# Information Gaps in Digital Databases as Identified by a Multi-Institution Initiative to Digitize Avian Specimens

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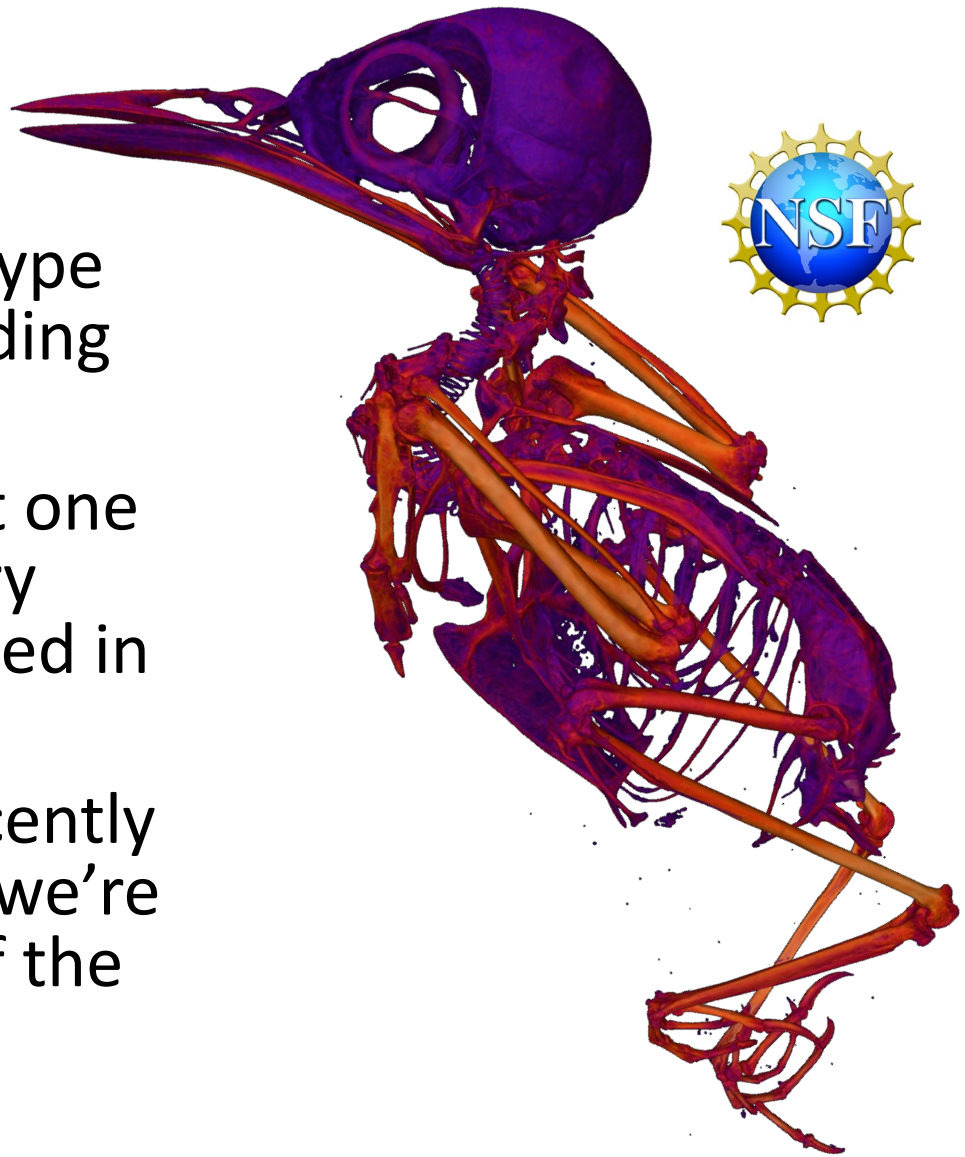
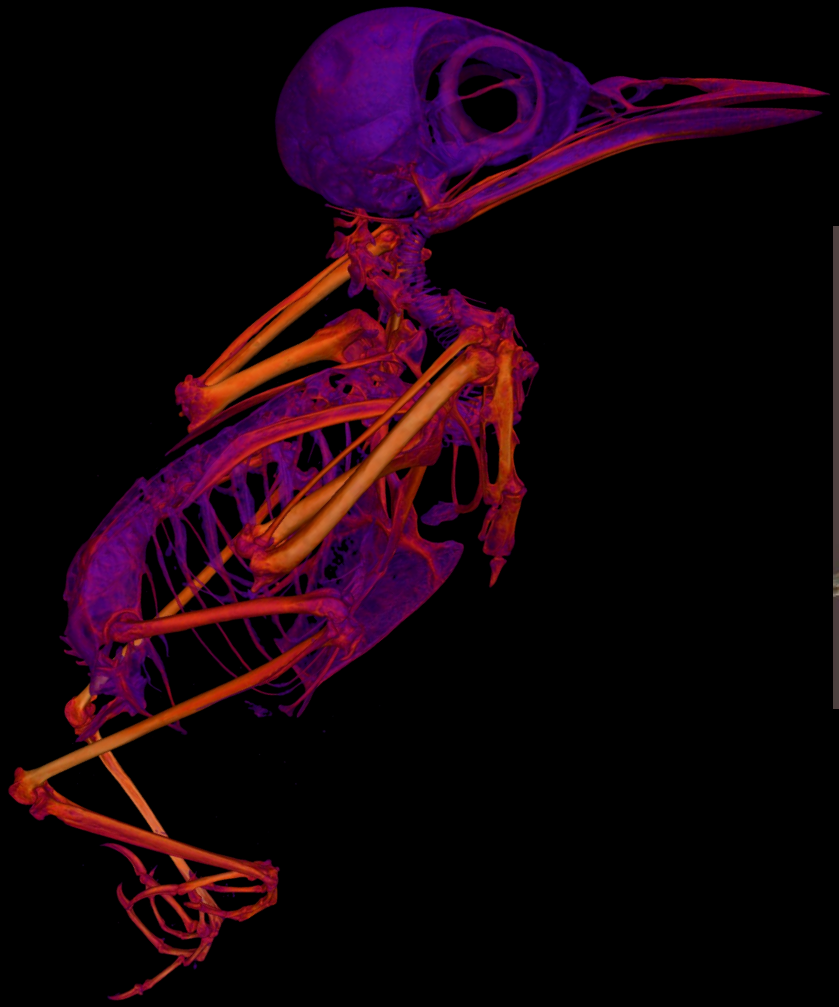
# oVert and birds

