

Funding Opportunities Newsletter

Office of Sponsored Programs Proposal Development

July 11, 2014

The Proposal Development unit within the Office of Sponsored Programs publishes this notice on a bi-weekly basis. If you are interested in any of the opportunities listed, and would like assistance with a proposal, please contact Carol Brodie at 53128, carol.brodie@unlv.edu Please see the Proposal Development website, http://www.unlv.edu/research for a complete list of our office's services.

NIH embraces bold, 12-year scientific vision for BRAIN Initiative

http://www.nih.gov/news/health/jun2014/od-05.htm?utm_source=twitterfeed&utm_medium=twitter

The **B**rain **R**esearch through **A**dvancing **I**nnovative **N**eurotechnologies (BRAIN) Initiative is part of a new Presidential focus aimed at revolutionizing our understanding of the human brain. By accelerating the development and application of innovative technologies, researchers will be able to produce a revolutionary new dynamic picture of the brain that, for the first time, shows how individual cells and complex neural circuits interact in both time and space. Long desired by researchers seeking new ways to treat, cure, and even prevent brain disorders, this picture will fill major gaps in our current knowledge and provide unprecedented opportunities for exploring exactly how the brain enables the human body to record, process, utilize, store, and retrieve vast quantities of information, all at the speed of thought. It is expected that \$4.5 Billion will be awarded for research under this initiative.

National Academies - Awards (to recognize achievements in science) -- Nominations Accepted

http://www.nasonline.org/about-nas/awards/how-to-nominate.html

Since 1886, the National Academy of Sciences has honored outstanding achievement in the physical, biological, and social sciences through its awards program.

Nominations are being accepted through **October 1, 2014** for the awards listed below.

Arctowski Medal (solar physics/solar terrestrial relationships)

Gilbert Morgan Smith Medal (marine or freshwater algae)

J. C. Hunsaker Award in Aeronautical Engineering

J. Lawrence Smith Medal (meteoritic bodies)

Mary Clark Thompson Medal (geology/paleontology)

NAS Award for Behavioral Research Relevant to the Prevention of Nuclear War

NAS Award for Chemistry in Service to Society

NAS Award for Scientific Discovery (chemistry, biochemistry, or biophysics)

NAS Award for Scientific Reviewing (biochemistry)

NAS Award in Chemical Sciences

NAS Award in Molecular Biology (young investigator)

NAS Public Welfare Medal

Pradel Research Award (neuroscience)

Richard Lounsbery Award (biology/medicine)

Selman A. Waksman Award in Microbiology

Troland Research Awards (psychology, young investigator)

William O. Baker Award for Initiatives in Science (statistics and machine learning)

National Humanities Center - National Humanities Center Fellowships

http://nationalhumanitiescenter.org/fellowships/appltoc.htm

The National Humanities Center offers 40 residential fellowships for advanced study in the humanities for the period September 2014 through May 2015. Applicants must have doctorate or equivalent scholarly credentials. Young scholars as well as senior scholars are encouraged to apply, but they must have a record of publication, and new Ph.D.s should be aware that the Center does not normally support the revision of a doctoral dissertation. In addition to scholars from all fields of the humanities, the Center accepts individuals from the natural and social sciences, the arts, the professions, and public life who are engaged in humanistic projects. The Center is also international and gladly accepts applications from scholars outside the United States.

<u>Deadline</u>: **Oct. 15, 2014**

Jackson Foundation, Henry M. - International Affairs Education Grants

http://www.hmjackson.org/international-affairs

The Foundation makes grants in international affairs and human rights and, to a limited extent, in the areas of environment and natural resources management and public service. In addition, through Strategic Initiatives, the Foundation utilizes the expertise of its board and staff to convene leaders in the nonprofit, philanthropic and government sectors to discuss timely public policy issues, and to partner with local and national organizations and foundations to leverage its resources. The Strategic Initiatives program is primarily conducted on an invitation-only basis; however, interested individuals may contact the Foundation's program officer to discuss potential partnership ideas that are consistent with Foundation interests and priorities.

Before approaching this foundation, contact Caleen Norrod Johnson, <u>caleen.johnson@unlv.edu</u>, 702-895-2828. Deadlines: **Dec. 1, Mar. 1, Jun. 1, Sep. 1**.

National Science Foundation - Documenting Endangered Languages (DEL)

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12816

This funding partnership between the National Science Foundation (NSF) and the National Endowment for the Humanities (NEH) supports projects to develop and advance knowledge concerning endangered human languages. Made urgent by the imminent death of roughly half of the approximately 7000 currently used languages, this effort aims to exploit advances in information technology to build computational infrastructure for endangered language research. The program supports projects that contribute to data management and archiving, and to the development of the next generation of researchers. Funding can support fieldwork and other activities relevant to the digital recording, documenting, and archiving of endangered languages, including the preparation of lexicons, grammars, text samples, and databases. Funding will be available in the form of one- to three-year senior research grants as well as fellowships for up to twelve months and doctoral dissertation research improvement grants for up to 24 months.

Deadlines: October 6, 2014; September 15, 2015; September 15, Annually Thereafter

National Education Association - Learning & Leadership Grants

http://www.neafoundation.org/pages/learning-leadership-grants/

The NEA Foundation provides grants to support public school teachers, public education support professionals, and/or faculty and staff in public institutions of higher education for one of the following two purposes: Grants to individuals fund participation in high-quality professional development experiences, such as summer institutes or action research; or grants to groups fund collegial study, including study groups, action research, lesson study, or mentoring experiences for faculty or staff new to an assignment.

