

# iDigBio Workshops / Working / Interest Groups

## E & I/O Resources & Potential!



Deborah Paul, @idbdeb

Gainesville, Florida 15 -17 January 2014

Integrated Digitized Biocollections (iDigBio) E&O Workshop



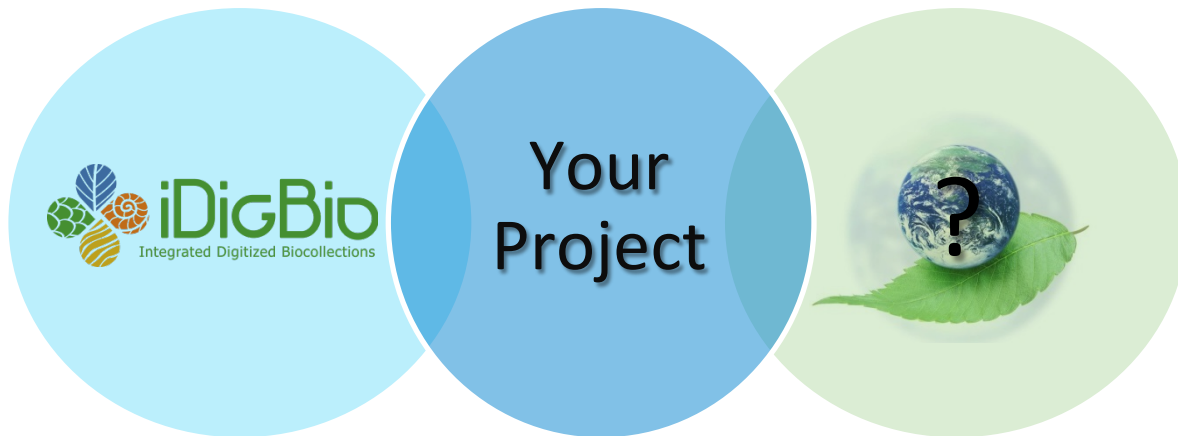
*iDigBio is funded by a grant from the National Science Foundation's Advancing Digitization of Biodiversity Collections Program (Cooperative Agreement EF-1115210). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation. All images used with permission or are free from copyright.*




## NIBA Implementation Plan - Goal 4

*Increase participation in and support for NIBA from a broad spectrum of stakeholders, both nationally and internationally.*

- 4.1. Align NIBA's strategic plan with road-mapping exercises of other broad-based biodiversity initiatives in order to *identify areas of overlap and synergy.*



# iDigBio E & I/O Potential

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Making data and images of millions of biological specimens available on the web

7,660,696  
Specimen Records

1,073,015  
Media Records

152  
Recordsets



**Why digitization matters**  
More about what we do and why

**Researchers**  
Learn about research directions



**Collections Staff**  
Learn how your collection can benefit from our work



**Teachers & Students**  
Download lesson plans about using digitized specimens





**Digitization**  
Learn, share and develop best practices



**Sharing Collections**  
Documentation on data ingestion



**Working Groups**  
Join in, contribute, be part of the community



**Proposals**  
New tool and workshop ideas



**Citizen Scientists**  
How can you help biological collections?

# E & I/O Potential in Past Workshops



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aOCR  
BIM  
CitSci  
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## iDigBio Workshops

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[1 Overview](#)  
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    [2.2 Calendar Year 2012](#)  
    [2.3 Calendar Year 2013](#)  
    [2.4 Calendar Year 2014](#)

### Overview[\[edit\]](#)

Materials from completed workshops will typically be archived in the iDigBio Forum to enable ongoing discussion. Codified documentation will reside on the [iDigBio Documentation](#)  page. Other material may be displayed via Wikis or external publications. The iDigBio Workshops page will serve as the index to link to deliverables produced by each workshop.

