NJIT Research Newsletter

Issue: ORN-2017-05

NJIT Research Newsletter includes recent awards, and announcements of research related seminars, webinars, national and federal research news related to research funding, and ***Grant Opportunity Alerts****.* The Newsletter is posted on the NJIT Research Website http://www.njit.edu/research/ .

Save The Date!

Office of Research Events Calendar: Spring 2017

Research Showcases and Presidential Research Forums:

Event: Inauguration of NJIT Institute of Brain and Neuroscience Research
When: March 6, 2017; 10.00 AM – 2.30 PM
Where: Ballroom A/B/Atrium
Keynote Speaker: Col. Sidney Hinds, MD, DoD Brain Health Research Program Coordinator, Medical Research and Material Command

Event: Panel Discussion: NSF Proposal Preparation and Review: Intellectual Merit and Broader Impact
When: March 7, 2017; 1.00 PM – 3.00 PM
Where: Campus Center Atrium
Panel Speakers:
Dr. Jennifer Slimowitz Pearl, Program Director, Division of Mathematical Sciences (DMS), NSF
Dr. Bernice Anderson, Senior Advisor, Office of Integrative Activities and Program Director-INCLUDES, NSF
Dr. Melvin Hall, Board Member, American Evaluation Association

Event: Faculty Research Showcase and Presidential Forum
When: March 28, 2017; 10.00 AM – 2.30 PM
Where: Ballroom A/B/Gallery
Keynote Speaker: James Gallarda, PhD, Senior Program Officer, Diagnostics at Bill & Melinda Gates Foundation

Event: Innovation Day Symposium (Student Research and Innovation Showcase)
When: April 10, 2017; 9.00 AM – 12.00 PM
Where: Ballroom A/B/Atrium
Keynote Speaker: Bill Huffnagle, President, Reconstructive Division at Stryker Orthopaedics

Event: Faculty Research Advisory Board Meeting
When: April 11, 2017; 1.00 PM – 2.00 PM
Where: Ballroom B

Event: Science and Technology Forum: Big Data Analytics: Current and Future Trends
When: April 12, 2017; 1.00 PM – 2.00 PM
Where: Ballroom B
Panel Speaker: Ms. Terry Christiani, Product Marketing Manager, Microsoft

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Grant Opportunity Alerts
Keywords and Areas Included in the Grant Opportunity Alert Section Below

NSF: Tomorrow's Internet Project Office (TIPOFF) Building on the Success of the Global Environment for Network Innovations; Faculty Early Career Development Program (CAREER); Mind, Machine and Motor Nexus (M3X)
NIH: NCMRR Early Career Research Award (R03); Data Science Research: Personal Health Libraries for Consumers and Patients (R01); CTSA Program Data to Health (CD2H) Coordinating Center (U24); Development of Socially-Assistive Robots (SARs) to Engage Persons with Alzheimer's Disease (AD) and AD-Related Dementias (ADRD), and their Caregivers (R43/R44)
Department of Defense/US Army/DARPA/ONR: DoD Precision Trauma Care Research Award; 2017 Broad Agency Announcement; AFRL-NM Tech Transfer and Education Outreach (STEM) Partnrship Intermediary Agreement
Department of Energy: Stewardship Science Academic Alliances (SSAA) Program
NASA: EARLY CAREER FACULTY (ECF)
National Endowment of Humanities: Fellowships; Institutes for Advanced Topics in the Digital Humanities

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Recent Research Grant and Contract Awards
Congratulations to faculty and staff on receiving research grant and contract awards!

PI: Deane Evans (PI)
Department: Center for Building Knowledge
Grant/Contract Project Title: Clean Energy Learning Center
Funding Agency: NJ BPU
Duration: 07/01/16-06/30/17

PI: Siva Nadimpalli (PI), Samuel Lieber (Co-PI), Shawn Chester (Co-PI)
Department: Mechanical and Industrial Engineering, Engineering Technology
Grant/Contract Project Title: Acuitive Technologies Material Characterization
Funding Agency: Acuitive Technologies, Inc.
Duration: 01/10/17-12/31/17

PI: Kamlesh Sirkar (PI)
Department: MAST Center, Chemical, Biological and Pharmaceutical Engineering
Grant/Contract Project Title: Development and characterization of composite membranes for use in counter current solvent extraction
Funding Agency: Los Alamos National Laboratory
Duration: 01/19/17-01/18/20

PI: Louis Lanzerotti (PI), Andrew Gerrard (Co-PI)
Department: Center for Solar Terrestrial Research
Grant/Contract Project Title: Van Allen Probes RBSPICE Phase E Operations - Extended Mission I (ARDES)
Funding Agency: NASA
Duration: 07/15/16-12/15/17

PI: Rajesh Dave (PI)
Department: Chemical, Biological and Pharmaceutical Engineering
Grant/Contract Project Title: Commercializing Pharmaceutical Process Modeling for Continuous Manufacturing
Funding Agency: NSF
Duration: 10/01/15-09/30/17

PI: Xiaoyang Xu (PI)
Department: Chemical, Biological and Pharmaceutical Engineering
Grant/Contract Project Title: Engineering Polymeric Nanoparticles for Delivering Therapeutics to Brain
Funding Agency: NJ Health Foundation
Duration: 03/01/17-02/28/18

PI: Somenath Mitra (PI)
Department: Chemistry and Environmental Sciences
Grant/Contract Project Title: Carbon Nanotube Enhanced Membrane Distillation for Effective Utilization of Municipal Waste Water and Brackish Water
Funding Agency: EPRI - Electronic Power Research Insitute
Duration: 02/26/17-04/30/20

PI: Zoi-Heleni Michalopoulou (PI)
Department: Mathematical Sciences
Grant/Contract Project Title: Shallow Water Inversion with Optimization and Direct Methods
Funding Agency: Office of Naval Research
Duration: 04/01/16-09/30/19

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In the News…
(National and Federal News Related to Research Funding and Grant Opportunities)

US Senate Bill on Dissemination of Research Results: Congressional Democrats are rallying behind a bill to protect federal scientists from attempts to interfere with scientific discourse and dissemination of research results. Senator Bill Nelson (D–FL) introduced a bill (**S.338**) that would codify existing policies at some two dozen federal agencies. Those policies stem from a 2009

executive order from former President Barack Obama that required them to spell out how they would safeguard scientific integrity. The policies have dribbled out over the last 7 years. More Information on the website http://www.sciencemag.org/news/2017/02/us-senate-bill-aims-make-sure-federal-scientists-aren-t-muzzled .

