

■ **NOVEL NUCLEIC ACID SEQUENCING TECHNOLOGY DEVELOPMENT (R21): RFA-HG-15-031**

**Components of Participating Organizations**

*National Human Genome Research Institute*

Application Receipt Date(s): October 27, 2015; July 14, 2016; June 15, 2017, by 5:00 PM local time of applicant organization.

**Funding Opportunity Purpose**

This Funding Opportunity Announcement (FOA) solicits R21 grant applications to develop novel technologies that will enable new approaches to DNA and direct RNA sequencing. Applicants may propose to develop novel complete sequencing systems, investigate challenges underlying key novel system components, or propose improvements of at least an order of magnitude improvement to existing systems. Exploration of methods other than those currently in use is highly encouraged. High-risk/high-payoff applications are appropriate to achieve the goals of this FOA.

*Also note:*

*Novel Nucleic Acid Sequencing Technology Development (R01): RFA-HG-15-032*

Details at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-15-032.html>.

*Novel Nucleic Acid Sequencing Technology Development (R43/R44): RFA-HG-15-033*

Details at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-15-033.html>.

Complete details available at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-15-031.html>.

■ **ADVANCED DEVELOPMENT OF INFORMATICS TECHNOLOGIES FOR CANCER RESEARCH AND MANAGEMENT (U24): PAR-15-331**

**Components of Participating Organizations**

*National Cancer Institute*

Application Receipt/Submission Date(s): November 20, 2015; June 14, 2016; November 21, 2016; June 14, 2017; November 20, 2017; June 14, 2018, by 5:00 PM local time of applicant organization.

**Funding Opportunity Purpose**

The purpose of this Funding Opportunity Announcement (FOA) is to invite Cooperative Agreement (U24) applications for advanced development and enhancement of emerging informatics technologies to improve the acquisition, management, analysis, and dissemination of data and knowledge across the cancer research continuum, including cancer biology, cancer treatment and diagnosis, cancer prevention, cancer control and epidemiology, and/or cancer health disparities. As a component of the NCI's Informatics Technology for Cancer Research (ITCR) Initiative, this FOA focuses on emerging informatics technology, defined as one that has passed the initial prototyping and pilot development stage, has demonstrated potential to have a significant and broader impact, has compelling reasons for further improvement and enhancement, and has not been widely adopted in the cancer research field. The central mission of ITCR is to promote research-driven informatics technology across the development lifecycle to address priority needs in cancer research. In order to be successful, proposed development plans must have a clear rationale on why the proposed technology is needed and how

it will benefit the cancer research field. In addition, mechanisms to solicit feedback from users and collaborators throughout the development process should be included. Potential applicants who are interested in early-stage development or informatics resource sustainment should consult companion FOAs listed above.

Complete details available at: <http://grants.nih.gov/grants/guide/pa-files/PAR-15-331.html>.

■ **EARLY-STAGE DEVELOPMENT OF INFORMATICS TECHNOLOGIES FOR CANCER RESEARCH AND MANAGEMENT (U01): PAR-15-332**

**Components of Participating Organizations**

*National Cancer Institute*

Application Receipt/Submission Date(s): November 20, 2015; June 14, 2016; November 21, 2016; June 14, 2017; November 20, 2017; June 14, 2018, by 5:00 PM local time of applicant organization.

**Funding Opportunity Purpose**

The purpose of this Funding Opportunity Announcement (FOA) is to invite Cooperative Agreement (U01) applications for the development of enabling informatics technologies to improve the acquisition, management, analysis, and dissemination of data and knowledge across the cancer research continuum including cancer biology, cancer treatment and diagnosis, cancer prevention, cancer control and epidemiology, and/or cancer health disparities. As a component of the NCI's Informatics Technology for Cancer Research (ITCR) Program, this FOA focuses on early-stage development from prototyping to hardening and adaptation. Early-stage development is defined for the purpose of this FOA as the initial development or the significant modification of existing tools for new applications. The central mission of ITCR is to promote research-driven informatics technology across the development lifecycle to address priority needs in cancer research. In order to be successful, proposed development plans must have a clear rationale on why the proposed technology is needed and how it will benefit the cancer research field. In addition, mechanisms to solicit feedback from users and collaborators throughout the development process should be included.