- Targeting over 2,200 type species of birds according to the Peters checklist
- Goal is to scan at least one representative of every avian genus represented in US collections
- Scanning birds has recently begun in earnest and we're already almost 10% of the way to our goal

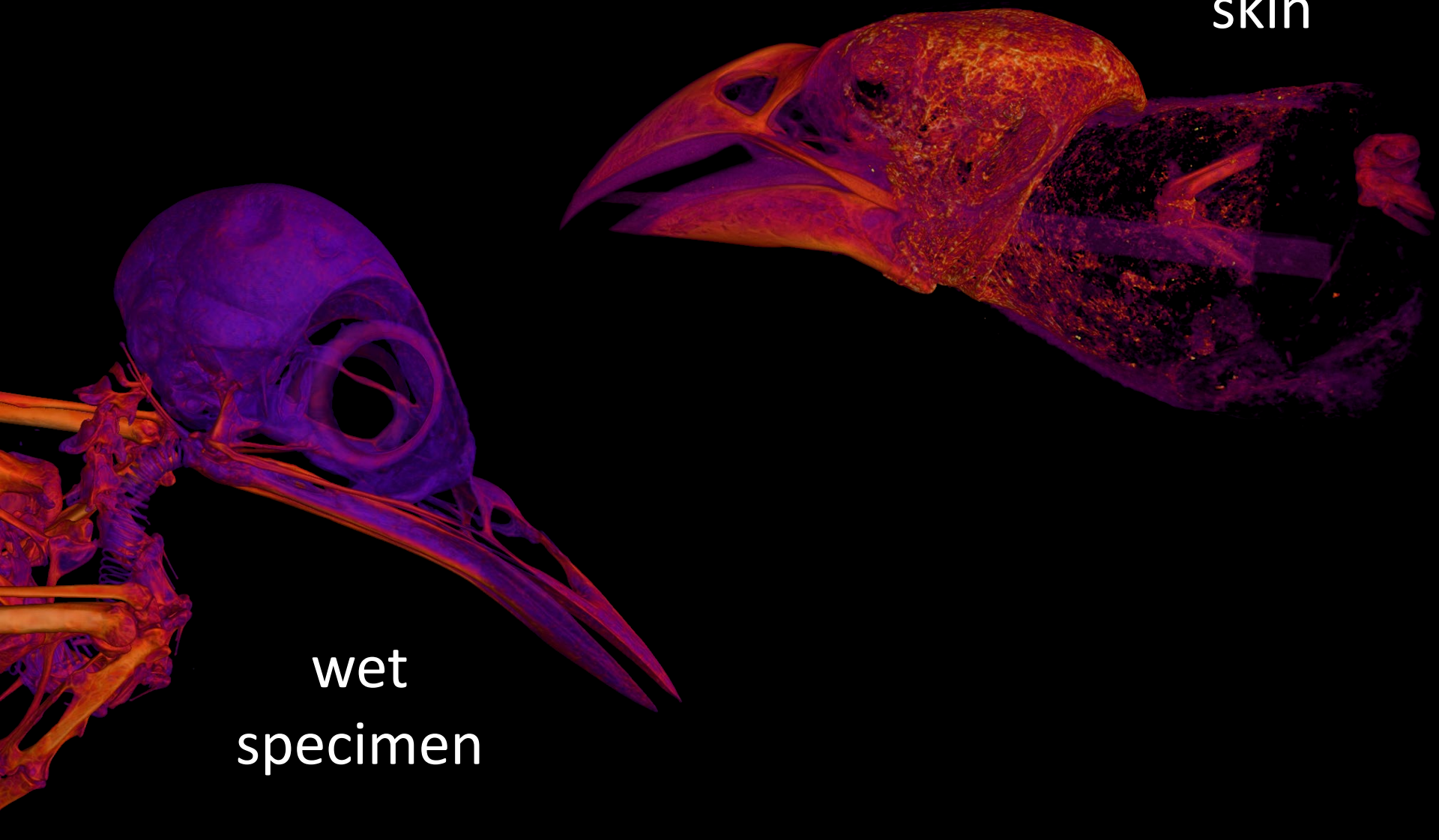


# Where are the fluid-preserved birds?

# Why fluid-preserved birds?



# Why fluid-preserved birds?



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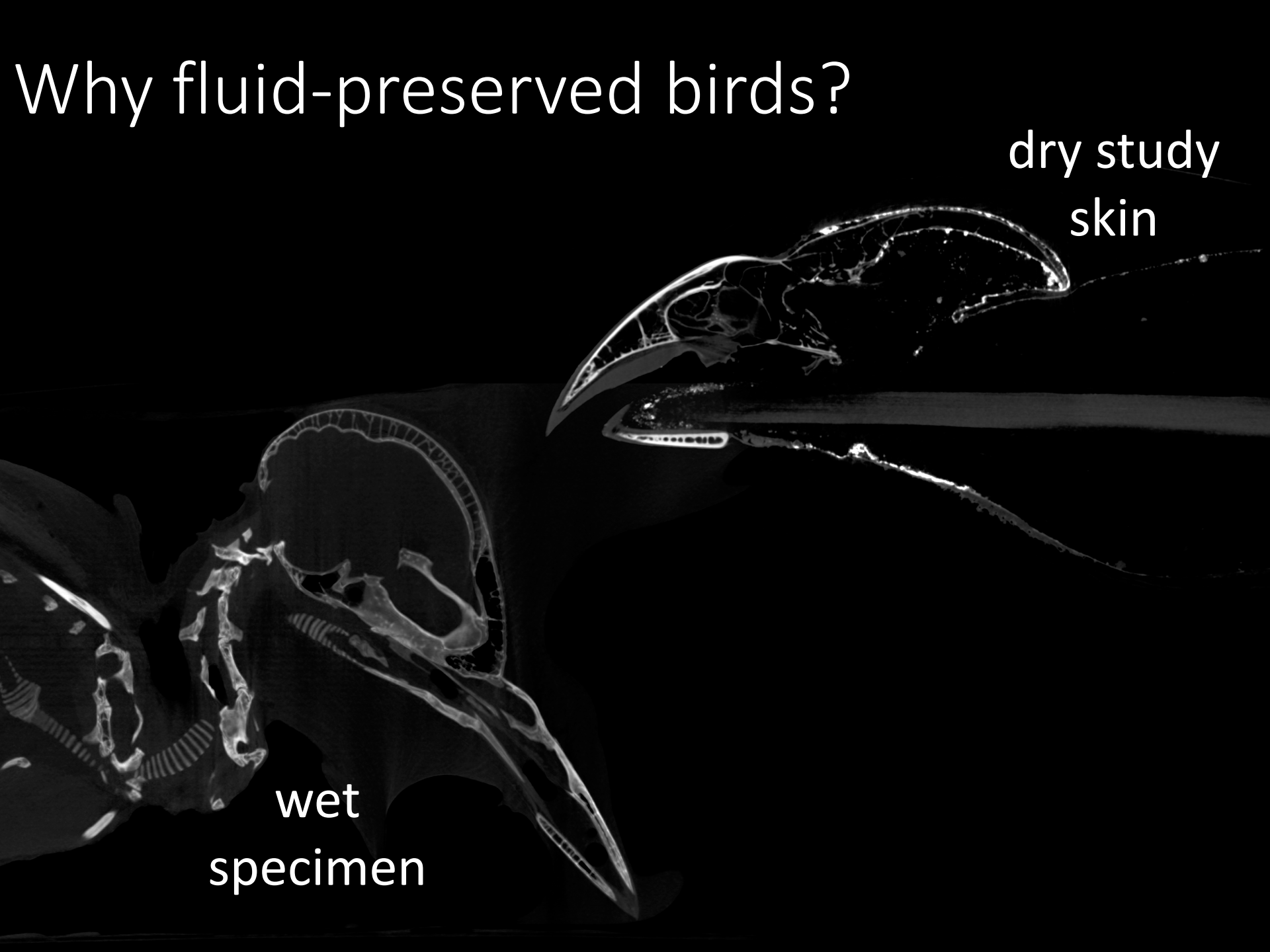

