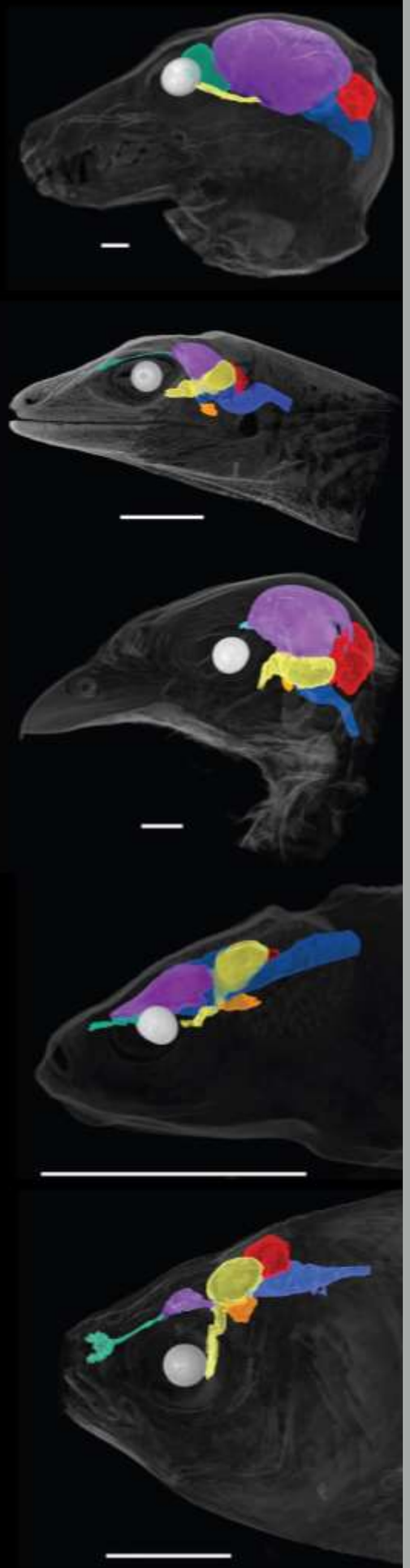


openVertebrate (oVert) Thematic Collection Network

David C. Blackburn

University of Florida

iDigBio Annual Summit

University of Florida

October 2, 2018

bit.ly/oVert_iDigBio

#oVertTCN

openVertebrate Thematic Collection Network

