

Office of Research Newsletter – December 12, 2014

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Part I. News and Announcements

\$1M Available for Digital Innovation that Moves Us Beyond the Bug Box

The U.S. National Science Foundation (NSF) and the American Institute of Biological Sciences (AIBS) have launched the Beyond the Box National Digitization Innovation Competition. The initiative will award \$1 million to the individual or team who develops a novel way to accurately and efficiently capture digital images of insect specimens and their associated data from a standard museum drawer of insects.

“The Beyond the Box Digitization Competition is designed to inspire the ingenuity of the American public, and to engage scientists, engineers, and everyday inventors, in an effort to solve a problem that has been slowing the rate of scientific discovery,” said Dr. James L. Olds, Assistant Director for the Directorate for Biological Sciences at NSF.

“Insects are an amazingly diverse group of organisms that represent an overwhelming amount of living biological diversity on Earth,” said AIBS President Dr. Joseph Travis. “Very few insect species are pests and most play important roles in our ecosystems. They pollinate many of our crops, recycle nutrients and energy, and are sources of food for the other animals in the food chain. Unfortunately, despite all we know about insects, we have yet to describe all of the species of insects and, in fact, we are still discovering new species at a surprisingly high rate.”

“We share the planet with so many insects, wouldn't it be wonderful if when we find a new one in our backyard we could take a picture of it and have that matched to an image in a museum somewhere. We could learn the name, understand what its role in the ecosystem is, or understand if it is an invasive species that might devastate our garden or nearby crop fields,” said Dr. Norman Johnson, Director of the Triplehorn Insect Collection at The Ohio State University, and

the Chairman of the Planning Committee that established the rules for the competition.

For more than 250 years, scientists have collected millions of insects from around the world. These specimens are now held in more than 1,000 natural science collections in universities and museums across the United States alone. Unfortunately, many of these specimens remain unknown to science, education, natural resource and public health managers, and the general public. Quite simply, they have been locked away in cabinets.

"With technological advances in robotics, imaging, data capture and management, among other areas, it is now possible to develop new tools to digitally capture images of insect specimens and their associated data," said Johnson.

Official contest rules and guidance are available at beyondthebox.aibs.org. Inquires related to the contest must be submitted on the website, where the questions and answers will be posted.

The contest opened on December 5, 2014 and will close on September 4, 2015. A winner will be selected following a competitive judging process and on-site demonstration by the finalists.

A Weekly Newsletter from DOE Office of Energy Efficiency and Renewable Energy (EERE): <http://apps1.eere.energy.gov/news/emn.cfm>

MARK YOUR CALENDAR

February 4-5, 2015, 2015 Naval Future Force Science & Technology Expo, Washington, D.C.

The Naval Future Force Science & Technology (S&T) Expo is the premiere event sponsored by the Office of Naval Research (ONR). Formerly titled ONR S&T Partnership Conference, it provides access to naval leaders who will discuss the objectives of the revised Naval S&T Strategy; the status of key programs; and new research opportunities within the Navy and Marine Corps community.

More at

https://www.fbo.gov/index?s=opportunity&mode=form&id=fd61fc8b4c98a2e0d87d4f6980658e59&tab=core&_cview=0

Part II. Funding Opportunities

AFRL

RFI: Next Generation Live, Virtual, and Constructive Training Waveform

https://www.fbo.gov/index?s=opportunity&mode=form&id=37d3a0ee7bf79f7762caf792c8ac0fa8&tab=core&_cview=0

Proposal Due Date TBD

Pre-solicitation: Agile Manufacturing for Intelligence, Surveillance and Reconnaissance Program

https://www.fbo.gov/index?s=opportunity&mode=form&id=6c2fae2c7a27c448e8cf37385f5d3ba4&tab=core&_cview=0

Proposal Due Date TBD

DARPA

Transparent Computing

https://www.fbo.gov/index?s=opportunity&mode=form&id=f96d7b0bcb81d1362ffa9a5dce2e3b99&tab=core&_cview=0

February 10, 2015

Electrical Prescriptions

https://www.fbo.gov/index?s=opportunity&mode=form&id=0d64f811eb06ea87b3302ba49242dc36&tab=core&_cview=0

