



## Leveraging Digitization Practices across Multiple Domains 6-9 October 2014

**iDigBio and the Cheadle Center for Biodiversity & Ecological Restoration (CCBER) at the University of California, Santa Barbara are pleased to offer Leveraging Digitization Practices across Multiple Domains, a natural history collections digitization workshop targeted to collections managers, directors, curators, and other collections professionals.**

### Day 1: 6 October 2014

| Time           | Activity                                                                             | Responsible                                                                   |
|----------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|                | <b>Transportation leaves Harbor View for Santa Barbara Museum of Natural History</b> |                                                                               |
| 6:30-9:00 p.m. | <b>Reception<br/>Santa Barbara Museum of Natural History</b>                         | Jennifer Thorsch<br>Gil Nelson<br>Paul Scott<br>Others to welcome attendees?? |

### Day 2: 7 October 2014

| Time           | Activity                                                  | Responsible   |
|----------------|-----------------------------------------------------------|---------------|
| 7:30 a.m.      | <b>Transportation departs Harbor View for Loma Pelona</b> | Laurie Hannah |
|                |                                                           |               |
|                | <b>Getting started</b>                                    |               |
| 8:00-8:30 a.m. | <b>Breakfast</b>                                          |               |

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|------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| 8:30-8:40 a.m.   | <b>Welcome</b>                                                                              | Jennifer Thorsch<br>University of<br>California Santa<br>Barbara           |
| 8:40-8:50 a.m.   | <b>Logistics<br/>Introduction to iDigBio</b>                                                | Gil Nelson<br>Florida State<br>University<br>iDigBio                       |
| 8:50-9:05 a.m.   | <b>Expanding NIBA: New Research<br/>Coordination Network in support of<br/>digitization</b> | Rob Gropp<br>American Institute<br>of Biological<br>Sciences               |
| 9:05-9:20 a.m.   | <b>Digitization Task Clusters</b>                                                           | Gil Nelson                                                                 |
| 9:20-9:40 a.m.   | <b>Digitization policies, practices,<br/>innovations, and discoveries</b>                   | Steve Dilliplane<br>Academy of Natural<br>Sciences of Drexel<br>University |
|                  |                                                                                             |                                                                            |
|                  | <b>Challenges to Digitization</b>                                                           |                                                                            |
| 9:40-9:55 a.m.   | <b>Challenges for small town, rural natural<br/>history collections</b>                     | Mary Beth<br>Prondzinski<br>Fairbanks Museum<br>& Planetarium              |
| 9:55-10:10 a.m.  | <b>Challenges in database selection and<br/>design</b>                                      | Laura Brenskelle<br>University of Texas,<br>Austin                         |
| 10:10-10:25 a.m. | <b>Challenges to digitization</b>                                                           | Margaret Landis<br>Sam Noble<br>Museum, University<br>of Oklahoma          |
| 10:25-10:45 a.m. | <b>Coffee break</b>                                                                         |                                                                            |

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| 10:45-11:15 a.m. | <b>Panel<br/>Questions and discussion<br/>Challenges to Digitization</b>                                              |                                                                           |
|                  |                                                                                                                       |                                                                           |
|                  | <b>Pre-digitization curation and preparation</b>                                                                      |                                                                           |
| 11:15-11:35 a.m. | <b>Getting a collection ready for digitization</b>                                                                    | Dawn Roberts<br>Chicago Academy of Science, Peggy Notebaert Nature Museum |
| 11:35-11:55 p.m. | <b>Getting an insect collection ready for digitization at the Illinois Natural History Survey's InvertNet project</b> | Dmitry Dmitriev<br>Illinois Natural History Survey                        |
| 11:55-12:15 p.m. | <b>Pre-digitization curation for wet collections</b>                                                                  | Dean Pentcheff<br>Natural History Museum of LA County                     |
| 12:15-1:15 p.m.  | <b>Lunch</b>                                                                                                          |                                                                           |
| 1:15-1:35 p.m.   | <b>Using the crowd to augment data entry: BioSpecs, public participation, and citizen science</b>                     | Libby Ellwood<br>iDigBio<br>Florida State University<br>iDigBio           |
| 1:35-1:55 p.m.   | <b>Citizen science programs</b>                                                                                       | Erica Clites<br>University of California Museum of Paleontology           |
|                  | <b>Field trips</b>                                                                                                    |                                                                           |
| 1:55-5:30 p.m.   | <b>The Cheadle Center for Biodiversity and Ecological Restoration (CCBER)</b>                                         | Laurie Hannah<br>Mireia Beas-Moix                                         |

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|----------------|------------------------------------------------------------|--------------------------------------|
|                |                                                            | UCSB/CCBER                           |
| 1:55-5:30 p.m. | <b>The Santa Barbara Museum of Natural History (SBMNH)</b> | Paul Valentich-Scott,<br>Krista Fahy |
| 1:55-5:30 p.m. | <b>The Western Foundation of Vertebrate Zoology (WFVZ)</b> | Linnea Hall                          |

