Empowering the Collections Community

Digitization

Information dissemination

Collaboration

Broadening the diversity of our workforce

Gil Nelson
Integrated Digitized Biocollections
Florida State University

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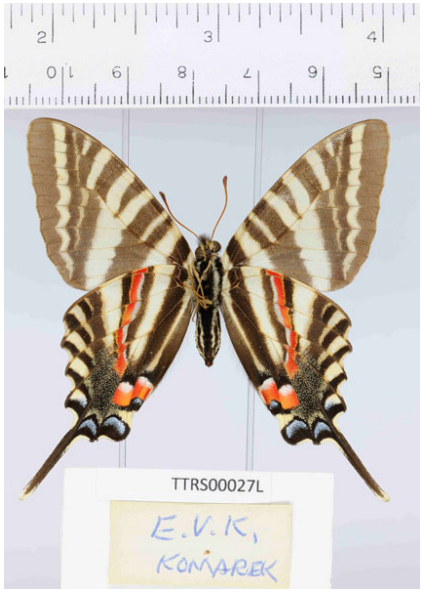
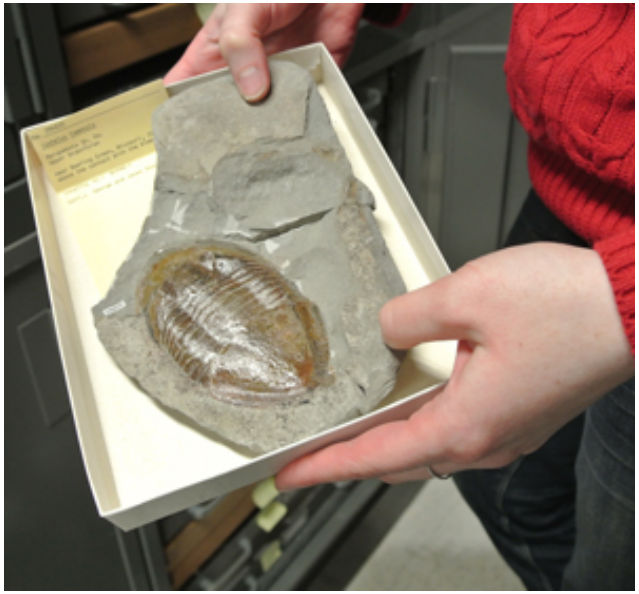
Estimates suggest that there may be 3 billion biological and paleobiological specimens currently deposited in the world's biodiversity collections, maybe 2 billion in U. S. museums and academic institutions. No one really knows!





