### Student Research Projects Rhawn Denniston Cornell College

### 2019

- Linking Observational Records of Rainfall to Cave Flooding Events, cave KNI-51, Australian Tropics Paige Kluge
- Testing the Impact of Temperature and Humidity Variations on Isotopes in Speleothems from Tropical Australian Caves Chloe Martin
- HONORS THESIS: Testing the Influence of Major Volcanic Eruptions on the Indo-Australian Summer Monsoon using the Last Millennium Ensemble (with Dr. Caroline Ummenhofer, Woods Hole Oceanographic Institution)– Cali Pfleger,
- Environmental Signals in Buraca Gloriosa cave, central Portugal Jace Bricker
- Environmental Signals in Companheira and Ibn Amar caves, southern Portugal Gabrielle Hiatt

## 2018

- HONORS THESIS: Boron Isotope-Based Shallow Ocean pH Estimates from Miocene and Pliocene Caribbean Corals

   Kira Fish
- Isotopic Signals of Volcanic Eruptions in the Australian Summer Monsoon as Recorded in Tropical Australian Stalagmites Savhana Chrisco
- Environmental Monitoring of Three Tropical Western Australia Caves: Implications for Speleothem Paleoclimate Reconstructions – Cole Zrinsky
- Calibrating the Links between Rainfall and Thresholds for Cave Flooding in Three Tropical Western Australia Caves Matthew Stivland
- The Response of the Indo-Australian Summer Monsoon to the AD 1257 Mount Salamas Eruption as Indicated by the Last Millennium Ensemble (with Dr. Caroline Ummenhofer, Woods Hole Oceanographic Institution)– Cali Pfleger,
- Paleofire Reconstructions from Tropical Australian Stalagmites (with Dr. Elena Argiriadis, Ca' Foscari University, Venice)– Anhia Nguyen
- Reconstructing Late Holocene Cave Flooding Events using Mud Layers in KNI-51 Stalagmites Paige Kluge
- Reconstructing Late Holocene Cave Flooding Events using Mud Layers in KNI-51 Stalagmites Chloe Martin

## 2017

- Testing the Influence of Major Volcanic Eruptions on the Indo-Australian Summer Monsoon using Sub-Annually-Resolved Stable Isotope Analyses of Tropical Australia Stalagmites – Cole Zrinsky
- Stable Isotopic Analysis of Aragonite Stalagmites from Central Nepal Daniel Klever
- Trace Elements in Late Holocene Aragonite Stalagmites from the Australian Tropics Stephanie Voller
- Trace Elements in Late Holocene Aragonite Stalagmites from the Australian Tropics Cali Pfleger
- Investigating Rainwater, Dripwater, and Australian Cave Environments Danielle Polson
- Investigating Rainwater, Dripwater, and Australian Cave Environments Shay Rule

# 2016

• Assessing Southern Hemisphere Behavior of the Indo-Pacific Tropical Rain Belt during the Late Holocene through Stable Isotope and U-Th Analyses of a Tropical Australia Stalagmite – Elena Skosey-LaLonde

• Maintaining a Cave Environmental Monitoring Program, Western Australia - James Garrett

## 2015

- Design and Installation of Cave Environmental Monitoring Program, Western Australia James Garrett
- Paleoclimate Stalagmite Records from Cape Range, Western Australia Spanning Portions of the Last Five Glacial Cycles James Garrett
- HONORS THESIS: Monthly-Resolved Paleoceanographic Variability Reconstructed from Pristine Miocene Corals from the Dominican Republic Thomas Weiss
- HONORS THESIS: Stable Isotopic and Petrographic Analysis of Bounding Surfaces in Nevada Stalagmites Chris Felt

## 2014

- Millennial-Scale Climate Variability of Marine Isotope Stages 2-5b from Blanchard Springs Caverns, northern Arkansas Vreni Reidel
- Paleomonsoon Implications of Carbon Isotopic Variability in Late Holocene Aragonite Stalagmites from the Central Australian Tropics Stephanie Lucker