### Workshop Documentation[\[edit\]](#)

#### Calendar Year 2011[\[edit\]](#)

Date	Workshop Name	Brief Summary	Links
11/29/2011 - 12/01/2011	<a href="#">iDigBio Summit 2011</a> 	Foster communication and cohesion between iDigBio and Thematic Collections Networks (TCNs), clarify objectives, identify challenges and needs.	<ul style="list-style-type: none"><li><a href="#">Summit Summary</a> </li><li><a href="#">Participant Survey</a> </li><li><a href="#">Presentations</a> </li></ul>



[iDigBio](#)  
Integrated Digitized Biocollections



# E & I/O Potential in Future Events


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## Upcoming Outreach Events

Event	Start Date to End Date
Education & Outreach Workshop	01-15-2014 to 01-17-2014
Demo Webinar: Visualize Text Data Using OCR Output	01-22-2014
Broadening Diversity	02-01-2014
North American Paleontological Convention	02-15-2014 to 02-18-2014
Florida Academy of Sciences Meeting	03-07-2014 to 03-08-2014
Original Source Materials Worksop	03-09-2014 to 03-12-2014
LEEF 2014	03-21-2014 to 03-23-2014
Data Modeling Workshop	03-24-2014 to 03-25-2014
Digitization Process Workshop	03-24-2014 to 03-28-2014
75th Annual Meeting of the Association of Southeastern Biologists	04-02-2014 to 04-05-2014
Small Collections Workshop	04-07-2014 to 04-10-2014
WISE Girls Science Spring Camp	04-13-2014
Broadening Diversity Shadow Days	04-17-2014 to 04-19-2014
Earth Day	04-19-2014
Paleo Imaging/3D Imaging Workshop	04-28-2014 to 05-02-2014
Natural History Collections Symposium	05-05-2014 to 05-06-2014
Specify for Paleo Collections Workshop	05-19-2014 to 05-23-2014
SPNHC 2014	06-01-2014
North American Network of Small Herbaria Workshop and Botany 2014	07-31-2014
GSA iDigBio Symposium	10-19-2014 to 10-22-2014
iDigBio Summit IV	10-27-2014 to 10-28-2014

[more events >>](#)

# E & I/O Potential in New Workshop Proposals

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[My account](#) [Log out](#)

[Technical Info](#) | [Working Groups](#) | [Workshops](#) | [Digitization](#) | [Proposals](#) | [Bibliography](#) | [Wiki](#) | [Forums](#)

## Workshop Proposal

[Webform](#) | [Results](#)

**Researchers**  
Browse our specimen portal

**Collections Staff**  
Learn how your collection can benefit from our work

**Teachers & Students**  
Download lesson plans about using digitized specimens

Instructions for submitting workshop proposals are provided in the following document: [Workshop Proposal Process](#)

We recommend that you review the [iDigBio Workshop Summaries](#) prior to submitting your proposal.

Once you have prepared your proposal, please use the form below to submit & manage your Workshop Proposals.

**Title \***

Full Title (80 characters max)

Making data and images of millions of biological specimens available on the web

7,660,696

Specimen Records

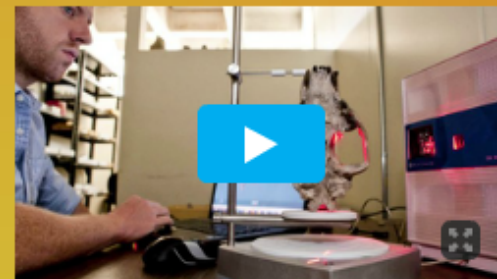
1,073,015

Media Records

152

Recordsets

[Search the Portal](#)



**Why digitization matters**

More about what we do and why

### Researchers

Learn about research directions



### Collections Staff

Learn how your collection can benefit from our work



### Teachers & Students

Download lesson plans about using digitized specimens



#### Digitization

Learn, share and develop best practices



#### Sharing Collections

Documentation on data ingestion



#### Working Groups

Join in, contribute, be part of the community



#### Proposals

New tool and workshop ideas



#### Citizen Scientists

How can you help biological collections?

