

# Benthic Invertebrate Collection

## Scripps Institution of Oceanography, University of California San Diego

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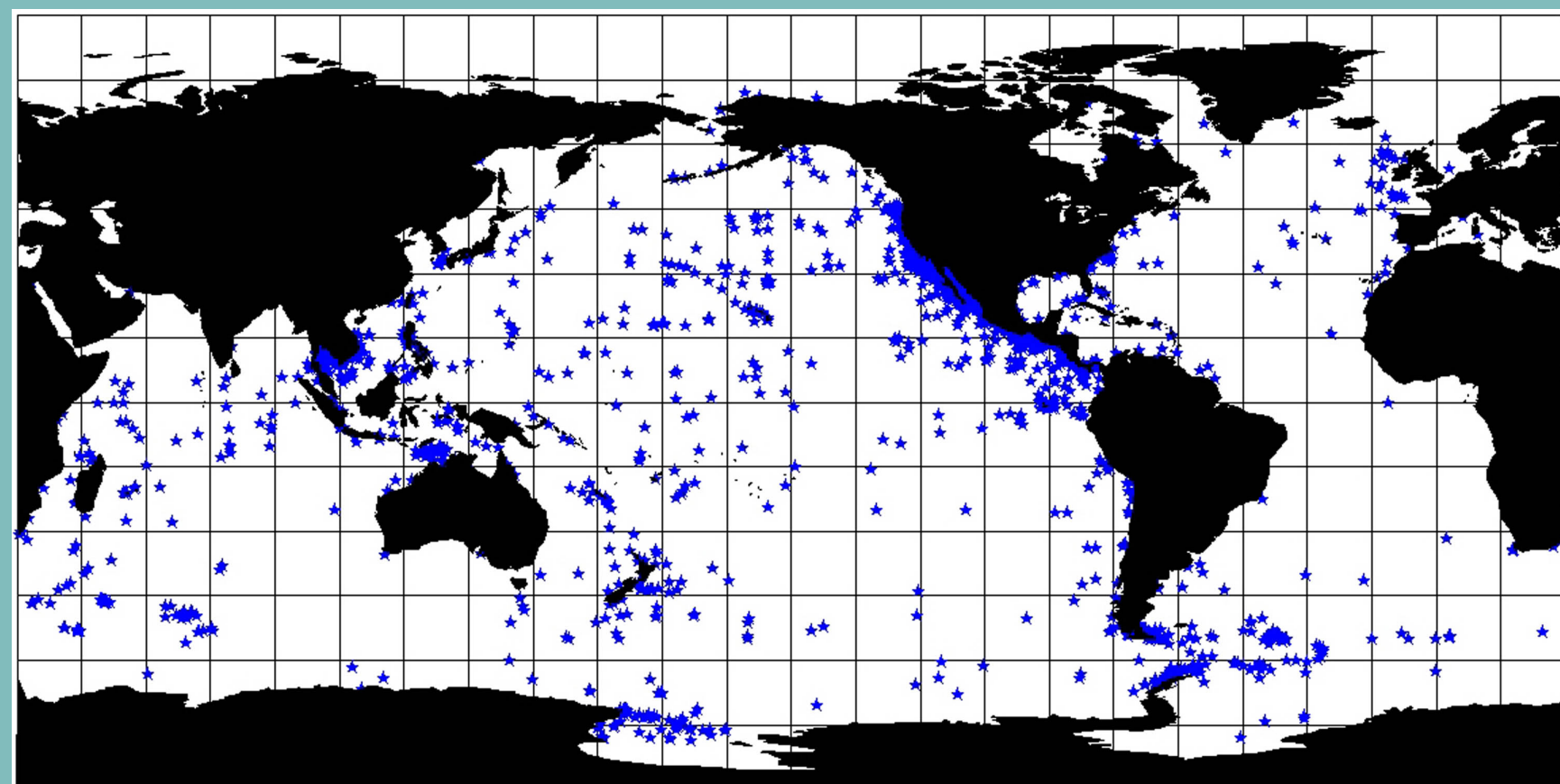


The Scripps Institution of Oceanography Benthic Invertebrate Collection (SIO BIC) is a university collection sourced through Scripps scientists, external researchers, and private collectors.

