SHARA FELD

Seattle, WA 98112 • www.sharafeld.com

Anesthesiology and Critical Care
Physician and engineer improving systems of care with clinical decision-making informatics
Hobbies are all mountain-based sports on skis, foot and rocks

EDUCATION

Physician specialized in anesthesiology and critical care with background in earth sciences and engineering.

Critical Care Fellowship, University of Washington 2022 – 2023

Anesthesiology and Critical Care Residency, University of Washington 2018 – 2022
- Chief Resident 2021 - 2022

M.D., University of Wisconsin School of Medicine and Public Health. 2014-2018

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

B.A. in Earth Science with Honors Thesis, Dartmouth College 2003-2007

PROFESSIONAL AND RESEARCH EXPERIENCE

Extensive research and project management experience in medical informatics, engineering and environmental resources, and public health. Secured funding (detailed in honors and awards) and published and presented research.

Anesthesiology Informatics Research, University of Washington, Seattle, WA Apr. 2019 – Aug. 2021
- Predicting intraoperative hypotension in traumatic brain injury patients

Medical Informatics Research, University of Wisconsin, Madison, WA May 2015 – Mar. 2018
- Modeling post-surgical complications using machine learning methods
- Eliciting breast cancer risk from demographic/genetic/mammography features

Water Resources, Public Health Research, University of Washington, Seattle, WA Jul. 2010 – Aug. 2014
- Water resources and public health projects in Washington; Peru
- Teaching: community development, engineering and school workshops

DNV Global Energy Concepts, Inc. Seattle, WA Feb. 2008 – Apr. 2010
- Wind energy data analyst, client lead and field work

Moosilauke Ravine Lodge (crew, manager**)**, Warren, NH Summer 2004, 2007
- Mountain lodge operations, cooking, maintenance and training crew

Engineering /Earth Science Research, Dartmouth College; Colorado State University Sep. 2003 – Jun. 2007
- Contaminant transport and river restoration studies; micro-robot development

LEADERSHIP AND SERVICE

Quality improvement and technical design for medical systems. Leadership in outdoor organizations.

Medical

Reviewer, American Medical Informatics Association; Anesthesiology — Mar. 2016 – Dec. 2020

MEDIC free health clinics, Madison, WI — Sep 2014 – May 2018
- Electronic Medical Record development and implementation

Quality Improvement Interest Group, Madison, WI — Sep. 2014 – Apr. 2017
- Selected for Telluride Health Care Quality Improvement Workshop
- Public health integrative cases course design

Neighborcare Health Volunteer, Seattle, WA — Feb. 2012 – Aug. 2014
- Implemented diabetes management system

Outdoors

Cascade Orienteering Club, Seattle, WA — Oct. 2008 – Nov. 2014
- Event organization; designing technical race maps; competitor

Dartmouth Outdoor Club Directorate, Dartmouth College, Hanover, NH — Sep. 2003 – June 2007
- President; hiking club chair, rock climbing instructor, woodsmen's team captain

HONORS AND AWARDS

Secured funding for undergraduate, graduate and medical research and the medical school free clinic. Received numerous research and design awards.

Fellowships and Funding

Dane County Medical Society Grant: MEDIC electronic referrals system — 2015
NIH T35 Training Grant in Surgery — 2015
National Defense Science and Engineering Graduate Fellowship (NDSEG): full PhD funding — 2012-2014
GoHealth Global Health Travel Funding — 2013
Travel Funding for 6th Annual Fog Conference — 2013
Graduate Student Fund for Excellence and Innovation Travel Award — 2013
Research Experience for Undergraduates Internship — 2006
Women in Science Program, Dartmouth — 2003-2004

Honors and Awards

Judy Su Clinical Research Award — 2021
2016 Medical Student Leadership Award — 2016
Buckminster Fuller Challenge Finalist — 2014
American Society of Landscape Architects (ASLA) Green space and health (Peru) — 2014
Social Economic Environmental Design (SEED) Green space and health (Peru) — 2014
EDRA45 New Orleans Green space and health (Peru) — 2013
Council of Educators in Landscape Architecture (CELA) Water systems (Peru) — 2013
Public Interest Design – Global Green space and health (Peru) — 2013
Environmental Protection Agency (People's choice 1st, ASCE 2nd) Water systems (Peru) — 2013
NSF Graduate Fellowship Program: Honorable Mention — 2011, 2012
Upham Geology Prize for Senior Thesis, Dartmouth — 2007