# Working Group Thoughts

## WG (Outreach) Liaison?

- bridge the gap
  - increase participation
  - increase awareness
  - best practices adoption
  - digitization maturity
  - expertise sharing
  - public documentation

## An outside member?

- bridge the gap
  - no expertise



# iDigBio Working Groups - a gateway to workshops

• aOCR

• BIM

• CitSci

• CYWG

• DROID

• Paleo

• E & O

• GWG

• WDD

Interest Group



The screenshot shows the iDigBio Working Groups page. The top navigation bar includes links to iDigBio Home, Wiki, iDigBio Resources, Working Groups, Workshops, and Wiki Formatting. A user profile for 'Dpaul' is visible in the top right. On the left, a sidebar menu lists various resources: Wiki Home, HUB Resources, Digitization Resources, Workshops, Working Group List, iDigBio Working Groups (expanded), aOCR, BIM, CitSci, CYWG, E&O, GWG, MISC, WDD, Navigation Tools, and Tools. The main content area is titled 'iDigBio Working Groups' and features a 'Contents [hide]' section. The contents are organized into three main categories: 1 Overview, 2 Active Working Groups, and 3 Inactive Working Groups. Under '2 Active Working Groups', there is a list of 15 sub-groups, including aOCR, BIM, CitSci, CYWG, E&O, GWG, MISC, WDD, PaleoDigi, Paleontology (Paleo), Public Participation in Digitization (CitSci), Strategic Communication Interest Group, and Website Content Providers Editorial Board and Interest Group. Under '3 Inactive Working Groups', there are two sub-groups: Authority Files and Intellectual Property Policy.

iDigBio Home Wiki iDigBio Resources Working Groups Workshops Wiki Formatting

Wiki Home  
HUB Resources  
Digitization Resources  
Workshops  
Working Group List

iDigBio Working Groups

aOCR  
BIM  
CitSci  
CYWG  
E&O  
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MISC  
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## iDigBio Working Groups

Contents [hide]

- 1 Overview
- 2 Active Working Groups
  - 2.1 Augmenting OCR (aOCR)
  - 2.2 Biodiversity Informatics Management (BIM) Working Group
  - 2.3 Cyberinfrastructure (CYWG)
  - 2.4 Developing Robust Object to Image to Data (DROID1)
  - 2.5 Developing Robust Object to Image to Data (DROID2)
  - 2.6 Developing Robust Object to Image to Data (DROID3): 3D Objects and Things in Spirits
  - 2.7 Education & Outreach (E&O)
  - 2.8 Georeferencing Working Group (GWG)
  - 2.9 International Whole-Drawer Digitization Interest Group (WDD)
  - 2.10 Minimum Information Standards, Authority Files, & Semantics (MISC)
  - 2.11 Paleo Digitization Working Group (PaleoDigi)
  - 2.12 Paleontology (Paleo)
  - 2.13 Public Participation in Digitization (CitSci)
  - 2.14 Strategic Communication Interest Group
  - 2.15 Website Content Providers Editorial Board and Interest Group
- 3 Inactive Working Groups
  - 3.1 Authority Files
  - 3.2 Intellectual Property Policy

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workflows

up

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# iDigBio Digitization Resources from DROID 1-2-3 and you...

- How to use them in Education & (Inreach) Outreach?

The screenshot shows the iDigBio website with the following elements:

- Header:** iDigBio Integrated Digitized Biocollections logo. Navigation links: About iDigBio, Portal, Technical Information, Education. Search bar with "Google Custom Search" and "Search" button. Links for "My account" and "Log out".
- Main Content Area:**
  - Left:** Image of biological specimens with text: "Making data and images of millions of biological specimens available on the web".
  - Center:** Statistics: 7,660,696 Specimen Records, 1,073,015 Media Records, 152 Recordsets. A green button labeled "Search the Portal".
  - Right:** Video thumbnail with a play button and text: "Why digitization matters. More about what we do and why".
- Footer/Navigation Bar:**
  - Digitization:** Learn, share and develop best practices (highlighted with a green box).
  - Collections Staff:** Learn how your collection can benefit from our work (indicated by a green arrow).
  - Teachers & Students:** Download lesson plans about using digitized specimens (indicated by an orange arrow).
  - Sharing Collections:** Documentation on data ingestion (indicated by a green double arrow icon).
  - Working Groups:** Join in, contribute, be part of the community (indicated by a green group of people icon).
  - Proposals:** New tool and workshop ideas (indicated by a green lightbulb icon).
  - Citizen Scientists:** How can you help biological collections? (indicated by a green microscope icon).