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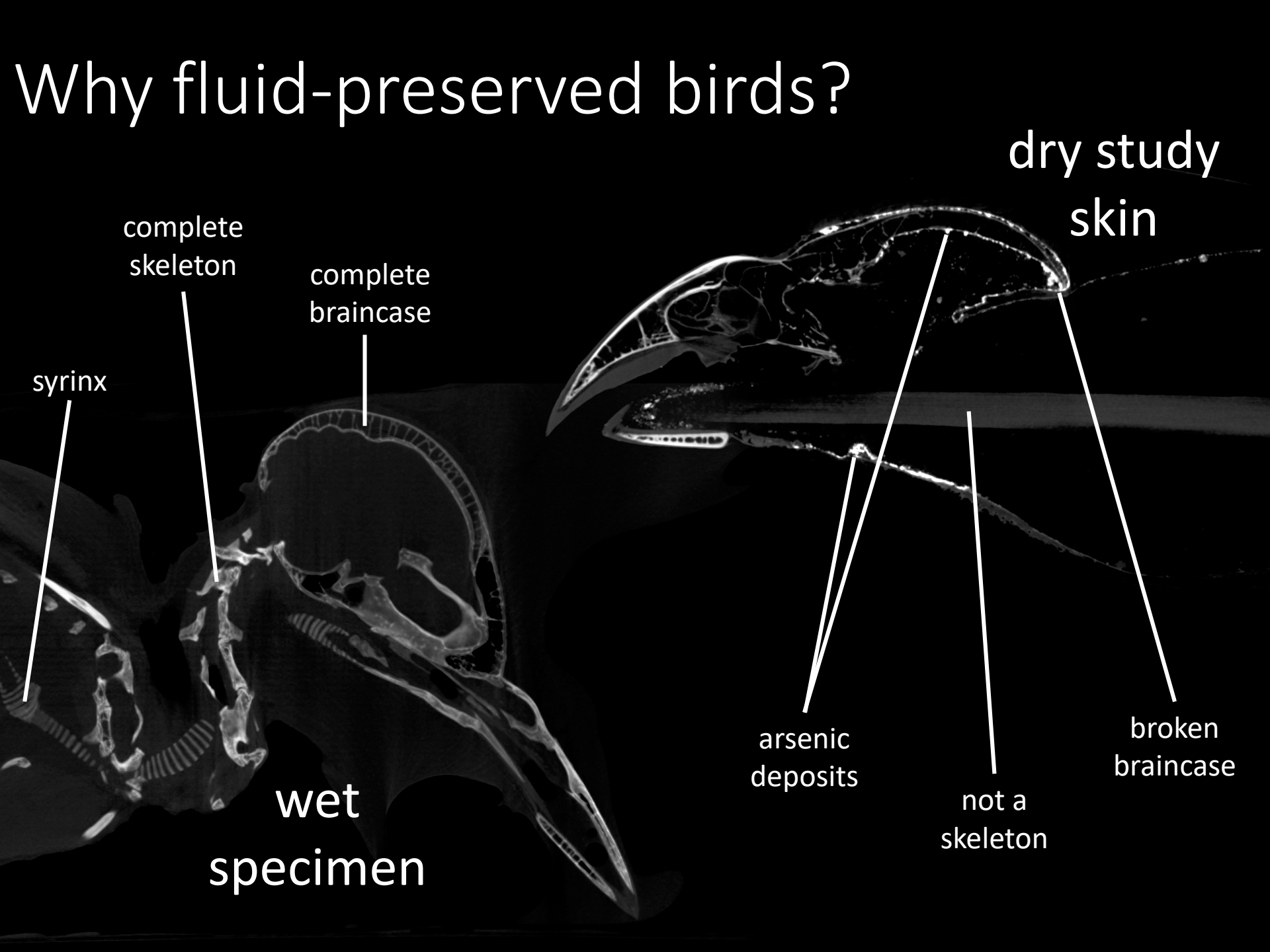