DoD Report on Defense Research Enterprise Assessment: The study proposes recommendations in the areas of missions, operating models, organization, workforce, infrastructure, and collaboration of the Department of Defense laboratories, engineering centers and warfare centers ("the Labs"). The Labs operate in a rapidly evolving environment and, in order to maintain their value proposition, the report recommends expanding missions to include open innovation and technology defense while leading the Department of Defense through fundamental technology shifts by anticipating the emerging requirements of the warfighter.

The report concluded: To maintain and enhance their value proposition, the Labs need to embrace open innovation and technology defense as an integral part of their mission. The Labs also need to lead the DoD through fundamental technology shifts by being able to anticipate and canvas emerging and future requirements and evolving warfighter missions. There needs to be expanded coordination among intermural basic research portfolios across the Labs without creating additional administrative burden. In turn, the DoD (the OSD, the Services, and the Combatant Commands) needs to actively engage in the evolution of the Lab enterprise. Congress needs to continue working with the DoD to simplify the regulatory environment in which the Labs operate; yet, the Labs need a culture shift to utilize the authorities already granted— they should be aware of them and willing to use them. Perhaps most importantly, the Labs need to be more active and at the table in the DoD requirements definition process. To achieve this, they have to be both present and credible by focusing their portfolios on the capabilities that will be needed by the warfighter today and tomorrow. They have extensive and growing authorities at the disposal they ought to leverage to carve a productive path through the complex environment they operate in. Building a spirited culture of self-reliance will be essential for their success and their ability to support our forces fighting the good fight. More information is posted on http://www.acq.osd.mil/dsb/reports/Defense_Research_Enterprise_Assessment.pdf .

White House Statements on R&D and Engineering Priorities: A cluster of White House statements and executive orders shed light on policies affecting engineering:

- An **America First energy statement** says the administration will "embrace the shale oil and gas revolution" and its "estimated $50 trillion" in untapped reserves, using "revenues from energy production to rebuild our roads, schools, bridges and public infrastructure." It's "also committed to clean coal technology, and to reviving America's coal industry. . . . Lastly, our need for energy must go hand-in-hand with responsible stewardship of the environment. . . .President Trump will refocus the EPA on its essential mission of protecting our air and water."
- An **Executive Order Expediting Environmental Reviews and Approvals For High Priority Infrastructure Projects** says "All agencies shall give highest priority to completing such reviews and approvals by the established deadlines using all necessary and appropriate means."
- A **memorandum on manufacturing** calls for departments and agencies "to support the expansion of manufacturing in the United States through expedited reviews of and approvals for proposals to construct or expand manufacturing facilities and through reductions in regulatory burdens affecting domestic manufacturing."

- A **pipeline memorandum** calls for a plan "under which all new pipelines, as well as retrofitted, repaired, or expanded pipelines . . . use materials and equipment produced in the United States, to the maximum extent possible."

NSF Announces New Proposal & Awards Policies & Procedures Guide (PAPPG): The new NSF PAPPG provides the policies and procedures for all proposals to be submitted on or after January 30, 2017. The *Proposal & Award Policies & Procedures Guide* (PAPPG) is comprised of documents relating to the Foundation's proposal and award process for the assistance programs of NSF. The PAPPG, in conjunction with NSF's Grant General Conditions, serves as the Foundation's implementation of 2 CFR § 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*. If the PAPPG and NSF Grant Conditions are silent on a specific area covered by 2 CFR § 200, the requirements specified in 2 CFR § 200 must be followed. Please see a summary of changes and complete PAPPG 2017 document on the NSF website https://www.nsf.gov/pubs/policydocs/pappg17_1/index.jsp.

NIH Notice NOT-OD-17-003: Ruth L. Kirschstein National Research Service Awards (NRSA) Postdoctoral Stipends, Training Related Expenses, Institutional Allowance, and Tuition/Fees Effective for Fiscal Year 2017
URL https://grants.nih.gov/grants/guide/notice-files/NOT-OD-17-003.html
Related Announcements
NOT-OD-16-134
NOT-OD-16-062
National Institutes of Health (NIH)
Purpose: The purpose of this Notice is to announce the process whereby recipients of Kirschstein-NRSA institutional training grant and individual fellowship awards supporting currently active postdoctoral trainees or fellows with 0, 1, or 2 years of experience as of December 1, 2016, will received increased stipends. The Notice also provides instructions for requesting one-time supplemental funding to cover the stipend increase. As previously announced (NOT-OD-16-134), stipend levels for postdoctoral NRSA recipients with 0, 1 or 2 years of experience will be increased in furtherance of the NIH mission. This increase is distinct from a projected cost-of-living adjustment for postdoctoral stipends that is subject to the availability of FY 2017 appropriations.

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Webinar and Events

Event: NSF Webinar: Emerging Role of Mobile Phones in Health
When: February 15, 2017; 2.00 PM
Website: https://www.nsf.gov/events/event_summ.jsp?cntn_id=190988&org=NSF
Brief Description: Abstract: Always available remote physiologic monitoring through wearable sensors brings the transformational possibility of health care that empowers patients to conduct self-care, and making self-monitoring a lifelong process. Patients can more effectively manage chronic diseases, as well as, screening for conditions could occur much sooner. It also fundamentally shifts and shares responsibility and creates a true partnership between clinician and patient. Beyond the individual patient, it also creates the potential for population health management in a way that has not been possible before. Shwetak Patel argues the smartphone will play a central role in this vision to a point where the phones themselves will provide many of these physiologic sensing capabilities. In his talk, he will describe a set of projects where it is already possible to conduct clinically relevant health diagnostics using just the sensors already

present on a smartphone. He will also discuss the critical role of computer science in mobile health and the future of the field.

Speaker Bio: Shwetak Patel is the Washington Research Foundation Endowed Professor in Computer Science & Engineering and Electrical Engineering at the University of Washington, where he directs the Ubicomp Lab. His research is in the areas of Human-Computer Interaction, Ubiquitous Computing, and Sensor-Enabled Embedded Systems, with a particular emphasis on the application of computing to health and sustainability. He received his Ph.D. in Computer Science from Georgia Tech in 2008. Patel is a recipient of a MacArthur "Genius" Fellowship, Sloan Fellowship, Microsoft Research Faculty Fellowship, MIT TR-35 Award, World Economic Forum Young Global Scientist Award, NSF Career Award, PECASE award, and was selected as an ACM Fellow. He was also a co-founder of an home energy monitoring company called Zensi, Inc. (acquired by Belkin, Inc. in 2010) and a low-power home wireless sensing company called SNUPI Technologies, Inc. (acquired by Sears, Inc. in 2015). Patel currently also serves as a council member of the Computing Community Consortium within the Computing Research Association.