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La Jolla, CA 92093-0244  
858-822-2818 / [cseid@ucsd.edu](mailto:cseid@ucsd.edu)  
<https://scripps.ucsd.edu/collections/bi>

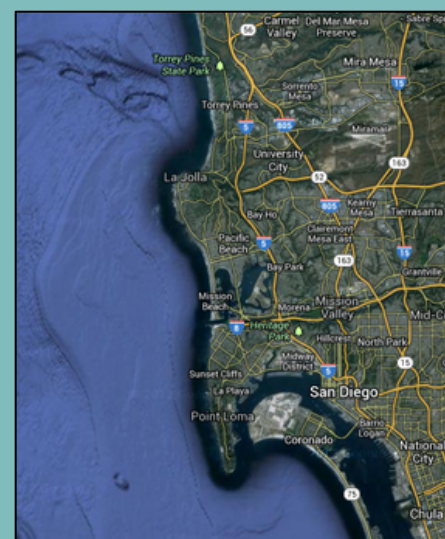
### Geographic Scope

Global benthic marine habitats

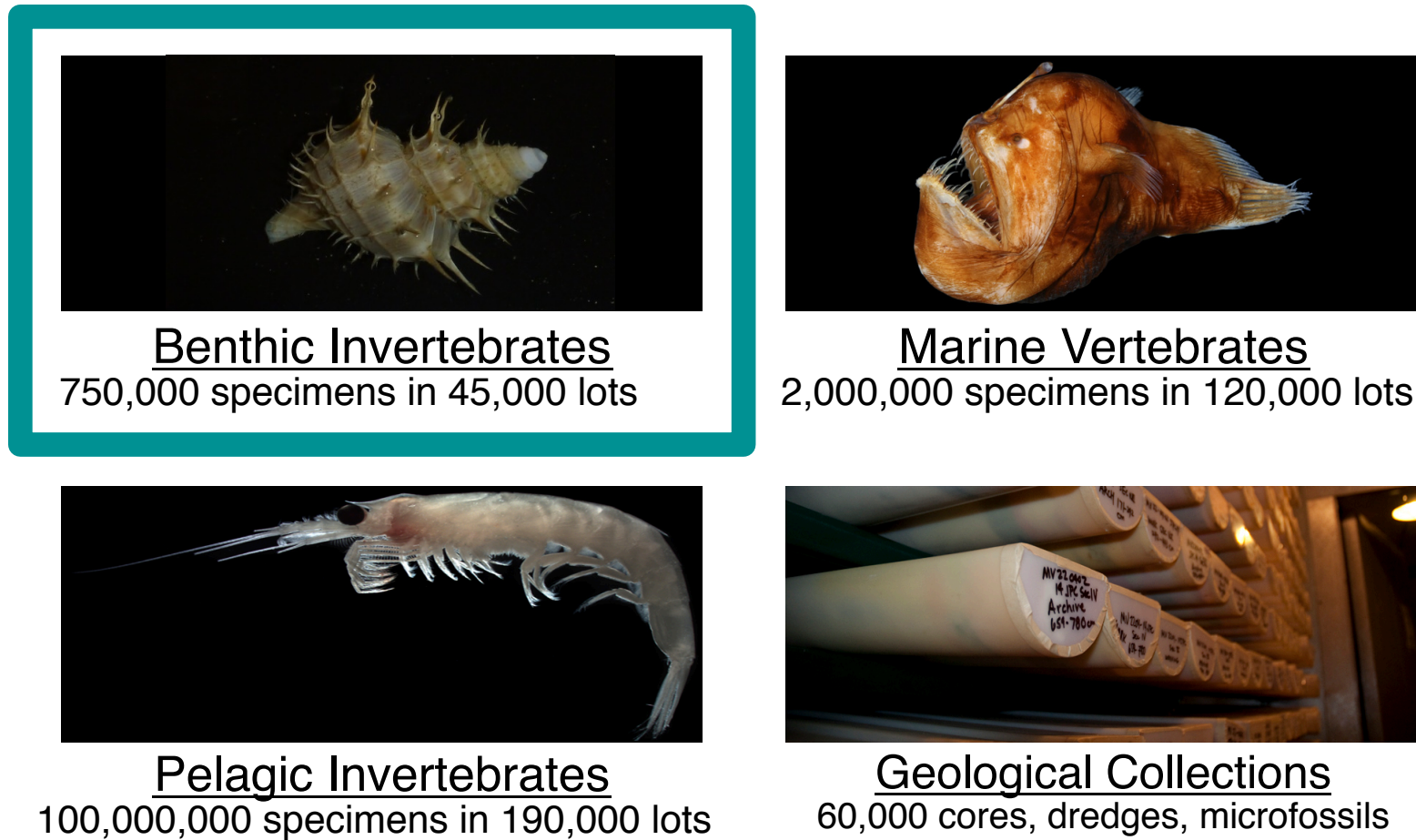


### Strengths

- Southern California region
- Eastern Pacific
- Antarctica
- Deep sea (>1,000 m)
- Chemosynthetic ecosystems



