NINDS (see [NOT-NS-14-032](#));
- Limited expansion, quality assessment and distribution of fibroblast lines developed by extramural investigators, wherein patient consents allow for banking with a repository and broad distribution of these lines;
- *De novo* generation, quality assessment and distribution of fibroblast lines from skin biopsies. Quality assessment of fibroblast lines should include karyotyping at the distribution phase to ensure normal karyotypes;
- Generation and maintenance of a peripheral blood mononuclear cell source for future iPSC derivation efforts. Extensive de-identified clinical data must accompany each sample and a global unique identifier (GUID) will be used to link the clinical data with the cell resource;
- Generation, quality assessment and distribution of isogenic iPSC lines through genome editing using standardized protocols. The parent and corresponding genome-edited

lines must undergo standardized quality assessments including whole genome sequencing;

- Data management including a catalog of all cell sources available through the NINDS Repository, as well as routine tracking and reporting of submissions, requests, and distribution.

A successful application will have strengths in four major areas of emphasis: 1) iPSC technology and genome editing; 2) project management; 3) resource creation, maintenance, and operation; and 4) data management. Qualifications for applicants should include academic excellence in the field of induced pluripotent stem cell derivation, quality assessment, and genomic editing.

The administrative structure should be such that it provides leadership and program management to the entire project. Because this is a cooperative agreement, extensive collaboration and management input from the NINDS will occur, and milestones will be used to make go/no go funding decisions. This overall structure is intended to insure that stakeholders including academic and industry scientists, and research subjects will be served by the resource. The resource and research activities will also require the continued collection and maintenance of existing NINDS Repository human cell lines and data. Other disorders are likely to be added during the duration of the project. Receipt, processing, storage, and the national and international distribution of iPSC and fibroblast cell lines will be required. Applications that propose to develop non-human cell resources are non-responsive to this funding announcement.

Due to the unique requirements of this project, applicants are strongly encouraged to consult with NINDS Scientific/Research Staff early on during the planning for an application.

#### Section II. Award Information

**Awards:** up to \$1 Million (1-2 awards)

**Letter of Intent:** May 9, 2015

**Full Proposal Deadline:** June 9, 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 this date.

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.

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### **Grant Program: Interdisciplinary Training in Bioinformatics and Diabetes, Obesity and Metabolic Disease(T32)**

**Agency:** NIH PAR-15-182

**RFP Website:** <http://grants.nih.gov/grants/guide/pa-files/PAR-15-182.html>

**Brief Description:** The objective of the Ruth L. Kirschstein National Research Service Award (NRSA) Institutional Research Training Grant (T32) program is to develop and/or enhance research training opportunities for individuals interested in careers in biomedical, behavioral and clinical research that are relevant to the NIH mission. The training program should provide:

- A strong foundation in research design, methods, and analytic techniques appropriate for the proposed research area;
- The enhancement of the trainees' ability to conceptualize and think through research problems with increasing independence;



- Experience conducting research using state-of-the-art methods as well as presenting and publishing their research findings;
- The opportunity to interact with members of the scientific community at appropriate scientific meetings and workshops; and
- The enhancement of the trainees' understanding of the health-related sciences and the relationship of their research training to health and disease.

The proposed institutional research training program may complement other ongoing research training and career development programs at the applicant institution, but the proposed program must be clearly distinct from related programs currently receiving Federal support.