Deadlines: Feb. 1, Jun. 1, Oct. 15.

Law School Admission Council - LSAC Research Grant Program

http://www.lsac.org/lsacresources/grants/lsac-research

The Law School Admission Council (LSAC) Research Grant Program funds research on a wide variety of topics related to the mission of LSAC. Specifically included in the program's scope are projects investigating precursors to legal training, selection into law schools, legal education, and the legal profession. To be eligible for funding, a research project must inform either the process of selecting law students or legal education itself in a demonstrable way. Projects will be funded for amounts up to \$200,000.

The program welcomes proposals for research proceeding from any of a variety of methodologies, a potentially broad range of topics, and varying time frames. Proposals will be judged on the importance of the questions addressed, their relevance to the mission of LSAC, the quality of the research designs, and the capacity of the researchers to carry out the project. Eligible investigators need not be members of law school faculties. Proposals from interdisciplinary teams of law faculty and researchers from outside law schools are strongly encouraged. LSAC's membership includes law schools in the United States, Canada, and Australia. Comparative proposals about topics outside the United States, Canada, and Australia are welcome, but they must include some explicit connection to legal education or the legal profession within those countries.

A meritorious project could be informed by any disciplinary perspective and be guided by any of a variety of methodologies. Applicants may use methodologies derived from many disciplines, including anthropology, criminology, demography, economics, history, political science, psychology, and sociology. Projects may be qualitative or quantitative, cross-sectional or longitudinal. They may involve any of a variety of research techniques such as surveys, experiments, correlational methods, systematic observations, and ethnography. The program, however, requires that any project that is funded be planned and conducted in accordance with the best social scientific standards that are applicable to the type of research in question.

<u>Deadline:</u> August 15.

National Science Foundation - Science of Science and Innovation Policy (SciSIP)

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501084

The Science of Science & Innovation Policy (SciSIP) program supports research designed to advance the scientific basis of science and innovation policy. Research funded by the program thus develops, improves and expands models, analytical tools, data and metrics that can be applied in the science policy decision making process. For example, research proposals may develop behavioral and analytical conceptualizations, frameworks or models that have applications across a broad array of SciSIP challenges, including the relationship between broader participation and innovation or creativity. Proposals may also develop methodologies to analyze science and technology data, and to convey the information to a variety of audiences. Researchers are also encouraged to create or improve science and engineering data, metrics and indicators reflecting current discovery, particularly proposals that demonstrate the viability of collecting and analyzing data on knowledge generation and innovation in organizations.

Among the many research topics supported are:

- examinations of the ways in which the contexts, structures and processes of science and engineering research are affected by policy decision,
- the evaluation of the tangible and intangible returns from investments in science and from investments in research and development,
- the study of structures and processes that facilitate the development of usable knowledge, theories of creative processes and their transformation into social and economic outcomes,
- the collection, analysis and visualization of new data describing the scientific and engineering enterprise.

The SciSIP program invites the participation of researchers from all of the social, behavioral and economic sciences as well as those working in domain-specific applications such as chemistry, biology, physics, or nanotechnology. The program welcomes proposals for individual or multi-investigator research projects, doctoral dissertation research improvement awards, conferences, workshops, symposia, experimental research, data collection and

dissemination, computer equipment and other instrumentation, and research experience for undergraduates. The program places a high priority on interdisciplinary research as well as international collaboration.

Investigators are encouraged to submit proposals of joint interest to the SciSIP Program and other NSF programs and NSF initiative areas.

<u>Deadline</u>: **September 9, 2014**; September 9, Annually Thereafter

National Science Foundation - Thermal Transport Processes

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13367

The **Thermal Transport Processes (TTP)** program supports engineering research aimed at gaining a basic understanding of the thermal transport phenomena at nano/micro and macro scales. Core application areas of interest include:

- Cooling and heating of components, devices and equipment.
- Thermal processes in energy conversion & storage, power generation, and propulsion.
- Thermal transport in the synthesis and processing of materials including advanced manufacturing. Note
 that proposals that focus primarily on issues pertaining to materials, synthesis and/or processing are not
 of interest to the TTP program, and should be directed to the Materials Engineering and Processing (MEP)
 program in CMMI/ENG or DMR/MPS as appropriate.
- Thermal phenomena in biological systems. Only two topics are of interest in this area: cryopreservation and the role of heat transfer and thermal management in the treatment of cancer cells.

The program supports transformational research in transport processes that are driven by thermal gradients, and manipulation of these processes to achieve engineering goals. Mass transport or system-design oriented efforts are not of interest to this program. Of specific interest is research that explores active and passive control of the dynamics of thermal processes, and simulations and diagnostics that bridge and model information across multiple-scales. Priority is given to insightful investigations of fundamental problems with clearly defined economic, environmental and societal impacts.