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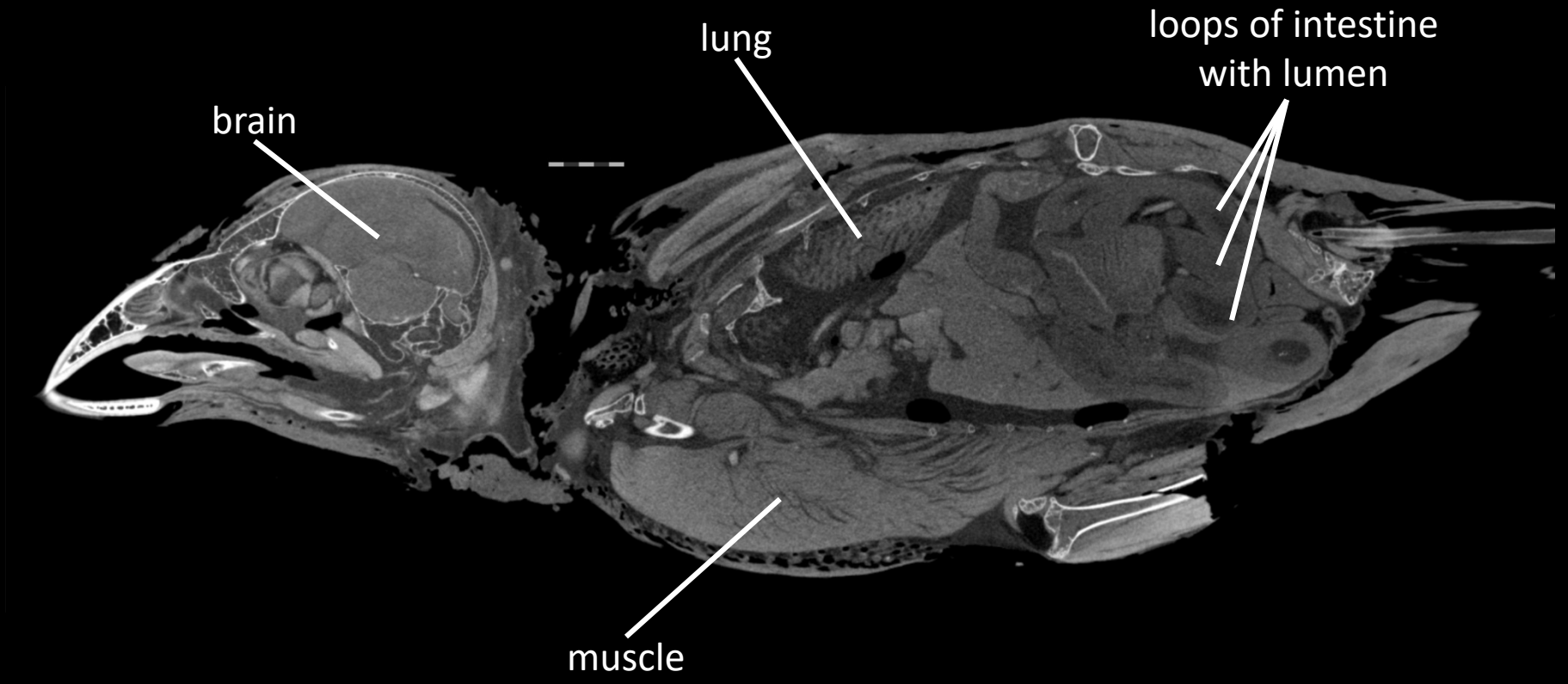