Complete details available at: <http://grants.nih.gov/grants/guide/pa-files/PAR-15-332.html>.

■ **SUSTAINED SUPPORT FOR INFORMATICS RESOURCES FOR CANCER RESEARCH AND MANAGEMENT (U24): PAR-15-333**

**Components of Participating Organizations**

*National Cancer Institute*

Application Receipt/Submission Date(s): November 20, 2015; June 14, 2016; November 21, 2016; June 14, 2017; November 20, 2017; June 14, 2018, by 5:00 PM local time of applicant organization.

**Funding Opportunity Purpose**

The purpose of this Funding Opportunity Announcement (FOA) is to invite Cooperative Agreement (U24) applications for the continued development and sustainment of high-value informatics research resources to serve current and emerging needs across the cancer research continuum including cancer biology, cancer treatment and diagnosis, cancer prevention, cancer control and epidemiology, and/or cancer health disparities. As

a component of the NCI's Informatics Technology for Cancer Research (ITCR) Program, this FOA focuses on supporting activities necessary for improved user experience and availability of existing, widely-adopted informatics tools and resources. This is in contrast to early-stage and advanced development efforts to generate these tools and resources that are supported by companion ITCR FOAs. The central mission of ITCR is to promote research-driven informatics technology across the development lifecycle to address priority needs in cancer research. In order to be successful, the proposed sustainment plan must provide clear justifications for why the research resource should be maintained and how it has benefited and will continue to benefit the cancer research field. In addition, mechanisms for assessing and maximizing the value of the resource to researchers and supporting collaboration and/or deep engagement between the resource and the targeted research community should be described.

Complete details available at: <http://grants.nih.gov/grants/guide/pa-files/PAR-15-333.html>.

## ■ DEVELOPMENT OF INNOVATIVE INFORMATICS METHODS AND ALGORITHMS FOR CANCER RESEARCH AND MANAGEMENT (R21): PAR-15-334

### Components of Participating Organizations

*National Cancer Institute*

Application Receipt/Submission Date(s): November 20, 2015; June 14, 2016; November 21, 2016; June 14, 2017; November 20, 2017; June 14, 2018, by 5:00 PM local time of applicant organization.

### Funding Opportunity Purpose

The purpose of this Funding Opportunity Announcement (FOA) is to invite exploratory/developmental research grant (R21) applications for the development of innovative methods and algorithms in biomedical computing, informatics, and data science addressing priority needs across the cancer research continuum, including cancer biology, cancer treatment and diagnosis, cancer prevention, cancer control and epidemiology, and/or cancer health disparities. As a component of the NCI's Informatics Technology for Cancer Research (ITCR) Initiative, this FOA encourages applications focused on the development of novel computational, mathematical, and statistical algorithms and methods that can considerably improve acquisition, management, analysis, and dissemination of relevant data and/or knowledge. The central mission of ITCR is to promote research-driven informatics technology across the development lifecycle to address priority needs in cancer research. In order to be successful, the proposed informatics method or algorithm must have a clear rationale on why it is novel and how it will benefit the cancer research field. Potential applicants who are interested in more downstream tool development, from prototyping to hardening and adaptation, should consult the other companion FOAs listed above.

Complete details available at: <http://grants.nih.gov/grants/guide/pa-files/PAR-15-334.html>.