Deadline: November 5, 2014

WateReuse Research Foundation - Methodology for Assigning Pathogen Removal Credits to Desalination Intake Wells (WRRF-14-04)

https://www.watereuse.org/node/3229

The water desalination industry does not have an established protocol for determining whether groundwater is under the influence of surface water and typically does not assign pathogen removal credits to raw water sources for drinking water facilities. This challenge is faced by many utilities that derive their source water from wells that may be under the influence and is particularly challenging for seawater projects that are considering what could be a substantial additional investment in a subsurface intake.

Objectives:

- Evaluate methodologies and approaches currently practiced for making a determination as to whether or not an intake well is under the influence of surface water.
- Evaluate methodologies available for determining the pathogen removal credit that can be verified for a given intake well.
- Make recommendations for the preferred methodologies and demonstrate the validity of these methods on a full-scale seawater well to establish whether or not it is under the influence of surface water and provide pathogen removal credits for protozoa and virus.

Deadline: August 13, 2014

US Fish and Wildlife Service - Wildlife Without Borders - Mexico http://www.fws.gov/international/wildlife-without-borders/mexico/

The U.S. Fish and Wildlife Service (USFWS) and the Mexican Ministry of Environment and Natural Resources (SEMARNAT) are soliciting proposals under the Wildlife Without Borders-Mexico Program for projects that address Mexico's capacity building for biodiversity conservation.

Program Goal: Build human and institutional capacity for biodiversity conservation and management in Mexico through training. Of interest are projects that provide direct and significant training to Mexican personnel in terms of the number of individuals trained, the strategic or innovative nature of the training, and the impact of the training on the conservation of biodiversity.

Program Objectives:

To address the training needs of Mexican natural resources managers for managing and conserving biodiversity; To provide local communities access to training that links sound management practices in priority biodiversity areas with the creation of sustainable economic opportunities;

To involve key stakeholder groups to address biodiversity conservation challenges to enable the delivery and implementation of effective conservation actions.

Deadline: Oct. 1, annually.

National Science Foundation - Environmental Health and Safety of Nanotechnology http://www.nsf.gov/funding/pgm summ.jsp?pims id=501030

The goal of the **Environmental Health and Safety of Nanotechnology (Nano EHS)** program is to examine and mitigate the environmental effects of nanotechnologies. Fundamental engineering research is sought to understand, evaluate, and lessen the impact of nanotechnology on the environment and biological systems. The program emphasizes engineering principles underlying the environmental health and safety impacts of nanotechnology. Proposals may address methods to characterize and quantify the presence of nanomaterials in products, and the release of nanomaterials from intermediate materials or finished products during consumer use or disposal scenarios. NanoEHS research informs and enables responsible development and sustainability. This program does not include biomedical and nanotoxicology topics involving clinical trials.

Proposals submitted to nanoEHS should address one or more of the following research areas:

- Complex and heterogeneous engineered nanomaterials: Fundamental engineering research on the environmental and health implications of these nanomaterials is needed. NOTE: Proposals addressing silver or gold nanomaterials will be given low priority.
- **Prevention of adverse impacts**: This research area includes both applying environmentally benign methods in engineering and manufacturing nanomaterials as well using nanotechnology in preventing adverse impacts in current non-nano synthesis and manufacturing processes.
- Research taking a systems approach: Whether the impacted system is a natural system or an industrial
 system, nanoEHS engineering research must start from a systems view to justify how and where adverse
 impacts could occur. Research may include models and statistical techniques used to identify priorities for
 study within systems.
- The development of fundamental tools: Monitoring instrumentation, sensors, models, and metrology are but a few of the tools necessary for measuring nanomaterials' impact on the environment, health or safety. Fundamental work on standards for measurements are also encouraged.

Deadline: November 5, 2014

National Science Foundation - Environmental Sustainability

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501027

The goal of the **Environmental Sustainability** program is to promote sustainable engineered systems that support human well-being and that are also compatible with sustaining natural (environmental) systems. These systems provide ecological services vital for human survival. Research efforts supported by the program typically consider long time horizons and may incorporate contributions from the social sciences and ethics. The program supports

engineering research that seeks to balance society's need to provide ecological protection and maintain stable economic conditions.

There are four principal general research areas that are supported:

- Industrial Ecology
- Green Engineering:
- Ecological Engineering
- Earth Systems Engineering

All proposed research should be driven by engineering principles, and be presented explicitly in an environmental sustainability context. Proposals should include involvement in engineering research of at least one graduate student, as well as undergraduates. Incorporation of aspects of social, behavioral, and economic sciences is welcomed. Innovative proposals outside the scope of the four core areas mentioned above may be considered. However, prior to submission, it is recommended that the PI contact the Program Director to avoid the possibility of the proposal being returned without review.

Deadline: November 5, 2014

National Science Foundation - Energy for Sustainability

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501026

The goal of the **Energy for Sustainability** program is to support fundamental engineering research and education that will enable innovative processes for the sustainable production of electricity and transportation fuels. Processes for sustainable energy production must be environmentally benign, reduce greenhouse gas production, and utilize renewable resources.

Current topics of interest in sustainable energy technologies are:

- Biomass Conversion, Biofuels & Bioenergy
- Photovoltaic Solar Energy
- Advanced Batteries for Transportation and Renewable Energy Storage

Deadline: November 5, 2014

National Science Foundation - Environmental Engineering

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501029

The goal of the Environmental Engineering program is to encourage transformative research which applies scientific and engineering principles to avoid or minimize solid, liquid, and gaseous discharges, resulting from human activity, in land, inland and coastal waters, and air, while promoting resource and energy conservation and recovery. The program also fosters cutting-edge scientific research for identifying, evaluating, and monitoring the waste assimilative capacity of the natural environment and for removing or reducing contaminants from polluted air, water, and soils.

