Workshop Announcement: Biological Collections Digitization in the Pacific

iDigBio, East-West Center, Bishop Museum, University of Hawaii, and the Pacific Science Association are pleased to announce a biological collections digitization workshop targeted to natural history collections personnel in Hawaii, Guam, and other countries in the South Pacific.

The workshop is part of a continuing series of iDigBio-sponsored workshops focused on organizing, launching, maintaining, and enhancing biological collections digitization programs. The primary goals are to 1) enhance international collaboration and sharing regarding biological collections digitization in the South Pacific, and 2) prepare participants with the necessary skills and knowledge to launch, manage, and sustain a biodiversity collections digitization program individually, through collaboration with an existing Thematic Collections Network (TCN), as a Partner with an Existing Network (PEN), through direct collaboration with iDigBio, or through collaboration with other collections and museums within the region.The target audience includes collections managers, curators, directors, digitization specialists, biodiversity informatics managers, and related collections staff. A major focus of the workshop will be encouraging national and international collaboration and sharing to include representatives from the United States and its territories (Guam), as well as potentially Australia, Fiji, Palau, and Papua New Guinea.

This is a broad-based workshop of value to a wide range of biodiversity collections, including all those represented in Hawaii, Guam, and other countries in the Pacific region. This workshop will focus on common and unique practices across a variety or preparations and collection types, including vascular and non-vascular plants, fungi, arthropods, vertebrates, and paleobiology. Ample time will be included for rich discussion and international interchange of ideas and practices.

Workshop content and discussion topics will include but not be limited to: 1) an overview of Integrated Digitized Biocollections (iDigBio), the National Science Foundation's national resource for Advancing Digitization of Biodiversity Collections, 2) a round-up of digitization activities in the South Pacific, 3) the future of NSF funding and other funding opportunities to support digitization programs, 4) activities of GBIF's international task force for collections digitization, 5) issues in organizing and launching a collections digitization program, 6) a detailed overview of the clusters

of essential digitization tasks, 7) detailed parameters for designing and developing effective digitization workflows and protocols, 8) detailed overviews for the use and configuration of imaging systems for various collection types, 9) issues affecting database design and management, including dealing with taxonomic trees and authority files, 10) issues in uniquely identifying collection objects and records, 11) strategies for evaluating hardware and software, 12) strategies and considerations for georeferencing collection objects, including use of online collaborative tools, 13) methods for moving digitized data to the internet via data aggregators, harvesters, and portals, 14) dealing with poor connectivity and bandwidth, 15) how to contribute data to iDigBio's portal and data repository, 16) tools for developing institutional portals for serving biological collections data, 17) the establishment of international working and interest groups for sustainable sharing of digitization practices and discoveries across nations, and 18) issues unique or especially relevant to collections digitization and management in the South Pacific.

What: Biological Collections Digitization in the South Pacific

Where: The East-West Center and Bishop Museum, Honolulu, Hawaii

Who: Collections managers, curators, and directors and biodiversity informatics managers and specialists who are interested in initiating, enhancing, or sustaining a biological collections digitization program.

When: March 24–28, 2014 (March 24 and 28 will be travel days). Opening reception, evening of March 24, Bishop Museum.

Planning Team: Burke Burnett (Pacific Science Association), Shelley James (Bishop Museum), Nancy Lewis (East-West Center), Gil Nelson (iDigBio), Michael Thomas (University of Hawaii).