# More about Digitization Resources

## Digitization Workshop Wikis

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- Object To Image To Data Workshop Wiki, Gainesville (May 2012)
- Herbarium Workshop Wiki, VSU, Valdosta, GA (Sept 2012)
- Wet Collections Workshop Wiki (March 2013)
- Dried Insect Digitization Workshop Wiki (April 2013)
- ASB Digitization Workshop and Symposium (April 2013)
- CSIRO Digitization Workshop, Canberra, Australia (July 2013)
- Specify Workshop Wiki (August 2013)
- Fluid-preserved Invertebrate and Microscopic Slide Imaging (Sept 2013)
- Paleo Collections Digitization Workshop Wiki (Sept 2013, Yale Peabody Museum)
- Small Herbarium Digitization Workshop Wiki (December 2013, Florida State University)
- CITSCribE Hackathon (16-20 December 2013, University of Florida, Gainesville)
- Digitizing from Source Materials Workshop Wiki (March 2014, Yale Peabody Museum)
- Biological Collections Digitization in the Pacific (March 25-27 2014)
- Paleo Imaging Workshop (April-May 2014, University of Texas)



# NANSH North American Network of Small Herbaria

## *North American Network of Small Herbaria*

### Homepage

[Search Collections](#)

[Dynamic Checklist](#)

[Dynamic Key](#)

[Image Library](#)

[About Network](#)

[Resource Links](#)

[Symbiota Help Page](#)

### Other Networks

[Great Plains](#)

[Intermountain](#)

[MABA Flora](#)

[SEINet](#)

[SERNEC](#)

[Log In](#)

[New Account](#)

[Sitemap](#)

### North American Network of Small Herbaria

The North American Network of Small Herbaria is an open access data portal provided by Symbiota and intended to foster digitization of small collections and facilitate collaboration among institutions. The establishment of this portal is the result of collaboration between Symbiota and iDigBio's Small Herbarium Working Group ([https://www.idigbio.org/wiki/index.php/Small\\_Herbarium\\_Interest\\_Group](https://www.idigbio.org/wiki/index.php/Small_Herbarium_Interest_Group)). To learn how to join the working group or network, contact Anna Monfils ([monf1ak@cmich.edu](mailto:monf1ak@cmich.edu)) or Gil Nelson ([gnelson@bio.fsu.edu](mailto:gnelson@bio.fsu.edu)).

Small herbaria constitute a major source of information for understanding North America's plant diversity. These collections are typically regional in scope with strong ecological, taxonomic, and geographic biases. They frequently hold specimens that are unduplicated in larger herbaria and usually represent intense samplings of community composition that significantly expand our knowledge of landscape-level biogeography. As a result, they are singularly important to the study of regionally and nationally significant natural communities.

Until recently, access to the wealth of biodiversity data stored in small herbaria has been hampered by travel requirements, insufficient staff, and long-term loans that render specimens unavailable for extended periods. With the advent of biodiversity collections digitization, small herbaria are now poised to overcome these obstacles by making label data and specimen images readily available online through searchable electronic databases. As more institutions take advantage of open-source, community-supported digitization software, the online presence of small collections will rapidly increase and with it the volume of

### Plant of the Day



**What is this plant?**

[Click here to test your knowledge](#)