Major areas of interest and activity in the program include:

- Enhancing the availability of high quality water supplies
- Fate and transport of contaminants of emerging concern in air, water, and soils

Deadline: November 5, 2014

National Science Foundation - Biomedical Engineering (BME)

http://www.nsf.gov/funding/pgm summ.jsp?pims id=501023

The goal of the Biomedical Engineering (BME) program is to provide opportunities to develop novel ideas into discovery-level and transformative projects that integrate engineering and life sciences in solving biomedical problems that serve humanity in the long-term. BME projects must be at the interface of engineering and life sciences, and advance both engineering and life sciences. The projects should focus on high impact transformative methods and technologies. Projects should include methods, models and enabling tools of understanding and

controlling living systems; fundamental improvements in deriving information from cells, tissues, organs, and organ systems; new approaches to the design of structures and materials for eventual medical use in the long-term; and novel methods for reducing health care costs through new technologies.

The BME program supports fundamental and transformative research in the following BME themes:

- Molecular, cellular and tissue approaches for advanced biomanufacturing
- Neural engineering and human brain mapping

Deadline: November 5, 2014

National Science Foundation - Biotechnology, Biochemical and Biomass Engineering (BBBE) http://www.nsf.gov/funding/pgm_summ.isp?pims_id=501024

The Biotechnology and Biochemical Engineering (BBE) program supports fundamental engineering research that advances the understanding of cellular and biomolecular processes (*in vivo*, *in vitro*, and/or *ex vivo*) and eventually leads to the development of enabling technology for advanced manufacturing and/or applications in support of the biopharmaceutical, biotechnology, and bioenergy industries, or with applications in health or the environment. A quantitative treatment of biological and engineering problems of biological processes is considered vital to successful research projects in the BBE program.

Major areas of interest in the program include:

- Metabolic engineering and synthetic biology
- Quantitative systems biotechnology
- Tissue engineering and stem cell culture technologies
- Protein engineering & design
- Single cell dynamics and modeling

Deadline: November 5, 2014

National Science Foundation - General & Age-Related Disabilities Engineering (GARDE) http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501021

The General & Age Related Disabilities Engineering (GARDE) program supports fundamental engineering research that will lead to the development of new technologies, devices, or software for persons with disabilities. Research may be supported that is directed to the characterization, restoration, and/or substitution of human functional ability or cognition, or to the interaction of persons with disabilities and their environment. Areas of particular interest are disability-related research in neuroengineering and rehabilitation robotics.

The duration of unsolicited awards is generally one to three years. The typical award size for the program is around \$100,000 per year. Small equipment proposals of less than \$100,000 will also be considered and may be submitted during the annual proposal submission window.

GARDE also supports Undergraduate Engineering Design projects, especially those that provide prototype "custom-designed" devices or software for persons with disabilities. These projects are designed to enhance the education of undergraduate engineering students. Undergraduate engineering design projects to aid persons with disabilities include:

- A design experience for the engineering student that will directly aid a specific individual with a disability.
- Undergraduate student engineers or engineering technology students develop prototype "custom-designed" devices and software.
- The PI and the students work with institutions providing care or education for individuals with disabilities.

The proposal must include a short description of ten possible design projects. These projects should be suitable for an undergraduate student, or a small team of students, to complete in about one year.

<u>Deadline:</u> November 5, 2014

National Institutes of Health - NIH Director's New Innovator Award Program (DP2)

http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-13-007.html

The NIH Director's New Innovator (DP2) Award initiative supports a small number of early stage investigators of exceptional creativity who propose bold and highly innovative new research approaches that have the potential to produce a major impact on broad, important problems in biomedical and behavioral research. The New Innovator Award initiative complements ongoing efforts by NIH and its Institutes and Centers to fund early stage investigators through R01 grants, which continue to be the major sources of NIH support for early stage investigators. The NIH Director's New Innovator Award initiative is a component of the High Risk - High Reward Research Program of the NIH Common Fund.

Deadlines: October, 17, 2014, and October 16, 2015

National Institutes of Health - NIH Pioneer Award Program (DP1)

http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-13-006.html

The NIH Pioneer Award initiative complements NIH's traditional, investigator-initiated grant programs by supporting individual scientists of exceptional creativity who propose pioneering and possibly transforming approaches to addressing major biomedical or behavioral challenges that have the potential to produce an unusually high impact on a broad area of biomedical or behavioral research. To be considered pioneering, the proposed research must reflect substantially different scientific directions from those already being pursued in the investigator's research program or elsewhere.

Deadlines: October 10, 2014, and October 9, 2015

National Institutes of Health - Genomic Resource Grants for Community Resource Projects (U41)

http://grants.nih.gov/grants/guide/pa-files/PAR-14-191.html

Genomic research has had substantial impact on biomedical research, in large part because of the open sharing of data (often prior to publication) and resources with the greater research community. To facilitate genomic research and the dissemination of its products, NHGRI supports resources that are crucial for disease studies, model organism studies, and other biomedical research. Awards under this FOA will support the development and distribution of genomic resources that will be available to and valuable for the broad research community, using cost-effective approaches. Such resources include (but are not limited to) informatics resources (such as human and model organism databases, ontologies, and coordinated sets of analysis tools), comprehensive identification and collections of genomic features (such as structural variants or functional genomic elements), and standard data types produced for central sets of samples (such as 1000 Genomes or GTEx samples).