February 25, 2015

Agnostic Compact Demilitarization of Chemical Agents

<http://www.grants.gov/web/grants/view-opportunity.html?oppId=270354>

March 2, 2015

Navy

Research and Development for Underwater Communications Transceivers

https://www.fbo.gov/index?s=opportunity&mode=form&id=503d95e9f32eeb48ea58e2a9caf4aaf9&tab=core&_cview=0

February 6, 2015

Multi-INT Research Initiatives at the Naval Postgraduate School

<http://www.grants.gov/web/grants/view-opportunity.html?oppId=266534>

September 30, 2015

DOE

Notice of Intent to Issue FOA Entitled Clean Energy Manufacturing Innovation Institute on Smart Manufacturing: Advanced Sensors, Controls, Platforms, and Modeling for Manufacturing

<https://eere-exchange.energy.gov/#FoaId6d17538f-e07e-4f36-9570-8ad5f2164159>

Full Application Due Date TBD

Micro-Scale Optimized Solar-Cell Arrays With Integrated Concentration (MOSAIC)

<https://arpa-e-foa.energy.gov/#FoaId493debb8-c8a7-42bc-a9a0-2c18492c082b>

Concept Paper Due Date: January 22, 2015

NASA

Small, Innovative Missions for Planetary Exploration

<http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId=%7B1DDABD1B-6261-1D15-874A-67BB42357C3A%7D&path=open>

January 13, 2015 (Step 1); March 13, 2015 (Step 2)

Terrestrial Ecology

<http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={5620CBD5-3C36-5AC5-1B8C-3DEE1435AF95}&path=open>

NOI Due Date: January 20, 2015. Proposal Due Date: March 20, 2015

Severe Storm Research

<http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={05C8B845-2A46-C01C-49DD-B613EF2D405E}&path=open>

NOI Due Date: January 23, 2015. Proposal Due Date: March 3, 2015

Astrophysics Research and Analysis

<http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={C2025992-0DFA-D79E-A99B-9DE84DBE214A}&path=open>

March 20, 2015

Strategic Astrophysics Technology

<http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={04437F11-1BA9-9F2C-85F3-87E5263B4292}&path=open>

March 20, 2015

NIH

Unconventional Roles of Ethanol Metabolizing Enzymes, Metabolites, and Cofactors in Health and Disease (R01)

<http://grants.nih.gov/grants/guide/pa-files/PA-15-058.html>

February 5, 2015

The NCI Transition Career Development Award (K22)

<http://grants.nih.gov/grants/guide/pa-files/PAR-15-056.html>

February 12, 2015

NCI Mentored Research Scientist Development Award to Promote Diversity (K01)

<http://grants.nih.gov/grants/guide/pa-files/PAR-15-064.html>

February 12, 2015

NCI Transition Career Development Award to Promote Diversity (K22)

<http://grants.nih.gov/grants/guide/pa-files/PAR-15-063.html>

February 12, 2015

Unconventional Roles of Ethanol Metabolizing Enzymes, Metabolites, and Cofactors in Health and Disease (R21)

<http://grants.nih.gov/grants/guide/pa-files/PA-15-057.html>

February 16, 2015

Building on High Impact Basic Neurobiology Through Assay Development: Advancing Tools for Therapeutic Discovery (R01)

<http://grants.nih.gov/grants/guide/pa-files/PA-15-066.html>

February 23, 2015

NSF

Geotechnical Engineering and Materials

<http://www.grants.gov/web/grants/view-opportunity.html?oppId=270252>

February 1, 2015 - February 17, 2015; September 1, 2015 - September 15, 2015

Infrastructure Management and Extreme Events

<http://www.grants.gov/web/grants/view-opportunity.html?oppId=270275>

February 1, 2015 - February 17, 2015; September 1, 2015 - September 15, 2015

NEH

Digital Humanities Implementation Grants

<http://www.grants.gov/web/grants/view-opportunity.html?oppId=270291>

February 18, 2015

Please note that this bulletin is not intended to be an exhaustive listing of funding opportunities. Your input and feedback are always welcome. Please send your comments and requests to be removed from the distribution list to huangj7@rpi.edu.