## ■ BRAIN INITIATIVE: TECHNOLOGY SHARING AND PROPAGATION (R03): RFA-MH-16-725

### Components of Participating Organizations

*National Institute of Mental Health*

*National Center for Complementary and Integrative Health*

*National Eye Institute*  
*National Institute on Aging*  
*National Institute on Alcohol Abuse and Alcoholism*  
*National Institute of Biomedical Imaging and Bioengineering*  
*Eunice Kennedy Shriver National Institute of Child Health and Human Development*  
*National Institute on Drug Abuse*  
*National Institute on Deafness and Other Communication Disorders*  
*National Institute of Neurological Disorders and Stroke*

Application Receipt Date(s): January 06, 2016

### Funding Opportunity Purpose

The purpose of this Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative Funding Opportunity Announcement (FOA) is to encourage the transfer of new technologies and new data analysis techniques into a research laboratory. One of the key goals of the BRAIN Initiative is to develop new technologies to improve our understanding of the brain. In order for those technologies to be useful, they need to be broadly disseminated beyond the laboratory or company where they originated. This FOA promotes this goal by providing funds to enable the incorporation of new technologies or data analysis techniques into research programs that further the aims of the BRAIN initiative.

Complete details available at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-16-725.html>.

## ■ ADVANCED CLINICAL TRIALS TO TEST ARTIFICIAL PANCREAS DEVICE SYSTEMS IN TYPE 1 DIABETES (UC4): RFA-DK-16-008

### Components of Participating Organizations

*National Institute of Diabetes and Digestive and Kidney Diseases*

Application Receipt Date(s): March 09, 2016

### Funding Opportunity Purpose

This FOA will support the conduct of advanced clinical trials designed to test the outpatient clinical safety and efficacy of artificial pancreas (AP) device systems in type 1 diabetes with the objective of improving glycemic control, reducing acute complications and improving quality of life. These trials should generate data able to satisfy safety and efficacy requirements by regulatory agencies regarding the clinical testing of AP device systems.

Complete details available at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-DK-16-008.html>.

## ■ NHLBI CAREER TRANSITION AWARD FOR INTRAMURAL FELLOWS (K22): PAR-15-341

### Components of Participating Organizations

*National Heart, Lung, and Blood Institute*

Application Receipt/Submission Date(s): Multiple dates, see announcement.

### Funding Opportunity Purpose

The purpose of the NHLBI Career Transition Award (K22) program is to provide highly qualified postdoctoral fellows in the NHLBI Division of Intramural Research the opportunity to

transition of their research programs as new investigators to extramural institutions. To achieve these objectives, the NHLBI Career Transition Award will support two phases of research: a mentored intramural phase (up to two years) and an extramural phase (three years), for a total of five years of combined support. Transition from the intramural phase of support to the extramural phase is not automatic. Approval of the transition will be based on the success of the awardee's research program during the 2-year mentored phase as determined by an NHLBI progress review, which will include an evaluation of a research plan to be carried out at the extramural institution.

Complete details available at: <http://grants.nih.gov/grants/guide/pa-files/PA-15-341.html>.

### ■ AIDS-SCIENCE TRACK AWARD FOR RESEARCH TRANSITION (R03): PA-15-290

#### Components of Participating Organizations

*National Institute on Drug Abuse*

Application Receipt/Submission Date(s): Multiple dates, see announcement.

#### Funding Opportunity Purpose

This funding opportunity announcement (FOA) seeks to facilitate the entry of both newly independent and early career investigators to the area of drug abuse research on HIV/AIDS. This FOA, AIDS-Science Track Award for Research Transition (A-START), encourages Small Research Grant (R03) applications to support research projects on drug abuse and HIV/AIDS that can be carried out in a short period of time with limited resources. Applications under this FOA are welcomed from all areas of HIV/AIDS research that NIDA supports.

Complete details available at: <http://grants.nih.gov/grants/guide/pa-files/PA-15-290.html>.

