

iDigBio, the National Resource for Advancing Digitization of Biodiversity Collections

Dr. Larry Page

iDigBio is the National Resource for Advancing Digitization of Biodiversity Collections (ADBC) funded by the U.S. National Science Foundation and supported by the Natural Science Collections Alliance. Through ADBC, data and images for millions of biological specimens are being made available in electronic format for the research community, government agencies, students, educators, and the general public. The vision for ADBC is a permanent database of digitized information from all biological collections in the U.S. that will lead to new discoveries through research and better understanding and appreciation of biodiversity through improved education and outreach, which will result in improved environmental and economic policies.

iDigBio involves the development of a permanent and powerful cloud computing infrastructure to link biological data from collections across the U.S. into a single unified web interface, overcoming the “data silos” that currently exist across the country. Search and analytical tools enable users to mine diverse data, such as taxonomy, geographic location, 2- and 3-dimensional images, vocalizations, and molecular resources tied to specimens in collections. These data promote integrative biological research on living and fossil species and provide an immense resource for agricultural science and land use management, and assessing the impacts of climate change, invasive species, and other natural resource management issues.