## 2013

- Stalagmite Records of the Penultimate Glacial Cycle from Western Iberia Setsen Altan-Ochir
- HONORS THESIS: Ultra-High Resolution Isotopic Records of Late Holocene Indo-Australian Summer Monsoon Dynamics - Kristian Passaro

# 2012

- Sea Level Variability over the Last Glacial Cycle (literature study) Daniel Pawlak
- Tropical Sea Surface Temperature Variability over the Last Glacial Cycle (literature study) David Allen
- HONORS THESIS: Coupled Stable Isotopes and Mud Layer Analysis of Aragonite Stalagmites from Tropical Western Australia Angelique Gonzales
- HONORS THESIS: Climate of the Last Glacial Cycle from Portugal Reconstructed using Stalagmites from Glory Hole Cave - Amanda Houts
- HONORS THESIS: The Last Glacial Maximum through Middle Holocene Climate Record from Stalagmites from Cape Range, Western Australia Ni An

# 2011

- Modeling Oxygen Isotopic Ratios in Recent Stalagmite Aragonite from Northern Australia Andrew Roers
- Constraining Initial Thorium Ratios in Northern Australia Stalagmites Julian Peota
- Towards a Unified Paleoclimate Reconstruction from Portuguese Stalagmites Lucas Anderson
- Tropical Cyclones Reconstructions using Mud Layers in a 300-900 Yr Old Tropical Western Australia Stalagmite -Mike Barthelmes
- Tropical Cyclones Reconstructions using Mud Layers in a 300-600 Yr Old Tropical Western Australia Stalagmite -Dan Cleary

### 2010

- Comparison of Middle Holocene Oxygen Isotopic Time Series from Australian Stalagmites Elizabeth Greaves
- High-Precision U/Th Dates of GH Cave Stalagmites, Portugal Megan Denner
- Sub-Decadal Climate Reconstructions from Late Holocene Aragonite Stalagmites from the Ning Bing Range, Kimberley, Western Australia - Nick Campbell

## 2009

• Preliminary Dates on a Suite of Stalagmites from the Ning Bing Range, Kimberley, Western Australia - Bipul Timilsina

## 2008

- Refining a U-Th Chronology for a Western Australia Stalagmite Paleoclimate Series Emily Krauter
- Trace Element Characteristics of a Kimberley Australia Stalagmite Abby Michaelson
- Investigating Late Pleistocene Australian Monsoon Variability Rebecca Ellerbroek

#### 2006

- Growth Histories of Stalagmites from Western Australia: Implications for Reconstructing the Australian Monsoon over the Last Glacial Cycle Kristyn Rodzinyak
- A Comparison of U/Ca and Sr/Ca-Based Sea Surface Temperatures from Caribbean Fossil Corals Michael Lommler

### 2005

- An Arkansas Stalagmite Penultimate Deglaciation Record: Pt I Lara Moellers
- An Arkansas Stalagmite Penultimate Deglaciation Record: Pt II Diana Krogmeier
- Reconstructing Growth Histories of Portuguese Stalagmites: Relationships to Heinrich Events Charles Trodick
- U/Th Dating of Select Great Basin Stalagmites Amanda Gibson

#### 2004

- Collection, Preparation, and Preliminary Chronology of Stalagmites from Coastal Portugal Alyssa Borowske
- U-Pb Dating Pristine Neogene Corals from Dominican Republic Peter Cole
- Construction of Chronologies and Stable Isotopic Trends of Ozark Stalagmites Brian Hoye

#### 2003

- High-Resolution Stable Isotopic Analysis of Sea Surface Temperatures from Neogene Corals from Dominican Republic Stephanie Penn
- High-Res. Stable Isotopic Analysis of a New Zealand Stalagmite Alexa Clements

## 2002

• A Late Holocene Speleothem Record from Devils Ice Box Cave, Central Missouri - Michelle DuPree