To Join the Webinar, register here: http://www.tvworldwide.com/events/nsf/170215/

Event: NSF Webinar: Industry Leaders and Academic Privacy Researchers: Adversaries or Partners?
When: February 16, 2017 12.00 PM – 1.00 PM
Website: https://www.nsf.gov/events/event_summ.jsp?cntn_id=190894&org=NSF

Brief Description: As 2017 begins, are we entering a time of crisis or a time of opportunity for individual privacy? Law enforcement demands for consumer data continue to grow and surveillance by intelligence agencies continues to drive civil liberties debates. Online tracking for analytics and advertising has been extended to mobile devices, to interactive television and to smart home devices. Social media sharing has achieved near ubiquity, with services integrating location, facial recognition, and live video sharing. With connected cars, our motor vehicles become data collectors and with drones our public spaces can be more easily monitored. Big data strains against fair information practices of consent, limited purpose and data minimization. Algorithmic decision making and machine learning wreak havoc with efforts to provide transparency. Artificial Intelligence may leave us unsure who will even be accountable for data driven determinations.

About the Speaker: Jules serves as CEO of the Future of Privacy Forum, a Washington, D.C.-based think tank that seeks to advance responsible data practices. FPF is supported by the chief privacy officers of more than 110 leading companies, several foundations, as well as by an advisory board comprised of the country's leading academics and advocates. FPF's current projects focus on Big Data, Mobile, Location, Apps, the Internet of Things, Wearables, De-Identification, Connected Cars and Student Privacy. Jules previous roles have included serving as Chief Privacy Officer at AOL and before that at DoubleClick, as Consumer Affairs Commissioner for New York City, as an elected New York State Legislator and as a congressional staffer, and as an attorney. Jules serves on the Advisory Board of the Center for Copyright Information. He has served on the boards of a number of privacy and consumer protection organizations including TRUSTe, the International Association of Privacy Professionals, and the Network Advertising Initiative. From 2011-2012, Jules served on the Department of Homeland Security Data Privacy and Integrity Advisory Committee. In 2001, Crain's NY Business magazine named Jules one of the top technology leaders in New York City. Jules is a regular speaker at privacy and technology events and has testified or presented before Congressional committees and the Federal Trade Commission.

Event: NSF Webinar: Introduction to I-Corps Teams
When: March 7, 2017; 2.00 PM – 4.00 PM
Website: https://www.nsf.gov/events/event_summ.jsp?cntn_id=189701&org=NSF
Brief Description: Abstract: Curious about the NSF I-Corps program? Join this monthly introductory webinar to learn more about I-Corps Teams and how they contribute to the innovation ecosystem. During the webinar, I-Corps program directors will answer questions about I-Corps and provide updated information about I-Corps contacts, the curriculum, important dates and other aspects of I-Corps. The I-Corps curriculum provides real-world, hands-on, immersive learning about what it takes to successfully transfer knowledge into products and processes that benefit society.
The webinar will be held the **first Tuesday of every month at 2:00 p.m., eastern time**.
To Join the Webinar: First, access the audio portion of the webinar by phone by calling (800) 857-5210 (for callers inside the U.S.) OR (210) 234-7080 (for callers outside the U.S.). The participant passcode is 3192939#
Second, access the visual portion of the webinar (WebEx meeting number 743 582 265):
  • Go
    to https://nsf.webex.com/nsf/j.php?MTID=m37c931eeb5d7a1c32e62c41975c03a2b [Note: Firefox is recommended for Mac users.]
  • If requested, enter your name and email address.
  • If a password is required, enter the meeting password: I_C0rp5!
  • Click "Join".
You may download the slides in advance--download the slides (PDF, 1.6 MB).
For assistance joining the meeting, go to https://nsf.webex.com/nsf/mc and click "Support" on the left navigation bar.
Note for first-time users: To check whether you have the appropriate players installed for UCF (Universal Communications Format) rich media files, go to https://nsf.webex.com/nsf/systemdiagnosis.php.

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Grant Opportunities

National Science Foundation

Grant Program: Tomorrow's Internet Project Office (TIPOFF)
Building on the Success of the Global Environment for Network Innovations
Agency: National Science Foundation NSF 17-540
RFP Website: https://www.nsf.gov/pubs/2017/nsf17540/nsf17540.htm
Brief Description: In order to leverage, advance and strengthen its investments in mid-scale computing research infrastructure, the National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) will support the work of **Tomorrow's Internet Project Office (TIPOFF)**. Working closely with the U.S. academic and industrial computer networking research community, TIPOFF will provide leadership and administrative oversight in developing, deploying and operating innovative mid-scale computing research infrastructure to meet evolving research community needs and align with emerging national priorities.

To initiate this activity, TIPOFF will assume responsibility for the operation and future evolution of the Global Environment for Network Innovations (GENI) platform. TIPOFF will then lead the research community in developing an expanded and enriched experimental platform ("Platform") that leverages the existing GENI infrastructure to support exploration of robust new

networking and distributed systems architectures, services and applications. This Platform will serve as a virtual laboratory for research and education, with the goal of advancing understanding of computing and communication systems and sustaining U.S. technology leadership and competitiveness in information technology (IT) and Internet-based services.

Limit on Number of Proposals per Organization: 1: An organization may participate in no more than one TIPOFF proposal submitted to this solicitation, either as a lead or a subawardee. For proposals involving multiple institutions, only one institution should submit the proposal, with funding for participating institutions made through subawards. In other words, joint projects should not be submitted as linked collaborative proposals. See PAPPG Chapter II.D.3.a for additional information.

