XIAHONG FENG

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EDUCATION

Ph.D. August 1991, Case Western Reserve University Advisor: Samuel M. Savin
M.S. July 1985, Peking University
B.B. February 1982, Peking University

EXPERIENCE

Professor July 1, 2006 – Present
Chair, Department of Earth Sciences, July 2004 – June 2007 Dartmouth College
Associate Professor July 1, 2000 – June 30, 2006, Department of Earth Sciences, Dartmouth College
Assistant Professor June 1994 – June 30, 2000, Department of Earth Sciences, Dartmouth College
Research Fellow in Geochemistry August 1991 - June 1994 California Institute of Technology, Advisor: Samuel Epstein
Graduate Assistant September 1985 - July 1991 Case Western Reserve University, Department of Geological Science
Consultant 1988-1989 Geosciences Associates, Inc., Burton, Ohio
Research Assistant July 1988 - July 1991 Case Western Reserve University, Weatherhead School of Management
Research Assistant February 1982 - June 1985 Peking University, Department of Geology
Factory Worker July 1976 – February 1978 Yan Shan Petrochemical Industry Corporation, Beijing, China
High School Teacher February 1976 - July 1976 172nd High School, Beijing, China. (High school physics)

RESEARCH INTERESTS

Studies of climate and environmental change using stable isotopes and major/trace elements, including: i) studies of the atmosphere and hydrological processes and climate change using hydrogen, oxygen isotopes of precipitation, water vapor, lake water, and sediments; ii) nitrogen and carbon cycles in soils using carbon and nitrogen isotopes; iii) mercury mobility and sequestration in soil and sediments controlled by carbon quality and coupled with carbon cycles; iv) studies of snow, ice and watershed hydrochemical processes using oxygen isotopes and major and trace elements; v) studies of global carbon cycles using carbon isotopes of tree rings and soil organic matter; vi) studies of paleoclimate change using oxygen and hydrogen isotopic ratios in tree rings.

HONORS

Fellow - American Association for the Advancement of Science 2024-
Visiting Professor, National Taiwan University December 2016-May 2017
Frederick Hall Professor of Mineralogy and Geology 2003-
Fellow – Geological Society of America, 2006-
CAREER award – NSF, 1996-2001
Susan and Gib Myers 1964 Faculty Fellow, Dartmouth, 2000
Faculty Fellow – Dartmouth College, 1999
Foley Fellow – Dartmouth College, 1999

PROFESSIONAL MEMBERSHIP

American Geophysical Union
Geological Society of America
Geochemical Society
American Association for the Advancement of Science
IPACES (International Professionals for Advancement of Chinese Earth Sciences)

SYNERGISTIC ACTIVITIES AND PROFESSIONAL SERVICES

Panelist: NSF/EAR/IF (Instrumentation and Facilities), 2000-2003, 2022

Panelist: NSF/MSB (MacroSystems Biology), 2012

Panelist: NSF/IGERT (Integrative Graduate Education and Research Traineeship), 2008, 2009

Panelist: NSF/BE/CBC (Coupled Biogeochemical Cycles), 2004

Panelist: NSF/GEO POWRE (Professional Opportunities for Women in Research and Education), 1999

Chair: Inclusion, Diversity, and Equity Committee, Earth Sciences Department, Dartmouth College, 2020-2022

Director: AUG Bridge Program Partner, Earth Sciences Department, Dartmouth College, 2020-2022

Director: Dartmouth Trace Element Analysis Core Facility, 2001-2003

Deputy Chair: IPACES (International Professionals for the Advancement of Chinese Earth Sciences), 2013-2014

Chair: IPACES, 2014-2015

Chair: IPACES Nomination Committee, 2006-2022

Member: Board of Directors of CUAHSI (Consortium of Universities for Advancement of Hydrological Science, Inc.) 2003-2004

Dartmouth Representative: CUAHSI, 2003-2022

Co-Editor: Advances in Earth Science, Vol. 4, The International Professionals for Advancement of Chinese Earth Science, 2008-2009

Associate Editor: *Journal of Hydrology*, 2005-2008

Reviewer for many professional journals, and US and international funding agencies.