Digitizing biodiversity collections

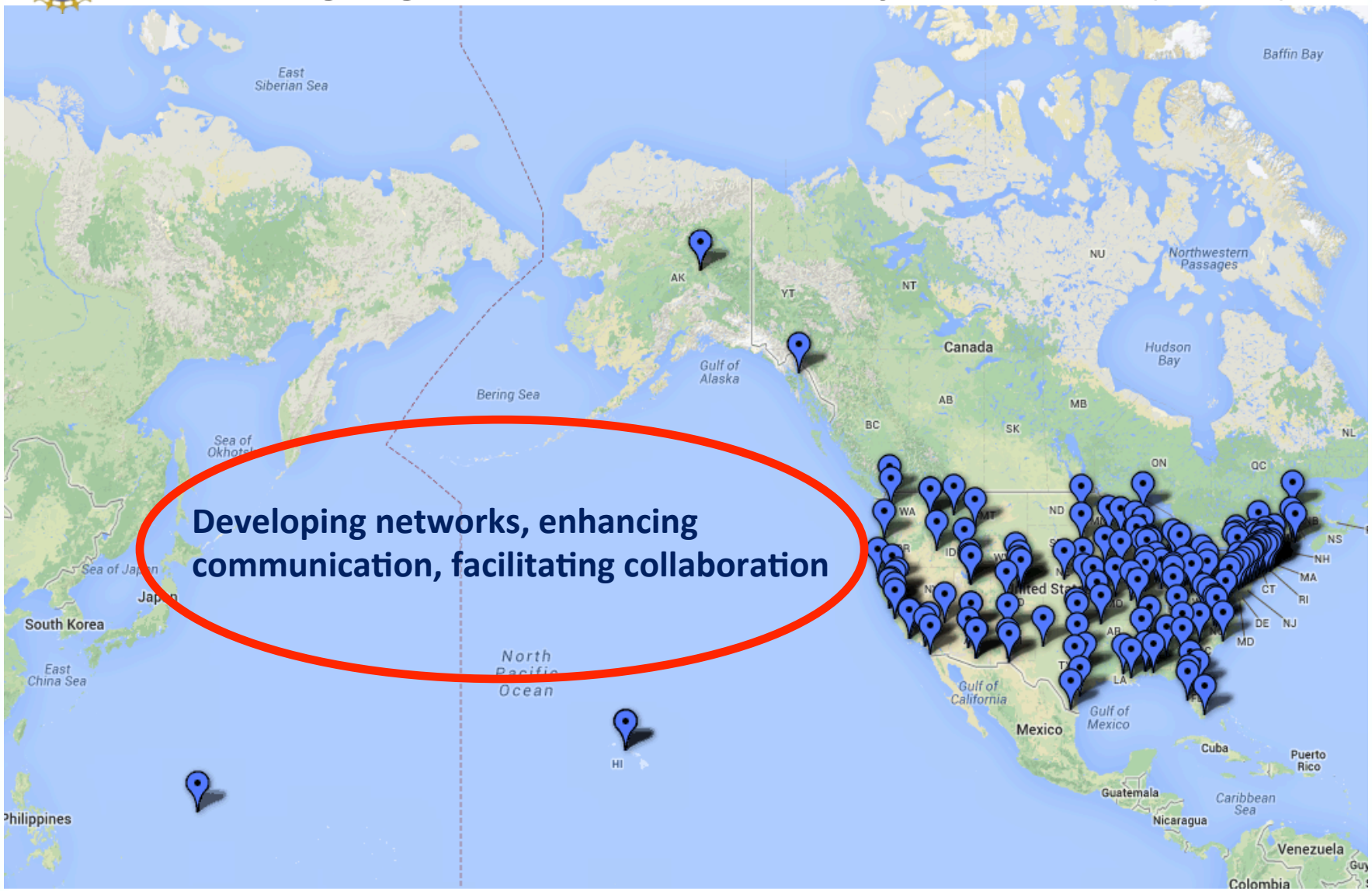
Serves science by making data accessible

Enhances enthusiasm for natural science

Builds constituencies for our collections

iDigBio
Integrated Digitized Biocollections

Advancing Digitization of Biodiversity Collections (ADBC)



To date: 10 TCNs, 152 unique institutions, ~276 projects, 50 states

iDigBio Integrated Digitized Biocollections

Definition and benefits of digitization

- Converting text and specimens to digital format
- Facilitating collaborative research (professionals and non-professionals)
- Reinforcing the link between professionals and non-professionals
- Broadening data accessibility to underscore the importance of collections
- Encouraging innovation and creativity in digital data creation, discovery, and use
- Bringing small collections out of the “dark”

Yale PEABODY MUSEUM OF NATURAL HISTORY

Empowering the collections community means being inclusive

Large Collections

+

Medium Collections

THE FLORIDA STATE UNIVERSITY
Biology Department
Robert K. Godfrey Herbarium

+

Small Collections

(Including biological research and field stations)

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Defining Small Collections

Collections that ARE small
Collections that FEEL small

Number of specimens

Number of staff

Budget

Integral to one's appointment

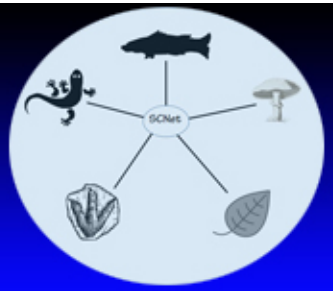
Teaching load

Committee assignments

Professional focus

SCNet Small Collections Network

Serving, Supporting, Connecting Natural History Collections



Empowering and including small collections means:

- Reaching out and incorporating small collections into the collections community
- Incorporating small collections data into data repositories
- Encouraging large collections to ensure small collections' sustainability
- Providing formal and informal networks that provide forums for small collections issues
- Resurrecting or otherwise saving orphaned collections from being lost to science

iDigBio Integrated Digitized Biocollections

It is not about how many specimens!

The successes and sustainability of the smallest among us is indicative of our success as a collections community.

Ensuring that we all succeed is our professional responsibility.

Altruism and selfishness!

Information Dissemination

In March 2012, the iDigBio Steering Committee established a series of preparation-specific digitization training workshops focused on helping collections managers get started with and/or enhance local digitization programs, all to be held at host institutions.