<u>Deadlines:</u>

Letter of Intent: 30 days before the application due date

Application: September 25, 2014; January 25, 2015; May 25, 2015; September 25, 2015; January 25, 2016; May 25, 2016; September 25, 2016; January 25, 2017

National Institutes of Health - Ethical Legal and Social Implications (ELSI) of Genomic Research Regular Research Program (R01, R03, R21)

http://grants.nih.gov/grants/guide/pa-files/PA-14-276.html

This Funding Opportunity Announcement (FOA) invites Research Project Grant (R01) applications that propose to study the ethical, legal and social implications (ELSI) of human genome research. Applications should propose well-integrated studies using either single or mixed methods. Proposed methods may include, but are not limited to, data-generating qualitative or quantitative approaches, legal, economic or normative analyses, or other analytical or conceptual research methodologies.

Although this funding opportunity uses the R01 mechanism, it runs in parallel with two program announcements of identical scientific scope: <u>PA-14-277</u>, for Small Research Grants (R03) and <u>PA-14-278</u>, which uses the exploratory/developmental (R21) grant mechanism.

Deadlines:

R01 Deadlines: Feb. 5, Jun. 5, Oct. 5.

R03 and R21 Deadlines: Feb. 16, Jun. 16, Oct. 16.

National Institutes of Health - Family-Centered Self-Management of Chronic Conditions (R01, R21)

http://grants.nih.gov/grants/guide/pa-files/PA-14-112.html

This funding opportunity announcement seeks to build the science of family-centered self-management (FCSM) in chronic conditions.

Research Objectives NINR seeks to solicit research that builds the science of family-centered self-management (FCSM) in chronic conditions. Examples of approaches to this opportunity are as follows but are not limited to:

- Develop and test FCSM interventions that promote family equilibrium for individuals with chronic conditions as well as when multiple family members have chronic conditions and are at risk of exacerbation of their illness. Examples may include community interventions or programs around a built environment
- Develop innovative research designs to determine which FCSM interventions are most efficient to include variability across developmental life stages and who will benefit most. Examples of innovative designs may include using a multiphase optimization strategy (MOST) when applied to self- management studies. This design leads to identification of a likely best intervention that can be evaluated at optimal levels, through an iterative process. Another example may be using a Multiple Assignment Randomized Trial (SMART) or pragmatic design that would facilitate high-quality data that can be used to construct adaptive interventions. Methodological designs such as SMART and MOST could be adapted to family-centered self-management research prevention and management programs; since these designs are practical, innovative, and hold promise for producing more effective interventions
- Incorporate novel technologies for individual and family members to facilitate FSCM such as: monitoring symptom status, promoting health behavioral modifications and accessing/imparting health information
- Determine effective methods for dissemination of FSCM interventions into practice
- Develop outcome measures (short and long term) to assess effectiveness of FSCM interventions

Although this funding opportunity uses the R01 grant mechanism, it runs in parallel with a program announcement of identical scientific scope, <u>PA-14-113</u>, which uses the exploratory/developmental (R21) grant mechanism. Deadlines:

R01 Due Dates: **Feb. 5, Jun. 5, Oct. 5** R21 Due Dates: **Feb. 16, Jun. 16, Oct. 16** AIDS Due Dates: **Jan. 7, May 7, Sep. 7**

National Institutes of Health - Early Stage Development of Technologies in Biomedical Computing, Informatics, and Big Data Science (R01)

http://grants.nih.gov/grants/guide/pa-files/PA-14-155.html

The NIH is interested in promoting a broad base of research and development of technologies in biomedical computing, informatics, and Big Data Science that will support rapid progress in areas of scientific opportunity in biomedical research. It is expected that this research and development is conducted in the context of important biomedical and behavioral research problems. As such, applications are intended to develop enabling technologies that could apply to the interests of most NIH Institutes and Centers and range from basic biomedicine and including research to all relevant organ systems and diseases. Major themes of research include collaborative environments; data integration; analysis and modeling methodologies; and novel computer science and statistical approaches. New opportunities are also emerging as large and complex data sets are becoming increasingly

available to the research community. This initiative aims to address biomedical research areas in biomedical computing, informatics, and Big Data science through the early stage development of new software, tools and related resources, as well as the fundamental research (e.g., methodologies and approaches) leading up to that development.

Through separate funding opportunity announcements of similar scientific scope, participating Institutes and Centers invite applications for extended development, hardening and dissemination of software technology (R01) PA-14-156, as well as small business innovation research (SBIR) PA-14-154 and small business technology transfer research (STTR) PA-14-157. Some NIH Institutes and Centers may have other grant mechanisms that could apply to biomedical computing projects. Applicants are encouraged to visit the BD2K and BISTI web sites for these and other relevant funding opportunities: http://www.bd2k.nih.gov/opportunities, and http://www.bisti.nih.gov/bistic funding.cfm.