Awards: Anticipated funding amount: $10,000,000

Letter of Intent: Not Required

Full Proposal Submission Due Date: May 02, 2017

Contacts:
- Jack Brassil, Program Director, CISE/CNS, telephone: (703) 292-8950, email: jbrassil@nsf.govKevin Thompson, Program Director, CISE/ACI, telephone: (703) 292-4220, email: kthompso@nsf.gov

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Grant Program: Faculty Early Career Development Program (CAREER) Includes the description of NSF Presidential Early Career Awards for Scientists and Engineers (PECASE)

Agency: National Science Foundation NSF 17-537

RFP Website: https://www.nsf.gov/pubs/2017/nsf17537/nsf17537.htm

Brief Description: *CAREER*: The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Activities pursued by early-career faculty should build a firm foundation for a lifetime of leadership in integrating education and research. NSF encourages submission of CAREER proposals from early-career faculty at all CAREER-eligible organizations and especially encourages women, members of underrepresented minority groups, and persons with disabilities to apply.

PECASE: Each year NSF selects nominees for the Presidential Early Career Awards for Scientists and Engineers (PECASE) from among the most meritorious recent CAREER awardees. Selection for this award is based on two important criteria: 1) innovative research at the frontiers of science and technology that is relevant to the mission of NSF, and 2) community service demonstrated through scientific leadership, education, or community outreach. These awards foster innovative developments in science and technology, increase awareness of careers in science and engineering, give recognition to the scientific missions of the participating agencies, enhance connections between fundamental research and national goals, and highlight the importance of science and technology for the Nation's future. Individuals cannot apply for PECASE. These awards are initiated by the participating federal agencies. At NSF, up to twenty nominees for this award are selected each year from among the PECASE-eligible CAREER awardees most likely to become the leaders of academic research and education in the twenty-first century. The White House Office of Science and Technology Policy makes the final selection and announcement of the awardees.

Awards: Standard Grants. Anticipated funding amount: $222,000,000

Letter of Intent: Not Required

Full Proposal Submission Due Date:
July 19, 2017

Third Wednesday in July, Annually Thereafter
BIO, CISE, EHR
    July 20, 2017
    Third Thursday in July, Annually Thereafter
ENG
    July 21, 2017
    Third Friday in July, Annually Thereafter
GEO, MPS, SBE
Contacts:
- Division CAREER contacts listed on the CAREER web page at: http://www.nsf.gov/crssprgm/career/contacts.jsp
- Henry A. Warchall, telephone: (703) 292-4861, email: hwarchal@nsf.gov
- See Contacts listing, NSF, telephone: (703) 292-5111, email: info@nsf.gov

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Grant Program: Mind, Machine and Motor Nexus (M3X)
Agency: National Science Foundation NSF PD 17-058Y
RFP Website:
https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505402&org=NSF&sel_org=NSF&from=fund
Brief Description: The Mind, Machine and Motor Nexus (M3X) program supports fundamental research at the intersection of mind, machine and motor. A distinguishing characteristic of the program is an integrated treatment of human intent, perception, and behavior in interaction with embodied and intelligent engineered systems and as mediated by motor manipulation. M3X projects should advance the holistic analysis of cognition and of embodiment as present in both human and machine elements. This work will encompass not only how mind interacts with motor function in the manipulation of machines, but also how, in turn, machine response and function may shape and influence both mind and motor function.

        The M3X program seeks to support the development of theories, representations, and working models that draw upon and contribute to fundamental understanding within and across diverse fields, including but not limited to systems science and engineering; mechatronics; cognitive, behavioral and perceptual sciences; and applied computing. Research funded through this program is expected to lead to new computable theories and to the physical manifestation of these theories.

        Application areas supported by the M3X program span the full breadth of the Division of Civil, Mechanical and Manufacturing Innovation. Methodological innovation is emphasized, as is a focus on engaging new and emerging thematic areas.

        The M3X program does not support disaggregated, parallel efforts from individual disciplines or investigators: rather, supported activities must strongly integrate across disciplines to enable discoveries that would not otherwise be possible. Additionally, the M3X program will not consider proposals that do not integrate physical considerations in a fundamental way. Principal investigators proposing pure artificial intelligence or pure machine learning research are referred to funding opportunities in the Directorate for Computer and Information Science and Engineering.
Awards: Standard Grants.
Letter of Intent: Not Required
Full Proposal Submission Due Date: September 1, 2017 - September 15, 2017
Contacts: Jordan M. Berg   jberg@nsf.gov   (703) 292-5365

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National Institutes of Health

Grant Program: NCMRR Early Career Research Award (R03)
Agency: National Institutes of Health PAR-17-161
RFP Website: https://grants.nih.gov/grants/guide/pa-files/PAR-17-161.html
Brief Description: The NCMRR Early Career Research (ECR) Award is different from other NIH R03 programs, including the Parent Announcement. It is restricted to clinical and basic scientists who are in the early stages of their independent career in rehabilitation research. The research should be focused on one or more of the areas within the biomedical and behavioral mission of NCMRR: pathophysiology and management of chronically injured nervous and musculoskeletal systems; repair and recovery of motor and cognitive function; functional plasticity, adaptation, and windows of opportunity for rehabilitation interventions; rehabilitative strategies involving pharmaceutical, stimulation, neuroengineering approaches, exercise, motor training, and behavioral modifications; pediatric rehabilitation; secondary conditions associated with chronic disabilities; improved diagnosis, assessment, and outcome measures; and development of orthotics, prosthetics, and other assistive technologies and devices. The expected outcome from projects funded under this mechanism is the acquisition of necessary preliminary data for a subsequent research project grant (R01) application.

The proposed project may or may not be hypothesis-driven since the goal is to collect the necessary preliminary data sufficient to apply for an R01 grant. The project may aid in the formulation of hypotheses and may be milestone-driven or descriptive in scope. Given that the goal is to collect preliminary data, R03 projects may be less immediately impactful or significant compared to the typical R01. It is not an expectation that this R03 project will likely "move the field forward" at this stage.

Preliminary data are not required. However, the applicant PD/PI should have sufficient information to give confidence to the reviewers that the proposed work is feasible and that data derived from the project would likely be suitable as preliminary data for a subsequent R01 application.
Awards: The combined budget for direct costs for the entire project period may not exceed $200,000. No more than $100,000 in direct costs may be requested in any single year.
Letter of Intent: Not required.
Deadline: April 21, 2017, March 30, 2018, March 29, 2019, by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.
Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.
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Grant Program: Data Science Research: Personal Health Libraries for Consumers and Patients (R01)
Agency: National Institutes of Health PAR-17-159
RFP Website: https://grants.nih.gov/grants/guide/pa-files/PAR-17-159.html
Brief Description: Increasingly, consumers and patients have access to a broad and complex array of personal health information that is relevant to the state of their health. Health-related information can come from diverse sources, such as mass media and social networks, health care organizations, government agencies, clinicians, family members and friends. Health-related information also comes in many different formats, such as data from an individual's electronic medical record, family histories and genealogies, data streams from activity trackers, personal genome sequences, articles, videos about diseases and treatments, and public research data sets.