RESEARCH GRANTS

"COLLABORATIVE RESEARCH: Arctic Landfast Sea Ice Formation in the Presence of Fresh Water Input", NSF Arctic Research Opportunities 14-584 Arctic Natural Sciences, $455,141, Co-PI with Rachel W. Obbard as PI, 01 September 2016 – 31 August 2020.

"COLLABORATIVE RESEARCH: A pan-Arctic, storm-by-storm isotopic investigation of the influence of Arctic sea ice on precipitation – a crucial link in the coupled climate system", NSF 1022032, PI $514,534, September 1, 2010, August 31, 2013 (expended to August 31, 2015, due to logistic delays).

DOE: ARM Climate Research Facility (ACRF): "Effect of sea ice on Arctic precipitation" PI (with Posmentier as Co-PI); $10,000, January 1, 2009 – December 31, 2010.

DOE: ARM Climate Research Facility (ACRF): "Effect of sea ice on Arctic precipitation-extended" PI (with Posmentier as Co-PI); $24,000, January 1, 2011 – December 31, 2014.

Strategic University Research Partnership, Director's Research and Development Fund, Jet Propulsion Laboratory: Estimating sources of Arctic moisture using ground and space-based measurements of water vapor and its isotopes (Co-PI with Posmentier as PI); $100,000, July 1, 2009 – June 30, 2010.

"IGERT Polar Environmental Change" NSF 0801490. Co-PI (PI: Ross Virginia); $2,999,613, August 1, 2008 – July 31, 2013.

"TECHNICIAN SUPPORT: Watershed Studies at Dartmouth College [Phase II]" NSF/EAR-IF 0418809, PI with Renshaw as Co-PI, $149,503, 01/01/05–12/31/06.

"Acquisition of a Gas Chromatography-Inductively Coupled Plasma Mass Spectrometry System for Interdisciplinary Environmental and Health Sciences Research at Dartmouth College" NSF/MRI/DBI 0215913, PI with Folt and Sturup as Co-PIs, $159,346, 0701/02–06/30/05.

"Acquisition of continuous-flow stable isotope analytical equipment at Dartmouth College." NSF (EAR/IF-0132018), PI $68,945, 03/15/02-02/29/04.

"COLLABORATIVE RESEARCH: Investigating timescales of hydrologic transport, storage, and mixing in catchments, using natural tracer time series, theoretical models, and laboratory-scale simulations." NSF (EAR0125338), PI at Dartmouth (with James Kirchner at UC Berkeley), $39,181, 03/01/2002 – 02/28/2005.

"TECHNICIAN SUPPORT: Watershed studies at Dartmouth College", NSF (EAR-0111403), Principal investigator, $141,700, 09/01/01 – 08/31/04

"Contaminant loading of watersheds from snowmelt: An integrated study using stable isotopes and rare earth elements", NSF (EAR-9903281), Principal investigator, $191,442, 02/01/00 – 07/31/04; supplement:

$22,481 (1.5 year extension).

"TECHNICIAN SUPPORT: gas-isotope ratio mass spectrometry laboratory at Dartmouth College", Co-PI with Dr. Chamberlain PI, NSF (EAR-9903082) $179,925, September 1999 – August 2002.

"COLLABORATIVE RESEARCH Developing an absolutely-dated Holocene tree-ring chronology from sub-fossil huon pine in Tasmania for paleoclimatic and isotopic studies" NOAA (NA96GP0480) (NSF/NOAA ESH program), PI at Dartmouth College with Dr. Cook at Lamont-Doherty Earth Observatory, $83,200, 09/01/99–08/31/02.

Exchange and collaboration with oversea Chinese scholars, The Chunhui Project, Education Committee of China, $600, summer, 1998.

Collaborative Research with the Cold Region Research and Engineering Laboratory: "Measuring and modeling the isotopic variability of snowmelt". The Department of Defense to the Army, Snow Ice and Frozen Ground Program, Co-PI, $100,000, 06/01/98-05/31/00.