PUBLICATIONS

Feld, S.; Hippe, D.; Miljacic, M.; Polissar, N.; Newman, S-F., Nair, B., Vavilala, M. A Machine Learning Approach for Predicting Real-Time Risk of Intraoperative Hypotension in Traumatic Brain Injury 2021. J Neurosurg Anesthesiol.

Feld, S.; Fan, F.; Yuan, M.; Wu, Y.; Woo, K; Alexandridis, R; Burnside, ES. Utility of genetic testing in addition to mammography for determining risk of breast cancer depends on patient age 2018. AMIA Jt Summits Transl Sci Proc.

Feld, S.; Cobian, A.; Tevis, S.; Kennedy, G.; Craven, M. Modeling the temporal evolution of postoperative complications 2016. American Medical Informatics Association Annual Symposium Proceedings. 2016: 551-559.

Feld, S.; Tevis, S.; Cobian, A.; Craven, M; Kennedy, G. Multiple postoperative complications: making sense of the trajectories, 2016, Surgery. 160(6):1666-1674.

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, N.; Hamlet, A.; Hughes, Mimi; **Feld, S.;** Lundquist, J. 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.; Merai, K.; Smith, C.J.; Barnes, C.; Nathwani, R. Survey Evaluation of a new perioperative Resident Position and Curriculum 2022, Western Anesthesia Residents Conference, UCLA, CA.

Feld, S.; Hippe, D.; Miljacic, N.; Polissar, N.; Newman, S-F.; Nair, B.; Vavilala, M. A Machine Learning Approach for Predicting Real Time Risk of Intraoperative Hypotension in Traumatic Brain Injury, 2021, Society for Neuroscience in Anesthesiology and Critical Care Annual Meeting, Virtual.

Feld, S. Machine Learning in Healthcare, 2021, INSIGHT, Harborview Injury Prevention and Research Center Summer Research Program. Seattle, WA.

Feld, S.; Hippe, D.; Miljacic, N.; Polissar, N.; Newman, S-F.; Nair, B.; Vavilala, M. A Machine Learning Approach for Predicting Real Time Risk of Intraoperative Hypotension in Traumatic Brain Injury, 2021, Western Anesthesia Residents Conference, Virtual.

Feld, S.; Hippe, D.; Miljacic, N.; Polissar, N.; Newman, S-F.; Nair, B.; Vavilala, M. A Machine Learning Approach for Predicting Real Time Risk of Intraoperative Hypotension in Traumatic Brain Injury, 2021, International Anesthesia Research Society annual meeting, Virtual.

Feld, S.; Mundangepfupfu, T. Hemorrhagic Shock Secondary to Non-Traumatic Superior Mesenteric Vein Rupture in a Patient with Hepatitis Peliosis 2019, Society of Critical Care Anesthesiology Annual Meeting, Montreal, CA.

Feld, S.; Fan, F.; Yuan, M.; Wu, Y.; Woo, K; Alexandridis, R; Burnside, ES. Utility of genetic testing in addition to mammography for determining risk of breast cancer depends on patient age 2018, American Medical Informatics Association Informatics Symposium, San Francisco, CA.

Feld, S. (Moderator). Abstracts, posters, publications: presenting your research 2016, NEJM Resident 360, Virtual.

Feld, S.; Cobian, A.; Tevis, S.; Kennedy, G.; Craven, M. (2016) Modeling the temporal evolution of postoperative complications 2016, American Medical Informatics Association Annual Symposium, 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, 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, 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, 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 2010, Windpower: American Wind Energy Association, Washington, D.C.

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

Feld, **S.**; 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 2007, Geological Society of America, Vol. 39, Issue 1, pp.105.

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 2007, Geological Society of America, Vol. 39, Issue 1, pp.105.