It is well known that, while patients discuss personal health decisions and health information with the clinicians from whom they receive care, they also seek health information from other sources that are increasingly digital, and are constantly changing, enriched with new streams of data and new types of data. National biomedical research initiatives are emerging, such as the Precision Medicine Initiative Cohort Program ("All of Us SM" https://www.nih.gov/research-training/allofus-research-program) and the Million Veteran Program (http://www.research.va.gov/MVP/), that invite citizens to share personal digital health data and biospecimens with researchers. There are also collaborative initiatives such as Patients Like Me © (https://www.patientslikeme.com/) wherein patients contribute personal health data for citizen science projects.

To bring the benefits of big data research to consumers and patients, new biomedical informatics and data science approaches are needed, shaped to meet the needs of consumers and patients, whose health literacy, language skills, technical sophistication, education and cultural traditions affect how they find, understand and use personal health information. Novel data science approaches are needed to help individuals at every step, from harvesting to storing to using data and information in a personal health library. Areas of development suggested below are not meant to limit the scope or creativity of proposed projects.

- Constructing a personal health library: informatics approaches that help a person gather together different types of health data/information/knowledge into a single, searchable resource for personal use, including intelligent mapping tools for vocabulary used to describe elements of the library.
- Managing a personal health information library: novel informatics approaches that make it easy for an average user to expand or remove entries, make notes or corrections, including intelligent tools that alert the user to new information about topics covered in a personal health information library.
- Using a personal health library: data science and informatics approaches that make it easy to find and use the information stored there, including visual tagging, text summarization, graphics translation, knowledge mapping, suggestions for tutorials, analytic and visualization techniques that make the information understandable based on characteristics of the individual user or group.
- Digital librarian/assistant for personal health library: data science and informatics approaches that bring machine intelligence to the management and use of a personal health information library through personalized alerts and suggestions, literacy aids, translators or other approaches, taking into account characteristics of the individual user or group.

Applicants must base their proposed work on an informed profile of the intended users, and, the work should be developed through interaction with the user. The strongest projects will provide approaches that incorporate health data and information from more than one source, such as diagnostic images and links to full-text articles or genome sequence data linked to a family health history. An application should be centered on the problem area being addressed and the intended audience, propose a possible solution that employs novel data science or informatics, and undertake a pilot that will result in evidence of the degree of success and/or needed next steps. Applicants should expect to involve the intended users in their work.

Applicants may propose new tools or extensions to the capabilities of existing open source tools such as personal health record systems, by adding new features or extending capabilities of the tool. In either case, scientific innovation is key. Applicants are encouraged to take advantage of freely available public information resources available from NLM and others, such as MedLINEPlus, Genetics Home Reference, PUBMED Central, Online courses and tutorials.

Applicants should plan to undertake one or more pilots to test their ideas with the intended user group. If pilots focus on a single disease or health condition, applicants should provide assurance that their approach is generalizable to others. Awardees are expected to share the results of their work through publication, and through open source mechanisms for data or resource sharing. The plan for data/resource sharing will be discussed during the initial scientific merit review.

Awards: Up to $250K direct costs may be requested in any single year.

Letter of Intent: March 31, 2017; February 16, 2018.

Deadline: May 1, 2017; March 19, 2018), by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.

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

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Grant Program: CTSA Program Data to Health (CD2H) Coordinating Center (U24)
Agency: National Institutes of Health RFA-TR-17-006
RFP Website: https://grants.nih.gov/grants/guide/rfa-files/RFA-TR-17-006.html
Brief Description: Translating biomedical discoveries into clinical applications that improve human health is a complex process with high costs and substantial failure rates. This can result in a delay of years or decades before discoveries in biomedical research result in health benefits for patients and communities. Recognizing the need to improve translation, the National Institutes of Health (NIH) established the CTSA Program in 2006. Within the context of the CTSA Program, translation is the process of turning observations in the laboratory, clinic, and community into interventions that improve the health of individuals and the public – from diagnostics and therapeutics to medical procedures and behavioral interventions. In 2011, the CTSA Program became part of the National Center for Advancing Translational Sciences (NCATS). The mission of NCATS is to catalyze the generation of innovative methods and technologies that will enhance the development, testing, and implementation of diagnostics and therapeutics across a wide range of human diseases and conditions. To accomplish this, NCATS promotes excellence in translational science – a relatively new field of inquiry focused on understanding and improving the scientific and operational principles underlying each step of the translational process. To accelerate this process, NCATS further promotes innovation in translational research to develop, demonstrate, and disseminate advances across the translational science spectrum.

Applicants for the CD2H-CC should design projects that:

1) Support and enhance a collaborative informatics community for the CTSA Program by:

- Facilitating the communication with key stakeholders, including the CTSA Program informatics domain task force and External Scientific Consultants, to identify high impact informatics projects that advance and encompass the full spectrum of translational research, including preclinical research, clinical research and/or the engagement of communities in research.
- Providing a governance structure for the CTSA Program community that develops a transparent, reproducible, and inclusive process for the evaluation of such high impact informatics projects.
- Providing an inclusive framework to collaboratively develop well-defined multi-site projects that should include time-limited milestones, expected outcomes and evaluation measures.

- Create a process for the assessment of merit-based projects that may include the consideration of the project's impact within the CTSA Program, overall goals of enhancing efficiency and performance, and/or reducing costs.
- Establishing processes and methods for common IT architecture for the CTSA Program Consortium including defining technical standards, identifying security requirements, and identifying and integrating existing resources.
- Fostering and promoting the development of an academic attribution and reimbursement framework for informatics products and processes. These processes could allow the contribution to be used for academic promotion.
- Providing a secure internet-based infrastructure (web-portal or other method) to support communications, document and resource sharing. Innovative synchronous and asynchronous communication and messaging are encouraged for the various activities.