"Acquisition of a Particle Size Analyzer for Geochemical Research at Dartmouth College", NSF EAR-9727362, PI, $29,700, 03/01/98 - 02/29/00.

Chinese National Science Foundation, Program of Short-Term Scientific Exchange with Oversea Chinese Scholars, ¥6,000, 1997.

Collaborative Research with Peking University: "Post-formational alteration of zeolite ore deposits and its environmental significance" Chinese National Science Foundation, CNSF-49672118, PI at Dartmouth College, ¥120,000, January 1997 – December 1999.

"Studies of Diagenetic and Post-Formational Processes of Zeolite Formations Using Stable Oxygen and Nitrogen Isotopes, K/Ar Dating and Major and Trace Elements" NSF EAR-9628402, Principal Investigator, $139,905, August 1996 - August 1999.

"CAREER: Dendrochronology and Stable Isotope Studies of Tree Rings for Selected Areas of the United States" NSF ATM-9628759, PI, $219,177, 06/01/96–05/31/00, plus $29,725 supplement for 06/01/00–05/31/01.

Chinese National Science Foundation, Program of Short-term Scientific Exchange with Oversea Chinese Scholars, ¥16,000, 1995.

"Stable Oxygen and Hydrogen Isotope Studies of Groundwater and Wood from the Last Glacial Maximum to the Present" NSF EAR-9506752, PI, $17,997, September 1995- February 1997.

Chinese National Science Foundation, Program of Short-Term Scientific Exchange with Oversea Chinese Scholars, ¥7,000, 1994.

PUBLICATIONS ([UG]=undergraduate; [G]=graduate; [PD]=postdoctoral fellow)

Journal Articles

84) Harris C., S. Kopf, R. J. Rhim, A. Cobban, F. Elling, X. Feng, J. McFarlin, Y, Weber, Y, Zhang, A. Zhou, H. Batther, A. Pearson, and W. Leavitt (in review) Lipid hydrogen isotope compositions primarily reflect growth water in the model archaeon *Sulfolobus acidocaldarius. Applied and Environmental Microbiology.*

83) Liu J., E.D. Young, A. Pellerin, J.L. Ash, G.T. Barrett, X. Feng, P.R. Girguis, S.J.E. Krause, W.D. Leavitt, K.Murphy, Q. Qin, O. Sivan, A. Teske, D.L. Valentine, K.W. Anthony, T. Treude (in review) Clumped isotopes of methane trace bioenergetics in the environment.

82) Jeemin H.R., K. Sebastian, J. McFarlin, B. Harpreet, M.H. Harris, A. Zhou, **X. Feng**, Y. Weber, S. Hoeft-McCann, A. Pearson, and W.D. Leavitt (Accepted) The hydrogen isotope signatures of autotrophy versus heterotrophy recorded in archaeal tetraether lipids. *Geochimica et Cosmochimica Acta.*

81) Li, J., B.K. Chiu, A.M. Piasecki, **X. Feng**, J.D. Landis, S. Marcum, E.D. Young, W.D. Leavitt, (2024) The evolution of multiply substituted isotopologues of methane during microbial aerobic oxidation. *Geochimica et Cosmochimica Acta,* 381, 223-238.

80) Busch, J. F., T.H. Boag, E.A., Sperling, A.D. Rooney, **X. Feng**, D.P. Moynihan, and J.V. Strauss (2023), Integrated Litho-, Chemo-and Sequence Stratigraphy of the Ediacaran Gametrail Formation Across a Shelf-Slope Transect in the Wernecke Mountains, Yukon, Canada. *American Journal of Science*, *323*, 4. https://doi.org/10.2475/001c.74874

79) Kopec[G], B.G., **X. Feng**, E.C. Osterberg, and E.S. Posmentier (2022), Climatological significance of δD-$\delta^{18}O$ line slopes from precipitation, snow pits, and ice cores at Summit, Greenland, *Journal of Geophysical Research: Atmospheres*, *127*(21). https://doi.org/10.1029/2022jd037037

78) Landis[G], J. D., **X. Feng**, J. M. Kaste, and C. E. Renshaw (2021), Aerosol Populations, Processes, and Ages in Bulk Deposition: Insights From a 9-Year Study of ^{7}Be, ^{210}Pb, Sulfate, and Major/Trace

