

KARA HOPPES

EDUCATIONAL BACKGROUND

University of Wyoming (2016-2018)

- Working towards MS degree in Geology
- Awards: McMurry Fellowship in Energy Research (2016-2017), J H Hanley Memorial Scholarship (2016-2017)

University of Delaware (2013-2016)

- Graduated with degrees in Geology (BS) and Environmental Science (BS)
- Awards/Honors: Special Merit Award (2016), Dean's List (Fall 2013, Spring 2014-2015)
- Extracurricular Activities: Environmentors [mentored freshman within the College of Earth, Ocean, and Environment (CEOE) and helped run Admission's events to discuss the CEOE program with prospective students and their families], Geology Club, Club Ultimate (Frisbee)

Bucknell University (2011-2013)

- Awards/Honors: Dean's Scholarship (2011-2013), Dean's List (2011-2012), Women's Rowing Patriot League Honor Roll (2012)
- Extracurricular Activities: Outing Club, Varsity Crew (athlete and manager)

McDonogh School (2007-2011)

- Awards/Honors: Cum Laude (2011), Dean's List (2010-2011), Character and Influence Award (2010-2011), Honor Roll (2007-2010)
- Extracurricular Activities: Honor Council (2007-2011), Rollins-Luetkemeyer Scholarship Program [leadership program] (2010-2011), Varsity Softball (2008-2011; Captain '10-'11), Varsity Cross-Country (2007-2010; Captain '10)

POSTERS AND PRESENTATIONS

- Presented "Microbial Iron Oxidation and Contribution to Fe Oxide Coatings in Aquifer Sediment" poster at Delaware Environmental Institute (DENIN) Scholars Symposium (May 2016)
- Presented "Microbial Iron Oxidation and Contribution to Fe Oxide Coatings in Aquifer Sediment" poster at University of Delaware Microbial Systems Symposium (Feb. 2016)
- Presented "Microbial Iron Oxidation and Contribution to Fe Oxide Coatings in Aquifer Sediment" poster at the 2015 GSA Conference (Nov. 2015)
- Presented "Biomineralization of Iron Oxide Sand Coatings within Groundwater Systems" poster at Delaware Experimental Program to Stimulate Competitive Research (EPSCoR) Summer Scholars Symposium (Aug. 2015)
- Orally presented "Biomineralization of Iron Oxide Sand Coatings within Groundwater Systems" and accompanying poster at DENIN Scholars Symposium (May 2015)

PROFESSIONAL EXPERIENCE

Undergraduate Researcher of Geobiochemistry with Dr. Clara Chan at University of Delaware (Nov. 2014-June 2016)

- Investigated the role of iron-oxidizing microbes in iron oxide sand coating production within freshwater aquifers
- Examined biotic vs. abiotic sand coating production rates by improvising an artificial aquifer system and collecting data through microscopic analysis and iron oxide quantification

Research Assistant for Cape Shores, DE Hydrogeology/Geobiochemistry Data Collection with Dr. Erin Field at University of Delaware (Aug. 2015)

- Collected parameters of salinity, temp., redox potential, pH, and dissolved oxygen throughout intertidal mixing cell
- Completed laboratory analyses of collected iron and sulfur species from groundwater
- Assisted in two vibracore extractions

OUTSIDE AWARDS/GRANTS

Delaware Environmental Institute (DENIN) Scholars Grant (Oct. 2014-May 2015; Oct. 2015-May 2016)

- Received undergraduate grant to participate in environmental research
- Attended DENIN Science Communication Workshop
- Presented work at DENIN Scholars Symposium

EPSCoR Summer Scholars Grant (June-Aug. 2015)

- Received undergraduate grant to participate in environmental research
- Attended EPSCoR Research Ethics Seminar
- Presented work at EPSCoR Summer Scholars Symposium

ADDITIONAL SKILLS/EXPERIENCE

Topographic and geologic mapping

Brunton and GPS use

Outcrop analysis and synthesis via stratigraphic column

Sediment core analysis

Light, SEM, and confocal microscopy

Centrifuge and autoclave use

Spectrophotometric analysis

Chemical safety

Literature review