

# The University of Arizona: Economic Geology, Fall 2019

A member of the Lowell Institute for Mineral Resources



## New Students

This year, we welcome several new graduate students! **Eytan Orent (MS)**, **Dylan Carlini (MS)**, **Kyle Lewis (PSM)**, and **Chad Williams (PSM)**. They plan to enhance their knowledge of ore depositist and conduct field-based assessments of ore-forming systems

## Recent Graduates

Our group graduated several students last year, including **Carson Richardson (PhD)**, **Micheal Kassela (MS)**, **Alex Whitehead (PSM)**, **Daniel Perea (PSM)**, and **Ben Robinson (PSM)**.

Carson is a research scientist at the Arizona Geological Survey. Micheal is working for Rio Tinto near South Jordan, Utah. Alex Whitehead currently works for Freeport-McMoRan. Daniel Perea is a geologist working for Peñoles. Ben Robinson attained a position at the Bureau of Land Management in New Mexico.

## Current Students

Our current students' work spans Arizona, Nevada, and Utah with focuses in structural geology, petrology, geochemistry, magmatism, and mineralogy.

### Arizona

**Dan Favorito's (PhD)** focuses on understanding the original geometry, magnitude, and timing of Laramide reverse faults and how they relate to porphyry copper systems in southeastern Arizona. Recent work involves a regional study of Laramide shortening and overprinting mid-Cenozoic extension in the Santa Catalina, Rincon, and southern Galiuro Mountains. **Roy Greig (PhD)** is studying the evolution of the Laramide arc and porphyry Cu province in southwestern North America. **Dylan Carlini (MS)** plans to study epithermal deposits within Arizona. **Billy Fitzpatrick (MS)** is studying the relationship between magmatic phases and tungsten, copper mineralized hydrothermal systems in Texas Canyon, Little Dragoons Mountains Arizona.

### Nevada

**Alexandra Wallenberg (MS)** is studying the magmatism and hydrothermal evolution of the Gregg Canyon pluton; a porphyry Mo-Cu system on the eastern flank of the Sonoma Range, Nevada.

### Utah

**Eytan Orent (MS)** is researching the uranium mineralization in the Paradox Basin.

## Faculty and Researchers

**Dr. Mark Barton** and **Dr. Eric Seedorff** cooperatively taught the Advanced Ore Deposit Mapping Short Course in September 2019. In the 2019-2020 academic year, Mark and Eric taught Economic Mineral Deposits and Geologic Best Practices, respectively, before spending the summers in the field with graduate students. Mark conducted field mapping in conjunction with students for the interdisciplinary Paradoz Basin paleofluid project. Eric made visits to student field areas and began preparing for the January 2020 IMR Leadership Short Course.

**Dr. Isabel Barton** is an Assistant Professor in the Mining and Geological Engineering division of the College of Engineering.

**Dr. Frank Mazdab** has begun curating the U of A Geology hard rock collections, organizing and digitizing specimens for increased access and online interaction. He also continues to work with former and current graduate students and with undergraduate students interested in pursuing economic geology.



Participants of the 2019 Advanced Ore Deposit Mapping Short Course

## Society of Economic Geologists (SEG) Student Chapter

Our SEG student chapter continued fundraising during the last academic year through mineral sales and industry support. The goal of the chapter this year is to organize a field trip to see examples of active, world-class mining districts.

