

Alexandra Pearce

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Education:

M.S. Environmental Geoscience
Saint Louis University, St. Louis, MO
Graduating May 2016

B.S. Geosciences: Hydrogeology Option; B.S. Geobiology
The Pennsylvania State University, State College, PA
May 2014

Interests

Hydrology; Biogeochemistry
Remote Sensing; Ecology; Environmental conservation

Skills

Field work
Mapping with ArcGIS 10.1
Microbiological lab work (including DNA extraction, PCR, Fluorescence *in situ* Hybridization)

Scholarships and Awards

2014-2015: Graduate Assistantship at Saint Louis University
2013/2014: James and Nancy Hedberg Scholarship in Geosciences; Matthew J. Wilson Honors Scholarship
2012/2013: Donald B. and Mary E. Tait Scholarship in Microbial Biogeochemistry; Robert F. Schmaltz Award
Summer 2012: Center for Environmental geoChemistry and Genomics (CECG) Summer Fellowship
2011/2012: Donald B. and Mary E. Tait Scholarship in Microbial Biogeochemistry

Experience

**Biogeochemistry Research with Soil and Water Research Lab,
Saint Louis University** **August 2014 (ongoing)**

Teaching Assistant for Dr. Lisa Chambers, Saint Louis University **August 2014 (ongoing)**

Acid Mine Drainage Research with Macalady Lab Group, Penn State **May 2012-May 2014**
I characterized the microbial community of an acid mine drainage seep at an abandoned coal mine in Windber, PA for my senior thesis with Dr. Jennifer Macalady. I assisted on a sample collecting trip to West Virginia and Alabama in June 2012. In my last year at the Group, I contributed to research involving the quantification of the proportion of *Xanthomonadales* bacteria at various AMD sites.

Teaching Instructor for Dr. Peter Wilf, Penn State **August - December 2013**
EARTH 150 is a course aimed at non-science majors and teaches them the fundamentals of evolution and the major hypotheses of paleontology, including dinosaur extinction. I helped with and coordinated review sessions, preliminary grading of written assignments and exam proctoring for a class of 200.

Literature Research, CM Solutions, Johannesburg, South Africa **June, July 2011**
I summarized the problems mining industries face with worldwide water shortages for an engineering firm. Of special focus were mining policies and environmental legislation, new methods in water efficiency, impacts of climate change, and mine self-regulation.

Field assistant, University of Pretoria, South Africa **June, July 2011**
I assisted a Zoology PhD candidate, Dina Mustafa Fagir Abu Bakr, at the Ezemvelo Nature Reserve, Pretoria, South Africa. The research concerned the role of parasites in the population ecology of Southern African small mammals. Tasks included laying hundreds of humane traps, transporting and handling the animals, and their re-release. I also assisted with the collection of ectoparasites and tissue samples, data entry and lab preparation.