### **Specific Program Objectives of This Announcement**

The specific purpose of this Funding Opportunity Announcement (FOA) is to encourage and enable the development of an interdisciplinary workforce to promote the application of bioinformatics to research in diabetes, obesity and related metabolic diseases that are relevant to the research mission of NIDDK. It will support predoctoral and postdoctoral interdisciplinary training to develop bioinformatics scientists capable of leading or participating in integrative and team approaches to solve complex problems related to the understanding, prevention, treatment and cure of diabetes, obesity and related metabolic diseases that are relevant to the research mission of NIDDK, with mentorship in both disciplines. In order to advance bioinformatics science and encourage its application to these diseases and disorders, NIDDK invites applications for implementing novel institutional training and education programs. These programs should focus on interdisciplinary approaches and mentorship between mathematics and computer science and medicine and diabetes, obesity and related metabolic diseases. These programs will support a variety of new and innovative didactic and research activities designed to provide trainees with the necessary knowledge and research experience to apply bioinformatics skills to the prevention, treatment or cure of diabetes, obesity and related disorders. It is expected that these interdisciplinary training programs would involve multiple departments including bioinformatics and the biological, medical, computational, engineering, and mathematical sciences. Trainees in these programs should be mentored by two or more faculty mentors, one from computational and the other from biology or medical sciences of diabetes, obesity and metabolism, and, ideally, spend time in both mentors' laboratories. Applicants are encouraged to build these new training/education programs around existing institutional research programs in diabetes, obesity and related metabolic diseases that are relevant to the research mission of NIDDK and the computational sciences, whether formal (e.g., research programs supported by program project, center, or cooperative agreement mechanisms) or informal (e.g., networks of collaborating R01 grantees). It is expected that applying institutions have substantial current diabetes, obesity and metabolism research support within the mission of NIDDK and that they have substantial support and facilities for bioinformatics and the computational sciences. Applicants should focus only on research areas within diabetes, obesity and related metabolic diseases that the institution and involved departments have substantial research support and expertise.

### **Interdisciplinary Research Supported Examples**

Bioinformatics trainees should have backgrounds in computational and/or mathematical sciences and should be applying analytical, probabilistic, and heuristic methods to solve research problems in diabetes, obesity and related metabolic disorders. Examples of relevant research areas include, but are not limited to:

- 1) Metabolic modeling of known and unknown pathway kinetics and compartmentalization in diabetes, obesity and related metabolic disorders.

- 2) Analysis of genomics, proteomics, metabolomics, epigenetics, clinical records, continuous monitoring and other high dimensional or throughput datasets for characterization of the etiology, characterization, diagnosis, prognosis or response to therapy of these disorders including biomarkers for the risk of developing type I or type II diabetes or obesity.
- 3) Network and systems biology of intra and intercellular regulation and inter-tissue and organ homeostasis with regard to the etiology, characterization, diagnosis, prognosis or response to treatment of these diseases including the progression of diabetes, obesity, and related metabolic diseases including biomarkers for the risk of developing type I or type II diabetes or obesity.
- 4) Structural biology/informatics and chemical informatics of endocrine and metabolic pathways in diabetes, obesity and related metabolic disease relevant to the mission of NIDDK.
- 5) High-throughput and/or high information content image analysis of organs or tissues of relevance to diabetes or obesity.
- 6) Characterization of the normal or abnormal development of involved organs such as the formation of the islets of Langerhans.

**Awards:** Standard Budget

**Letter of Intent:** October 17, 2015

**Full Proposal Deadline:** November 17, 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 this date.

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.

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**Grant Program: Jointly Sponsored Ruth L. Kirschstein National Research Service Award Institutional Predoctoral Training Program in the Neurosciences (T32)**

**Agency:** NIH PAR-15-178

**RFP Website:** <http://grants.nih.gov/grants/guide/pa-files/PAR-15-178.html>

**Brief Description:** The NRSA program has been the primary means of supporting predoctoral and postdoctoral research training programs since enactment of the NRSA legislation in 1974. Research training activities can be in basic biomedical or clinical sciences, in behavioral or social sciences, in health services research, or in any other discipline relevant to the NIH mission.

Institutional NRSA programs allow the Training Program Director/Principal Investigator (Training PD/PI) to select the trainees and develop a program of coursework, research experiences, and technical and/or professional skills development appropriate for the selected trainees. Each program should provide high-quality research training and offer opportunities in addition to conducting mentored research. The grant offsets the cost of stipends, tuition and fees, and training related expenses, including health insurance, for the appointed trainees in accordance with the approved NIH support levels.