Deadlines:

R01 Due Dates: Feb. 5, Jun. 5, Oct. 5 AIDS Due Dates: Jan. 7, May 7, Sep. 7

National Institutes of Health - Innovative Programs to Enhance Research Training (IPERT) (R25)

http://grants.nih.gov/grants/guide/pa-files/PAR-14-170.html

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The Innovative Programs to Enhance Research Training (IPERT) R25 funding opportunity announcement from NIGMS seeks applications that propose creative and innovative educational activities to complement and/or enhance the training of a workforce to meet the nation's biomedical, behavioral and clinical research needs. The goal of this NIGMS R25 program is to support educational activities that complement and/or enhance the training of a workforce to meet the nation's biomedical, behavioral and clinical research needs. To this end, this funding opportunity announcement encourages activities with a primary focus on courses for skills development, structured mentoring activities, and outreach programs.

Deadlines:

Letter of Intent Due Date(s): 30 days before the application due date Application: June 9, 2014; January 25, 2015; January 25, 2016

National Institutes of Health - Exploratory Grant Award to Promote Workforce Diversity in Basic Cancer Research (R21)

http://grants.nih.gov/grants/guide/pa-files/PAR-12-096.html

This funding opportunity announcement (FOA), issued by the Center to Reduce Cancer Health Disparities (CRCHD) and the Division of Cancer Biology (DCB) of the National Cancer Institute (NCI), invites applications by investigators from diverse backgrounds underrepresented in basic and biomedical cancer research. The NIH recognizes a unique and compelling need to promote diversity in the NIH-funded research workforce. The purpose of this FOA is to improve the diversity of the NCI-funded research workforce by supporting and recruiting eligible investigators from groups that have been shown to be underrepresented in the biomedical, clinical, behavioral, and social sciences including individuals from underrepresented racial and ethnic groups, individuals with disabilities, and individuals from socially, culturally, economically, or educationally disadvantaged backgrounds that have recently and demonstrably inhibited their ability to pursue a career in health-related research. This funding opportunity will also provide a bridge to investigators that have completed their research training and may need extra time to develop a research project grant application.

Deadline: November 20 2014

National Institutes of Health - Early-Stage Development of Informatics Technology (U01) http://grants.nih.gov/grants/guide/pa-files/PAR-12-288.html 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 in cancer research. As a component of the NCI's Informatics Technology for Cancer Research (ITCR) Initiative, this FOA focuses on early-stage development from prototyping to hardening and adaptation. The central mission of the ITCR is to promote research-driven informatics technology development. 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 community. In addition, mechanisms to solicit feedback from users and collaborators throughout the development process should be included. Applications that focus on data processing and analysis or mathematical/statistical modeling alone without new technology development are not appropriate for this FOA.

There are four additional FOAs issued under the ITCR Initiative that cover additional types of project and support technology development at different stages. Investigators are allowed to submit multiple applications in response to these FOAs given that they are scientifically distinct from each other.

PAR-12-286, "Competing Revisions for Early-Stage Development of Informatics Technology (R01)";

PAR-12-289, "Competing Revisions for Early-Stage Development of Informatics Technology (U01)";

PAR-12-290, "Competing Revisions for Early-Stage Development of Informatics Technology (P01)"; and

PAR-12-287, "Advanced Development of Informatics Technology (U24)".

Deadlines:

Letter of Intent Due Date: 30 days before the due date
Application Due Date(s): **November 18, 2014, June 18, 2015**

National Institutes of Health - Implications of New Digital Media Use for Underage Drinking, Drinking-Related Behaviors, and Prevention Research (R01)

http://grants.nih.gov/grants/guide/pa-files/PA-13-262.html

This Funding Opportunity Announcement (FOA) encourages R01 research grant applications from institutions/organizations that propose to investigate whether, and how, heavy involvement in new digital media usage, particularly social media and social networking sites, may influence adolescent alcohol use and drinking patterns, as well as drinking-related problems. This FOA also encourages applications proposing to explore the ways in which new digital media may be utilized as platforms for preventive interventions aimed at underage drinking and related problems.

Although this funding opportunity uses the R01 grant mechanism, it runs in parallel with a program announcement of identical scientific scope, <u>PA-13-263</u>, which uses the exploratory/developmental (R21) grant mechanism. Deadlines:

R01 Due Dates: **Feb. 5, Jun. 5, Oct. 5** R21 Due Dates: **Feb. 16, Jun. 16, Oct. 16** AIDS Due Dates: **Jan. 7, May 7, Sep. 7**

National Institutes of Health - Improving Diet and Physical Activity Assessment (R01, R21) http://grants.nih.gov/grants/guide/pa-files/PAR-12-198.html

This Funding Opportunity Announcement (FOA encourages innovative research to enhance the quality of measurements of dietary intake and physical activity. Applications submitted under this FOA may include development of: Novel assessment approaches; better methods to evaluate instruments; assessment tools for culturally diverse populations or various age groups, including older adults; improved technology or applications of existing technology; statistical methods to assess or correct for measurement errors or biases, methods to investigate the multidimensionality of diet and physical activity behavior through pattern analysis; or integrated measurement of diet and physical activity along with the environmental context of such behaviors.

This FOA will utilize the Research Project Grant (R01) grant mechanism and runs in parallel with a FOA of identical scientific scope, <u>PAR-12-197</u>, that encourages applications under the NIH Exploratory/Developmental (R21) mechanism.

