Grant Opportunity Alerts: Issue: ORD-GOA-2014-03

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

Keywords and Areas Included: DOE, BioFuels, NSF, Cyberspace, Security, Partners in Innovation, AFOSR, Instrumentation Grant, Humanities, Cultural Heritage Collection, NIH, Clinical and Translational Engineering

Department of Energy

Program: TARGETED ALGAL BIOFUELS AND BIOPRODUCTS (TABB)
Agency: DOE; DE-FOA-0001162

BAA Website: https://eere-exchange.energy.gov/Default.aspx?Search=DE-FOA-0001162&SearchType=#FoaId561a56f3-f75c-4edc-b9f2-074b6fc76a13

Brief Description: The Office of Energy Efficiency and Renewable Energy (EERE) is issuing, on behalf of the Bioenergy Technologies Office (BETO), a Funding Opportunity Announcement (FOA) DE-FOA-0001162, entitled “Targeted Algal Biofuels and Bioproducts (TABB)”.

The TABB FOA seeks alternative pathways to overcome two of the key barriers to commercializing algal biofuels: the high cost of producing algal biomass and the low yield of target biofuel and bioproduct feedstocks produced from algae. Specifically, the TABB FOA will support: 1) the development of algae cultures that produce valuable bioproducts alongside fuels to increase the overall value of the biomass; and 2) the development of crop protection and CO2 utilization technologies to boost culture productivity and yield to reduce the cost of the biomass. The goal is to enable a modeled minimum fuel selling price, assuming mature technologies, of less than $5 gasoline gallon equivalent for algal biofuels through creation of valuable products alongside fuels and achieving increased biomass productivity that leads to higher feedstock yields. The TABB FOA includes two topic areas:

1. Consortia that bring together upstream and downstream expertise to develop biofuels and bioproducts from algae that are comparable and competitive with their petroleum-based counterparts and have broad national market impacts;

2. Single investigator or small team technology development projects focused on developing crop protection or CO2 utilization technologies to raise the biomass productivity and demonstrate that the increase could lead to higher yields.

Webinar: TABB FOA Informational Webinar will be held on Wednesday, October 8, 2014 from 1:00pm-3:00pm EST
Deadlines:

Submission Deadline for Concept Papers: 10/30/2014 at 5:00 P.M. EST

Submission Deadline for Full Applications: 12/15/2014 at 5:00 P.M. EST

National Science Foundation

Grant Program: Partnerships for Innovation: Building Innovation Capacity (PFI:BIC)

Agency: NSF, 14-610; Directorates of Engineering, Computer and Information Systems, Computer and Networking Systems, and Information and Intelligent Systems

RFP Website: http://www.nsf.gov/pubs/2014/nsf14610/nsf14610.htm

Brief Description: The Partnerships for Innovation: Building Innovation Capacity (PFI:BIC) program supports academe-industry partnerships, which are led by an interdisciplinary academic research team with a least one industry partner to build technological, human, and service system innovation capacity. These partnerships focus on the integration of technologies into a specified human-centered smart service system with the potential to achieve transformational change in an existing service system or to spur an entirely new service system. These technologies have been inspired by existing breakthrough discoveries.

A "smart" service system is a system capable of learning, dynamic adaptation, and decision making based upon data received, transmitted, and/or processed to improve its response to a future situation. The system does so through self-detection, self-diagnosing, self-correcting, self-monitoring, self-organizing, self-replicating, or self-controlled functions. These capabilities are the result of the incorporation of technologies for sensing, actuation, coordination, communication, control, etc. The system may exhibit a sequence of features such as detection, classification, and localization that lead to an outcome occurring within a reasonable time.

Human interaction with technologies and with physical and virtual realities can produce and deliver service(s) never before imagined. A signature characteristic of service systems in the NSF context is first and foremost, a smart service system that is human-centered. A human-centered service system involves users, recipients, beneficiaries, providers, and/or decision makers utilizing the information and capability provided by the service. Second, interactions between humans and physical/virtual realities necessarily happen and are integral to the “service”. Sometimes, these interactions happen in different sequences and combinations, in parallel or series, among physical and virtual worlds before interacting with the human reality. Sometimes, interactions occur with the human world from the start, but interactions always occur. These interfaces with humans can take many forms: e.g., co-creation, interaction, response, needs assessment, surveillance, etc. Third, the interactions need to add value to humans; for an activity to become a service, a human or group of humans need to ultimately benefit from the interactions either directly or indirectly.

Awards: Up to $1,000,000, with an award duration of three (3) years; ten awards are expected.

Limit on Number of Proposals per Organization:2

Letter of Intent: Required*,* 5 p.m. (proposer's local time)*:* December 03, 2014

Proposal Deadline: *,* 5 p.m. (proposer's local time)*:* January 28, 2015;

Grant Program: Secure and Trustworthy Cyberspace (SaTC)

Agency: NSF, 14-599; Directorates of Computer, Information Science and Engineering, Engineering, Computer and Information Systems, Computer and Networking Systems, and Information and Intelligent Systems

RFP Website: http://www.nsf.gov/pubs/2014/nsf14599/nsf14599.htm

Brief Description: Cyberspace has transformed the daily lives of people for the better. The rush to adopt cyberspace, however, has exposed its fragility and vulnerabilities: corporations, agencies, national infrastructure and individuals have been victims of cyber-attacks. In December 2011, the National Science and Technology Council (NSTC) with the cooperation of NSF issued a broad, coordinated Federal strategic plan for cybersecurity research and development to "change the game," minimize the misuses of cyber technology, bolster education and training in cybersecurity, establish a science of cybersecurity, and transition promising cybersecurity research into practice. This challenge requires a

dedicated approach to research, development, and education that leverages the disciplines of mathematics and statistics, the social sciences, and engineering together with the computing, communications and information sciences.

