



UA SCIENCE

# Geosciences

## Current student updates



**Emilia Caylor** (left) continues her research into the basin evolution of the Late Cretaceous Fort Crittenden Formation in southern Arizona using Uranium-Lead geochronology and sedimentology/stratigraphy to constrain exhumation rates of Laramide uplifts. Her recent field observations suggest a change in depositional environment and provenance throughout the

formation, and will help to shed light on basin formation in southern Arizona resulting from Laramide tectonism.

**Scott Meek** (right) enters the second year of his PhD working with Dr Barbara Carrapa. He is currently working on modeling the architecture of several ancient alluvial fan deposits in the western US using UAV based photogrammetry with a view to refining models of fan deposition and its interaction with climate and tectonics.



**Susana Henriquez** continues her research into the dynamics of tectono-thermal evolution of the northern Puna Plateau, Argentina.

This past summer, **Walt Afonso** spent 6 weeks in the field collecting samples for a thermochronologic study of the Gros Ventre Range in northwestern Wyoming assisted by an undergraduate, aiming to constrain the exhumation history of the range and understand its relationship to similar ranges in the area. The field work was supported by the Chernoff Family Field Experience Scholarship, the Geological Society of America and the Kenneth H. Crandall Memorial Grant through AAPG.



**Chris Clinkscales** (left) is now a PhD candidate and is continuing to pursue research projects on the Jurassic–Cretaceous Cordilleran tectonics

of East Asia and North China, the exhumation history of the Shanxi Rift in China, and Laramide to Oligocene tectonics of the western USA. Chris presented last summer at the GSA Cordilleran conference in Flagstaff, AZ.

## Tectonics Research Group: 2017 – 2018 update

### Graduations

This year, the tectonics department congratulates two graduates! **John He** completed his MSc under Dr Paul Kapp on the structural geology of Tajikistan and currently holds a position in the UA Helium labs.

**Jay Chapman** completed his Ph.D. on the orogenic evolution of the Pamir mountains under Dr Pete DeCelles and has since assumed a position as an Assistant Professor in the Department of Geology and Geophysics at the University of Wyoming.

### Faculty highlights

**Barbara Carrapa** has taken up the mantle as Department Chair at UA alongside her continuing research.

**Pete DeCelles** received the Pettijohn Medal for Sedimentology at the SEPM Awards Ceremony this May.

**George Gehrels** is set to lead the Short Course on Detrital Zircon Geochronology at GSA 2018, IN.

**Paul Kapp** has published a series of papers on the evolution of the Tibetan orogenic system, and has a further paper in press with Am. J. Sci.



### New students

This fall, the Department welcomes two new graduate students into the fold:

**Tshering Lama Sherpa** (above left) is starting a Master's degree having graduated from her BS at Union College, NY. She will be working with Dr Pete DeCelles on the uplift dynamics of the Bhumichula Plateau, Nepal. **Rob Hayes** (above right) is starting a Ph.D. after graduating with a Master's of Geology from the University of Leicester, UK, studying under Prof Sarah Gabbott. He plans to research the Triassic–Jurassic transition in the Western Interior of the US, working under Dr Pete DeCelles.