Elements, *Journal of Geophysical Research: Atmospheres*, 126(21). https://doi.org/10.1029/2021JD035612

77) Taenzer[G], L., J. Labidi, A.L. Masterson, **X. Feng**, D. Rumble, E.D. Young, and W.D. Leavitt (2020), Low $\Delta^{12}CH_2D_2$ values in microbialgenic methane result from combinatorial isotope effects, *Geochimica et Cosmochimica Acta*, *285*, 225-236. https://doi.org/10.1016/j.gca.2020.06.026

76) Strauss, J.V., T. Fraser, M.J. Melchin, T.J. Allen, J. Malinowski, **X. Feng**, J.F. Taylor, J. Day, B.C. Gill, and E.A. Sperling (2020), The Road River Group of northern Yukon, Canada: early Paleozoic deep-water sedimentation within the Great American Carbonate Bank, *Canadian Journal of Earth Sciences*, 1-27. https://doi.org/10.1139/cjes-2020-0017

75) Ouyang[G], B., D.J. Renock, M.A. Ajemigbitse, K. Van Sice, N.R. Warner, J.D. Landis, and **X. Feng** (2019), Radium in hydraulic fracturing wastewater: distribution in suspended solids and implications to its treatment by sulfate co-precipitation, *Environmental Science Processes & Impacts*, *21*(2), 339-351. https://doi.org/10.1039/c8em00311d

74) Kopec[G], B.G., **X. Feng**, E.S. Posmentier, and L.J. Sonder (2019), Seasonal deuterium excess variations of precipitation at Summit, Greenland, and theirclimatological significance, *Journal of Geophysical Research: Atmospheres*, *124*, 72-91. https://doi.org/10.1029/2018JD028750

73) **Feng, X**., E.S. Posmentier, L.J. Sonder, and N. Fan[G] (2019), Rethinking Craig and Gordon's approach to modeling isotopic compositions of marine boundary layer vapor, *Atmospheric Chemistry and Physics*, *19*(6), 4005-4024. https://doi.org/10.5194/acp-19-4005-2019

72) Kopec[G], B.G., **X. Feng**, E.S. Posmentier, J.W. Chipman, and R.A. Virginia (2018), Use of principal component analysis to extract environmental information from lake water isotopic compositions, *Limnology and Oceanography*. https://doi.org/10.1002/lno.10776

71) Bailey[PD], A., E. Posmentier, and **X. Feng** (2018), Patterns of evaporation and precipitation drive global isotopic changes in atmospheric moisture, *Geophysical Research Letters*, *45*, 7093–7101. https://doi.org/10.1029/2018GL078254

70) Yin[G], J.J., H.C. Li, Z.G. Rao, C.C. Shen, H.S. Mii, R.K. Pillutla, H.M. Hu, Y.X. Li, and **X. Feng** (2017), Variations of monsoonal rain and vegetation during the past millennium in Tiangui Mountain, North China reflected by stalagmite $\delta^{18}O$ and $\delta^{13}C$ records from Zhenzhu Cave, *Quaternary International*, *447*, 89-101. https://doi.org/10.1016/j.quaint.2017.06.039

69) Putman[G], A.L., **X. Feng**, E.S. Posmentier, A.M. Faiia, and L.J. Sonder (2017), Testing a novel method for initializing air parcel back trajectories in precipitating clouds using reanalysis data, *Journal of Atmospheric and Oceanic Technology*, *34*, 2393-2405. https://doi.org/10.1175/JTECH-D-17-0053.1

68) Putman[G], A. L., **X. Feng**, L. J. Sonder, and E. S. Posmentier (2017), Annual variation in event-scale precipitation at Barrow, AK, reflects vapor source region, *Atmospheric Chemistry and Physics*, *17*(7), 4627-4639. https://doi.org/10.5194/acp-17-4627-2017