Awards:
- Small projects: up to $500,000 in total budget, with durations of up to three years
- Medium projects: $500,001 to $1,200,000 in total budget, with durations of up to four years
- Large projects: $1,200,001 to $3,000,000 in total budget, with durations of up to five years

Deadlines:

Nov 10, 2014 October 27, 2014 - November 10, 2014 MEDIUM Projects November 12, 2014 - November 20, 2014 LARGE ProjectsDecember 4, 2014 - December 19, 2014 CYBERSECURITY EDUCATION Projects January 2, 2015 - January 14, 2015 SMALL Projects

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Air Force Office of Scientific Research

Program: Defense University Research Instrumentation Program (DURIP) FY 2015

Agency: AFOSR: PA-AFOSR-2014-001

RFP Website: www.grants.gov

Brief Description: The Department of Defense (DoD) announces the Fiscal Year 2015 Defense University Research Instrumentation Program (DURIP), a part of the University Research Initiative (URI). DURIP is designed to improve the capabilities of U.S. institutions of higher education (hereafter referred to as “universities”) to conduct research and to educate scientists and engineers in areas important to national defense, by providing funds for the acquisition of research equipment. This announcement seeks proposals to purchase instrumentation in support of research in areas of interest to the DoD, including areas of research supported by the Army Research Office (ARO), the Office of Naval Research (ONR), and the Air Force Office of Scientific Research (AFOSR), hereafter referred to collectively as “the administering agencies.”

Awards: Through this DURIP competition, the DoD intends to award approximately $46 million for FY 2015, subject to the availability of funds. These funds will be awarded via grants made by the administering agencies. Grants will be for the purchase of research equipment costing $50,000 or more, which typically cannot be purchased within the budgets of single-investigator awards. With few exceptions (see section III.4.b.ii) an individual award may not exceed $1,500,000 in DoD funding. In FY 2014, 149 awards totaling $40 million were made. They ranged from approximately $50,000 to $1,102,000, averaging $267,824.

Deadline: 4:00PM Eastern Time, 17 November 2014.

National Endowment for the Humanities

Program: Sustaining Cultural Heritage Collections

Agency: National Endowment for the Humanities

RFP Website: http://www.neh.gov/grants/preservation/sustaining-cultural-heritage-collections

Brief Description: Sustaining Cultural Heritage Collections (SCHC) helps cultural institutions meet the complex challenge of preserving large and diverse holdings of humanities materials for future generations by supporting sustainable conservation measures that mitigate deterioration and prolong the useful life of collections.

Libraries, archives, museums, and historical organizations across the country face an enormous challenge: to preserve collections that facilitate research, strengthen teaching, and provide opportunities for life-long learning in the humanities. Ensuring the preservation of books and manuscripts, photographs, sound recordings and moving images, archaeological and ethnographic artifacts, art, and historical objects requires institutions to implement measures that slow deterioration and prevent catastrophic loss. This work is best accomplished through preventive conservation, which encompasses managing relative humidity, temperature, light, and pollutants in collection spaces; providing protective storage enclosures and systems for collections; and safeguarding collections from theft and from natural and man-made disasters.

Awards: $350,000

Deadline: December 3, 2014

National Institutes of Health

Program: Clinical and Translational Science Award (U54)

Agency: NIH, RFA-TR-14-009; National Center for Advancing Translational Sciences

RFP Website: http://grants.nih.gov/grants/guide/rfa-files/RFA-TR-14-009.html

Brief Description: The purpose of this funding opportunity announcement (FOA) is to invite applications to participate in the Clinical and Translational Science Award (CTSA) program which supports high quality translational and clinical research locally, regionally, and nationally, and fosters innovation in methods, training, and career development.

The NCATS CTSA program as a whole actively supports the full spectrum of clinical and translational research while encouraging flexibility for each hub to build on its own unique strengths. To reach and maintain this goal, defined sets of capacities and resources should be present at each hub so that it can act as a qualified partner in the CTSA program, promoting an environment of quality, safety and efficiency for translational and clinical research. CTSA hubs should be agents of continuous improvement as they identify gaps and opportunities in the research process and develop innovative solutions. CTSA hubs should promote team science, and the development of a well-trained and skilled translational workforce. An additional important objective for each CTSA hub is the support of collaboration among CTSA hubs towards building a national CTSA network. This national network will allow for the efficient planning and implementation of high-quality multi-center research, will harmonize standards and best practices, and will enhance translational research training through shared innovative curricula, mentorship programs, online courses, or “externships” to take advantage of unique learning opportunities outside of the CTSA hub. In response to the IOM report, an enhanced CTSA program will have an increased focus on the network as a whole, and its goal to realize the promise of translational science. Synergy within the CTSA program is likely to yield greater impact than any sum of unique, individual efforts. Strengthening synergy will add to the justification of the nation’s investment into the CTSA program.

Awards: Application budgets for the U and K awards are expected to be between $4M and $10M.

Letter of Intent: December 15, 2014

Submission Deadline: January 15, 2015