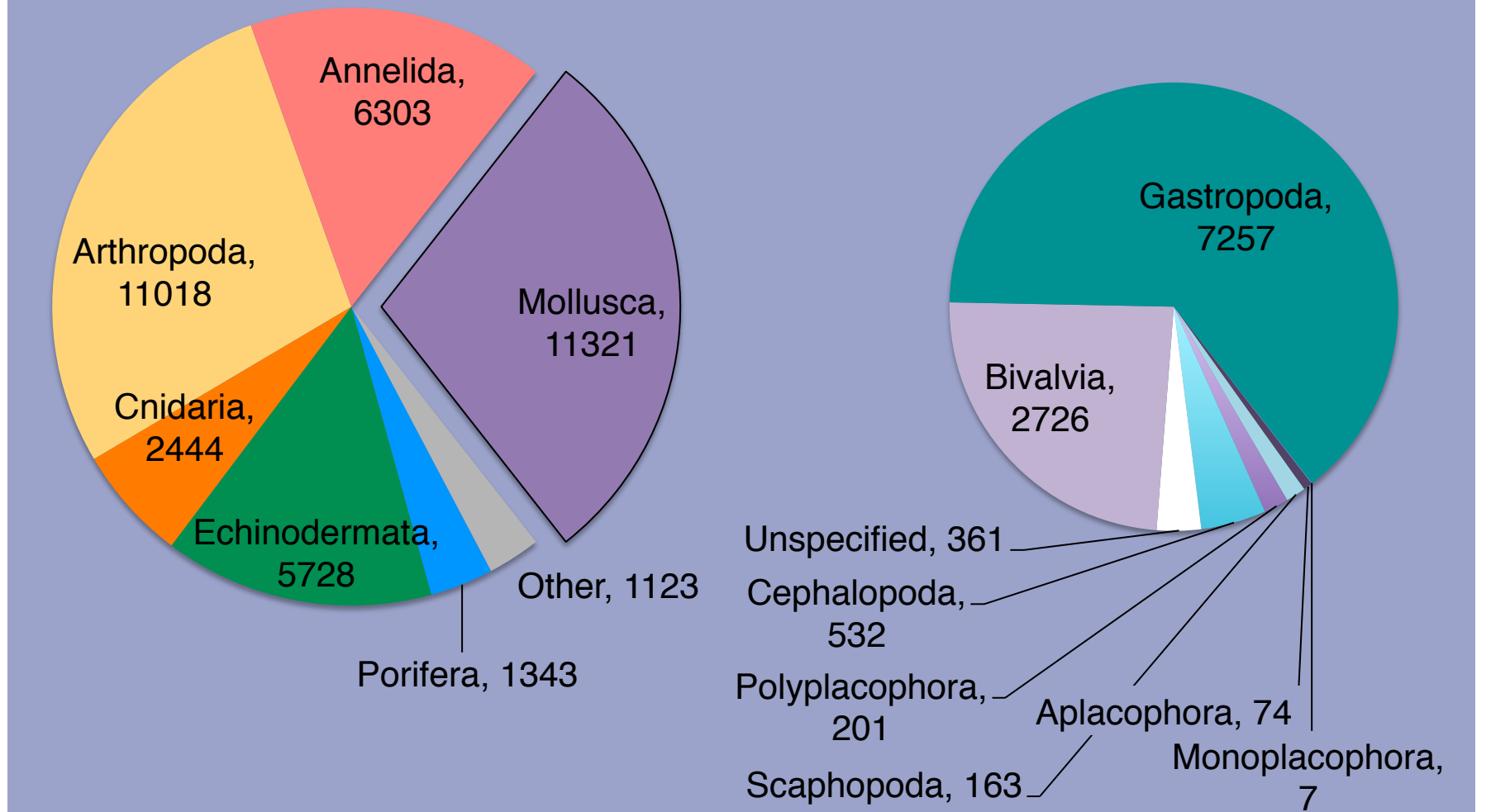
### SIO Oceanographic Collections



**750,000+** specimens  
**45,000+** lots (11,319 mollusks)  
**93** holotypes (7 mollusks)  
**453** paratypes (61 mollusks)

### Taxonomic Scope

SIO BIC Lots by Major Taxon



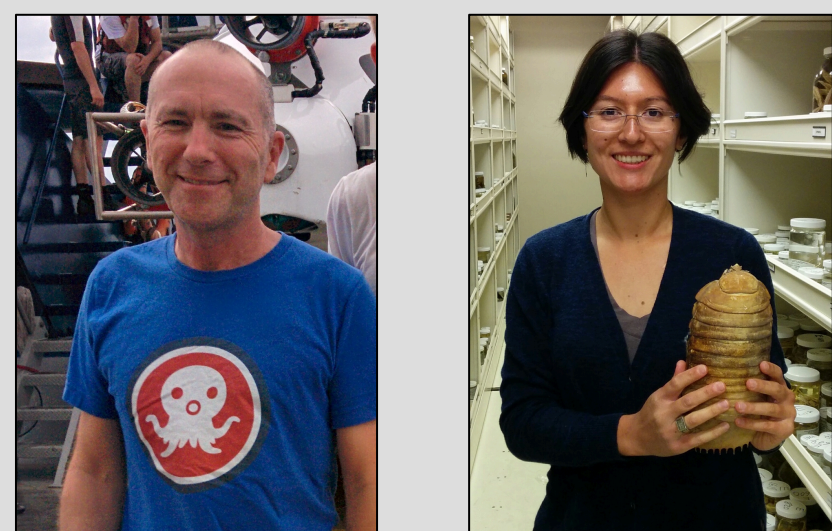
Taxonomic Representation

Phyla: 22  
Classes: 94 (7 molluscan)  
Families: 1,132 (320 molluscan)  
Genera: 3,315 (1,238 molluscan)  
Species: 8,817 (4,070 molluscan)



### Personnel

- Staff: curator, collection manager



- Students: 1 to 6, ~10 hrs/wk as part-time workers or volunteers
- Operating budget: \$5,000/yr

