USA College of Arts and Sciences

Department of Biology

Expertise and Resource Map

**Research Faculty**

**Cell Biology, Genomics, Physiology**
- Glen Borchert, Ph.D. – MicroRNAs & Genomics (non-coding RNA, bioinformatics) *NSF
- Ryan Littlefield, Ph.D. – Muscle Physiology (actin filament length determination-force feedback)**USA ORED
- Tim Sherman, Ph.D. – Plant Physiology and Cell Biology (sea grass)*USDC

**Fungal Biology**
- Juan Luis Mata, Ph.D. – Fungal Biology (taxonomy, systematics, biodiversity, ecology of macrofungi esp. Agaricales: subtropical and neotropical distribution) * NSF

**Evolution**
- Brian Axsmith, Ph.D. – Paleobotany and Evolution (fossil plants-Mobile & Baldwin Co.)
- Ylenia Chiari, Ph.D. – Evolutionary Biology, Herpetology, Systematics, Genomics

**Ecology**
- Sinead Ni Chadhain, Ph.D. – Marine Microbial Ecology and Genomics
- Mr. Smoot Major – Plant Ecology, Geographical Information Systems
- John McCreadie, Ph.D. – Freshwater Ecology, Entomomology, Statistics
- David Nelson, Ph.D. – Herpetological Ecology
- Jack O’Brien, Ph.D. – Ecological Parasitology

**Biochemistry**

**Herpetology**

**Plants**

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**Collaborations/Resources**

- **UCUR**
- **MS Program**
- **Departmental Honors**
- **University Honors**

**Non-Coding RNA/Bioinformatics Forum**

**Equipment/Instrumentation:**
- Fluorescence Dissecting Microscope
- Ion Torrent Sequencer
- Research Vessels

**Collections:**
- Herbarium (Major)
- Fungi (Mata)
- Insect (McCreadie)
- Vertebrate (Chiari)