**Program Objective**

**Broad-based research training.** In keeping with the goals of the NIH Blueprint for Neuroscience Research (<http://neuroscienceblueprint.nih.gov/>), the National Institute on Aging (NIA), National Institute on Alcohol Abuse and Alcoholism (NIAAA), Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), National Institute on Drug Abuse (NIDA), National Institute of General Medical Sciences (NIGMS), National Institute of Mental Health (NIMH), and the National Institute of Neurological

Disorders and Stroke (NINDS) are continuing this Jointly Sponsored Predoctoral Training Program in the Neurosciences (JSPTPN). The aim of this program is to encourage and support broad training in the neurosciences that will prepare students for research in the mission of any of the participating institutes.

The JSPTPN financially supports a program of broad-based education and research experience during the first two years of graduate training. As such, training programs supported by a JSPTPN training grant must have a comprehensive, two year training plan. Individual programs may choose, however, to use funds from this award to support students for either two years or just a single year. Trainees are expected to participate in a predoctoral curriculum that provides broad and fundamental training in the neurosciences. This curriculum should include education in multiple levels of analysis (which may include, for example, genetic, molecular, cellular, systems, behavior and/or computational; note that not all programs will necessarily cover all levels of analysis, but there must be enough coverage to be considered adequate for an broad understanding of neurobiological function and the technologies used for neuroscience research ). In addition, programs are encouraged to expose students to basic, clinical and translational research approaches, and should provide significant exposure to the neuroscience of disease and disorders. It is critical that students obtain a thorough understanding of experimental design, including the principles of experimental rigor (see [http://www.ninds.nih.gov/funding/transparency\\_in\\_reporting\\_guidance.pdf](http://www.ninds.nih.gov/funding/transparency_in_reporting_guidance.pdf), <http://www.nature.com/news/policy-nih-plans-to-enhance-reproducibility-1.14586>, <http://www.nih.gov/about/reporting-preclinical-research.htm>), through formal training activities (note that, although some of these examples focus on preclinical and clinical research, the principles are important, and applicable training is necessary, for all research). Programs should ensure that students have a solid understanding of statistics appropriate for neuroscience research, and should provide students with broad exposure to experimental methodologies, as success in future neuroscience research is likely to depend upon a working knowledge of multiple methodological approaches to answering scientific questions. Programs are strongly encouraged to engage students in quantitative approaches to research, which may include quantitative problem-solving, an introduction to programming, exercises in quantitative analysis of experimental research, and/or other didactic or hands-on activities that will enhance student understanding of the value of quantitative approaches to answering scientific questions.

There are many ways to achieve breadth of expertise, and the format of the training program is up to the PD/PI. For example, breadth may be achieved through any combination of formal courses, significant laboratory rotations, workshops and other programmatic activities. Programs may provide specially tailored curricula based on individual trainee background and needs, but in these cases, the core knowledge, breadth of knowledge, minimum expertise and research experience expected of all trainees, should be carefully described. Programs should also provide students with outstanding mentoring and training in scientific skills such as written and oral presentation, as well as quantitative skills needed for the conduct of cutting-edge neuroscience research. Programs should provide an environment that encourages students to apply for individual support, such as fellowships, career development awards and other individual awards from federal and non-federal sources. Further, programs should provide training in the skills necessary for such applications, such as grant writing, understanding the grant submission and review process and understanding and responding to critiques. It is expected that these institutional training programs will contribute to fundamental and disease-related neuroscience research that is relevant to the participating NIH Institutes. Moreover, it is expected that the JSPTPN will undergo regular evaluation, in

order to promote innovation and evolution, as well as to bring attention to any deficiencies that arise.

**Awards:** Standard Budget

**Letter of Intent:** May 10, 2015

**Full Proposal Deadline:** June 10, 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 this date.

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.

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