SARAH E. KINTNER

CURRICULUM VITAE
NOVEMBER 2016

14204 NE Salmon Creek Avenue, Vancouver, WA 98684 • sarah.kintner @wsu.edu

EDUCATION

Washington State University Vancouver, Vancouver, WA Anticipated graduation date: May 2018
M.S. in Environmental Science

University of Wisconsin-Eau Claire, Eau Claire, WI September 2011-May 2016
B.S. in Comprehensive Geology (hydrogeology emphasis) *summa cum laude*, GPA 3.81/4.0
Minors: University Honors Program, History

AWARDS AND HONORS

2016 Excellence in Geology Award, UW-Eau Claire Geology Department 2016
John Dickinson Scholarship, Barr Engineering 2016
Goldwater Scholar, Barry Goldwater Scholarship & Excellence In Education Program 2015
Fairmount Santrol Responsible Mining Scholarship, University of Wisconsin-Eau Claire 2015
***MGWA Foundation Student Scholarship*,** Minnesota Groundwater Association 2015
Best Poster, WI Ground Water Association Annual Meeting 2015
Unimin Corporation Sophomore Scholarship, University of Wisconsin-Eau Claire 2014

RESEARCH EXPERIENCE

Nanoparticle Fate and Transport in Municipal Water Supply, UW-Eau Claire June 2015-May 2016

- Developed a study of the fate and transport of nanoparticles in Eau Claire municipal water supply
- Applied for and received funding from UW-Eau Claire Office of Research and Sponsored Programs
- Collected and examined water samples throughout the treatment process
- Operated the Transmission Electron Microscope (TEM) for chemical analysis purposes
- Presented at the 2016 UW-Eau Claire Celebration of Research & Sponsored Programs symposium

Characterizing Unsaturated Zone with Geophysical Techniques, UW-Eau Claire May 2014-May 2015

- Collected hydraulic conductivity data in the field using traditional techniques
- Collected soil samples and conducted lab analyses
- Designed Phase II of study

- Presented at 2015 Wisconsin Groundwater Association Annual Meeting, 2015 Northwest GSA annual meeting, 2015 UW-Eau Claire Honors Symposium, and 2015 UW-Eau Claire Celebration of Research & Sponsored Programs symposium

PROFESSIONAL EXPERIENCE

AREMP Stream Technician, American Conservation Experience May-September 2016

- Worked with BLM and Forest Service Biologists to monitor watershed condition on public lands.
- Conducted stream habitat surveys including channel morphology, habitat typing, substrate measurements, large wood surveys, macroinvertebrate collection and invasive species identification
- Field collection and processing of environmental DNA samples
- Conducted aquatic species diversion surveys on bridges and culverts to assist in replacement priorities in coordination with the FS and Salmon Superhighway project

Assessment & Remediation Intern, Barr Engineering, Minneapolis, MN May-August 2015

- Conducted geologic drilling shifts which included soil sampling and classification, and oversight of subcontractors
- Performed gas and soil monitoring at construction site
- Conducted chemical analysis of water quality and data management review for environmental impact assessments
- Coordinated with subcontractors and prepare contract documents
- Prepared technical reports and permits

Team Leader, AmeriCorps ECLIPSE, Eau Claire, WI September 2011-May 2014

- Facilitated communications between program and site staff
- Supervised, supported and reviewed team member's progress through evaluation and weekly team meetings
- Lead individual and small group activities to foster at-risk preschool children's literacy, numeracy and social skills

PRESENTATIONS

Knutson, Sarah E. (2015). Estimating Hydraulic Conductivity In The Vadose Zone Using GPR Techniques. Oral Presentation presented at the University of Wisconsin Eau Claire's Celebration of Excellence in Research and Creative Activity, Eau Claire, WI.

Kintner, Sarah E., and Hooper, Robert R. (2016). Evaluation of Nanoparticles and Colloids in a Public Water Supply from Well-Head to the Consumer Tap. Poster presented at the University of Wisconsin Eau Claire's Honor's Symposium, Eau Claire, WI.

Kaufman, Aaron, Kintner, Sarah E., and Thomas, Paul J. (2016). Rayleigh-Benard Convection: Simulation vs. Experimental Results. Poster presented at the University of Wisconsin Eau Claire's Honor's Symposium, Eau Claire, WI.

Passow, Haillie N., Knutson, Sarah E., and Grote, Katherine R. (2015). Estimating Hydraulic Conductivity In The Vadose Zone Using GPR Techniques. Poster presented at annual conference of the Geologic Society of America North-Central Section, Madison, WI.

Knutson, Sarah E., Passow, Haillie N., Grote, Katherine R. (2015). Characterizing Unsaturated Zone Permeability Using Geophysical Techniques. Poster presented at annual conference of the Wisconsin Ground Water Association, Waukesha, WI

Passow, Haillie N., Knutson, Sarah E., and Grote, Katherine R. (2015). Estimating Hydraulic Conductivity In The Vadose Zone Using GPR Techniques. Poster presented at the University of Wisconsin Eau Claire's Honor's Symposium, Eau Claire, WI.

TEACHING EXPERIENCE

Geology (GEOL 104) Teaching Assistant, UW-Eau Claire September -December 2014

- Aided professor in Honor's Program lab section of 20 students
- Provided laboratory assistance including explain geologic concepts and demonstrating lab procedures

ADDITIONAL LEADERSHIP AND SERVICE

Campus Ambassador, UW-Eau Claire, Admission's Office 2015-16 Academic Year

Geology Department Assistant, UW-Eau Claire September 2014-May 2016

TECHNICAL SKILLS

Field Techniques: environmental DNA collection and processing, Macroinvertebrate collection, bankfull measurements, invasive species ID, collect gradient using autolevel, aquatic species diversion surveys, stream discharge measurement, groundwater mapping, infiltration measurement via double ring infiltrometer, borehole soil and rock logging, slug test, soil testing and characterization, landfill gas monitoring, geologic field mapping, field orientation via compass and GPS

Laboratory Techniques: Grain size analysis using sieve and hydrometer techniques, permeameter analysis, dispersivity analysis, water sample analysis using Transmission Electron Microscopy (TEM)

Computational: Subsurface contouring of rock and groundwater surfaces, predicting groundwater and contaminant transport using computer models, aquifer characterization, horizontal and vertical groundwater flow calculations, well drawdown predictions, slug and pumping test analysis, infiltration and surface runoff calculations, water chemistry analysis, hydrograph analysis, GIS spatial analysis

Communication: Report writing, public speaking, data organization and presentation

Software Skills: Microsoft Office Suite, Adobe Illustrator, ArcMap, CorelDRAW, gINT, AQTESOLV, MODFLOW, Geochemist's Workbench, MATLAB, IgPet