May 12, 2021

The Honorable Eddie Bernice Johnson  
Chairwoman  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
2321 Rayburn House Office Building  
Washington, DC 20515

The Honorable Frank Lucas  
Ranking Member  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
2321 Rayburn House Office Building  
Washington, DC 20515

The Honorable Haley Stevens  
Chairwoman  
Subcommittee on Research and Technology  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
1510 Longworth House Office Building  
Washington, DC 20515

The Honorable Michael Waltz  
Ranking Member  
Subcommittee on Research and Technology  
Committee on Science, Space, and Technology  
U.S. House of Representatives  
213 Cannon House Office Building  
Washington, DC 20515

Re: Endorsement of the NSF for the Future Act (H.R. 2225)

Dear Chairwoman Johnson, Ranking Member Lucas, Chairwoman Stevens, and Ranking Member Waltz:

On behalf of the Natural Science Collections Alliance, I thank you for crafting the bipartisan legislation, the National Science Foundation for the Future Act (H.R. 2225). The bill proposes making vital investments in the National Science Foundation’s (NSF) current scientific capacity while also expanding the agency’s potential to address emerging challenges. NSC Alliance is pleased to endorse this legislation, which articulates a strong commitment to our nation’s scientific and technological enterprise.

The Natural Science Collections Alliance is a non-profit association that supports natural science collections, their human resources, the institutions that house them, and their research activities for the benefit of science and society. Our membership consists of institutions that are part of an international network of museums, botanical gardens, herbaria, universities, and other institutions that contain natural science collections and use them in research, exhibitions, academic and informal science education, and outreach activities.

Scientific collections, and the collections professionals and scientists who make, care for, and study these resources, are a vital component of our nation’s research infrastructure. These
collections and their associated experts contribute to the expansion of our bioeconomy. Whether held at a museum, government managed laboratory or archive, or in a university science department, these scientific resources form a coordinated network of specimens, samples, and data (for example, genetic, tissue, organism, and environmental) that are a unique and irreplaceable foundation from which scientists are studying and explaining past and present life on earth.

NSF is the backbone of the U.S. scientific enterprise and is the only federal agency that funds basic research in all non-medical fields of science and engineering. NSF plays a unique role in protecting and expanding access to our nation’s scientific collections. NSF supports research that uses existing collections as well as studies that gather new natural history specimens.

NSF’s Directorates for Biological Sciences (BIO), Geosciences (GEO), and Social and Behavioral and Economic sciences support research and student training opportunities in natural history collections. NSF is an important supporter of national biological research infrastructure that houses natural history collections, such as living stock collections and field stations. NSF also funds evolving work to digitize high priority specimen collections. The result of this effort is that irreplaceable biological specimens and their associated data are now accessible through the Internet to researchers, educators, and the public. In addition to supporting research, NSF’s science, technology, engineering, and mathematics (STEM) education programs enhance the ability of museums, botanic gardens, zoos, and other research institutions to provide science learning opportunities for students.

We appreciate the emphasis placed on the importance of sustained support for biological research collections in H.R. 2225. Recent reports from the National Academies of Science, Engineering and Medicine and the Biodiversity Collections Network have highlighted the value of mobilizing biodiversity collections and data in spurring new scientific discoveries that grow our economy, improve our public health and wellbeing, and increase our national security. Both reports articulate a common vision of the future of biological collections and define a need to broaden and deepen the collections and associated data to realize the potential for biodiversity collections to inform 21st century science. This endeavor requires robust investments in our nation’s scientific collections, whether they are owned by a federal or state agency or are part of an educational institution or free-standing natural history museum or another research center. The investments proposed in H.R. 2225 would be critical in the efforts to mobilize biodiversity specimens and data in spurring new scientific discoveries.

The NSC Alliance supports the creation of a Directorate for Science and Engineering Solutions (SES) to fund translational research that complements the basic research supported by NSF’s existing directorates. The proposed investments in technological research will enable the biodiversity collections community to build the cyberinfrastructure and databases necessary to mobilize biodiversity data in ways that bolster 21st century science and drive innovation.
Investments in NSF programs that support natural science collections research and education are essential if we are to maintain our global leadership in innovation and biodiversity research. We also see these investments as critical for our efforts to grow diversity and inclusion in the scientific workforce. We support the bill’s provisions on increasing diversity, equity, and inclusion in the sciences and applaud the increased financial support proposed for the Graduate Research Fellowship Program. These are important steps towards enhancing recruitment and retention of underrepresented students.

We thank you for your leadership on this bipartisan effort to make much needed investments in our nation’s scientific enterprise and offer our endorsement. Please do not hesitate to contact NSC Alliance Executive Director Jyotsna Pandey (jpandey@aibs.org) if you have any questions or require further information to advance this legislation.

Sincerely,

John Bates
President