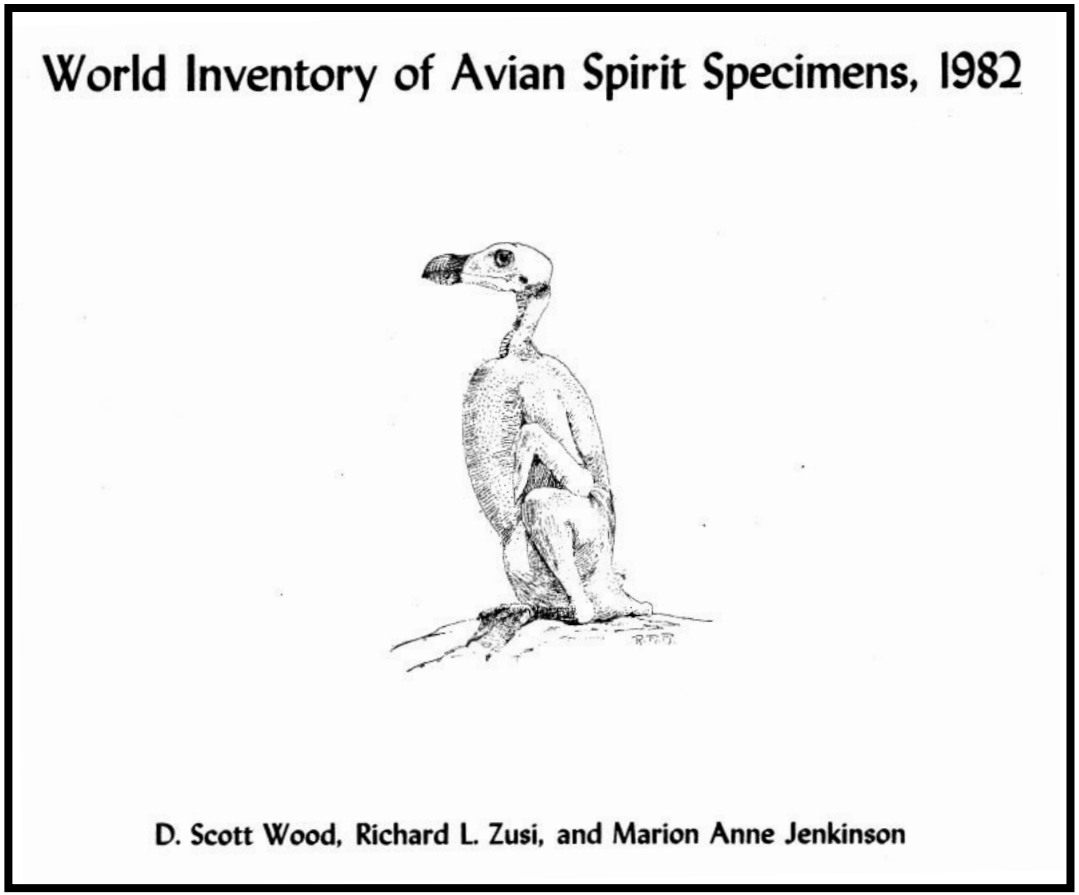
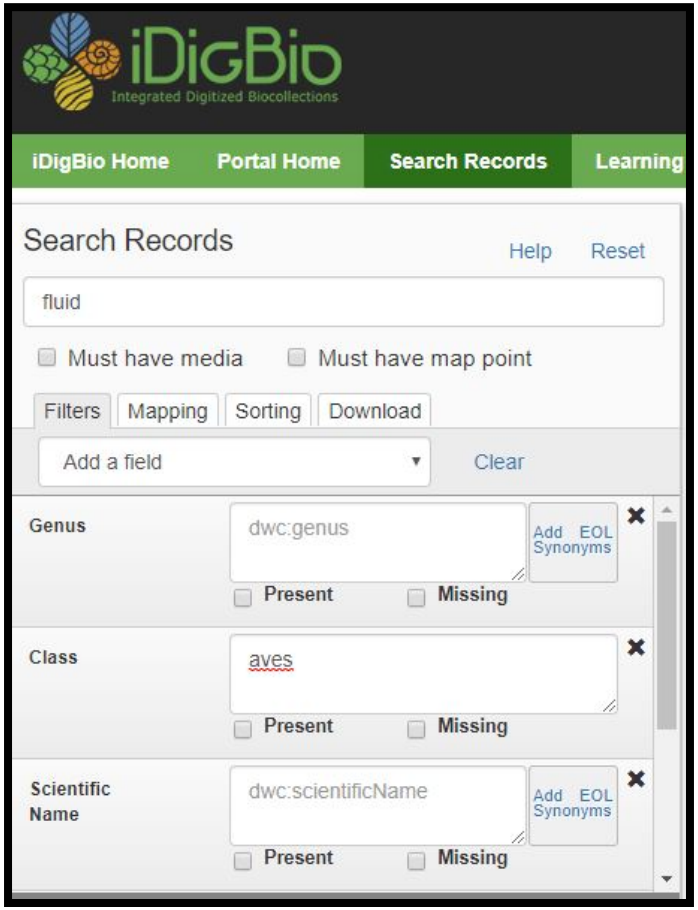