67) Curtis, A.N., D.M. Bugge, K.L. Buckman, **X. Feng**, A.M. Faiia, and C.Y. Chen (2017), Influence of sample preparation on estuarine macrofauna stable isotope signatures in the context of contaminant bioaccumulation studies, *Journal of Experimental Marine Biology and Ecology*, *493*, 1-6. https://doi.org/10.1016/j.jembe.2017.03.010

66) Throckmorton[G], H.M., B.D. Newman, J.M. Heikoop, G.B. Perkins, **X. Feng**, D.E. Graham, D. O'Malley, V.V. Vesselinov, J. Young, S.D. Wullschleger, C.J. Wilson (2016), Active layer hydrology in an arctic tundra cosystem: quantifying water sources and cycling using water stable isotopes, *Hydrological Processes*, *30*, 4972–4986. https://doi.org/10.1002/hyp.10883

65) Kopec[G], B.G., **X. Feng**, F.A. Michel, and E.S. Posmentier (2016), Influence of sea ice on Arctic precipitation, *Proceedings of the National Academy of Sciences*, *113*(1), 46-51. https://doi.org/10.1073/pnas.1504633113

64) **Feng, X**., A.M. Lauder[G], E.S. Posmentier, B.G. Kopec[G], and R.A. Virginia (2016), Evaporation and transport of water isotopologues from Greenland lakes: The lake size effect, *Quaternary Science Reviews*, *131*, 302-315. https://doi.org/10.1016/j.quascirev.2015.07.029

63) Voelker, S.L., M.C. Stambaugh, R.P. Guyette, **X. Feng**, D.A. Grimley, S.W. Leavitt, I. Panyushkina, E.C. Grimm, J.P. Marsicek, B. Shuman, B.B. Curry, (2015), Deglacial hydroclimate of midcontinental North America, *Quaternary Research*, *83*(2), 336-344. http://dx.doi.org/10.1016/j.yqres.2015.01.001

62) Kopec[G], B.G., A.M. Lauder[G], E.S. Posmentier, and **X. Feng** (2014), The diel cycle of water vapor in west Greenland, *Journal of Geophysical Research: Atmospheres*, *119*(15), 2014JD021859. http://dx.doi.org/10.1002/2014JD021859

61) Wang, G., and **X. Feng** (2012), Response of plants' water use efficiency to increasing atmospheric CO2 concentration, *Environmental Science & Technology*, *46*(16), 8610-8620. https://doi.org/10.1021/es301323m

60) Liu, Weiguo, Zhoufeng Wang, Zheng Wang, **Xiahong Feng**, Pu Zhang (2011) Variations in nitrogen isotopic values among various particle-sized fractions in modern soil in northwestern China. *Chinese Journal of Geochemistry*, 30(3):295-303. https://doi.org/10.1007/s11631-011-0513-7

59) Lee[G], J., **X. Feng**, A. Faiia, E. Posmentier, R. Osterhuber, and J. Kirchner (2010), Isotopic evolution of snowmelt: A new model incorporating mobile and immobile water, *Water Resources Research*, *46*, W11512. https://doi.org/10.1029/2009wr008306

58) Lee, J., **X. Feng**, A. M. Faiia, E. S. Posmentier, J. W. Kirchner, R. Osterhuber, and S. Taylor (2010), Isotopic evolution of a seasonal snowcover and its melt by isotopic exchange between liquid water and ice, *Chemical Geology*, *270*(1-4), 126-134. https://doi.org/10.1016/j.chemgeo.2009.11.011

57) Lee[G], J., **X. Feng**, E.S. Posmentier, A.M. Faiia, and S. Taylor (2009), Stable isotopic exchange rate constant between snow and liquid water, *Chemical Geology*, *260*(1-2), 57-62. https://doi.org/10.1016/j.chemgeo.2008.11.023

56) **Feng, X**., A.M. Faiia, and E.S. Posmentier (2009), Seasonality of isotopes in precipitation: A global perspective, *Journal of Geophysical Research*, *114*(D8). https://doi.org/10.1029/2008jd011279

55) Wang, G., **X. Feng**, J. Han, L. Zhou, W. Tan, and F. Su (2008), Paleovegetation reconstruction using delta C-13 of Soil Organic Matter, *Biogeosciences*, *5*(5), 1325-1337. https://doi.org/10.5194/bg-5-1325-2008

