

**Testimony in Support of FY 2020 Funding for the
Institute of Museum and Library Services**

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Submitted by:

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Senate Committee on Appropriations

Subcommittee on Labor, Health and Human Services, Education, and Related Agencies

The Natural Science Collections Alliance appreciates the opportunity to provide testimony in support of fiscal year (FY) 2020 appropriations for the Institute of Museum and Library Services (IMLS). **We encourage Congress to reject the President's request to eliminate the IMLS and to instead provide IMLS with at least \$257 million in FY 2020.**

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.

Museums strengthen our national economy. They provide core educational and outreach programs to engage the public and contribute more than \$50 billion to the U.S. economy every year, support more than 726,000 American jobs, and generate \$12 billion in tax revenue. It is of paramount importance to invest in museums given the enormous economic and educational contributions of these institutions.

IMLS provides funding that helps museums with public outreach programs and strengthens the capacity of museums to improve the well-being of their communities. Its Office of Museum Services awards grants to museums for preserving and digitizing collections, educational programming, professional development, and community outreach. In addition to providing grants, the agency conducts critical research, facilitates state and regional collaboration, and supports national initiatives that benefit museums. Implementing the President's request to eliminate IMLS is irresponsible and will lead to a loss of critical data, resources, and infrastructure the nation requires to chronicle our shared experiences, advance research, and provide educational opportunities for people of all ages.

Investments in IMLS and its efforts to support scientific and educational advances in science collections, such as those that comprise natural history museums, are in the national interest. Scientific collections contribute to improved public well-being and national economic security.

This important documentation of our nation's heritage is irreplaceable; it cannot be reconstructed or reassembled at a later date. Specimens collected decades or centuries ago are increasingly used to develop and validate models that explain how species, including viruses, parasites, and pathogens have dispersed around the world, as well as how and when they might infect humans now and in the future.

The IMLS is the primary federal agency that supports public education programs at museums and an important source of funding for preserving scientific collections. Investments in IMLS programs that support natural science collections research and education are essential if we are to maintain our global leadership in innovation.

Scientific collections enable us to tell the story of life on Earth. There are more than 1,600 biological collections in the United States, with a significant number of these constituting the research and education resources of our nation's natural history museums. These resources are the result of more than 200 years of scientific investigation, discovery, and inventory of living and fossil species. Scientists have collected, studied, and curated more than one billion specimens within those collections. This work is on-going as new questions continue to be asked. The institutions that care for scientific collections are important research infrastructure for the United States that also provide students with hands-on training opportunities.

Natural science collections advance scientific research and education that informs actions to improve public health, agricultural productivity, natural resource management, biodiversity conservation, artistic and creative pursuits, and American economic innovation more generally. Current research involving natural science collections also contributes to the development of new cyberinfrastructure, data visualization tools, and improved data management practices. A few examples of how scientific collections have saved lives, enhanced food production, and advanced scientific discovery include:

- Scientists used museum specimens in U.S. collections to gather data on the distribution of the mosquito *Culex quadrofasciatus*, which is known to carry West Nile Virus and other pathogens. This allowed them to model the distribution of the mosquito under different climate scenarios to predict regions to which the species might spread. These models can assist public health officials working to prepare for disease outbreaks.
- Citrus bacterial canker disease wreaks havoc on fruit crops in Florida. Using plant specimens collected a century ago, scientists have analyzed the bacterium and traced its source. Knowledge of how the bacteria spreads allows scientists to develop effective control methods and to protect the U.S. citrus industry.
- In 2018, researchers from Boston University documented Tau proteins in the brains of fluid preserved museum specimens of Downy Woodpecker (*Dryobates pubescens*). These proteins are also found in humans with traumatic brain injuries. Because of the life history traits of woodpeckers, the researchers argue these birds may have evolved a level of resistance to traumatic head injuries that could offer insights for potential treatments of traumatic brain injury in humans.

Please support funding of at least \$257 million for IMLS for FY 2020.

Thank you for your thoughtful consideration of this request and for your prior support of the Institute of Museum and Library Services.