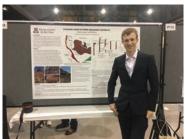


TECTONICS RESEARCH GROUP 2018-2019 update

STUDENT AND POST DOC HIGHLIGHTS

Tshering Lama Sherpa continues her Masters research, with Peter DeCelles, looking at the exhumation history of Bhumichula Plateau in Western Nepal. Tshering (down left) spent four weeks in western Nepal this past year, collecting samples for a thermochronological analyses of her study site and presented preliminary results at the 2019 GSA Annual Meeting in Phoenix.





Rob Hayes continues into the second year of his PhD with Peter DeCelles studying dynamic topography in context of Triassic succession of Colorado Plateau primarily focusing on the Moenkopi/Chinle Formations. He presented preliminary results at the 2019 GSA Annual meeting and has completed 3 months of fieldworks to date(with his trusty Toyota 4Runner). Rob (up right) will be looking at fluvial architecture on basin margins for the next phase of his research.



Chris Clinkscales, a PhD candidate working with Paul Kapp, recently published a paper on basement-involved uplifts in the Taihang-Luliangshan ranges in North China and recently submitted a manuscript on the exhumation history of the northern Shanxi Rift, also in North China. Chris (left) continues to conduct fieldwork, always trying to find the next measurement.

Jordan Wang (right) is starting his masters with Paul Kapp having graduated with a BS from University of Washington. He is interested in the timing and development of regional scale structures in the North American Cordillera. His current projects are focused on large scale coastwise displacements of terranes in British Columbia and the development of large wavelength corrugations in the Catalina-Rincon Mts.

Gilby Jepson is a new post doc with Barbara Carrapa in the Apatite Fission Track Lab. Gilby uses thermochronology to expand our current understanding about the formation and reactivation of collisional, intracontinental, and Cordilleran orogens in Central Asia and the Western USA. He is currently working on developing new thermochronological techniques and resolving existing thermochronometers.

Kurt Sundell (down left) is a postdoctoral research associate in the University of Arizona Department of Geosciences working with George Gehrels at the Arizona LaserChron Center. His recent research involves field work in southern Tibet and analytical methods development focused on the interpretation of petrogenetic geochemical information in the context of geochronology (i.e., petrochronology) to understand crustal thickness controls on surface uplift and paleocli-





Sarah George is a new postdoc working with Dr. George Gehrels to expand analytical capabilities at Arizona LaserChron. Sarah (up right) got her PhD from University of Texas with Dr. Brian Horton on tectonics of the northern Andes. Currently she is working in Patagonia, Peru, Ecuador, and Alaska, thinking about flat slab subduction, accretion, and regional unconformities.

Felipe R. Ferroni (down right) is a new PhD candidate working with Peter DeCelles on the tectono-stratigraphic evolution of Southern Subandean Basin, Bolívia. His research is mainly focused on interpretation of subsurface structural framework and kinematic restoration to link shortening as a response of dynamic processes that resulted in the prominent Altiplano-Puna tectonomorphic domain.





FACULTY HIGHLIGHTS



Barbara Carrapa continues this year as the department head while being actively involved with multiple projects. Her NSF 2026 Idea Machine pitch, titled "Globalization of Science Results with AI" with collaborators Mihai Ducea and Mihai Surdeanu, was among 33 chosen out of 800 applications for public review. She will also be leading a new field based lab class this spring, in collaboration with the University of Rio Negro in Patagonia.

George Gehrels successfully led another short course in Detrital Zircon Geochronology at GSA Annual Meeting in Phoenix.

Paul Kapp and **Peter DeCelles** (pictured left) published a comprehensive paper on the Himalayan-Tibetan orogen titled "Mesozoic-Cenozoic Geological Evolution of the Himalayan-Tibet orogen and working tectonic hypotheses" in the American Journal of Science this past March.

The tectonics department congratulates our new graduates: Emilia Caylor, Walt Afonso, Scott Meek and Dr. Susana Henriquez!

Dr. Susana Henriquez successfully defended her thesis on the kinematic evolution of Andean thrust belt in NW Argentina and has since been working at the UArizona Helium Lab. Emilia Caylor and Walt Afonso completed their MSc under Dr. Barbara Carrapa this year. Emilia will also be starting her PhD with Dr. Carrapa starting Spring 2020. Scott Meek completed his masters and has since assumed a faculty position at Snow College, Utah.