### Collection Uses

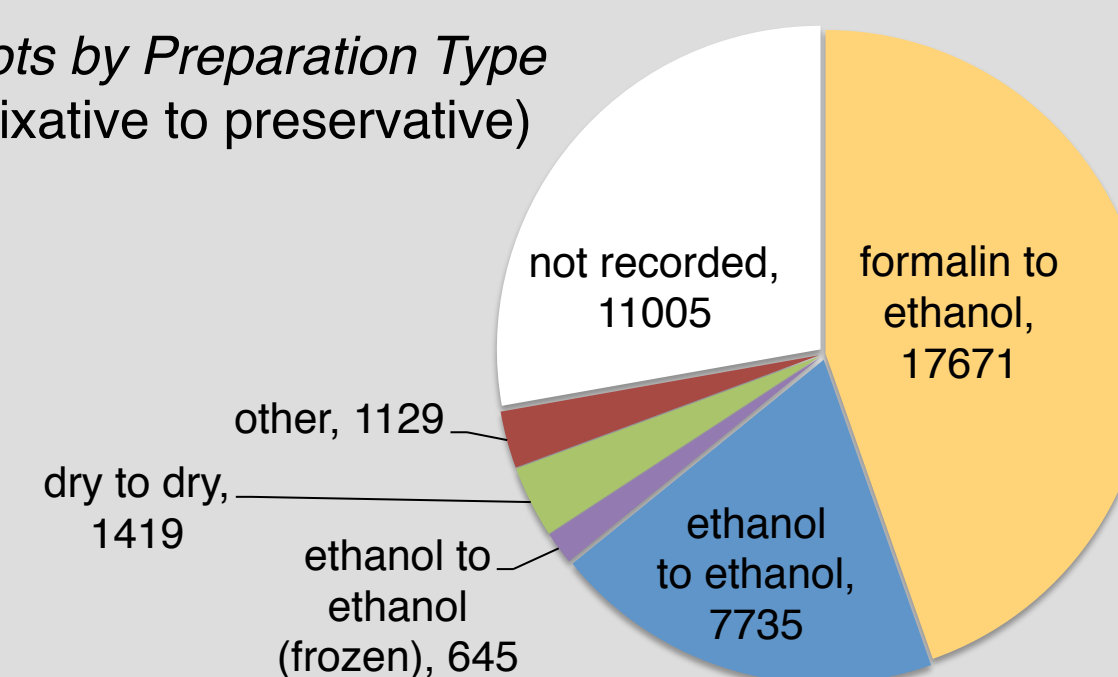
- Support **research** at SIO & beyond
- Furnish materials for **education**
- Preserve materials in **perpetuity**



### Curation

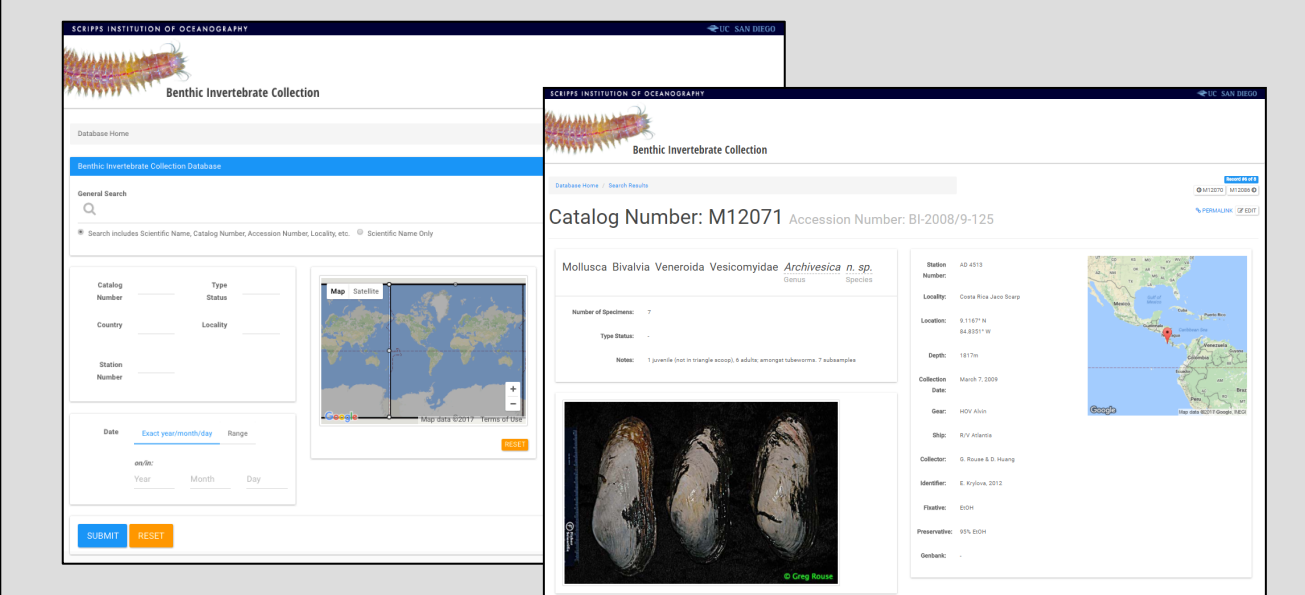
- Curated: ~40,000/45,000 lots (89%)
- Databased: 39,280 lots (87%)
- Georeferenced: 27,853 lots (62%)