Deadlines:

For new R01 applications: **February 5, 2015**For new R21 applications: **February 16, 2015**

National Institutes of Health - Implications of the Economic Downturn for Health, Wealth, and Work at Older Ages (R01)

http://grants.nih.gov/grants/guide/pa-files/PA-12-009.html

This Funding Opportunity Announcement (FOA) invites research on the implications of exogenous shocks, such as those produced by the recent economic downturn, for health, economic circumstances, and planning throughout the life-cycle.

Deadlines: Feb. 5, Jun. 5, Oct. 5

National Institutes of Health - Macroeconomic Aspects of Population Aging (R01)

http://grants.nih.gov/grants/guide/pa-files/PAR-12-186.html

This Funding Opportunity Announcement (FOA) invites research on the macroeconomics of aging - the impact of population aging on the macroeconomy and in turn how macroeconomic factors impact health and well-being.

<u>October 3, 2014</u>

Department of Veterans Affairs - Grants for Adaptive Sports Programs for Disabled Veterans and Members of the Armed Forces

http://www.grants.gov/web/grants/view-opportunity.html?oppId=258778

The ASP Program's purpose is to enable eligible adaptive sports entities to plan, develop, manage, and implement programs to provide opportunities for disabled Veterans and disabled members of the Armed Forces. This is accomplished through grants enabling adaptive sports activities that include:(1) instruction, participation, and competition in adaptive sports;(2) training and technical assistance to program administrators, coaches, recreation therapists, instructors, VA employees, and other appropriate individuals; and (3) coordination, Paralympic classification of athletes, athlete assessment, sport-specific training techniques, program development (including programs at the local level), sports equipment, supplies, program evaluation, and other activities related to the implementation and operation of the program grants to adaptive sports entities that will coordinate or provide adaptive sports activities.

Deadline: Aug. 11, 2014

National Institutes of Health - Environmental Exposures and Health: Exploration of Non-Traditional Settings (R01, R21)

http://grants.nih.gov/grants/guide/pa-files/PA-12-133.html The purpose of this funding opportunity announcement (FOA) issued by the National Institute of Nursing Research (NINR) and the National Institute of Environmental Health Sciences (NIEHS) is to encourage interdisciplinary research aimed at promoting health, limiting symptoms and disease, and reducing health disparities in children and older adults living or spending time in non-traditional settings. These settings result in exposure to environmental pollutants and toxins that result in health risks, symptoms, and other health conditions/diseases including lower respiratory diseases, chronic obstructive pulmonary disease, and cardiovascular diseases. Risk identification and symptom management include prevention and behavior changes and actions to maintain health and prevent disease with an emphasis on the individual, family, and community which will advance nursing science. For purposes of this FOA, non-traditional settings, for children and older adults, include, but are not limited to places such as community centers, pre-school

and non-traditional school environments (e.g., churches, daycare, home-based schools, dormitories, and alternative schools), child and older adult foster care facilities, older adult day care facilities, half-way homes, assisted living and long-term care facilities.

Although this funding opportunity uses the R01 mechanism, it runs in parallel with a program announcement of identical scientific scope, <u>PA-12-134</u>, that uses the exploratory/developmental (R21) grant mechanism.

Deadlines:

R01 Due Dates: **Feb. 5, Jun. 5, Oct. 5**R21 Due Dates: **Feb. 16, Jun. 16, Oct. 16**AIDS Due Dates: **Jan. 7, May 7, Sep. 7**

National Institutes of Health - Community Partnerships to Advance Research (CPAR) (R01, R15, R21)

http://grants.nih.gov/grants/guide/pa-files/PA-14-142.html

This funding opportunity announcement (FOA) encourages researchers to partner with communities using Community Engaged Research (CEnR) methodologies that will enhance relationships leading to better interventions and positive health outcomes.

Community Engagement (CE) lies on a continuum that reflects the level of involvement of community members, or representatives of community populations, in research. This continuum of involvement in research efforts ranges from community consent to research, to full participation and shared leadership of community members in research design and eventual dissemination and implementation. Advances in translating research findings into practice have been made; however, such advances have not been realized by all members of society according to age, race, ethnicity, and socioeconomic group. Narrowing the gap in translational research within the NINR strategic areas of emphasis is a priority for the Institute. Using CE approaches and addressing areas such as self and symptom management, health promotion and prevention is one way to narrow the gap. CE can take many forms, and partners can include community based groups, agencies such as the Center for Medicare and Medicaid Services (CMS) innovation centers, Centers for Disease Control and Prevention (CDC) prevention Research Centers, Health Resources and Services Administration (HRSA) Community Health Centers (CHC) and Federally Qualified Health Centers (FQHC), other academic health institutions, or individuals. Collaborators may be engaged in health promotion/prevention, clinical or intervention research.

Although this FOA uses the R01 grant mechanism, it runs in parallel with two program announcements of identical scientific scope: <u>PA-14-141</u>, for exploratory/developmental (R21) grants, and <u>PA-14-140</u>, for R15 Academic Research Enhancement Awards (AREA).

