

I (Dr. Jennifer McIntosh) am looking to recruit a PhD student to start Fall 2022 at the University of Arizona (UA) in the Department of Hydrology and Atmospheric Sciences, co-advised by Prof. Grant Ferguson at the University of Saskatchewan (adjunct at UA). The position is funded as a part of a new NSF project on Evolution of Subsurface Microbe-Rock-Fluid systems (<https://news.arizona.edu/story/nsf-awards-uarizona-led-team-28m-study-earthsmysterious-subsurface>). We are seeking a motivated and engaged PhD student interested in understanding how changes to the earth's surface over geologic time have influenced deep subsurface flow systems, fluid-rock reactions, and microbial life. Open questions include: how the geometry of flow systems and permeability distribution have changed in response burial and uplift/exhumation; key hydrologic drivers of paleofluid flow, mineral disequilibria, and metabolic potential; origin, preservation, and flushing of fluids; limits to life in the subsurface; etc. Research approaches include hydrogeologic, geochemical, and isotopic data analysis, as well as conceptual and numerical hydrogeologic and/or geochemical modeling, and opportunities for fieldwork and laboratory analyses. The PhD student will join a large, interdisciplinary, and international project team including other graduate students and postdoctoral fellows. Students will also have an opportunity to participate in public education and outreach activities for under-served school children.

Students with a background in hydrogeology, geosciences, and/or geochemistry are encouraged to apply. The deadline for applications is January 15, 2022. Interested students are encouraged to send their CV and a brief introduction to Dr. McIntosh (jenmc@email.arizona.edu) and Dr. Ferguson (grant.ferguson@usask.ca) before the application deadline. Please note the undergraduate course prerequisites in science and mathematics for the PhD program in Hydrology at UA (<https://grad.arizona.edu/catalog/>).

At the University of Arizona, we value our inclusive climate because we know that diversity in experiences and perspectives is vital to advancing innovation, critical thinking, solving complex problems, and creating an inclusive academic community. As a Hispanic- and American Indian and Alaska Native-serving institution, we translate these values into action by seeking individuals who have experience and expertise working with diverse students, colleagues, and constituencies. Because we seek a workforce with a wide range of perspectives and experiences, we provide equal employment opportunities to applicants and employees without regard to race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, or genetic information. As an Employer of National Service, we also welcome alumni of AmeriCorps, Peace Corps, and other national service programs and others who will help us advance our Inclusive Excellence initiative aimed at creating a university that values student, staff and faculty engagement in addressing issues of diversity and inclusiveness.