54) Pellerin[G], B.A., W.M. Wollheim, **X. Feng**, and C.J. Vörösmarty (2008), The application of electrical conductivity as a tracer for hydrograph separation in urban catchments, *Hydrological Processes*, *22*(12), 1810-1818. https://doi.org/10.1002/hyp.6786

53) Shu[G], Y., **X. Feng**, E.S. Posmentier, L.J. Sonder, A.M. Faiia, and D. Yakir (2008), Isotopic studies of leaf water. Part 1: A physically based two-dimensional model for pine needles, *Geochimica et Cosmochimica Acta*, *72*(21), 5175-5188. https://doi.org/10.1016/j.gca.2008.05.062

52) Lee[G], J., **X. Feng**, E.S. Posmentier, A.M. Faiia, R. Osterhuber, and J.W. Kirchner (2008), Modeling of solute transport in snow using conservative tracers and artificial rain-on-snow experiments, *Water Resources Research*, *44*(2). https://doi.org/10.1029/2006wr005477

51) Lee[G], J., V.E. Nez[G], **X. Feng**, J.W. Kirchner, R. Osterhuber, and C.E. Renshaw (2008), A study of solute redistribution and transport in seasonal snowpack using natural and artificial tracers, *Journal of Hydrology*, *357*(3-4), 243-254. https://doi.org/10.1016/j.jhydrol.2008.05.004

50) **Feng, X**., A.L. Reddington[UG], A.M. Faiia, E.S. Posmentier, Y. Shu[G], and X. Xu (2007), The Changes in North American atmospheric circulation patterns indicated by wood cellulose, *Geology*, *35*(2), 163-166. https://doi.org/10.1130/G22884A.1

49) Renshaw, C.E., B.C. Bostick, **X. Feng**, C.K. Wong, E.S. Winston, R. Karimi, C.L. Folt, and C.Y. Chen (2006), Impact of land disturbance on the fate of arsenical pesticides, *Journal of Environmental Quality*, *35*(1), 61-67. https://doi.org/10.2134/jeq2005.0096

48) Lennon[G], J.T., A.M. Faiia, **X. Feng**, and K.L. Cottingham (2006), Relative importance of CO_2 recycling and CH_4 pathways in lake food webs along a dissolved organic carbon gradient, *Limnology and Oceanography*, *51*(4), 1602-1613. https://doi.org/10.4319/lo.2006.51.4.1602

47) DeLemos[G], J.L., B.C. Bostick, C.E. Renshaw, S. Stürup, and **X. Feng** (2006), Landfill-stimulated iron reduction and arsenic release at the Coakley Superfund Site (NH), *Environmental Science and Technology*, *40*(1), 67-73. https://doi.org/10.1021/es051054h

46) Bostick, B.C., C.E. Renshaw, J.L. Delemos[G], S. Sturup, and **X. Feng** (2006), Response to comment on "landfill-stimulated iron reduction and arsenic release at the Coakley superfund site (NH)", *Environmental Science & Technology*, *40*(12), 4039-4039. https://doi.org/10.1021/es068004c

45) Shu[G], Y., **X. Feng**, E.S. Posmentier, A.M. Faiia, M.P. Ayres, L.E. Conkey, and L.J. Sonder (2008), Isotopic studies of leaf water. Part 2: Between-age isotopic variations in pine needles, *Geochimica et Cosmochimica Acta*, *72*(21), 5189-5200. https://doi.org/10.1016/j.gca.2008.08.015

44) Shu[G], Y., **X. Feng**, C. Gazis, D. Anderson, A.M. Faiia, K. Tang, and G.J. Ettl (2005), Relative humidity recorded in tree rings: A study along a precipitation gradient in the Olympic Mountains, Washington, USA, *Geochimica et Cosmochimica Acta*, *69*(4), 791-799. https://doi.org/10.1016/j.gca.2004.08.013

