

## Heather Upin

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PO Box 8074 1 Chapin Way, Northampton, MA 01063 (college)  
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### Education

- Smith College, Northampton, MA (anticipated May 2016)
  - Bachelor of Arts, Geosciences
  - GPA: 6.62
  - Honors thesis title- A study of the hydrology and geochemistry of Paulina Lake in Newberry Volcano, Central Oregon; Advisor: Robert Newton

### Awards and Honors

- Member of Sigma Xi (2015 – present)
- Geostars grant recipient (2015)
- Dean's List (2013-2014)

### Relevant Coursework

- Petrology (Spring 2016)
- Mineralogy; Sedimentary Geology (Fall 2015)
- Structural Geology; Aqueous Geochemistry (Spring 2015)
- Chemistry III: Organic II; Invertebrate Paleontology and History of Life (Fall 2014)
- Chemistry II: Organic Chemistry; Geomorphology (Spring 2014)
- Chemistry I: General; Introduction to Earth Processes and History; Exploring your Local Geologic Landscape (Fall 2013)
- Introductory Physics I; Fundamental engineering principles; Introduction to Computer Science through Programming- Python (Spring 2013)
- Calculus II: Differential Equations and Power Series; Engineering for Everyone (Fall 2012)

### Work and Academic Experience

- Teaching Assistant for Aqueous Geochemistry; Smith College Geosciences department (anticipated Spring 2016)  
*Will assist with laboratory exercises in the Center for Aqueous Biogeochemical Research (CABR) and on class field trips. Professor: Amy Rhodes*
- The Newberry Crater Lakes, Oregon; Keck Geology Consortium (Summer 2015)  
*Field and lab work in preparation for my senior thesis; project focusing on Paulina Lake's characteristically high arsenic concentration and its prehistoric catastrophic flood. Field work in Oregon lasted two weeks. Professor: Johan Varekamp, Wesleyan University*
- Teaching Assistant for Organic Chemistry lab; Smith College Chemistry department (Spring 2015)  
*Assisted instructor with laboratory experiments, answered student's questions and made sure the laboratory experiments ran smoothly. Professor: Rebecca Thomas*
- Museum assistant at the Museum of Mineralogy and Petrology, University of Athens (Summer 2014)  
*Aided museum employees with sorting unknown minerals and attended lectures on mineralogy with various professors in the Department of Geology at the University of Athens in Greece.*
- Smith College Global Engagement Seminar to Greece entitled The Archaeology of Greece in its Geologic Context (Summer 2014)  
*Studied on various Greek islands and the mainland during a three week seminar exploring the archaeology and geology of Greece. During the seminar each student gave two presentations about topics we covered and places we saw; my topics covered the Akrotiri cinder cones and ancient silver mines of Lavrio. Professors: John Brady and Scott Bradbury*

- Research Intern at the Institute of Child Development, University of Minnesota (Summer 2012)  
*Assisted a PhD student with dissertation research; duties- study preparation and protocol design*

### Abstracts

- Upin, Heather E.**, Newton, Robert M., Varekamp, Johan C., 2016, A study of the geochemical and geomorphic evidence for prehistoric floods from Paulina Lake, Newberry Crater, Central Oregon, Geologic Society of America *Abstracts with Programs*, v. 48, n. 2, p. 0.
- Horne, Julia, **Upin, Heather E.**, Harpp, Karen, Varekamp, Johan C., 2016, The geochemistry of Paulina Lake, Newberry, OR, Geologic Society of America *Abstracts with Programs*, v. 48, n. 2, p. 0.
- Caldwell, Samuel, Capece, Lena R., Chung, Angela, Hanschell, Rebecca, Horne, Julia, **Upin, Heather E.**, Thomas, Ellen and Varekamp, Johan C., 2015, The twin crater lakes of Newberry Volcano, OR, Geologic Society of America *Abstracts with Programs*, v. 47, n. 7, p. 757.
- Upin, Heather E.** and Newton, Robert M., 2015, Impact of logging on soil solution mercury in the Avery Brook Watershed, West Whately, Massachusetts, Geologic Society of America *Abstracts with Programs*, v. 47, n. 3, p. 70.

### Extracurricular and Additional Skills

- Geologic field skills including the ability to identify different rock types and structures; how to collect, label and organize samples
- Proficient at using laboratory equipment including the X-Ray Diffractometer, Inductively Coupled Plasma Spectrometer and the Hydra C for mercury analysis
- Proficient in Adobe Illustrator, Microsoft Word, PowerPoint and Excel
- Group leadership; Smith College Outing Club President (2015-2016): Organize club meetings, maintain connections to the local outdoor community and schedule and lead trips for the largest student club on campus
- Outdoor leadership; student leader for Smith College Outdoor Adventures Program
- Rock climbing instructor (2013-present)
- Customer service; front desk sales and registration at Central Rock Gym (Massachusetts) and Vertical Endeavors (Minnesota)
- Wilderness First Aid (WFA) certification through Stonehearth Open Learning Opportunities (SOLO); expires January 2017

### Profession Membership

- Sigma Xi, Smith College Chapter
- Geologic Society of America

### References

Robert Newton (rnewton@smith.edu), thesis adviser and mentor  
 Amy Rhodes (arhodes@smith.edu), professor  
 Scott Johnson (sjohnson@smith.edu), employer and mentor  
 Hana Shirkey (hana@centralrockgym.com), employer