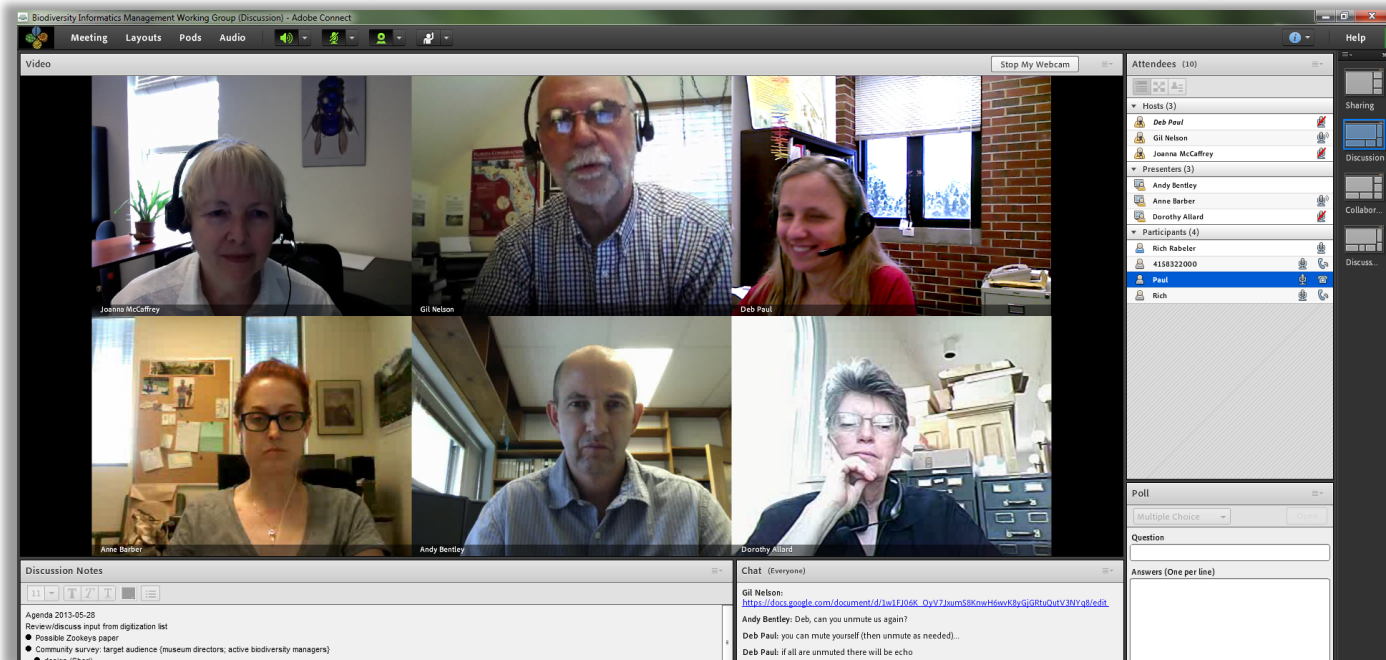
## NIBA Implementation Plan - Goal 3

- “...*pursue international **cooperative efforts** in training in biodiversity science...*”
  - 3.1. Implement new training opportunities in biodiversity informatics.



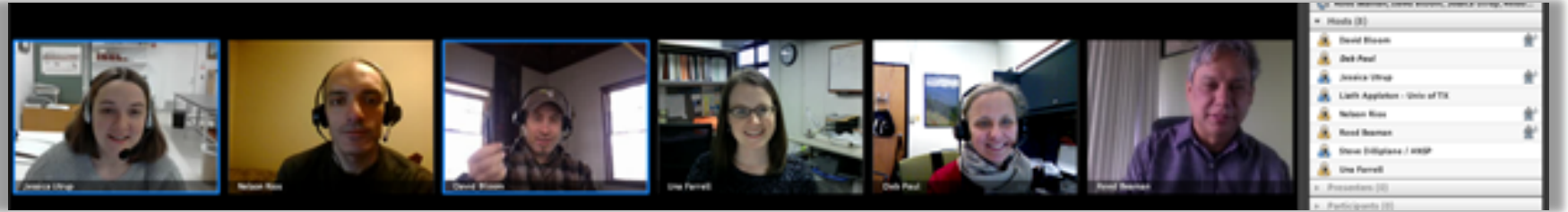


# Biodiversity Informatics Managers WG



- Long Live the Data
- Who will feed and care for it? Who will ensure the sustainability of the habitat?
- Where do these people come from?

