



August 29, 2013

Dear Sir or Madam,

Thank you for the opportunity to provide information about ‘big data’ collaborations. We would like to draw your attention to the Network Integrated Biocollections Alliance (NIBA), an initiative developed by the scientific community that will contribute to and benefit from big data collaborations.

The NIBA is a national scientific, engineering, and data mobilization initiative. When fully realized, NIBA will provide online access to digitized data for biological specimens held in natural history museums, university science departments, and government laboratories across the United States. Scientists have amassed and curated more than one billion specimens in more than 2,500 institutions across the United States. Once digitized, these specimens will represent millions or even billions of data points. These specimens and their associated data are maintained for research and education and to inform wise decisions about the environment, public health, food security, and commerce.

In 2010, with support from the National Science Foundation, the scientific community developed a Strategic Plan for NIBA. That plan outlines the elements required for an “inclusive, vibrant, partnership of U.S. biological collections that collectively will document the nation’s biodiversity resources and create a dynamic electronic resource that will serve the country’s needs in answering critical questions about the environment, human health, biosecurity, commerce, and the biological sciences.” The plan issues a strong and urgent call for an aggressive, coordinated, large-scale, and sustained effort to digitize the nation’s biological collections in order to mobilize their data, including images, through the Internet.

The Strategic Plan has been well received, but the scientific community also recognized a need to augment this plan by identifying the key steps, milestones, and stakeholders required to fully achieve its goals. Thus, the American Institute of Biological Sciences (AIBS) convened a workshop in the fall of 2012 to develop an Implementation Plan for NIBA (see <http://www.aibs.org/public-policy/biocollections.html>). Both documents have emerged from the biocollections community and have been widely informed through interactive workshops of experts. The broader scientific community and the public have also provided input that informed the final *Implementation Plan*.

The Implementation Plan emphasizes research applications while also highlighting important educational components and focusing on workforce training that will be necessary to achieve and sustain NIBA.

The report identifies many specific activities that can and should be led by individual scientific societies, biocollection institutions, federal and state agencies, colleges and universities, and other consumers of digitized data.

The Implementation Plan includes detailed recommendations to:

- Establish an organizational and governance structure that will provide the national leadership and decision-making mechanism required to implement NIBA and to fully realize its *Strategic Plan*.
- Advance engineering of the U.S. biocollections cyberinfrastructure.
- Enhance the training of existing collections staff and to create the next generation of biodiversity information managers.
- Increase support for and participation in NIBA by the research community and a broad spectrum of stakeholders.
- Establish an enduring and sustainable knowledge base.
- Infuse specimen-based learning and exploration into formal and informal education.

AIBS, the Natural Science Collections Alliance, and the Society for the Preservation of Natural History Collections are now working to implement some aspects of the NIBA.

If you have any questions or would like additional information, please do not hesitate to contact Dr. Robert Gropp, AIBS Director of Public Policy, at rgropp@aibs.org or 202-628-1500 x 250. NITRD is welcome to post this submission to a public web site.

Sincerely,

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