$2.5M from NSF's *Advancing Digitization of Biodiversity Collections* program

18 funded institutions, including 16 museums and 6 imaging centers

2017–2021

CT-scan >20,000 fluid-preserved vertebrate specimens

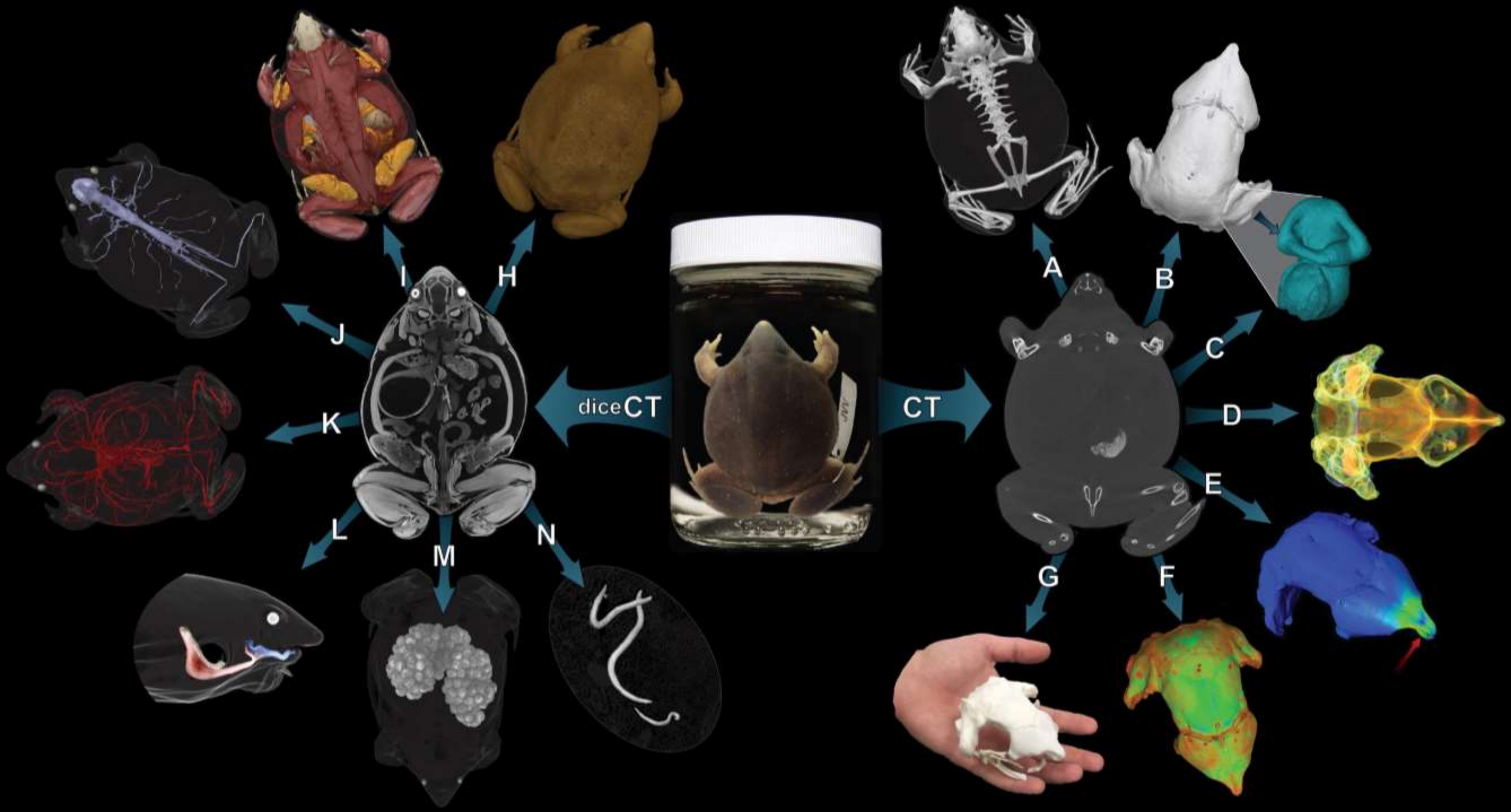
Scan >80% extant genera; "soft tissue" scan >60% extant families