43) Liu, W., **X. Feng**, Y. Ning, Q. Zhang, Y. Cao, and Z. An (2005), $\delta^{13}C$ variation of C3 and C4 plants across an Asian monsoon rainfall gradient in arid northwestern China, *Global Change Biology*, *11*(7), 1094-1100. https://doi.org/10.1111/j.1365-2486.2005.00969.x

42) Graham, S.A., C.P. Chamberlain, Y. Yue, B.D. Ritts, A.D. Hanson, T.W. Horton, J.R. Waldbauer, M.A. Poage, and **X. Feng** (2005), Stable isotope records of Cenozoic climate and topography, Tibetan Plateau and Tarim Basin, *American Journal of Science*, *305*(101-118). https://doi.org/10.2475/ajs.305.2.101
41) Posmentier, E.S., **X. Feng**, and M. Zhao (2004), Seasonal variations of precipitation $\delta^{18}O$ in eastern Asia, *Journal of Geophysical Research: Atmospheres*, *109,* D23106. https://doi.org/10.1029/2004jd004510
40) Poage[PD], M. A., and **X. Feng** (2004), A theoretical analysis of steady state $\delta^{13}C$ profiles of soil organic matter, *Global Biogeochemical Cycles*, *18*, GB2016. https://doi.org/10.1029/2003gb002195
39) Liu, W., **X. Feng**, Y. Liu, Q. Zhang, and Z. An (2004), $\delta^{18}O$ values of tree rings as a proxy of monsoon precipitation in arid Northwest China, *Chemical Geology*, *206*(1-2), 73-80. https://doi.org/10.1016/j.chemgeo.2004.01.010
38) Kirchner, J.W., **X. Feng**, C. Neal, and A.J. Robson (2004), INVITED COMMENTARY The fine structure of water-quality dynamics: the(high-frequency) wave of the future, *Hydrological Processes*, *18*(7), 1353-1359. https://doi.org/10.1002/hyp.5537
37) Gazis[PD], C., and **X. Feng** (2004), A stable isotope study of soil water: evidence for mixing and preferential flow paths, *Geoderma*, *119*(1-2), 97-111. https://doi.org/10.1016/s0016-7061(03)00243-x
36) **Feng, X**., J.W. Kirchner, and C. Neal (2004), Measuring catchment-scale chemical retardation using spectral analysis of reactive and passive chemical tracer time series, *Journal of Hydrology*, *292*(1-4), 296-307. https://doi.org/10.1016/j.jhydrol.2004.01.012
35) Renshaw, C.E., **X. Feng**, K.J. Sinclair[G] and R.H. Dums[G] (2003), The use of stream flow routing for direct channel precipitation with isotopically-based hydrograph separations: the role of new water in stormflow generation, *Journal of Hydrology*, *273*, 205-216. https://doi.org/10.1016/S0022-1694(02)00392-X
34) Quinn[G], M.R., **X. Feng**, C.L. Folt, and C.P. Chamberlain (2003), Analyzing trophic transfer of metals in stream food webs using nitrogen isotopes, *Science of the Total Environment*, *317*(1-3), 73-89. https://doi.org/10.1016/S0048-9697(02)00615-0
33) Quideau, S.A., R.C. Graham, **X. Feng**, and O.A. Chadwick (2003), Natural isotopic distribution in soil surface horizons differentiated by vegetation, *Soil Science Society of America Journal*, *67*, 1544-1550. https://doi.org/10.2136/sssaj2003.1544
32) **Feng, X**. (2003), Correction to "A theoretical analysis of carbon isotope evolution of decomposing plant litters and soil organic matter" by Xiahong Feng, *Global Biogeochemical Cycles*, *17*(1), https://doi.org/10.1029/2002GB002030
31) Taylor[G], S., **X. Feng**, M. Williams, and J. McNamara (2002), How isotopic fractionation of snowmelt affects hydrograph separation, *Hydrological Processes*, *16*(18), 3683-3690. https://doi.org/10.1002/hyp.1232
30) Taylor[G], S., **X. Feng**, C.E. Renshaw, and J.W. Kirchner (2002), Isotopic evolution of snowmelt 2. Verification and parameterization of a one-dimensional model using laboratory experiments, *Water Resources Research*, *38*(10), 36-31-36-38. https://doi.org/10.1029/2001wr000815
29) **Feng, X**., S. Taylor[G], C.E. Renshaw, and J.W. Kirchner (2002), Isotopic evolution of snowmelt 1. A physically based one-dimensional model, *Water Resources Research*, *38*(10), 35-31-35-38. https://doi.org/10.1029/2001wr000814
28) **Feng, X**., H. Cui, and L.E. Conkey (2002), Reply to the Letter to the Editor by Zhou on "Tree-Ring δD as an Indicator of Asian Monsoon Intensity", *Quaternary Research*, *58*(2), 212-213. https://doi.org/10.1006/qres.2002.2360
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Johnston[UG], M.H., **X. Feng**, E.S. Posmentier, M.R. Albert, J.W. Weatherly, and S. Stürup (2005) Tracing Pollutants in Northwest Alaskan Snow [C43B-06] *Eos Trans. AGU*, 86(18), Jt. Assem. Suppl.