### ■ LIMITED COMPETITION: SMALL GRANT PROGRAM FOR NIDDK K01/K08/K23 RECIPIENTS (R03): PAR-15-343

#### Components of Participating Organizations

*National Institute of Diabetes and Digestive and Kidney Diseases*

Application Receipt/Submission Date(s): September 07, 2018

#### Funding Opportunity Purpose

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) announces a program that provides NIDDK-supported K01, K08, and K23 recipients the opportunity to apply for Small Grant (R03) support at some point during the final two years of their K award. Through the use of this mechanism, the NIDDK is seeking to enhance the capability of its K01, K08, and K23 award recipients to conduct research as they complete their transition to fully independent investigator status. The R03 grant mechanism supports different types of projects, including pilot and feasibility studies; secondary analysis of existing data; small, self-contained research projects; development of research methodology; and development of new research technology. The R03 is, therefore, intended to support research projects that can be carried out in a short period of time with limited resources and that may provide preliminary data to support a subsequent R01, or equivalent, application.

Complete details available at: <http://grants.nih.gov/grants/guide/pa-files/PA-15-343.html>.

### ■ AGING RESEARCH ON STRESS AND RESILIENCE TO ADDRESS HEALTH DISPARITIES IN THE UNITED STATES (R01): RFA-AG-16-022

#### Components of Participating Organizations

*National Institute on Aging*

Application Receipt Date(s): January 13, 2016

#### Funding Opportunity Purpose

The purpose of this Funding Opportunity Announcement (FOA) is to stimulate interdisciplinary health-disparities research related to aging that considers the role that stress, stress response, and stress resilience play in differential health outcomes in priority health disparity populations in the U.S. In particular, this FOA seeks applications proposing to clarify pathways linking stress and aging-relevant health outcomes (e.g. mortality, cognitive impairment, multiple chronic conditions, disability, quality of life) through the investigation of links between environmental, socio-cultural, behavioral, and biological factors.

Complete details available at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-AG-16-022.html>.

### ■ LIMITED COMPETITION: CHILDHOOD CANCER SURVIVOR STUDY (U24): RFA-CA-15-502

#### Components of Participating Organizations

*National Cancer Institute*

Application Receipt Date(s): February 08, 2016

#### Funding Opportunity Purpose

The purpose of this limited competition Funding Opportunity Announcement (FOA) is to continue support for the Childhood Cancer Survivor Study (CCSS) as a resource enabling broad studies on the long-term effects of cancer and its associated therapies on survivors of pediatric cancers. CCSS is a multi-institutional collaborative project that supports a cohort of over 24,000 five-year survivors of childhood cancer diagnosed between 1970–1999 and over 3,700 sibling control subjects.

Complete details available at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-15-502.html>.

### ■ CLINICAL, BEHAVIORAL AND PHYSIOLOGICAL RESEARCH TESTING CURRENT AND NOVEL CLOSED LOOP SYSTEMS (DP3): RFA-DK-16-009

#### Components of Participating Organizations

*National Institute of Diabetes and Digestive and Kidney Diseases*

Application Receipt Date(s): June 28, 2016

#### Funding Opportunity Purpose

This Funding Opportunity Announcement (FOA) encourages applications from institutions/organizations proposing human studies to develop and/or test a highly reliable, wearable, portable and easy to operate system linking continuous glucose monitoring and pancreatic hormone delivery in a closed loop system. This research is intended to improve glucose control and quality of life of patients with type 1 diabetes. Only human studies will be considered responsive to this FOA.

Complete details available at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-DK-16-009.html>.

## ■ TIME-SENSITIVE OBESITY POLICY AND PROGRAM EVALUATION (R01): PAR-15-346

### Components of Participating Organizations

*National Institute of Diabetes and Digestive and Kidney Diseases  
National Cancer Institute*

*Eunice Kennedy Shriver National Institute of Child Health and Human Development*

*Office of Behavioral and Social Science Research*

Application Receipt/Submission Date(s): December 10, 2015; January 10, 2016; February 10, 2016; March 10, 2016; April 11, 2016; May 10, 2016; June 10, 2016; July 11, 2016; August 10, 2016; September 12, 2016; October 11, 2016; November 14, 2016; December 14, 2016; January 10, 2017; February 10, 2017; March 10, 2017; April 11, 2017; May 10, 2017; June 13, 2017; July 10, 2017; August 10, 2017; September 11, 2017; October 10, 2017; November 13, 2017; December 11, 2017; January 1, 2018; February 13, 2018; March 13, 2018; April 10, 2018; May 10, 2018; June 11, 2018; July 10, 2018; August 10, 2018; and September 13, 2018, by 5:00 PM local time of applicant organization.