# GWG – a Community Resource



- Powerpoints (wiki)
- Videos (vimeo)
- Working Group Expertise (listserv / webinars)
- Join us remotely on Adobe Connect
  - We can join you too!
- Community Expansion (map)

# iDigBio GWG

## Train the Trainers I and II

- 5 Days
- Pay-it-forward
- Community Resource

10:00	Workshop Overview, Introduction to Georeferencing, and Thinking like a Trainer	David Bloom
10:20	Selected Survey Results, Train-the-Trainers Second Georeferencing Pre-workshop Survey Report and Update from TTT1 Participants Pay-It-Forward Efforts	Shari Ellis
10:35	Break	
11:00	Georeferencing Introduction: Collaboration to Automation	Dave Bloom
11:30	Geographical Concepts	Nelson Rios
11:50	Point-Radius Method and Best Practices	Jessica Utrup
12:10	Darwin Core Standard, Key Terminology iDigBio Recommended fields	Dave Bloom
12:30	Lunch (Provided)	
13:30	Georeferencing Quick Reference Guide, Locality Types, and Georeferencing Template	Una Farrell
14:40	Georeferencing Calculator, Calculator Manual	Dave Bloom
15:30	Break	
16:00	Georeferencing Calculator Example and Exercises, MaNIS/HerpNET /ORNIS Georeferencing Guidelines	Dave Bloom
17:00	Day in Review and Considerations for Trainers-to-be Trivia Question of the Day A.M. Recording: Start-10:30 A.M. Recording: 10:40-12:30	David Bloom Debbie Paul

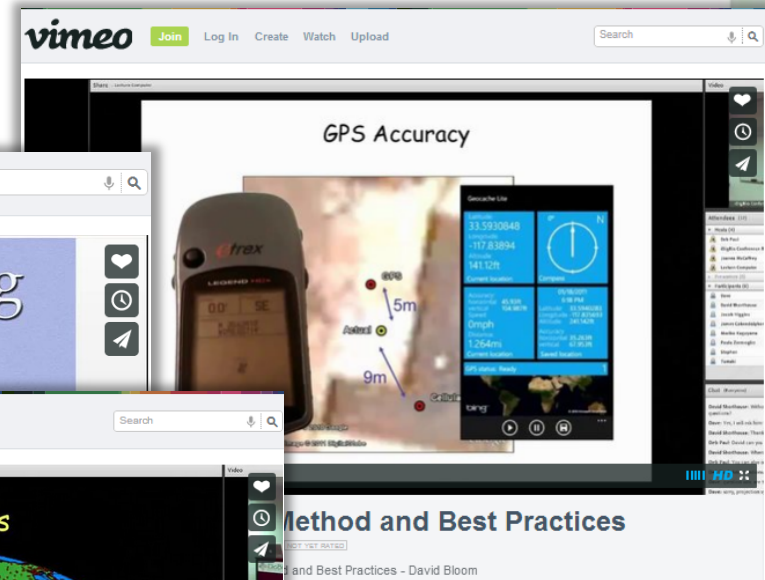


# A Georeferencing Resource Near You?

Name of Participant	Workshop	Project	Affiliation	Institution	Area of Expertise
Nina Abdollahian	TTT1	PaleoNICHES		San Jose State University	
Emily Aker	TTT1		Museum of Comparative Zoology	Harvard University	Curatorial Assistant, Harvard University, Museum of Comparative Zoology
Dorothy Allard*	TTT1	NEVP	Pringle Herbarium Burlington, Vermont	University of Vermont	Botanist, Assistant Curator, Digital Herbarium Coordinator
Liath Appleton*	TTT1		Texas Natural Science Center	University of Texas	Web Design,
Donna Shannon Asencio*	TTT1	MaCC		New York Botanical Garden	Environmental Biology, Plant Systematics, Project Coordinator
Hannah-Maria Rachel Brame*	TTT1	PaleoNICHES		Ohio University	Geological Sciences, Ohio University



# iDigBio (GWG) Videos on Vimeo



<http://vimeo.com/album/2163673>





# Citizen Science Potential

- Collaborative efforts
  - Digitization Blitz? (Stakeholder Suggestion)
  - Coordinated Media Efforts?
    - via NfN, TTD-TCN, Symbiota, MaCC, NEVP, your TCN?,...
- Augmenting OCR (aOCR wg)
  - visualizing the data for
    - transcribers
    - validators
    - researchers
- Public Participation Management Tool
  - see Austin, Libby, Greg, and Robert for details!
  - engaging the public in science through digitization
  - using humans-in-the-digitization-loop, thoughtfully