Agenda
Day 1, March 24, 2014 (Monday)

Time	Activity/Venue	Responsible
Various	**Participants arrive**	
9:00-5:00	**Data Modeling Workshop (Tagore Room, EW Center)**	**See separate agenda**
5:00-6:30 p.m. **6:30-9:00 p.m.**	**Bishop Museum Early Bird Collections tours Reception/ (Bishop Museum Atrium/Courtyard)**	**Gil Nelson (iDigBio) Blair Collis (Bishop) Larry Page (iDigBio) Shelley James (Bishop) Michael Thomas (U. Hawaii) Burke Burnett (PSA) Nancy Lewis (East-West)**

Day 2, March 25, 2014 (Tuesday) Venue for all activities: East-West Center, Asia Room

Time	Activity/Venue	Responsible
8:30 a.m.	Welcome Workshop Overview Logistics	Gil Nelson Shelley James Michael Thomas
8:45-9:15 a.m.	Introduction to iDigBio	Larry Page, Director, iDigBio
9:15-10:15 a.m.	Overview of current Thematic Collections Networks (8, 6-minute Video presentations)	TCN PIs
10:15-10:45 a.m.	Coffee break	
10:45-11:30 a.m.	TCN activities in Pacific (15 min ea.) Macroalgae TCN Bryophyte/Lichen TCN Tritrophic TCN	Holly Bolick, Moderator Chris Neefus Shelley James Alison Sherwood Tom Schils Michael Thomas Shelley James
11:30 a.m.-12:30 p.m.	Keynote: Digitization in a global environment	Donald Hobern, Executive Secretary, GBIF
12:30-1:30 p.m.	Lunch (catered)	
1:30-2:00 p.m.	NSF Programs for Funding Collections: What, When, Where, How	Judy Skog Expert Consultant Office of the Assistant Director Biological Sciences National Science Foundation
2:00-2:30 p.m.	The Art and Science of Project Management	David Jennings Project Manager iDigBio
2:30-3:30 p.m. (10 minutes each)	Symposium I Round up of digitization in the Pacific 1. Papua New Guinea 2. National Tropical Botanical Garden 3. Palau 4. Australia 5. Bishop Museum	Michael Thomas, Moderator Kipiro Damas David Lorence Olympia Morei Paul Flemons Shelley James

3:30-3:50 p.m.	Coffee Break	
3:50-5:00 p.m.	**Symposium I (cont'd):** **Round up of digitization in the Pacific** **6. University of Hawaii** **7. UOG Insect Collection** **8. Insect digitization at University of Hawaii** **9. UOG Diatoms** **10. PRAGMA**	**Michael Thomas** **Aubrey Moore** **Ryan Ceasar** **Chris Lobban** **Reed Beaman**
5:00 p.m.	**Daily wrap-up**	**Gil Nelson, Shelley James** **Michael Thomas, Moderators**

Day 3, March 26, 2014 (Wednesday) Venue for all activities: Bishop Museum

Time	Activity/Venue	Responsible
7:30 a.m.	**Be in lobby by 7:15 a.m.** **Shuttle departs Lincoln Hall**	
8:15-8:45 a.m.	**Digitization modules, tasks, and workflows**	**Gil Nelson**
8:45-10:30 a.m. **(10 minutes each)**	**Symposium II** **Pre-digitization curation: Getting collections ready for digitization** **1. Curation (web sources)** **2. Insects** **3. Fish** **4. Invertebrates** **5. Vertebrates** **6. Plants** **7. Barcoding**	**Shelley James, Moderator** **Shelley James** **Ryan Caesar/Nicole Fisher** **Arnold Suzumoto** **Holly Bolick** **Molly Hagemann** **Barbara Kennedy** **Varnelle Magoon**
10:30-10:45 a.m.	**Coffee break**	
10:45-11:45 a.m. **(10 minutes each)**	**Symposium III** **Crowd-sourcing, Public Participation, and Data Enrichment** **1. Available resources** **2. Using crowd-sourcing tools** **3. Transcribing fieldbooks** **4. Georeferencing tools & techniques**	**Deb Paul, Moderator** **Paul Flemons** **Nicole Fisher** **Carolyn Sheffield (remote)** **Deb Paul**

