

# SHARA FELD

Madison, WI 53715

*Interests in clinical decision-making informatics; systems engineering to improve quality of care*

## EDUCATION

<b>M.D.</b> , University of Wisconsin School of Medicine and Public Health	2014-present
<b>Ph.D. in Civil and Environmental Engineering</b> , University of Washington	2010-2014
• <i>Water Resources in an Arid Land: Availability, Improving Access and the Health Context</i>	
<b>B.A. in Earth Science with Honors Thesis</b> , Dartmouth College	2003-2007

## HONORS AND AWARDS

### Fellowships and Funding

<b>Dane County Medical Society Grant</b> : MEDIC electronic referrals system	2015
<b>NIH T35 Training Grant in Surgery</b>	2015
<b>National Defense Science and Engineering Graduate Fellowship (NDSEG)</b>	2012-2015
<b>GoHealth Global Health Travel Funding (Peru)</b>	2013
<b>Travel Funding</b> for 6 <sup>th</sup> Annual Fog Conference (Japan)	2013
<b>Graduate Student Fund for Excellence and Innovation Travel Award</b>	2013
<b>Research Experience for Undergraduates Internship</b>	2006
<b>Women in Science Program</b> , Dartmouth	2003-2004

### Honors and Awards

<b>2016 Medical Student Leadership Award</b>	2016
<b>Buckminster Fuller Challenge Finalist</b>	2014
<b>American Society of Landscape Architects (ASLA)</b> Green space and health (Peru)	2014
<b>Social Economic Environmental Design (SEED)</b> Green space and health (Peru)	2014
<b>EDRA45 New Orleans</b> Green space and health (Peru)	2013
<b>Council of Educators in Landscape Architecture (CELA)</b> Water systems (Peru)	2013
<b>Public Interest Design – Global</b> Green space and health (Peru)	2013
<b>Environmental Protection Agency (People's choice 1<sup>st</sup>, ASCE 2<sup>nd</sup>)</b> Water systems (Peru)	2013
<b>NSF Graduate Fellowship Program</b> : Honorable Mention	2011, 2012
<b>Upham Geology Prize for Senior Thesis</b> , Dartmouth	2007

## PROFESSIONAL AND RESEARCH EXPERIENCE

<b>Surgery and Medical Informatics Research</b> , University of Wisconsin, Madison, WA	May – Aug. 2015
• Modeling post-surgical complications using machine learning methods	
<b>Water Resources, Public Health Research</b> , University of Washington, Seattle, WA	Jul. 2010 – 2014
• Water resources and public health projects in WA; Peru	
• Teaching: community development, engineering and school workshops	
<b>DNV Global Energy Concepts, Inc.</b> Seattle, WA	Feb. 2008 – Apr. 2010
• Wind energy data analyst, client lead and field work	
<b>Moosilauke Ravine Lodge</b> (crew, manager), Warren, NH	Jun.-Aug. 2004; Jun.-Nov. 2007
• Mountain lodge operations, cooking, maintenance and training crew	
<b>Engineering /Earth Science Research</b> , Dartmouth College; Colorado State University	Sep. 2003 – Jun. 2007
• Contaminant transport and river restoration studies; micro-robot development	

## **LEADERSHIP AND VOLUNTEER EXPERIENCE**

### **Medical**

**MEDIC Quality Improvement and EMR Coordinator**, Madison, WI

Jan. 2015 – Apr. 2016

*MEDIC: 7 student-run free clinics*

- *Electronic Medical Record development and implementation*
- *Created legal advisory board*

**Public Health Integrative Cases Course Design**, Madison, WI

Nov. 2014 – Apr. 2016

*Medical education case series to examine health from public health/clinical/social perspectives*

**Quality Improvement Interest Group**, Madison, WI

Sep. 2014 – Sep. 2015

*Selected for Telluride Health Care Quality Improvement Workshop*

**Neighborcare Health**, Seattle, WA

Feb. 2012 – 2014

*First clinic volunteer; designed volunteer system for diabetes care management*

**Search and Rescue**, King County ESAR, Seattle, WA

Sep. 2011 – 2014

*Alpine rescue team*

### **Outdoors**

**Cascade Orienteering Club**, Seattle, WA

Oct. 2008 – Present

*Event organization; designing technical race maps; competitor*

**Dartmouth Outdoor Club Directorate**, Dartmouth College, Hanover, NH

Sep. 2003 – June 2007

*President (Mar. – May 2005); Cabin and Trail Chair (Mar. – June 2006)*

- 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.**; Tevis, S.; Cobian, A.; Craven, M.; Kennedy, G. (In Revision) Multiple postoperative complications: making sense of the trajectories Surgery.

**Feld, S.**; Cobian, A.; Tevis, S.; Kennedy, G.; Craven, M. (2016) Modeling the temporal evolution of postoperative complications Proceedings of the American Medical Informatics Association (AMIA) Annual Symposium.

**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 report, Foundation for Glacier and Environmental Research

## **PRESENTATIONS**

**Feld, S.;** Cobian, A.; Tevis, S.; Kennedy, G.; Craven, M. (2016) Modeling the temporal evolution of postoperative complications American Medical Informatics Association (AMIA) Annual Symposium, 2016, Chicago, IL.

**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 6<sup>th</sup> 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, R, SPSS    **Language:** Spanish

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