### Funding Opportunity Purpose

This Funding Opportunity Announcement (FOA) establishes an accelerated review/award process to support time-sensitive research to evaluate a new policy or program that is likely to influence obesity related behaviors (e.g., dietary intake, physical activity, or sedentary behavior) and/or weight outcomes in an effort to prevent or reduce obesity. This FOA is intended to support research where opportunities for empirical study are, by their very nature, only available through expedited review and funding. All applications to this FOA must demonstrate that the evaluation of an obesity related policy and/or program offers an uncommon and scientifically compelling research opportunity that will only be available if the research is initiated with minimum delay. For these reasons, applications in response to this time-sensitive FOA are not eligible for resubmission. It is intended that eligible applications selected for funding will be awarded within 4 months of the application due date. However, administrative requirements and other unforeseen circumstances may delay issuance dates beyond that timeline.

Complete details available at: <http://grants.nih.gov/grants/guide/pa-files/PAR-15-346.html>.

## ■ RESEARCH ON INFORMAL AND FORMAL CAREGIVING FOR ALZHEIMER'S DISEASE (R01): PAR-15-348

### Components of Participating Organizations

*National Institute on Aging*

*National Institute of Nursing Research*

Application Receipt/Submission Date(s): Multiple dates, see announcement.

### Funding Opportunity Purpose

This Funding Opportunity Announcement (FOA) invites applications for basic and translational research on caregiving for individuals with Alzheimer's disease (AD), at the individual, family, community, and population level. The scope of this funding opportunity includes support for applications that propose the following: interventions to reduce caregiver burden

and improve patient outcomes across various settings; population- and community-based research on the scope and impact of AD caregiving; improved characterization of informal and formal caregiving and the burden of caregiving across the full spectrum of the disease, including differences among socioeconomic, racial/ethnic and geographic sub-populations; and research addressing the unique challenges related to the provision of advanced AD care, including disparities in access to care.

Complete details available at: <http://grants.nih.gov/grants/guide/pa-files/PAR-15-348.html>.

## ■ HEALTH DISPARITIES AND ALZHEIMER'S DISEASE (R01): PAR-15-349

### Components of Participating Organizations

*National Institute on Aging*

Application Receipt/Submission Date(s): Multiple dates, see announcement.

### Funding Opportunity Purpose

This FOA invites applications proposing to study health disparities in Alzheimer's disease (AD) and related disorders. Health-disparities research related to AD should include the study of biological, behavioral, sociocultural, and environmental factors that influence population level health differences. Research approaches of interest include 1) improving recruitment and retention of populations underrepresented in AD research, 2) identifying priority factors or locating pathways and mechanisms that create and sustain AD health disparities, 3) addressing the challenges faced by informal/family caregivers from diverse racial, ethnic and socioeconomic backgrounds that are associated with the growing population of individuals with Alzheimer's Disease, and 4) understanding the disparities in access to and utilization of formal long-term supports and services for those with dementia.

Complete details available at: <http://grants.nih.gov/grants/guide/pa-files/PAR-15-349.html>.

## ■ EMERGING DIRECTIONS FOR ADDRESSING HEALTH DISPARITIES IN ALZHEIMER'S DISEASE (R03): PAR-15-350

### Components of Participating Organizations

*National Institute on Aging*

Application Receipt/Submission Date(s): Multiple dates, see announcement.

### Funding Opportunity Purpose

This FOA invites applications proposing to study health disparities in Alzheimer's disease (AD) and related disorders. Health disparities research related to AD should include the study of biological, behavioral, sociocultural and environmental factors that influence population level health differences. Research approaches of interest include 1) improving recruitment and retention of populations underrepresented in AD research, 2) identifying priority factors or locating pathways and mechanisms that create and sustain AD health disparities, 3) addressing the challenges faced by informal/family caregivers from diverse racial, ethnic and socioeconomic backgrounds that are associated with the growing population of individuals with Alzheimer's Disease, and 4) understanding the disparities in access to and utilization of formal long-term supports and services for those with dementia.

