

SHARA FELD

Madison, WI 53715 ▪ sifeld@wisc.edu

EDUCATION

- M.D.**, University of Wisconsin School of Medicine and Public Health 2014-present
- Ph.D. in Civil and Environmental Engineering**, University of Washington 2010-2014
- *Water Resources in an Arid Land: Availability, Improving Access and the Health Context*
 - *National Defense Science and Engineering Graduate fellowship recipient*
 - *M.S. in Civil and Environmental Engineering Received 2012*
 - *Representing atmospheric moisture content along mountain slopes: Examination using distributed sensors in the Sierra Nevada, California*
- B.A. in Earth Science with Honors Thesis**, Dartmouth College 2003-2007
- *An experimental study of buoyancy-driven penetration of a passive tracer from channel flow and into an underlying porous bed*

HONORS AND AWARDS

Fellowships and Funding

- Awarded the **Dane County Medical Society Grant** August 2015
- MEDIC: development of electronic referrals system
- Awarded **NIH T35 Training Grant in Surgery** April 2015
- Discovering Temporal Dependencies in Multiple Post-Surgical Complications Using Markov Chain Methods
- Awarded **National Defense Science and Engineering Graduate Fellowship (NDSEG)** Sept 2012
- Full financial support for 3 years of graduate education
 - Only awarded to 200 graduate students a year
- Honorable Mention: **NSF Graduate Fellowship Program** Mar 2011, Mar 2012
- GoHealth Global Health Travel Funding** for research in Peru July 2013
- Travel Funding** for 6th Annual Fog Conference (Japan) April 2013
- Graduate Student Fund for Excellence and Innovation Travel Award** April 2013
- “Research Experience for Undergraduates” Internship**, REU June 2006 – July 2006
- Women in Science Program**, Dartmouth Sept 2003 – June 2004

Honors and Awards

- 2016 Medical Student Leadership Award** May 2016
- Buckminster Fuller Challenge** Finalist August 2014
- American Society of Landscape Architects (ASLA)** Student Collaboration June 2014
- Gardens, Green Space and Health in Eliseo Collazos, Lima, Peru
- Social Economic Environmental Design (SEED)** January 2014
- Comunidad Ecologica Saludable- Lima, Peru
- EDRA45 New Orleans** Gardens and Health in Eliseo Collazos December 2013
- Council of Educators in Landscape Architecture (CELA)** December 2013
- SQWater: Design Pedagogy for Slum Cities
- Public Interest Design – Global** for Comunidad Ecologica Saludable – Lima, Peru December 2013
- Environmental Protection Agency P3** invited Competition April 2013
- People’s Choice Award, 1st Place
 - American Society for Civil Engineers Sustainable Development Award, 2nd Place
- Upham Geology Prize for Senior Thesis**, Dartmouth College June 2007

PROFESSIONAL AND RESEARCH EXPERIENCE

- Surgery and Medical Informatics Research**, University of Wisconsin, Madison, WA May – Aug. 2015
- Modeling post-surgical complications using machine learning methods
- Water Resources, Public Health Research**, University of Washington, Seattle, WA July 2010 – 2014
- Funded research assistant: water resources; public health projects in WA; Peru
 - Teaching: engineering/community development; hydraulics; school workshops
- DNV Global Energy Concepts, Inc.** Seattle, WA Feb. 2008 – Apr. 2010
- Data analyst: client lead, field work: wind energy measurement

Moosilauke Ravine Lodge , Warren, NH <i>Manager</i> (Sept. – Nov. 2007), <i>Assistant Manager</i> (June – Aug 2007)	June 2004 – Nov. 2007
<ul style="list-style-type: none"> Managed daily mountain lodge operations, maintenance and catering to guests Trained live-in crew in skills such as cooking for 100; building trails 	
Hydrology Research	June 2005 – June 2007
<ul style="list-style-type: none"> Contaminant transport studies: Dartmouth College (June 2005 – June 2007) River restoration studies: Colorado State University (June – July 2006) 	
Engineering and Earth Science Research	2001; 2003- 2004
<ul style="list-style-type: none"> Development of micro-robots: Dartmouth College (Sept 2003 – June 2004) Glacial survey: Juneau Icefield Research Program (June-Aug 2001) 	

LEADERSHIP AND VOLUNTEER EXPERIENCE

Medical

MEDIC Quality Improvement and EMR Coordinator , Madison, WI <i>MEDIC: 7 student-run free clinics</i>	Jan 2015 – Apr 2016
<ul style="list-style-type: none"> <i>Electronic Medical Record development and implementation</i> <i>Created legal advisory board</i> 	

Public Health Integrative Cases Course Design , Madison, WI <i>Medical education case series to examine health from public health/clinical/social perspectives</i>	Nov 2014 - Apr 2016
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Quality Improvement Interest Group , Madison, WI <i>Selected for Telluride Quality Improvement Workshop</i>	Sep 2014 – Sep 2015
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Neighborcare Health , Seattle, WA <i>First clinic volunteer; designed volunteer system for diabetes care management</i>	Feb. 2012 – 2014
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Search and Rescue , King County ESAR, Seattle, WA <i>Alpine rescue team</i>	Sep. 2011 – 2014
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Outdoors