- DROID (Developing Robust Object->Image->Data, May 2012)
- Herbarium digitization (Valdosta State, September 2012)
- Fluid-preserved collections digitization (U. Kansas, March 2013)
- Dried insect collections digitization (Field Museum, April 2013)
- Collections Digitization (West Virginia, ASB, April 2013)
- Imaging fluid-preserved invertebrates (U. Michigan, September 2013)
- Georeferencing Train-the-Trainers (iDigBio, Gainesville, August 2103)
- Paleontology digitization (Yale Peabody Museum, September 2013)
- Small Herbarium Digitization (Florida State University, December 2013)
- Digitization in the South Pacific (Honolulu, March 2014)
- Paleoimaging (Austin, TX, April 2014)
- Small Herbarium Digitization (Boise, Botany 2014, July 2014)
- Leveraging Digitization Knowledge Across Multiple Domains (Santa Barbara, October 2014)

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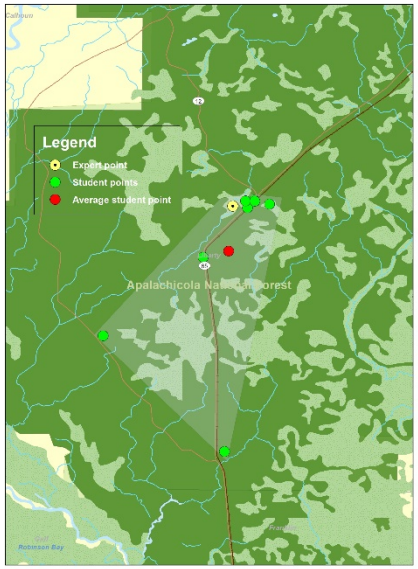

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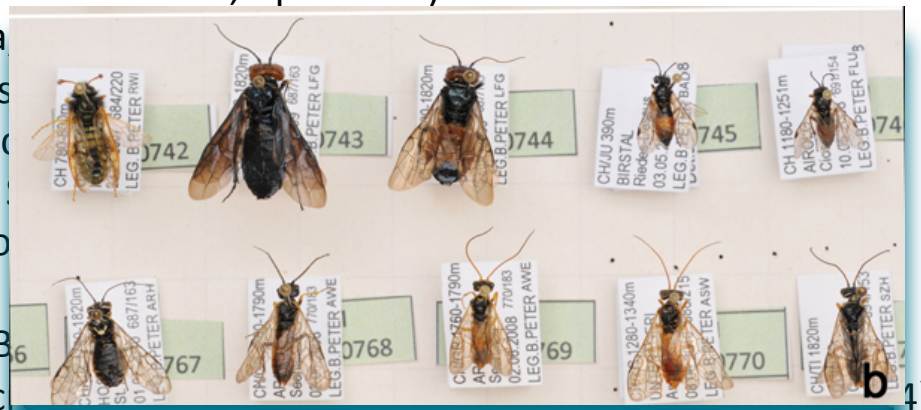

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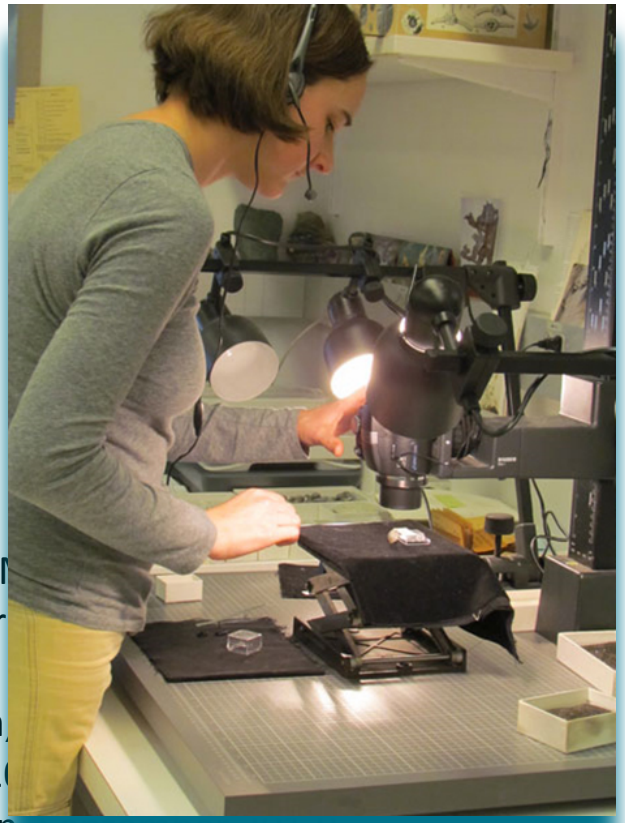