### Day 3: 8 October 2014

| <b>Time</b>    | <b>Activity</b>                                                     | <b>Responsible</b>                                                    |
|----------------|---------------------------------------------------------------------|-----------------------------------------------------------------------|
| 7:30 a.m.      | <b>Transportation departs Harbor View for Loma Pelona</b>           | Laurie Hannah                                                         |
| 8:00-8:30 a.m. | <b>Breakfast</b>                                                    |                                                                       |
|                |                                                                     |                                                                       |
|                | <b>Imaging and Image Processing Specifications and Workflows</b>    |                                                                       |
| 8:30-8:45 a.m. | <b>Imaging Standards and Workflows for Dried Insect Collections</b> | Jennifer Thomas<br>Biodiversity<br>Institute, University<br>of Kansas |
| 8:45-9:00 a.m. | <b>Imaging station set-up and configuration</b>                     | Roger Burkhalter<br>Sam Noble<br>Museum,<br>University of<br>Oklahoma |
| 9:00-9:15 a.m. | <b>Challenges in imaging biological specimens</b>                   | Chris Grinter<br>Denver Museum of<br>Nature & Science                 |
| 9:15-9:30 a.m. | <b>Selecting a camera and imaging station</b>                       | Joanna McCaffrey<br>iDigBio                                           |

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|                  | <b>Imaging and Image Processing Specifications and Workflows – Case studies</b>                        |                                                                          |
| 9:30-9:45 a.m.   | <b>Imaging workflows, equipment configuration, and challenges for 3-D objects in drawers and trays</b> | Paul Mayer,<br>The Field Museum                                          |
| 9:45-10:00 a.m.  | <b>Imaging herbarium specimens</b>                                                                     | Janet Bala<br>Idaho Museum of Natural History,<br>Idaho State University |
| 10:00-10:15 a.m. | <b>Coffee Break</b>                                                                                    |                                                                          |
| 10:15-10:30 a.m. | <b>Imaging 3D objects (birds, mammals, butterflies) with stacking for deep focus</b>                   | Gil Nelson<br>Florida State University, iDigBio                          |
| 10:30-10:45 p.m. | <b>Imaging challenges for 3D objects in trays and drawers</b>                                          | Ron Eng<br>Burke Museum of Natural History and Culture                   |
| 10:45-11:30 a.m. | <b>Imaging Q&amp;A Discussion</b>                                                                      |                                                                          |
|                  |                                                                                                        |                                                                          |
|                  | <b>Acquiring, managing, using, and publishing data</b>                                                 |                                                                          |
| 11:30-11:45 a.m. | <b>Standards for biodiversity data</b>                                                                 | Greg Riccardi<br>iDigBio PI<br>Florida State University                  |
| 11:45-12:00 p.m. | <b>Data standards: what we can learn from the information and library sciences</b>                     | Larry Schmidt                                                            |

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|                 |                                                                                                                        | University of Wyoming                                              |
| 12:00-1:00 p.m. | <b>Lunch</b>                                                                                                           |                                                                    |
| 1:00-1:15 p.m.  | <b>Using digitized data in scientific research</b>                                                                     | Pam Soltis<br>iDigBio PI<br>University of Florida                  |
| 1:15-1:30 p.m.  | <b>Moving data to iDigBio and other aggregators</b>                                                                    | Joanna McCaffrey                                                   |
| 1:30-1:45 p.m.  | <b>Applying data standards to multiple domains</b>                                                                     | Steve Dilliplane                                                   |
| 1:45-2:00 p.m.  | <b>Database schemas for natural history collections</b>                                                                | Laura Brenskelle<br>University of Texas                            |
| 2:00-2:15 p.m.  | <b>Databasing workflows for 3D objects in trays and drawers, fluid-preserved invertebrates, and microscopic slides</b> | Paul Valentich-Scott<br>Santa Barbara<br>Museum of Natural History |
| 2:15-2:30 p.m.  | <b>Databasing entomology collections: InvertNet</b>                                                                    | Dan Young<br>University of Wisconsin                               |
| 2:30-2:45 p.m.  | <b>Specify as a database management tool</b>                                                                           | Roger Burkhalter                                                   |
| 2:45-3:00 p.m.  | <b>Coffee break</b>                                                                                                    |                                                                    |
| 3:00-3:15 p.m.  | <b>Databasing workflows for paleontology</b>                                                                           | Erica Clites<br>University of California Museum of Paleontology    |
| 3:15-3:30 p.m.  | <b>Databasing workflows at the University of Wisconsin herbarium</b>                                                   | Mark Wetter                                                        |
| 3:30-4:00 p.m.  | <b>Data Q&amp;A</b>                                                                                                    | Gil Nelson                                                         |

|                |                                      |            |
|----------------|--------------------------------------|------------|
|                | <b>Discussion</b>                    |            |
| 4:00-5:00 p.m. | <b>Breakouts.</b><br><b>Wrap up.</b> | Gil Nelson |