# How can we find fluid-preserved birds?

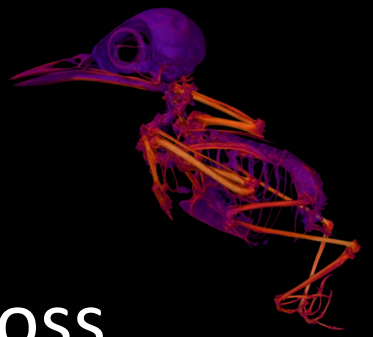
*Then…*




*Now…*



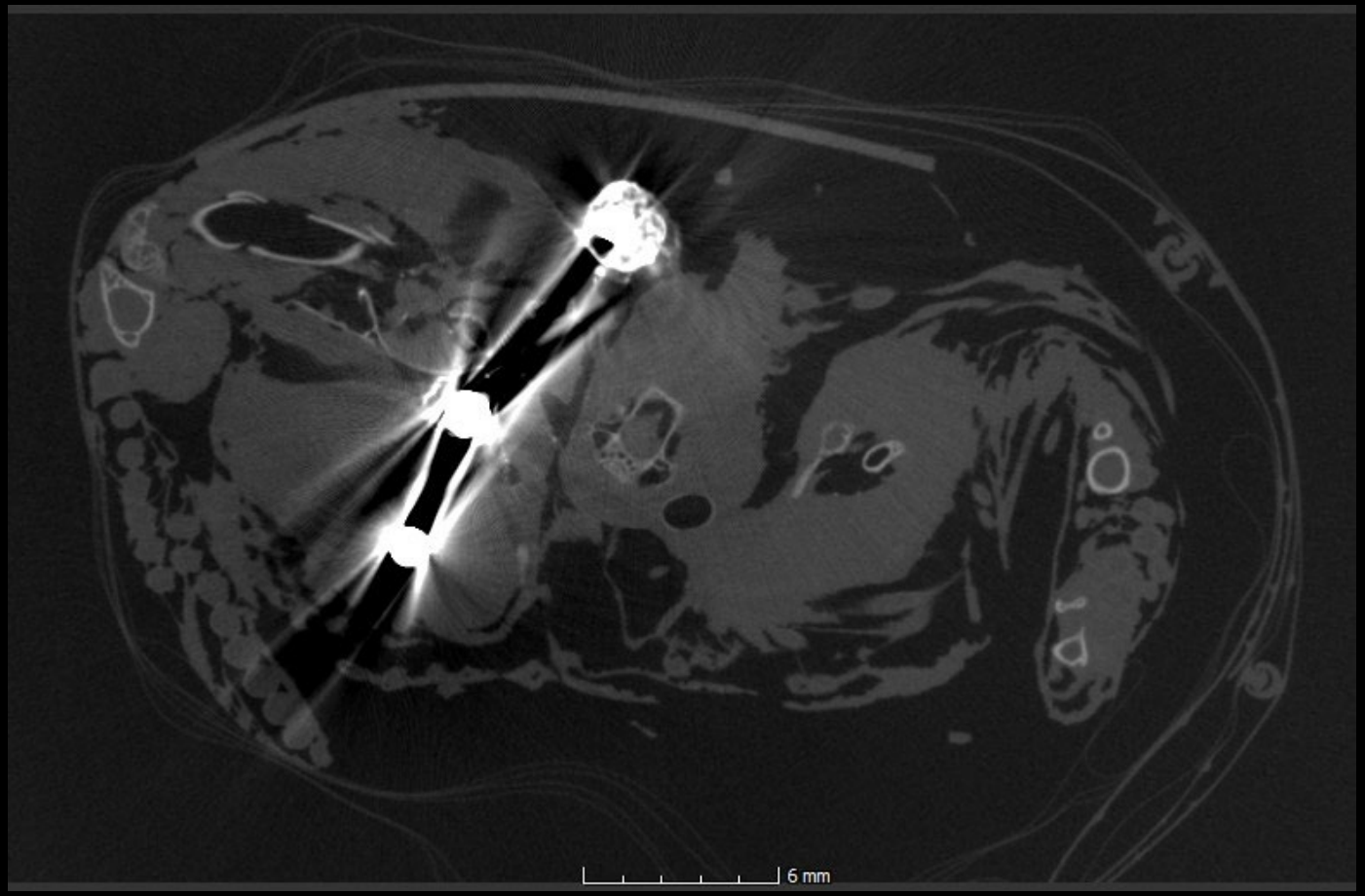
# Challenges with collections



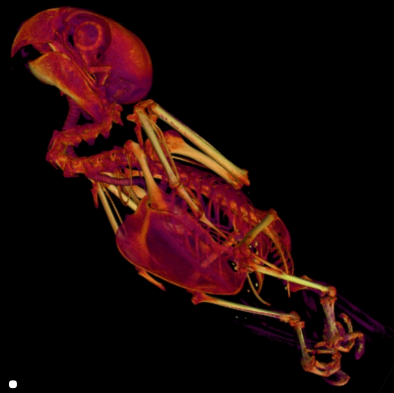
- Inconsistent terminology within and across institutions
  - 10,778 unique values for “Preparations” in iDigBio for 2,200+ type species of birds
  - 454 unique values for fluid-preserved specimens
- Inaccurate or unclear descriptions of preparation types
  - “Alcoholic: Whole; Alcoholic: Partial” (58)
  - “alc,tiss” (426)
- Lack of information about collecting protocols