Deadlines:

R01 Due Dates: **Feb. 5**, **Jun. 5**, **Oct. 5** R15 Due Dates: **Jan. 25**, **May 25**, **Sep. 25** R21 Due Dates: **Feb. 16**, **Jun. 16**, **Oct. 16** AIDS Due Dates: **Jan. 7**, **May 7**, **Sep. 7**

National Institutes of Health - Behavioral and Social Science Research on Understanding and Reducing Health Disparities (R01, R21)

http://grants.nih.gov/grants/guide/pa-files/PA-13-292.html

The purpose of this FOA is to encourage behavioral and social science research on the causes and solutions to health and disabilities disparities in the U. S. population. Health disparities between, on the one hand, racial/ethnic populations, lower socioeconomic classes, and rural residents and, on the other hand, the overall U.S. population are major public health concerns. Emphasis is placed on research in and among three broad areas of action: 1) public policy, 2) health care, and 3) disease/disability prevention. Particular attention is given to reducing "health gaps" among groups. Applications that utilize an interdisciplinary approach, investigate multiple levels of analysis,

incorporate a life-course perspective, and/or employ innovative methods such as systems science or community-based participatory research are particularly encouraged.

This FOA will utilize the NIH Research Project Grant (R01) award mechanism and runs in parallel with an FOA of identical scientific scope, <u>PA-13-288</u>, that encourages applications under the R21 (exploratory/developmental) grant mechanism.

Deadlines:

R01 Due Dates: **Feb. 5, Jun. 5, Oct. 5** R21 Due Dates: **Feb. 16, Jun. 16, Oct. 16** AIDS Due Dates: **Jan. 7, May 7, Sep. 7**

National Institutes of Health - Healthy Habits: Timing for Developing Sustainable Healthy Behaviors in Children and Adolescents (R01,R21)

http://grants.nih.gov/grants/guide/pa-files/PA-14-177.html

This Funding Opportunity Announcement (FOA) seeks to encourage applications that employ innovative research to identify mechanisms of influence and/or promote positive sustainable health behavior(s) in children and youth (birth to age 21). Applications to promote positive health behavior(s) should target social and cultural factors, including, but not limited to: schools, families, communities, population, food industry, age-appropriate learning tools and games, social media, social networking, technology and mass media. Topics to be addressed in this announcement include: effective, sustainable processes for influencing young people to make healthy behavior choices; identification of the appropriate stage of influence for learning sustainable lifelong health behaviors; the role of technology and new media in promoting healthy behavior; identification of factors that support healthy behavior development in vulnerable populations, identification of barriers to healthy behaviors; and, identification of mechanisms and mediators that are common to the development of a range of habitual health behaviors. Given the many factors involved in developing sustainable health behaviors, applications from multidisciplinary teams are strongly encouraged. The ultimate goal of this FOA is to promote research that identifies and enhances processes that promote sustainable positive behavior or changes social and cultural norms that influence health and future health behaviors.

Although this funding opportunity uses the R01 mechanism, it runs in parallel with a program announcement of identical scientific scope, <u>PA-14-176</u>, which uses the exploratory/developmental (R21) grant mechanism.

Deadlines:

R01 Deadlines: Feb. 5, Jun. 5, Oct. 5 R21 Deadlines: Feb. 16, Jun. 16, Oct. 16 AIDS Deadlines: Jan. 7, May 7, Sep. 7 PA-14-177 Expiration Date May 8, 2017

National Institutes of Health - Health Promotion Among Racial and Ethnic Minority Males (R01, R21)

http://grants.nih.gov/grants/guide/pa-files/PA-13-328.html

This initiative seeks applications from applicants that propose to stimulate and expand research in the health of minority men. Specifically, this initiative is intended to: 1) enhance our understanding of the numerous factors (e.g., sociodemographic, community, societal, personal) influencing the health promoting behaviors of racial and ethnic minority males and their subpopulations across the life cycle, and 2) encourage applications focusing on the development and testing of culturally and linguistically appropriate health-promoting interventions designed to reduce health disparities among racially and ethnically diverse males and their subpopulations age 21 and older. This FOA will utilize the R01 grant mechanism and runs in parallel with a FOA of identical scientific scope, PA-13-331, that encourages applications under the R21 mechanism.

Deadlines:

R01 Deadlines: Feb. 5, Jun. 5, Oct. 5.

R21 Deadlines: Feb. 16, Jun. 16, Oct. 16. AIDS Deadlines: Jan. 7, May 7, Sep. 7.

National Institutes of Health - AHRQ -- Exploratory and Developmental Grant to Improve Health Care Quality through Health Information Technology (IT) (R21)

http://grants.nih.gov/grants/guide/pa-files/PA-14-001.html

The purpose of this Funding Opportunity Announcement (FOA) is to fund exploratory and developmental research grants that will contribute to the evidence base of how health IT improves health care quality. This FOA supports the use of a wide variety of research designs in order to generate information regarding the design and development, implementation, use, or impact of health IT on quality. Depending on the research design and intent of the project, applicants may receive support for: (1) pilot and feasibility or self-contained health IT research projects; (2) secondary data analysis of health IT research; or (3) economic (prospective or retrospective) analyses of a health IT project. Each grant application must clearly state which type of the three types of studies is being proposed.

The five research areas of interest for this FOA are:

- 1. Design
- 2. Implementation
- 3. Use
- 4. Impact on outcomes
- 5. Measurement

<u>Deadlines:</u> Feb. 16, Jun. 16, Oct. 16