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Policy News from NSC Alliance

Through the NSC Alliance partnership with the American Institute of Biological Sciences, we are pleased to provide NSC Alliance members with the following public policy update. If you have any questions or require additional information regarding any of the following items, please contact NSC Alliance director of public policy Dr. Robert Gropp at 202-628-1500 x 250 or at rgropp@aibs.org.

Director of Smithsonian's Natural History Museum to Step Down

Cristián Samper, the director of the National Museum of Natural History (NMNH), will resign in July to become president and CEO of the Wildlife Conservation Society. Samper has served as director of NMNH since 2003.

"It has been a privilege to serve at the Smithsonian as director of this great museum, with a team of dedicated professionals and act as a steward of the largest natural history collection in the world," said Samper. "As a tropical biologist, I recognize the urgent need to conserve the natural and cultural diversity of this planet. It is my goal to contribute to these vital efforts as head of the Wildlife Conservation Society."

During his tenure, Samper helped the museum upgrade collections storage facilities and expand digitization of collections. He also oversaw the renovation of several major exhibits, including the Ocean Hall, Hall of Human Origins, and Hall of Mammals. Samper also worked to ensure that NMNH would continue to serve as a scientific leader in the long-term by recruiting and training the next generation of museum researchers.

Samper was a co-founder of the Encyclopedia of Life, an online database about life on Earth. Prior to becoming director, Samper was deputy director and staff scientist at the Smithsonian Tropical Research Institute in Panama.

Read more at http://newsdesk.si.edu/releases/cristian-samper-step-down-director-smithsonian-s-national-museum-natural-history.

Head of NSF BIO Shares His Vision for the Directorate's Future

The National Science Foundation's (NSF) new assistant director of the Directorate for Biological Sciences (BIO), Dr. John Wingfield, recently shared his vision for BIO with the AIBS journal, *BioScience*. The interview, which appears in the January issue, explores future directions in biological research, the budget for the directorate, and public access to data.

"[T]he organism in its environment is the ultimate frontier," said Dr. Wingfield. "How we are going to understand the organism-environment interaction in a changing world is a huge challenge. Going from genomes to phenomes is one way; also, the other way, top-down, from phenome back to genome, is a useful way to look at it."

With respect to the recent change to an annual grant cycle in the Divisions of Environmental Biology and Integrative Organismal Systems, Wingfield hopes that the new system will reduce the burden on reviewers and researchers: "You expect that with this system, where you have more time to assess the reviews, time to talk with the program officer, over the same timescale, you'll get funded, and you'll get a lot more feedback. One thing we're reminding people of is that despite this new cycle, we will still be funding the same number of grants and the same number of beginning investigators each year."

Wingfield recognizes the uncertainties in the current federal funding environment, and views protection of existing core programs as the first priority. An austere budget, notes Wingfield, could result in the delay of the opening of new synthesis centers.

Wingfield also expects NSF-funded researchers to start sharing their data. Mandated open access to data will be implemented in the future, although the details are still evolving.

Read the full interview with Dr. Wingfield for free at http://www.jstor.org/stable/10.1525/bio.2012.62.1.6.

National Science Board Proposes Revisions to Merit Review Criteria

The National Science Board (NSB) has suggested changes to the criteria the National Science Foundation (NSF) uses to evaluate grant proposals. The existing two merit review criteria, which consider the intellectual merit and broader impacts of the proposed research, would be retained. Changes, however, would be made to better define the criteria, in order to clarify misunderstandings within the research community.

The largest change was made to the broader impacts criterion, which considers a project's potential to benefit society and contribute to the achievement of specific, desired societal outcomes, such as expanding minority participation in science. The revised criterion takes into account a proposal's potential to benefit society and explore original or potentially transformative concepts, as well as the qualifications of the researcher(s), adequacy of resources,

and organization and rationality of the plan. The existing broader impacts criterion does not place an emphasis on the ability of a grantee to achieve his/her stated outcomes.

The NSB also recommended the addition of three overarching principles to better guide researchers and reviewers. The principles aim to ensure that NSF supports high quality research that advances the frontiers of knowledge; that NSF-supported research should contribute, in the aggregate, to achieving societal goals; and that assessment of NSF-funded projects should use appropriate metrics that account for the size and scope of the work.

NSF has already taken action to transition to use of the revised criteria, according to a memorandum from Ray M. Bowen, chair of the NSB.

Download the report at http://www.nsf.gov/nsb/publications/2011/meritreviewcriteria.pdf.