Complete details available at: <http://grants.nih.gov/grants/guide/pa-files/PA-15-350.html>.

■ **IMPACT OF THE USE OF GLUCOSE MONITORING AND CONTROL TECHNOLOGIES ON HEALTH OUTCOMES AND QUALITY OF LIFE IN OLDER ADULTS WITH TYPE 1 DIABETES (T1D) (DP3): RFA-DK-15-028**

**Components of Participating Organizations**

*National Institute of Diabetes and Digestive and Kidney Diseases*

Application Receipt Date(s): March 03, 2016

**Funding Opportunity Purpose**

This Funding Opportunity Announcement (FOA) encourages applications from institutions/organizations proposing clinical studies of the use of current and emerging technologies for monitoring of blood glucose and insulin administration in older adults with T1D. Older adults may have increased vulnerability to hypoglycemia, cognitive impairment and/or multiple co-morbidities which may affect the risks and benefits of these technologies in this population. This research is intended to improve health, glucose control and quality of life of older patients with type 1 diabetes.

Complete details available at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-DK-15-028.html>.

■ **BRAIN INITIATIVE: FOUNDATIONS OF NON-INVASIVE FUNCTIONAL HUMAN BRAIN IMAGING AND RECORDING - BRIDGING SCALES AND MODALITIES (R01): RFA-MH-16-750**

**Components of Participating Organizations**

*National Institute of Mental Health  
National Center for Complementary and Integrative Health  
National Eye Institute  
National Institute on Aging  
National Institute on Alcohol Abuse and Alcoholism  
National Institute of Biomedical Imaging and Bioengineering  
Eunice Kennedy Shriver National Institute of Child Health and Human Development  
National Institute on Drug Abuse  
National Institute on Deafness and Other Communication Disorders*

*National Institute of Neurological Disorders and Stroke*

Application Receipt Date(s): January 06, 2016

**Funding Opportunity Purpose**

This funding opportunity announcement (FOA), in support of the NIH Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative, aims to support transformative discoveries that will lead to breakthroughs in understanding human brain function. Guided by the long-term scientific plan, "BRAIN 2025: A Scientific Vision," this FOA specifically seeks to support efforts that will revolutionize our understanding of the biological activity underlying, and bioinformatic content of, data collected using contemporary non-invasive functional brain imaging techniques. The hope is that these transformative discoveries will lead to breakthroughs in understanding the dynamic activity of the human brain.

Complete details available at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-16-750.html>.

■ **LIMITED COMPETITION: UNDERSTANDING HOW EPIGENETICS AND INFECTIONS IMPACT AUTOIMMUNITY AND DIABETES IN THE ENVIRONMENTAL DETERMINANTS OF DIABETES IN THE YOUNG STUDY (TEDDY) (UC4): RFA-DK-15-506**

**Components of Participating Organizations**

*National Institute of Diabetes and Digestive and Kidney Diseases*

*National Institute of Allergy and Infectious Diseases*

Application Receipt Date(s): March 03, 2016

**Funding Opportunity Purpose**

This Funding Opportunity Announcement (FOA) invites a High Impact Research and Research Infrastructure Cooperative Agreement application (UC4) from the Program Director/Principal Investigator (PD/PI) of the Data Coordinating Center (DCC) that has been involved in study design and coordination, and data and biosample acquisition and management, since the inception of The Environmental Determinants of Diabetes in the Young (TEDDY) consortium, an ongoing epidemiological study. This FOA provides support for the TEDDY DCC to continue to follow TEDDY children, allowing collaborators to conduct further studies in the measurement and analysis of epigenetic marks and infectious exposures using samples from TEDDY subjects.

Complete details available at: <http://grants.nih.gov/grants/guide/rfa-files/RFA-DK-15-506.html>.