Cascade Orienteering Club , Seattle, WA <i>Event organization; designing/planning highly technical race maps; competitor</i>	Oct. 2008 – Present
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Dartmouth Outdoor Club Directorate , Dartmouth College, Hanover, NH <i>President</i> (Mar. – May 2005); <i>Cabin and Trail Chair</i> (Mar. – June 2006)	Sep. 2003 – June 2007
<ul style="list-style-type: none"> Outdoor Club President (all outdoor divisions) Cabin and Trail President (hiking and backcountry skiing club) Paid instructor: Rock climbing Captain: Woodsmen's team Proposed and developed: ski waxing workshop 	

PUBLICATIONS

Feld, S.; Voss, J.; Spencer, B.; Salazar, F.; Bolton, S.. Physical and mental health assessment of informal urban dwellers in Lima, Peru (Submitted) *Advances in Nursing Science*

Feld, S.; Spencer, B.; Bolton, S.. Improved fog collection using turf reinforcement mats (2016) *Journal of Sustainable Water in the Built Environment*.

Feld, S.; Cristea, N.; Lundquist, J. Representing atmospheric moisture content along mountain slopes: Examination using distributed sensors in the Sierra Nevada, California, 2013, *Water Resources Research*, 49(7), 4424-4441

Wayand, Nic; Hamlet, Alan; Hughes, Mimi; **Feld, Shara**; Lundquist, Jessica Intercomparison of Meteorological Forcing Data from Empirical and Mesoscale Model Sources in the N.F. American River Basin in northern Sierra Nevada using DHSVM, 2013, *Journal of Hydrometeorology*, 14, 677-699

Feld, S.; Lundquist, J. Brevia: Representing atmospheric moisture content in the Sierra Nevada, California Mountain Views, Fall 2012, Vol.6, No.2, p.47-48.

Geodetic activities during the 2001 Juneau Icefield Research Program Field Season. Compiled by Scott McGee and Dr. Walter Welsch. Student contributions by J. Amadon, E. Boyce, E. Chin, **S. Feld**, C. Smith, H. Wight. JIRP Open File Survey

PRESENTATIONS

Feld, S.; Tevis, S.; Cobian, A.; Craven, M.; Kennedy, G.. Big data in surgery: Modeling how post-surgical complications increase risk for further complications, 2016, Oral Presentation: Academic Surgical Congress, Jacksonville, FL.

Feld, S.; Tevis, S.; Cobian, A.; Craven, M.; Kennedy, G.. Big data in surgery: Modeling how post-surgical complications increase risk for further complications, 2015, SMPH Medical Student Research Forum, Madison, WI

Feld, S.; Spencer, B.; Bolton, S.. A landscape architecture course: Designing fog collection systems and integration into the community in Lima, Peru, 2013, Abstract in 6th Annual Fog Conference, Yokohama, Japan.

Lundquist, J.; Cristea, N.; Wayand, N.; **Feld, S.;** Henn, B.; Lapo, K.; Hinkelman, L.. Data driving us to distraction – where to focus attention for snow and stream simulations in complex terrain, 2013, Presentation in DAVOS; Meteorological forcing data and distributed modelling of snow, ice and hydrology in mountain watersheds.

Feld, S.; Jones, S.; Harper, D. Sensitivity of Differences in Anemometer Mounting on Shear Estimates In: Poster Sessions – Windpower 2010, American Wind Energy Association, Washington, D.C.

Babij, N.; Briggs, K.; **Feld, S.** Met Tower Effects on Wind Shear Measurement In: Poster Sessions – Windpower 2008, American Wind Energy Association, Washington, D.C.

Feld, Shara; Borosund, M.; Dade, W.B.; Renshaw, C. An experimental study of buoyancy-driven penetration of a passive tracer from channel flow and into an underlying porous bed In: Abstracts with Programs - Geological Society of America (GSA), March 2007, Vol. 39, Issue 1, pp.105 Published by: GSA : Boulder, CO.

Borosund, M.; **Feld, S.;** Renshaw, C.; Dade, W.B. An experimental study to determine the rate and depth of pore-water and passive-contaminant exchange between a porous granular bed and overlying channel flow In: Abstracts with Programs - Geological Society of America (GSA), March 2007, Vol. 39, Issue 1, pp.105 Published by: GSA: Boulder, CO.

PRESS

Can ‘big data’ predict postop complications?, February 22, 2016, ACS Surgery News, by Richard Kirkner. (<http://www.acssurgerynews.com/specialty-focus/general-surgery/single-article-page/can-big-data-predict-postop-complications/fe7a1ad1ae56c98639d3851108908ecb.html>) *About work presented at 2016 Academic Surgical Congress.*

ADDITIONAL SKILLS AND EXTRACURRICULAR INTERESTS

Computer Languages, Programs: Matlab, SQL, Visual Basic, Python, ArcGIS

Language: Spanish

Interests: Hiking, running, orienteering, cross-country and telemark skiing, rock climbing, cooking