2) Develop Good Data Practice (GDP) of clinical and research data to maximize the potential for health impact of various types of data and to facilitate rigorously conducted research by:
- Promoting the use of clinical and research data that are machine readable and that adhere to the FAIR (findable, accessible, interoperable, and re-useable) principles:
- *Findable:* Data should be uniquely and persistently identifiable and should minimally contain basic machine actionable metadata.
- *Accessible:* Data should be accessible so it can be always obtained by machines and humans, after appropriate authorization, through a well-defined telecommunications protocol (TCP) or internet provider (IP).
- *Interoperable:* Promoting interoperable data with the use or creation of metadata annotation/algorithms, a formal accessible language for knowledge representation, and using standard vocabularies [Systemized Nomenclature of Medicine-Clinical Terms (SnoMed-CT), International Classification of Diseases Ninth and Tenth Revision (ICD-9 / ICD-10), Human Phenotype Ontology (HPO), Monarch, Unified Medical Language System (UMLS), Logical Observation Identifiers Names and Codes (LOINC), etc.)
- *Re-useable:* Promoting data re-usability with relevant attributes, data usage license, and provenance (integrity and validity).

3) Promote software development standards for interoperability by:
- Creating and/or enhancing the use of software development standards. There is high need for the development and use of software development standards in order to facilitate the creation of collaborative informatics tools, methods, processes, and technologies that will be widely used to advance translational science.
- Facilitating the collaborative engagement of other stakeholders [e.g. federal partners and standards bodies such as the National Library of Medicine (NLM), Food and Drug Administration (FDA), Health Level Seven International (HL7), Office of the National Coordinator for Health Information Technology (ONC), Clinical Data Interchange Standards Consortium (CDISC), etc.].
- Supporting best practices to ensure the licensing of products, methods, and processes developed with the support of federal funds are freely available (open source) for the CTSA Program community and other stakeholders. This may include the following considerations as consistent with standard software development life cycle requirements:
- *Quality control:* assurances that all products developed under this cooperative agreement meet the highest standards of quality including usability, functionality, dependability, interoperability, security, deployment and maintenance.
- *Accessibility:* products that are developed under this cooperative agreement should become a national resource that could be used within the collaborative informatics laboratory environment and be accessible to all investigators.

- *Provenance:* Ensure derivatives of the products are owned by the authors of said products.
- *Maintenance:* Plans for maintenance of the products produced.
- *Support:* Ensure that customer support is available and responsive.
- *Interoperability:* Ensure that all products developed under this cooperative agreement could be interoperable and that the source code will be accessible.
- *Evaluation measures:* Metrics for performance of the product should be made available.

4) Foster collaborative innovation in the area of informatics tools, methods and processes by:
- Creating a collaborative informatics laboratory to be used as a CTSA Program consortium-wide resource, where novel ideas and products could be created, tested, prototyped, disseminated and maintained as well as collaboratively used.
- Fostering the identification of commercial tools by stakeholders that are thought to provide high value for the Consortium to facilitate translational science projects. The CD2H-CC may be a central negotiator with vendors of commercial tools.
- Developing a sustainable model for the informatics products produced and used. This may include developing a public private partnership model that would allow the possibility for investigators to develop and commercialize their tools and encouraging entrepreneurship that may include a mechanism where derivative versions of a product can be used for commercialization.

5) Stimulate the use of cutting edge biomedical research informatics by providing data science education for CTSA Program researchers.
- Disseminate educational informatics resources and other products and provide a forum that will provide an assessment of the value of these products.
- Disseminate high-quality educational resources and materials (e.g. Massive Open Online Courses or MOOCs), including workshops, externship offerings, conferences and courses.

6) Evaluate the impact of CD2H-CC activities to enhance health care through the use of informatics resources. This may include:
- Developing and implementing a model for continuous quality improvement (CQI) where projects are continuously measured and modified.
- Developing a system where quantifiable, measurable, and actionable results of the impact of the products of the CD2H-CC are reported.
- Supporting the publication of the impact of the tools, methods, and processes deployed.

Awards: Application needs to reflect the actual needs of the proposed project and are limited to $3.5M per year in direct costs.

Letter of Intent: March 14, 2017

Deadline: April 14, 2017, by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on 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: Development of Socially-Assistive Robots (SARs) to Engage Persons with Alzheimer's Disease (AD) and AD-Related Dementias (ADRD), and their Caregivers (R43/R44)
Agency: National Institutes of Health PAR-17-108
Companion Opportunities: PAR-17-107, STTR R41/R42- Phase I, Phase II, and Fast Track
RFP Website: https://grants.nih.gov/grants/guide/pa-files/PAR-17-108.html
Brief Description: The purpose of this Funding Opportunity Announcement (FOA) is to encourage Small Business Innovation Research (SBIR) research and development of next-generation socially-assistive robots (SARs) to enhance health and well-being, reduce illness and

disability, and improve quality of life for individuals with Alzheimer's disease (AD) and Alzheimer's-disease-related dementias (ADRD), and for caregivers of AD and ADRD patients.

This FOA targets the development of SARs that would function as companion robots providing psychosocial support (enhancing mood, mitigating the effects of loneliness, and enhancing social connection and communication), physiological interventions (e.g., stress reduction through the provision of biofeedback or other forms of behavioral therapy), and assistance with care management and activities of daily living. To achieve these ends, this FOA encourages a multi-disciplinary approach to foster collaborations between geriatricians (particularly those with knowledge of cognitive impairment and dementia), psychologists, neurologists, computer scientists, and mechanical, electrical, and software engineering professionals.

NIA anticipates that the development of next-generation SARs would enable AD and ADRD patients and their caregivers to preserve and, to the extent possible, enhance their psychosocial and cognitive coping skills and resources. To these ends, NIA seeks research and development of SARs that would provide capabilities and resources to compensate for AD and ADRD-related challenges and deficits, including the capabilities to interpret and translate cognitive intent (to perform certain activities), make context-based decisions, and help AD/ADRD patients perform activities of daily living. Ultimately, NIA anticipates that these SARs would be capable of remote operation and assist in the delivery of healthcare and social support in settings otherwise lacking the caregiving infrastructure necessary to support AD and ADRD patients.

Awards: Budgets up to $350,000 total costs per year for Phase I and up to $2,000,000 total costs per year for Phase II may be requested.

Letter of Intent: 30 days prior to the application due date.

Deadline: Standard dates apply, by 5:00 PM local time of applicant organization.