Time	Activity	Responsible
11:45 a.m.-Noon	**Leveraging lessons from museum studies: Colonial histories and ethical obligations**	**Karen Kosasa**
Noon-12:15 p.m.	**Preservation begins at creation**	**Susan Shaner**
12:15-1:30 p.m.	**Lunch**	
1:30-3:00 p.m. (10 minutes each)	**Symposium IV Digitization Workflows, Tools, and Techniques** **1. iDigBio's imaging standards/equipment purchasing guidelines** **2. Whole-drawer imaging** **3. Herbarium specimen imaging equipment: pros & cons** **4. Automontage** **5. Insect Soups** **6. Explorers Log**	**Gil Nelson & Shelley James, Moderators** **Joanna McCaffrey** **Nicole Fisher** **Nicole Shun** **Holly Bolick/Dan Polhemus** **Paul Flemons** **Rob Whitton**
3:00-3:15 p.m.	**Coffee break**	
3:15-4:30 p.m.	**Symposium IV, cont'd** **8. Uses for OCR output** **9. PNG Plants database** **10. Using voice recognition software** **11. Scratchpad as an online database** **12. Workflow issues in the digitization of fluid-preserved specimens**	**Deb Paul** **Kipiro Damas** **Chris Neefus** **Aubrey Moore** **Terry Donaldson**
4:30-6:00 p.m.	**Bishop Museum Collections tours - digitization discussion/demos (see separate agenda)**	
	Shuttles	

Day 4, March 27, 2014 (Thursday) Venue for all activities: East-West Center, Asia Room

Time	Activity/Venue	Responsible
8:30-8:45 a.m.	**Orientation to the day**	**Gil Nelson**

8:45-9:30 a.m. (15 minutes each)	**Symposium V** **Genomics and Specimen Data** 1. **Field collection, storage, and data** 2. **Phylogenetics/linking molecular data and collections**	**Shelley James, Moderator** **Shelley James** **Pam Soltis (remote)** **Tom Ranker**
9:30-10:00 a.m.	**Coffee break**	
10:00-noon (15 minutes each)	**Symposium VI** **Managing Data** 1. **Data standards** 2. **Contributing data to iDigBio** 3. **Aggregating and sharing data** 4. **Report on the data modeling workshop** 5. **Globally unique identifiers** 6. **Taxonomy and Global Names Architecture** 7. **Linking collections to related resources** 8. **The Holly challenge**	**Joanna McCaffrey, Moderator** **Joanna McCaffrey** **Joanna McCaffrey** **Deb Paul** **Greg Riccardi** **Greg Riccardi** **Rich Pyle** **Reed Beaman** **Holly Bolick**
12:15-1:15 p.m.	**Lunch**	
1:15 p.m. - 2:30 p.m. (12 minutes each)	**Symposium VII** **Uses for digitized data** 1. **Essential data to be digitized** 2. **Using digitized data for research** 3. **Uses for digitized data from entomology collections** 4. **Evaluating data usage** 5. **Fish Bones - natural history to archaeology** 6. **Educational tools**	**Gil Nelson, Moderator** **Larry Page** **Pam Soltis** **Ryan Caesar** **Reed Beaman** **Lydia Garetano** **Amber Inwood**
2:30 p.m. - 3:00 p.m.	**Coffee break**	
3:00-4:30 p.m.	**Overcoming challenges to digitization** **Audience participation!** **Discussion points:** 1. **Staffing** 2. **Equipment** 3. **Funding** 4. **Morale & productivity** 5. **Sustainability** 6. **Justifying activities to administrators (data usage)**	**Michael Thomas, Shelley James, Gil Nelson, Moderators**

	7. Concerns 8. Questions 9. How do I?	
4:30 p.m.	**Workshop wrap-up**	

Day 5, March 28, 2014 (Friday) Venue for all activities: Bishop Museum

Time	Activity/Venue	Responsible
9:00-1:00 p.m.	**Macroalgae TCN workshop**	**Chris Neefus** **Shelley James** **Michael Thomas**
2:00 p.m.-4:00 p.m.	**Consortium Pacific Herbaria meeting**	**Shelley James** **Michael Thomas** **David Lorence**