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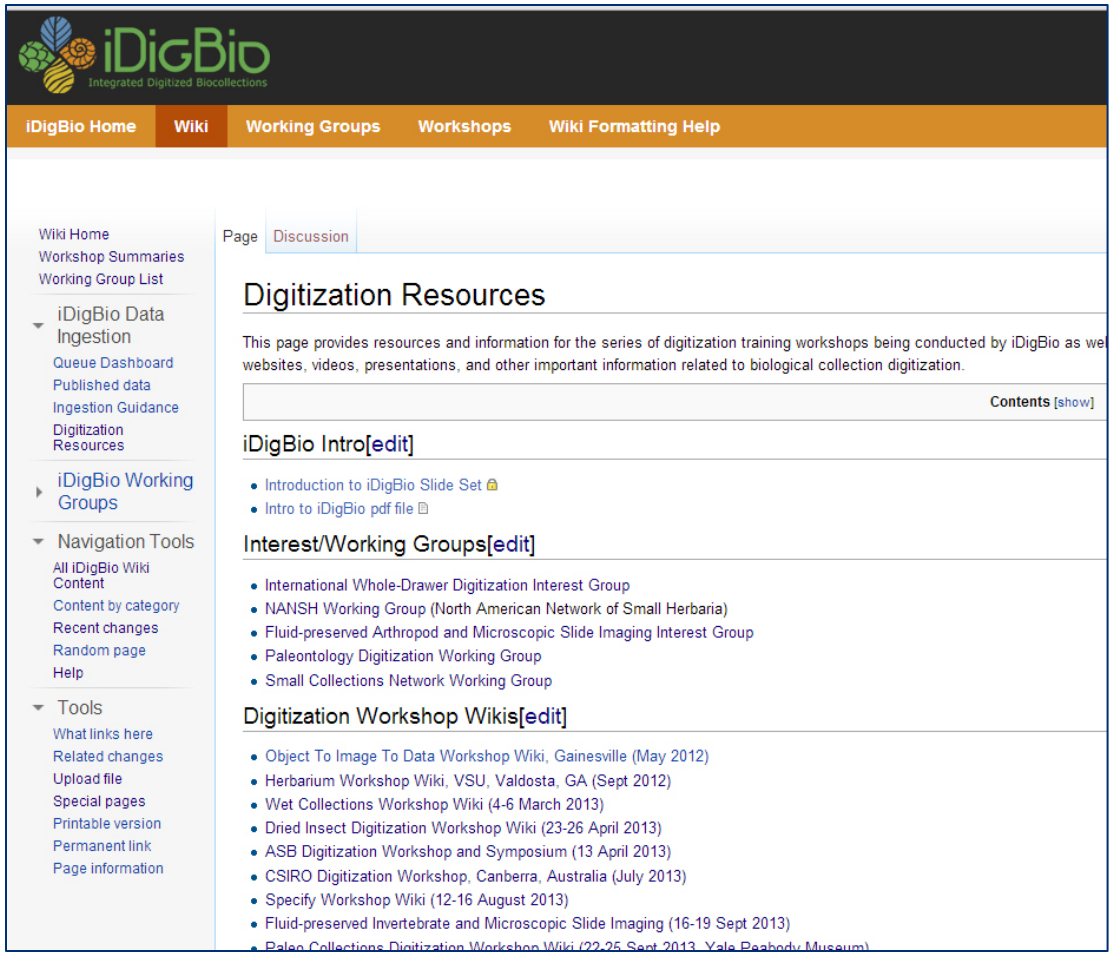
Collaborating on Best Practices

- Augmenting OCR Hackathon (Ft. Worth, February 2103)
- Original Source Materials Digitization (Yale Peabody Museum, March 2014)
- Recruiting and Retaining Small Collections in Digitization (Mt. Pleasant, MI, April 2014)
- CitScribe Hackathon (iDigBio, Gainesville, December 2013)
- Education and Outreach (iDigBio, Gainesville, January 2014)



Wikis
Interest groups
Working groups
Listservs

Value of networking, sharing, and collaboration

Networking scientists and collections is how science makes profound advances. (David Grimaldi, AMNH)