*** Note new SBIR/STTR Standard Due Dates.

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

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Department of Defense/US Army/DARPA/ONR

Grant Program: DoD Precision Trauma Care Research Award
Agency: Department of Defense USAMRAA W81XWH-18-DMRDP-PTCRA
Website: http://open-grants.insidegov.com/l/48322/DoD-Precision-Trauma-Care-Research-Award-W81XWH-18-DMRDP-PTCRA
Brief Description: In support of the Precision Medicine Initiative1, the OASD(HA) identified "precision medicine" as a top science and technical priority for the FY17 DHP RDT&E funds (this is also applicable to FY18 DHP RDT&E funds) and directed DHA to increase the use of "big data" and interdisciplinary approaches, establish a fundamental understanding of military disease and injury, and advance health status assessment, diagnosis, and treatment tailored to individual Service members and beneficiaries. For this Program Announcement/Funding Opportunity, precision medicine is defined as "an emerging approach for disease treatment and prevention that takes into account individual variability in genes, environment, and lifestyle for each person."2 Precision medicine pioneers a new model of patient-powered research that aims to accelerate biomedical discoveries and provide clinicians with new tools, knowledge, and approaches to select more accurate treatment and prevention strategies that will work best for individual patients. The intent of the Precision Trauma Care Research Award (PTCRA) is to support research applying precision medicine concepts to trauma care. In order to improve the care of combat casualties, the JPC-6/CCCRP requires capabilities to more accurately diagnose and treat injuries. In general, the field of trauma care progresses as empirical evidence accumulates. Accumulated

evidence supports the reduction of unwarranted practice variability (e.g., protocol-driven care). Reduction in practice variability leads to refinement of protocols through improved diagnostic and prognostic indicators that account for patient-specific variables such as injury pattern, co-morbidities, demographics, and morphometric data. These approaches are further refined by incorporation of near-term patient-specific variables such as injury progression, response to interventions, and theranostic indicators. The result is a precision medicine approach for trauma care that drives application of interventions to improve outcomes following trauma. The JPC-6/CCCRP seeks to develop precision medicine approaches for trauma care in the most challenging of environments, including point-of-injury care on the battlefield, deployed healthcare facilities such as casualty collection points, forward surgical teams, and combat support hospitals. This challenge of diverse combat environments and medical capabilities also requires research to develop new solutions to include support for medical providers in the assessment, diagnosis, and treatment of military trauma in out-of-hospital settings (point of injury, austere environment, or en route care) with limited resources through Role 4.3 Proposed research should consider the entire continuum of trauma care and must be focused on enabling patient-specific interventions and improved outcomes rather than "one size fits all" population-based tools and techniques.

Awards: Various; Estimated Funding Available: $4,870,000

Department of the Army - USAMRAA posted this science and technology and other R&D cooperative agreement on February 10, 2017. Department of the Army - USAMRAA is awarding 6 cooperative agreements with an estimated funding amount of $29,200,000 total for DoD Precision Trauma Care Research Award.

Full Proposal Deadline: Applications for this cooperative agreement are due June 15, 2017.

Contact Information: CDMRP Help Desk; Phone: 301-682-5507 Email: help@eBRAP.org

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Grant Program: 2017 Broad Agency Announcement
Agency: Department of Defense W912HZ-17-BAA-01
Website: http://open-grants.insidegov.com/l/48307/2017-Broad-Agency-Announcement-W912HZ-17-BAA-01
Brief Description: The U.S. Army Engineer Research and Development Center (ERDC) has issued a Broad Agency Announcement (BAA) for various research and development topic areas. The U.S. Army Engineer Research and Development Center (ERDC) includes the Coastal and Hydraulics Lab (CHL), the Geotechnical and Structures Lab (GSL), the Reachback Operations Center (UROC), the Environmental Lab (EL) and the Information Technology Lab (ITL) in Vicksburg, Mississippi, the Cold Regions Research and Engineering Lab (CRREL) in Hanover, New Hampshire, the Construction Engineering Research Lab (CERL) in Champaign, Illinois, and the Geospatial Research Laboratory (GRL) in Alexandria, Virginia. The ERDC is responsible for conducting research in the broad fields of hydraulics, dredging, coastal engineering, instrumentation, oceanography, remote sensing, geotechnical engineering, earthquake engineering, soil effects, vehicle mobility, self-contained munitions, military engineering, geophysics, pavements, protective structures, aquatic plants, water quality, dredged material, treatment of hazardous waste, wetlands, physical/mechanical/ chemical properties of snow and other frozen precipitation, infrastructure and environmental issues for installations, computer science, telecommunications management, energy, facilities maintenance, materials and structures, engineering processes, environmental processes, land and heritage conservation, and ecological processes. This research is conducted by Government personnel and by contract with educational institutions, non-profit organizations and private industries.

Awards: Various

Full Proposal Deadline: This cooperative agreement was posted on February 09, 2017 and applications are due on January 31, 2018. You can still apply for this opportunity! See the section below for steps to apply.

Contact Information: Michael Lee; Contract Specialist; Phone 601-634-3903; michael.g.lee@usace.army.mil

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Grant Program: AFRL-NM Tech Transfer and Education Outreach (STEM) Partnrship Intermediary Agreement

Agency: Department of Defense AFRL FOA-RVKV-2017-0001

Website: http://open-grants.insidegov.com/l/48305/AFRL-NM-Tech-Transfer-and-Education-Outreach-STEM-Partnrship-Intermediary-Agreement-FOA-RVKV-2017-0001

Brief Description: The AFRL Directed Energy Directorate (RD) and Space Vehicles Directorate (RV) are interested in receiving proposals under this announcement for multiple funding opportunities in support of the RD and RV Office of Research and Technology Applications (ORTA), herein referred to as AFRL-NM. These opportunities are for Partnership Intermediary Agreement(s) (PIAs) for two topic areas; 1) Technology Transfer (T2) and 2) Education Outreach (STEM). Innovative approaches to accomplish the objectives for these topic areas are of particular interest.

Awards: Various; Estimated available funding: $6,670,000

Full Proposal Deadline: Feb 08, 2022 Initial baseline proposals are due 9 March 2017 not later than 1500 MST. See announcement for additional proposal submission instructions.