Make both raw and processed data freely available on-line

Fall 2018

First PEN funded: oMEGA, led by Leif Tapanila at Idaho State Uni

Surface scans of individual bones of giant vertebrate skeletons


A
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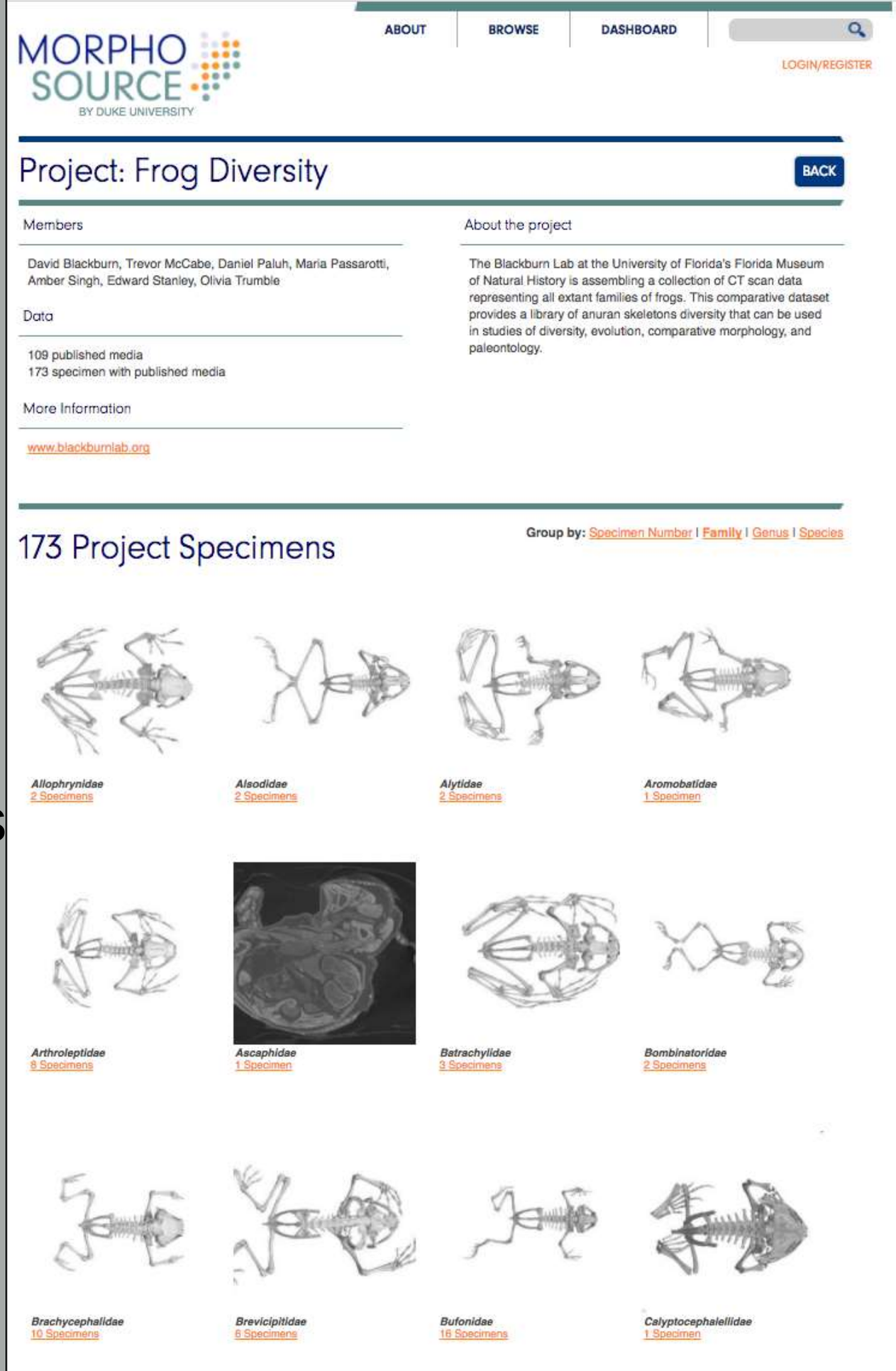
oVert

Data deposited in MorphoSource
- image stacks (.zip of .TIFF)
- 3D mesh files (.stl)
Download or view in browser

Year 1:
MorphoSource/iDigBio linkages
scanned >5,000 fluid specimens
>2,000 genera of ~500 families
~2,000 media files of 1,100
specimens on MorphoSource
viewed >16,000 times
>700 downloads



oVert

Builds on previous collection digitization efforts

In US, most scientific collections of vertebrates are digitized

Digital inventory allows oVert to (1) discover specimens and (2) prioritize particular specimens

Builds on previous collection digitization efforts

UF-Herp-12345

MorphoSource sends request

MORPHO SOURCE

iDigBio Application Program Interface (API)

iDigBio Integrated Digitized Biocollections

iDigBio sends metadata

Darwin Core structured metadata

referenceID
occurrenceID
locality
collectionDate
etc.