# Challenge: lack of information on collecting protocols

# Challenge: locating information on collection methods

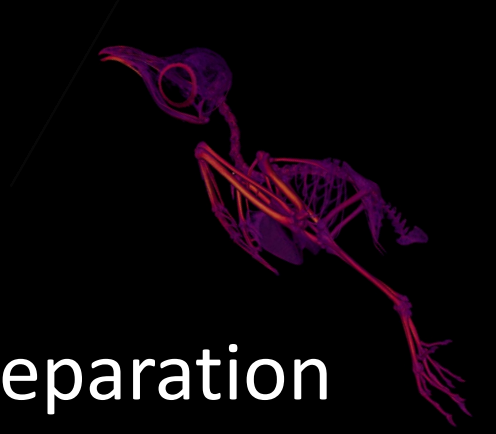


# Challenges with iDigBio



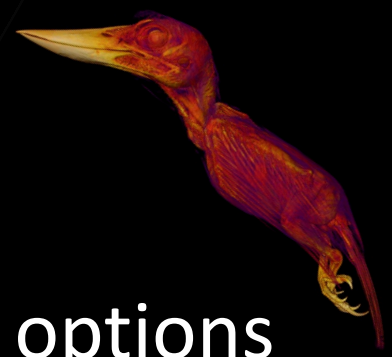
- Searching for preparation types
  - Inclusive terms in “search all fields” option mysteriously exclude terms
- Combines all preparation type information into one entry
  - “whole organism (ethanol); tissue (95% ethanol); spread wing”
- Identifying whole specimens
- Determining ontogenetic stage of specimen
- Selecting wild individuals

# Proposed solutions for bird collections



- Use a standardized vocabulary for preparation types
  - Workshop to develop this vocabulary planned for the 2020 American Ornithological Society meeting
- Maintain and make available notes about collecting protocols
- Avoid shooting bird specimens whenever possible

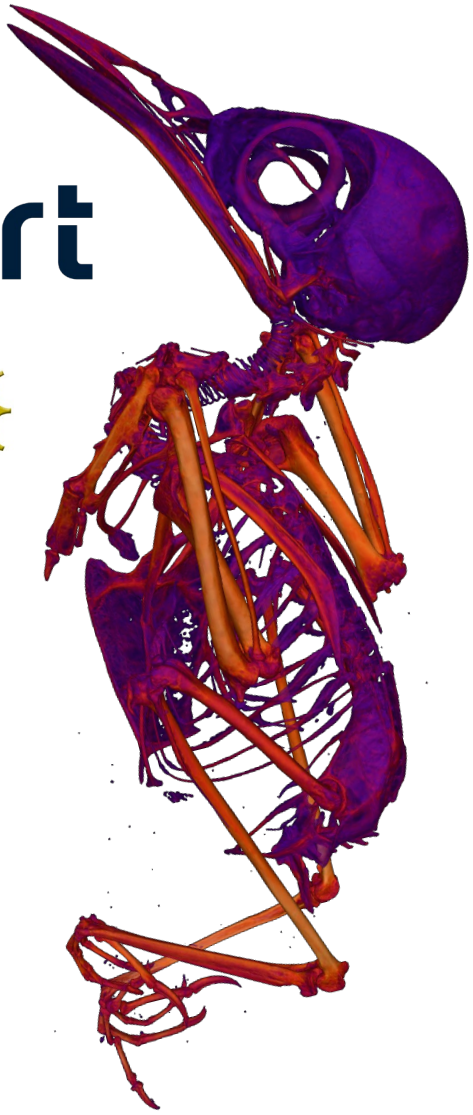
# Proposed solutions for iDigBio



- Add “Preparations” and “Life Stage” as options in the drop-down Add a Field menu
- Make an option to exclude captive individuals from searches
- Work with collections to harmonize data and standardize vocabulary on preparation type and ontogenetic stage

# Acknowledgments


- NSF DBI 1701714
- oVert Taxon Team Birds
- Helen James, Smithsonian National Museum of Natural History
- Steve Rogers, Carnegie Museum of Natural History

Check out our data at morphosource.org!

#oVertTCN
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