Lots by Preparation Type (fixative to preservative)



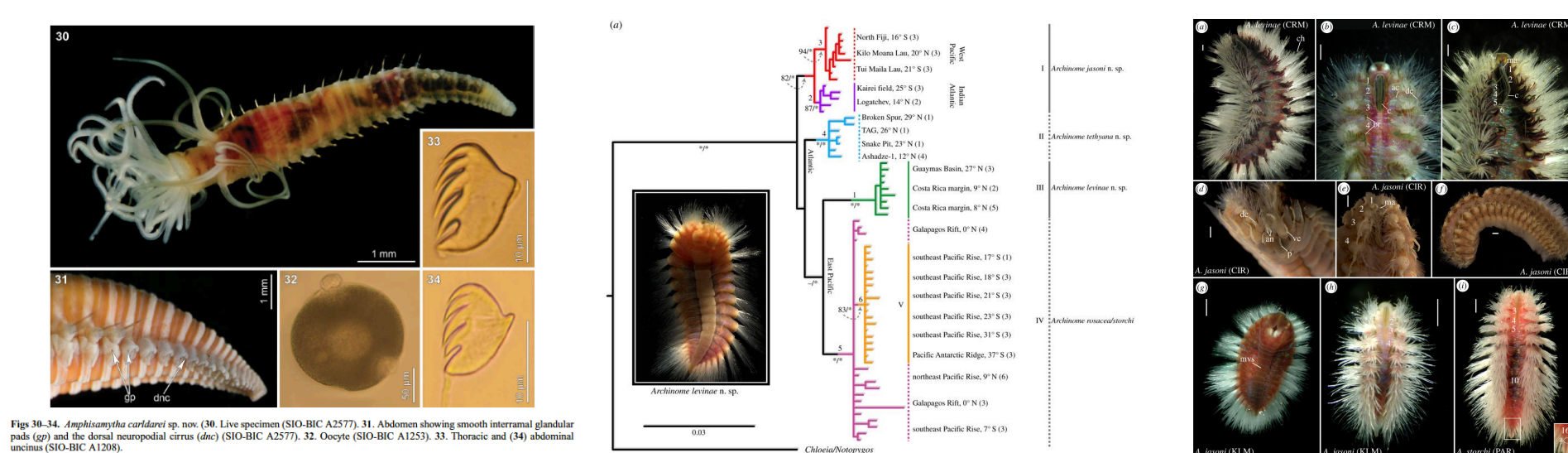
### Online Presence

- Searchable catalog <http://www.tinyurl.com/SIOBIC>
- SIO website, GRSciColl
- iDigBio (coming soon!)



## Current Activities

### Systematics of Annelids and Echinoderms



### Biodiversity and Evolution at Vents, Seeps, and Whalefalls



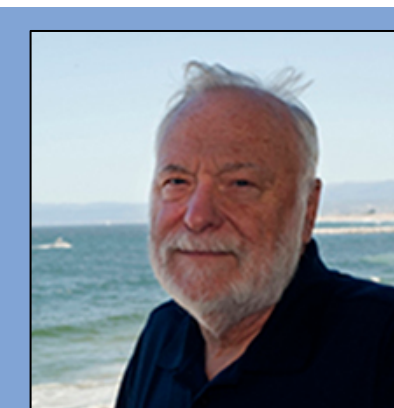
### History

- Earliest BIC specimens collected in **1902** by Dr. William Ritter, first Director of SIO
- SIO founded as the Marine Biological Association of San Diego in **1903**
- Public aquarium-museum built in **1910**
- SIO acquired by the University of California in **1912**, with UCSD founded in **1960**
- Collections divided into marine vertebrates and invertebrates (**1940s**) and then benthic and pelagic invertebrates (**1960s**)
- Collections moved in **1998** to their current home in Vaughan Hall, thanks to NSF grants



### Digitization Projects

- Accepting orphaned collections
- Cataloguing donated private collections
- iDigBio and taxonomic overhaul



Verena Tunnicliffe

Bob Vrijenhoek



### Outlook and Needs

- Inventory and prioritize our space
- Start -80 °C collection; organize -20 °C material
- Ventilation, humidity, and backup power issues