Getting information on media files back to collections

UF-Herp-12345

MORPHO SOURCE

Darwin Core
structured metadata

referenceID
occurrenceID
locality
collectionDate
etc.

for each collection
(i.e., UF
Herpetology)

MorphoSource RSS Feed
(via referenceID)
containing
1) Audobon Core metadata
2) usage statistics

FLORIDA MUSEUM

add Audobon Core
to IPT

GBIF

VertNet

iDigBio
Integrated Digitized Biocollections

Getting information on media files back to collections

MORPHO SOURCE
BY DUKE UNIVERSITY

ABOUT | BROWSE | DASHBOARD

DIGITIZING THE FLORIDA MU... | MEDIA CART | STATS

Data reporting for MorphoSource media

MorphoSource provides summary reports of media, download usage, and download requests for media that represent specimens that have been reported to iDigBio. The media report is formatted according to the Audubon Core metadata standard, and so can be incorporated into publisher reporting software, such as an IPT. All report files are linked and described in a single RSS feed, which can be used to receive regular report updates via automated download. Additionally, all report files are individually listed below, sorted by iDigBio publisher and recordset. For each report, there is a link to: **1)** a Comma Separated Values (CSV) spreadsheet with the primary media, download usage, or download request metadata; and **2)** an XML file encoded in Ecological Markup Language (EML) providing metadata about the CSV spreadsheet. These reports are updated as necessary on a daily basis.

RSS Feed: https://www.morphosource.org/rss/ms_rss.xml

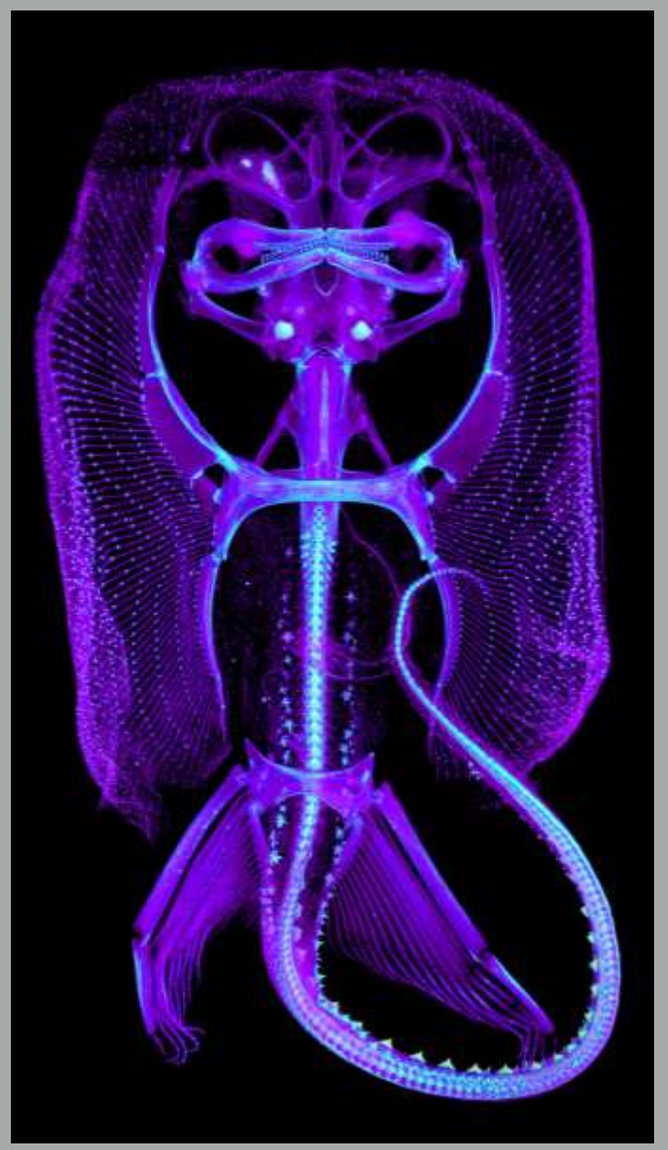
Berkeley Natural History Museums IPT (552a0e1a-4152-43ae-bad6-9314b4234536)

Recordset	Media	Downloads	Download Requests	Pub Date
University of California Museum of Paleontology (5ab348ab-439a-4697-925c-d6abe0c09b92)	CSV EML	CSV EML	CSV EML	Thu, 24 May 2018 12:46:05 -0400