**GOT IT! LET ME CHOOSE MY TRANSCRIPTION GROUP**

Country

- 

# Broadening Participation for *broader impacts*



**CAREERS *AND* GRADUATE STUDY**  
**IN THE BIOLOGICAL SCIENCES**

**FREE  
ONE-DAY  
WORKSHOP**

**INCLUDING...**  
**LUNCH**  
**EARLY EVENING SOCIAL**

For a complete agenda, more information, and registration please visit:

<http://tinyurl.com/biologycareer>

For further information, feel free to e-mail: Gil Nelson (gnelson@bio.fsu.edu)



FLORIDA MUSEUM  
OF NATURAL HISTORY

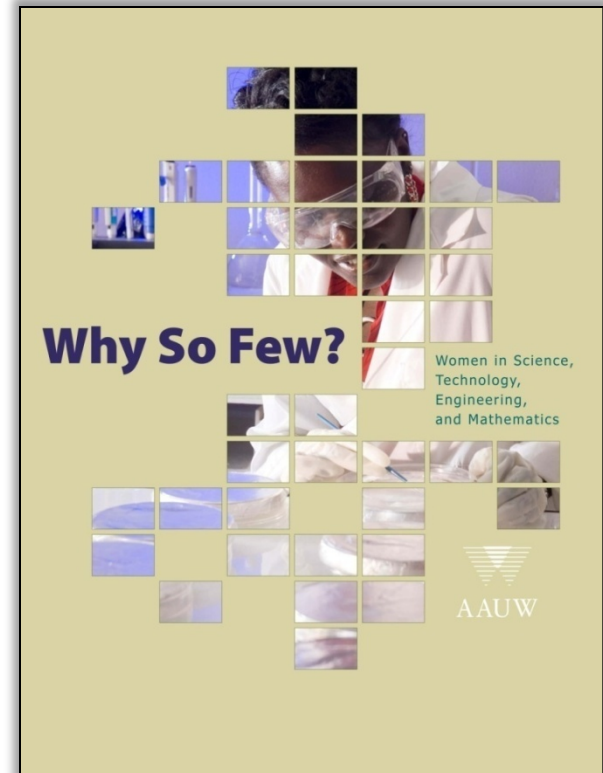


# Some Keys to Engaging Underrepresented Groups

- AAUW STEM 10-year research review
  - presents evidence that social and environmental factors contribute to the underrepresentation of women and girls in STEM.

## Eight research findings in three areas:

- How social and environmental factors shape girls' achievement and interest in math and science
- The climate of college and university science and engineering departments
- Continuing influence of bias



# Broadening Participation - E & I/O for Broader Impacts

- Inreach / Outreach
  - K-12, undergrads, graduate students, adults
  - our own community too!
    - especially workforce development
- How can we work together?
  - **Ambassadors** for each other's projects / workshops
  - **Social Media** collaboration
  - **Working Group overlap / outreach?**
  - **Workshop Evaluation / Assessment**
- Your thoughts?



# Thank you from iDigBio and the Education & Outreach Working Group

The screenshot shows the iDigBio website homepage. At the top, the iDigBio logo is on the left, and navigation links for 'About iDigBio', 'Portal', 'Technical Information', and 'Education' are on the right. Below the navigation is a Google Custom Search bar and links for 'My account' and 'Log out'. The main content area features a large image of biological specimens on the left with the text 'Making data and images of millions of biological specimens available on the web'. To the right of this image, statistics are listed: '7,660,696 Specimen Records', '1,073,015 Media Records', and '152 Recordsets'. A green button labeled 'Search the Portal' is below the statistics. Further right is a video player with a play button and the title 'Why digitization matters' with the subtitle 'More about what we do and why'. Below the main content area, there are three sections: 'Researchers' (Learn about research directions), 'Collections Staff' (Learn how your collection can benefit from our work), and 'Teachers & Students' (Download lesson plans about using digitized specimens). At the bottom, there are four green boxes with icons and text: 'Digitization' (Learn, share and develop best practices), 'Sharing Collections' (Documentation on data ingestion), 'Working Groups' (Join in, contribute, be part of the community), and 'Proposals' (New tool and workshop ideas).

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Integrated Digitized Biocollections

About iDigBio | Portal | Technical Information | Education

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