IMLS Releases Strategic Plan for 2012-2016

The Institute of Museum and Library Services (IMLS) has released a new strategic plan. The document identifies the mission of IMLS to inspire libraries and museums to advance innovation, learning, and cultural and civic engagement by providing leadership through research, policy development, and grant-making.

According to a press release by IMLS: "The strategic plan establishes a clear framework for performance improvement that emphasizes evidence-based program development and evaluation and includes identifying and sharing best practices; aligning grant-making to best practices and research results; networking to build capacity; and assessing progress."

Five strategic goals will underpin IMLS programs and investments:

- IMLS places the learner at the center and supports engaging experiences in libraries and museums that prepare people to be full participants in their local communities and our global society.
- IMLS promotes museums and libraries as strong community anchors that enhance civic engagement, cultural opportunities, and economic vitality.
- IMLS supports exemplary stewardship of museum and library collections and promotes the use of technology to facilitate discovery of knowledge and cultural heritage.
- IMLS advises the President and Congress on plans, policies, and activities that sustain and increase public access to information and ideas.
- IMLS achieves excellence in public management and performs as a model organization through strategic alignment of IMLS resources and prioritization of programmatic activities, maximizing value for the American public.

The new plan was developed with the input of 1,400 participants. NSC Alliance submitted comments on the draft plan in August 2011 (see http://nscalliance.org/?p=405).

Read the plan at http://www.imls.gov/about/strategic_plan.aspx.

NSF Releases 2012 S&E Indicators

The National Science Foundation has released Science and Engineering Indicators: 2012. This report highlights major developments in international and U.S. science and technology and is generally the source for data related to the STEM workforce. Among the topics included in the report are: Global Science and Technology Trends; Global Expansion of Research and Development Expenditures; Overseas Expenditures by Multinational Corporations; Global Higher Education Trends; Expanding Global Researcher Pool; Researcher Outputs; Changing International Research Collaborations; and, many other key indicators of investment, output and competitiveness.

As noted in the summary conclusion of the report: "Science and technology are becoming ubiquitous features of many developing countries, as they integrate into the global economy. As a group, developing countries appear to either have been less severely affected by the worldwide financial crisis and recession than the United States, EU, and Japan, or to have recovered more rapidly. Governments in these countries have held firm in building S&T into their development policies, as they vie to make their economies more knowledge- and technology-intensive to ensure their competitiveness. These policies include long-term investments in higher education to develop human talent, infrastructure development, support for research and development attraction of foreign direct investment and technologically advanced multinational companies, and the eventual development of indigenous high-technology capabilities."

Furthermore, the report asserts that: "The resulting developments open the way for widespread international collaboration in science and engineering research. The broad trend in this direction is reflected in increasing numbers of research articles in the world's leading journals with authors in multiple countries. These researchers are increasingly able to draw on high-quality work done outside the traditional S&T locales, and international connections are deepened by globally mobile experts. Competitive elements, such as the quest for international talent, enter as well. Once largely limited to major Western nations, the quest for international talent is now pursued by many and "brain drain" has evolved into cross-national flows of highly trained specialists. Governments are eager to develop more modern economies that will increase the wealth of their populations. They seek to establish specialty niches and indigenous world-class capacity and to become competitive in international investment, development, and trade."

Access the report at http://www.nsf.gov/statistics/seind12/.

Specimens Collected by Darwin Discovered in British Collection

A British paleontologist has found a lost set of specimens collected by Charles Darwin. The fossils were found in a box in the British Geological Survey. The collection contains 314 slides of fossils prepared by Darwin, John Hooker, and others. Darwin collected some of the slides on his expedition on the HMS Beagle.

"To find a treasure trove of lost Darwin specimens from the Beagle voyage is just extraordinary," said Dr. Howard Falcon-Lang, the discoverer of the specimens. "We can see there's more to learn. There are a lot of very, very significant fossils in there that we didn't know existed."

The slides have been photographed and can be viewed online at http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/archives/jdhooker/home.html.

The Natural Science Collections Alliance is a Washington, D.C.-based nonprofit association that serves as an advocate for natural science collections, the institutions that preserve them, and the research and education that extend from them for the benefit of science, society, and stewardship of the environment. NSC Alliance members are part of an international community of museums, botanical gardens, herbariums, universities, and other institutions that house natural science collections and utilize them in research, exhibitions, academic and informal science education, and outreach activities. Website: www.NSCAlliance.org.

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