

June 5, 2019

RE: 2019 BCoN report

To whom it may concern:

On behalf of the Field Museum, I am writing to endorse the recently released report: *Extending US Biodiversity Collections to Promote Research and Education* developed by the Biodiversity Conservation Network. This community-informed vision document presents a roadmap of where collections databasing and digitization at institutions like ours need to collectively go in the next decade. As the report outlines, implementing and maintaining this vision will take governmental support and institutional collaboration and coordination to strengthen ties across the nation's collections. The result will be a network of networks that can effectively provide access to past, present, and future collections-based data for national and international science and education initiatives.

The vital need for these data is highlighted in many of the pressing concerns that result from the confluence between humanity and biodiversity on the planet, and the responsibility humanity has to be an effective steward going forward. Museums and collections form the core of what we know about local, regional, and global biodiversity, and the report describes how our community will take advantage of new technologies and collaborations to improve systems and increase our understanding of all species.

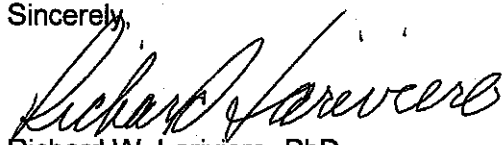
As an example, in 2016, scientists used museum specimens in U.S. collections to gather data on the distribution of the mosquito *Culex quadrofaciatus*, which is known to carry West Nile Virus and other pathogens. This allowed them to model the distribution of the mosquito under different climate scenarios to predict regions to which the species might spread. These models can assist public health officials working to prepare for disease outbreaks.

In 2018, researchers from Boston University documented Tau proteins in the brains of fluid preserved Field 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.

The next decade will see additional digitization of data for the most hyper-diverse taxonomic groups (e.g., insects and invertebrates), and will develop pipelines to link the growing number of associated data sets (e.g., genomics, photographs, and CT scans) for all biodiversity.

In expressing support for this report, we see it as a critical point in efforts to improve access and usage of the national and international treasure that are the biodiversity collections of the United States.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard W. Lariviere". The signature is written in a cursive style with a large, sweeping initial "R".

Richard W. Lariviere, PhD  
President and Chief Executive Officer