Broadening the diversity of our workforce

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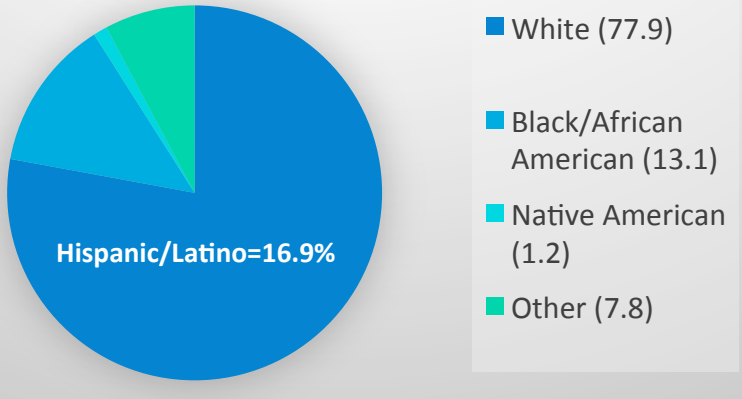
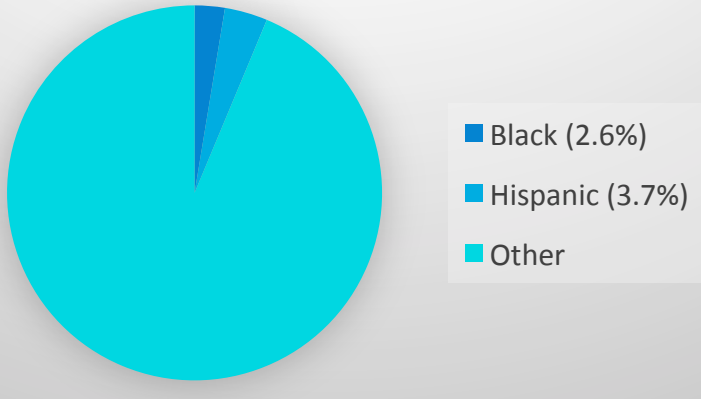
A Few Numbers

Population 2012 (%)



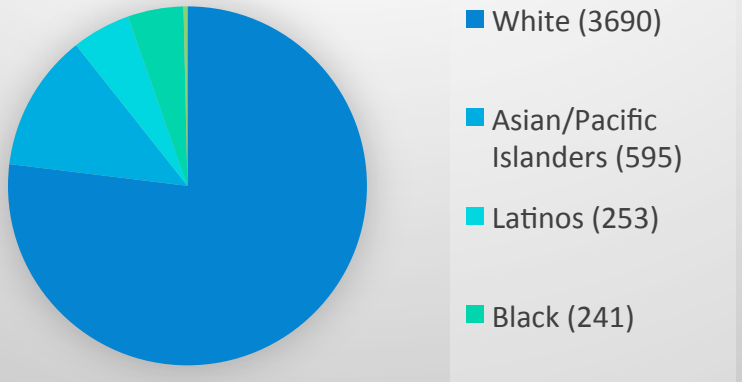
US Census Bureau: Quick Facts (http://quickfacts.census.gov/qfd/states/00000.html)

New PHDs 1993-2002



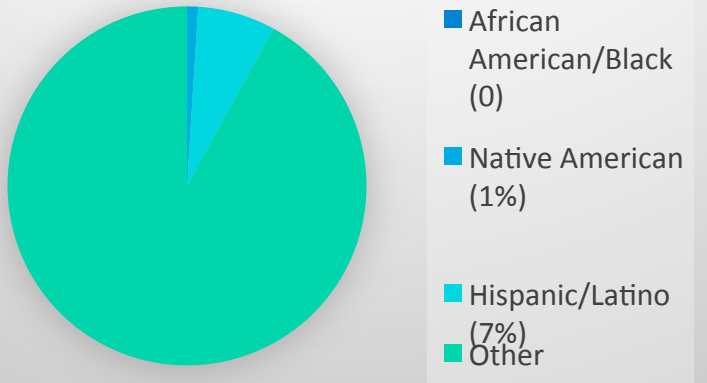
National Center for Education Statistics (http://ccv.med.harvard.edu/diversity.htm)

PHDs 2008



National Center for Education Statistics (http://ccv.med.harvard.edu/diversity.htm)

528 iDigBio Attendees



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Integrated Digitized Biocollections

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Broadening Minority Participation in the Biological Sciences: A Workshop Focused on Careers and Graduate Study Opportunities in Biology

Researchers
Browse our specimen portal

Collections Staff
Learn how your collection can benefit from our work

Teachers & Students
Learning resources & opportunities to engage

Space for this workshop is limited. To register, complete the online registration form.