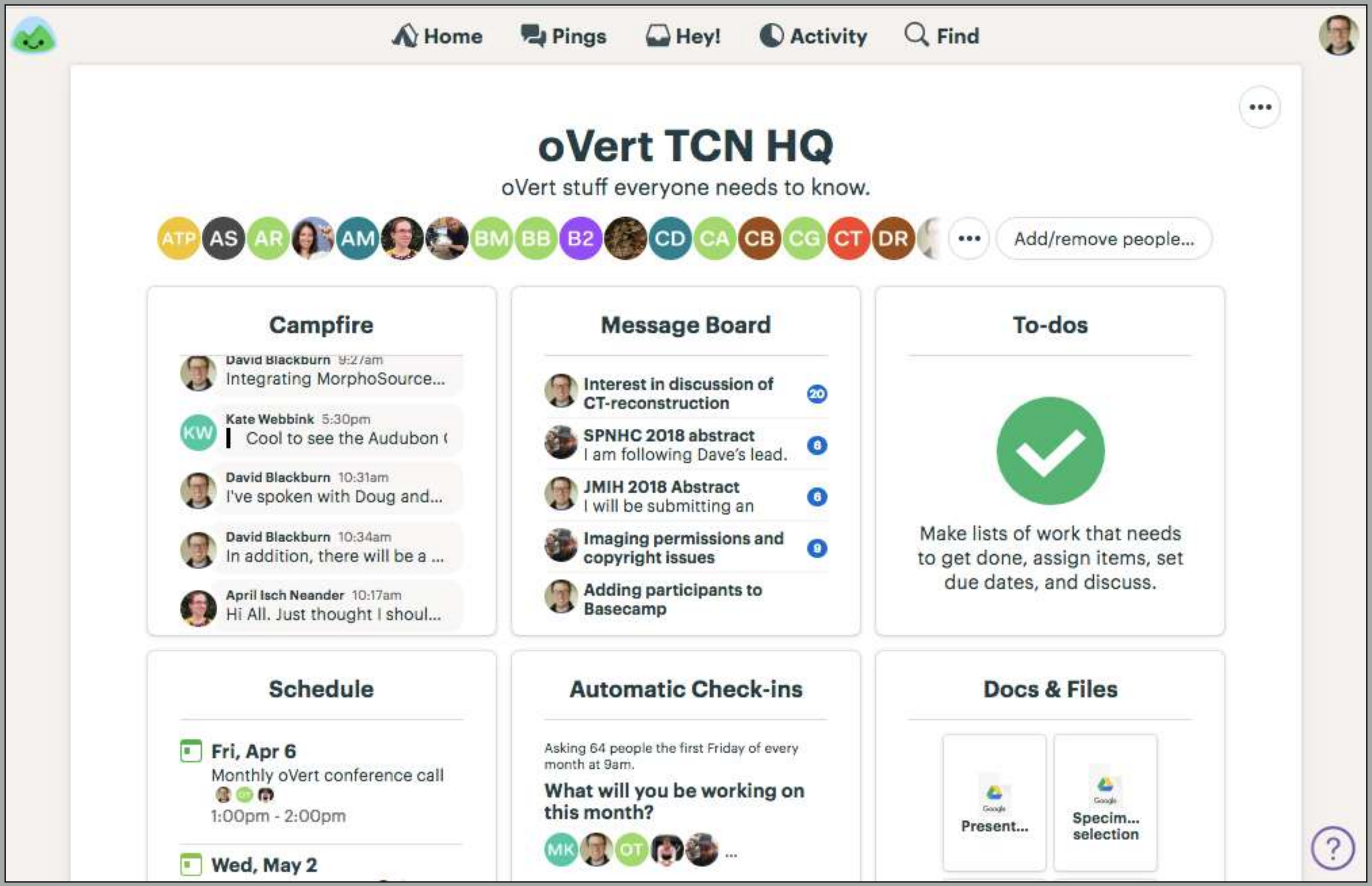
Communication and coordination is a challenge

Vertebrate collections at each institution communicate about
- specimen selection
- transport and packaging
- loans
- long-term data storage

Scanning centers communicate about
- standardized workflows
- imaging quality
- data transfer



oVert project management via Basecamp



http://bit.ly/oVert_iDigBio #oVertTCN