Contact Information: Julian Landavazo; julian.landavazo@us.af.mil; phone (505) 853-0071

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Department of Energy

Grant Program: Stewardship Science Academic Alliances (SSAA) Program

Agency: Department of Energy Advanced Research Projects Agency Energy

DE-FOA-0001634

Website: http://open-grants.insidegov.com/l/48138/Stewardship-Science-Academic-Alliances-SSAA-Program-DE-FOA-0001634

Brief Description: The Stewardship Science Academic Alliances (SSAA) Program was established in 2002 to support state-of-the-art research at U.S. academic institutions in areas of fundamental physical science and technology of relevance to the SSP mission. The SSAA Program provides the research experience necessary to maintain a cadre of trained scientists at U.S. universities to meet the nation's current and future SSP needs, with a focus on those areas not supported by other federal agencies. It supports the DOE/NNSA's priorities both to address the workforce specific needs in science, technology, engineering, and mathematics and to support the next generation of professionals who will meet those needs.

Awards: Awards may vary between $1 to $3 million. Approximately $18 million available in total funds.

Deadline: Apr 30, 2017 Applications should be received by April 30, 2017 and not later than 23:59 ET in Grants.gov.

Contact Information: Grants Management Specialist Patricia M. Parrish 505-845-4057 Patricia.Parrish@nnsa.doe.gov

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NASA

Grant Program: SPACE TECHNOLOGY RESEARCH GRANTS PROGRAM EARLY CAREER FACULTY (ECF)
Agency: NASA NNH17ZOA001N-17ECF-B1
 Website:
https://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId=%7BABF4264B-6D71-F670-F10E-19DB21BC6BBD%7D&path=open
Brief Description: The STRG Program within STMD is fostering the development of innovative, low-TRL technologies for advanced space systems and space technology. The goal of this lowTRL endeavor is to accelerate the development of groundbreaking, high-risk/high-payoff space technologies, not necessarily directed at a specific mission, to support the future space science and exploration needs of NASA, other government agencies, and the commercial space sector. Such efforts complement the other NASA Mission Directorates' focused technology activities which typically begin at TRL 3 or higher. The starting TRL of the efforts to be funded as a result of this Appendix will be TRL 1 or TRL 2; typical end TRLs will be TRL 2 or TRL 3. See Attachment 2 of the NRA for TRL descriptions.

This Appendix seeks proposals to develop unique, disruptive, or transformational space technologies that have the potential to lead to dramatic improvements at the system level — performance, weight, cost, reliability, operational simplicity, or other figures of merit associated with space flight hardware or missions. Although progress under an award may be incremental, the projected impact at the system level must be substantial and clearly defined. This Appendix does not seek literature searches, survey activities, or incremental enhancements to the current state of the art (SOA).

This Appendix exclusively seeks proposals that are responsive to one of the four topics described in 1.3. Proposals that are not responsive to any of these topics, as specifically described below, will be considered non-compliant and will not be submitted for peer review. NASA anticipates addressing other topics in future ECF and ESI Appendix releases.

The topics described in 1.3 are aligned with NASA's Technology Roadmaps (http://www.nasa.gov/offices/oct/home/roadmaps/index.html).
Awards: $200k per year up to 3 years.
Letter of Intent: March 3, 2017
Full Proposal Deadline: March 31, 2017
Contact: Doris Daou Planetary Science Division Science Mission Directorate NASA Headquarters Washington, DC 20546-0001 Telephone: (202) 358-1686 E-mail: Doris.Daou@nasa.gov
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National Endowment of Humanities

Grant Program: Fellowships
Agency: National Endowment of Humanities
Website: https://www.neh.gov/grants/research/fellowships
Brief Description: Fellowships support individuals pursuing advanced research that is of value to humanities scholars, general audiences, or both. Recipients usually produce articles, monographs, books, digital materials, archaeological site reports, translations, editions, or other scholarly resources in the humanities. Through NEH-Mellon Fellowships for Digital Publication, the National Endowment for the Humanities and The Andrew W. Mellon Foundation jointly support individual scholars pursuing interpretive research projects that require digital

expression and digital publication. To be eligible for this special opportunity, an applicant's plans for digital publication must be essential to the project's research goals. That is, the project must be conceived as digital because the nature of the research and the topics being addressed demand presentation beyond traditional print publication. Successful projects will likely incorporate visual, audio, and/or other multimedia materials or flexible reading pathways that could not be included in traditionally published books, as well as an active distribution plan. Applicants interested in research projects that require digital expression and digital publication are encouraged to apply for [NEH-Mellon Fellowships for Digital Publication](#).

Awards: $50,400 per Fellowship

Letter of Intent: Not Required

Full Proposal Deadline: April 12, 2017

Contact: Contact NEH's Division of Research Programs at 202-606-8200 or fellowships@neh.gov

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Grant Program: Institutes for Advanced Topics in the Digital Humanities
Agency: National Endowment of Humanities
Website: https://www.neh.gov/grants/odh/institutes-advanced-topics-in-the-digital-humanities
Brief Description: The Institutes for Advanced Topics in the Digital Humanities program supports national or regional (multistate) training programs for scholars, humanities professionals, and advanced graduate students to broaden and extend their knowledge of digital humanities. Through this program NEH seeks to increase the number of humanities scholars and practitioners using digital technology in their research and to broadly disseminate knowledge about advanced technology tools and methodologies relevant to the humanities.

The projects may be a single opportunity or offered multiple times to different audiences. Institutes may be as short as a few days and held at multiple locations or as long as six weeks at a single site. For example, training opportunities could be offered before or after regularly occurring scholarly meetings, during the summer months, or during appropriate times of the academic year. The duration of a program should allow for full and thorough treatment of the topic. These professional development programs may focus on a particular computational method, such as network or spatial analysis. They may also target the needs of a particular humanities discipline or audience. Today, digital resources and other complex data—their form, manipulation, and interpretation—are as important to humanities study as more traditional research materials. Datasets, for example, may represent digitized historical records, high-quality image data, or even multimedia collections, all of which are increasing in number due to the availability and affordability of mass data storage devices and international initiatives to create digital content. Moreover, extensive networking capabilities, sophisticated analytical tools, and new collaboration platforms are simultaneously providing and improving interactive access to and analysis of these data as well as a multitude of other resources. The Institutes for Advanced Topics in the Digital Humanities program seeks to enable humanities scholars in the United States to incorporate advances like these into their scholarship and teaching.

Awards: Awards normally range from one to three years and from $50,000 to a maximum of $250,000 in outright funds.

Proposal Deadline: March 14, 2017**.**

Contact: Contact the NEH Office of Digital Humanities via e-mail at odh@neh.gov. Applicants wishing to speak to a staff member by telephone should provide in an e-mail message a telephone number and a preferred time to call.

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