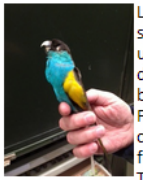
Please visit the workshop agenda for more information on the day's activities.

See the workshop flyer/announcement.

The University of Central Florida, University of Florida, Florida Museum of Natural History, and iDigBio are pleased to announce a **free 1-day workshop** for undergraduate students focusing on opportunities for careers and

graduate study in field and environmental biology, biodiversity, ecology, and evolution. The workshop is open to anyone. A primary goal is increasing minority participation in the biological sciences within such groups as African and Black Americans, Native Americans, and individuals of Hispanic ethnicity. Registration is open to freshmen, sophomores, juniors, seniors, and recent graduates. Click here for the agenda.

The workshop will be held at the University of Central Florida's Live Oak Center Saturday, February 1, 2014. Activities will begin at 10:00 a.m. with a keynote address by Dr. Scott Edwards, professor of organismic and evolutionary biology at Harvard University and division director at the National Science Foundation.



Lunch will be provided and will include a special opportunity to interact with undergraduate and graduate students, post-doctoral fellows, workshop speakers, and biology faculty from several universities. Following lunch, attendees will have the chance to explore several hands-on stations featuring a variety of scientific specimens. The end of the day will feature a reception and mixer with heavy hors d'oeuvres and the opportunity to win one of ten $25.00 Amazon gift cards as well as allow further opportunities for individualized conversation, personal attention, and networking.

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5

Sobering lesson learned:

Students majoring in biology have little knowledge or recognition that collections even exist, much less the opportunities they offer for research.

As one young woman put it:

You mean to tell me that I can make a living studying butterfly collections?

iDigBio
Integrated Digitized Biocollections

FLORIDA MUSEUM OF NATURAL HISTORY

What: Free career shadowing opportunity.
Who: Undergraduate students interested in a career in the biological sciences.
Where: Florida Museum of Natural History, University of Florida, Gainesville.
When: April 17-19, 2014.

Benefits

- Shadow biologists and museum scientists in their daily work.
- Learn about biological collections and their importance to biodiversity science.
- Spend time behind the scenes of a major museum.
- Get hands-on experience in the biological sciences.
- Experience first hand an array of career opportunities in the biological sciences.
- Meet and interact with working scientists.
- Begin establishing your professional network.

Scholarship includes 2 nights' lodging, meals, assistance with transportation.
Competitive. Limited to 10 students.

Apply by March 1: http://tinyurl.com/flmnhshadowing

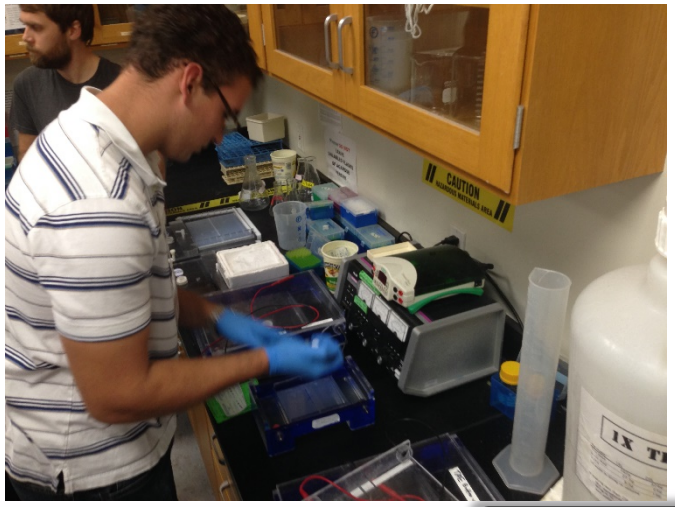
To learn more, e-mail Dr. Gil Nelson (gnelson.idigbio@gmail.com)

Fifteen students participated in this opportunity.

iDigBio Integrated Digitized Biocollections

Florida Undergraduate Research Conference (FURC)

Shadowing Days at the Florida Museum of Natural History



Shadowing Days at the Florida Museum of Natural History

Next up:

Field Museum

Goal: 150 students!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