Kirchner, J.W., **X. Feng**, and C. Neal (2004) INVITED The Fine Structure of Water-Quality Dynamics: the Wave of the Future in Catchment Hydrochemistry? [H51G-02] *Eos Trans. AGU*, 85(47), Fall Meeting Suppl.

Lee[G], J., A.M. Faiia[PD], **X. Feng**, R. Osterhuber, and J.W. Kirchner (2004) Hydrological responses of snowmelt in artificial rain-on-snow experiments. Proceedings of the 2004 Annual meeting, 61st Eastern Snow Conference, Portland, Maine, USA.

Turnbull[UG], I.D., A.M. Faiia[PD], E.S. Posmentier, and **Feng, X.** (2004) Seasonal Variations in the $\delta^{18}O$ Values of Global Meteoric Water and Climate Dynamic Patterns [A41B-02] *Eos Trans. AGU,* 85(17), Jt. Assem. Suppl.

Poage[PD], M.A. and **X. Feng** (2004) A theoretical analysis of steady state $\delta^{13}C$ profiles of soil organic matter [B42A-05] *Eos Trans. AGU,* 85(17), Jt. Assem. Suppl.

Pellerin[G], B., W. Wollheim, **X. Feng**, C. Vorosmarty, A.M. Faiia[PD] (2004) Quantifying new water contributions to stormflow in an urban watershed using electrical conductivity and isotopic tracers [H13B-02] *Eos Trans. AGU,* 85(17), Jt. Assem. Suppl.

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Posmentier, E.S. **X. Feng**, and M. Zhao (2003) Seasonal variations of precipitation $\delta^{18}O$ in Eastern Asia [GC12A-0153] *Eos Trans. AGU*, 84(46), Fall Meeting. Suppl.

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Kirchner, J.W., **X. Feng**, and C. Neal (2002) Linkages between hydrology and biogeochemistry, explored via spectral analysis of catchment hydrochemical data [H52D-0907] *Eos Trans. AGU*, 83(47), Fall Meeting Suppl.

Shu[G], Y. and **X. Feng** (2002) Relative humidity recorded in the hydrogen and oxygen isotopic compositions of tree rings [GC21B-0158] *Eos Trans. AGU*, 83(47), Fall Meeting Suppl.

Feng, X. (2002) A theoretical analysis of carbon isotope evolution of decomposing plant sitters and soil organic matter [GC72B-0218] *Eos Trans. AGU*, 83(47), Fall Meeting Suppl.

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Wong[G], C.K., C.E. Renshaw, **X. Feng** and S. Stürup (2002) New Hampshire apple orchards as a source of arsenic contamination [H42A-05] *Eos Trans. AGU*, Spring Meeting Suppl.

Feng, X., V. Nez[G], J.W. Kirchner, C.E. Renshaw, R. Osterhuber, and S. Stürup (2002) Solute transport processes in temperate snowpacks revealed from nitrate and sulfate concentrations [H42D-09] *Eos Trans. AGU*, Spring Meeting. Suppl.

Feng, X. (2002) Studies of mountain uplift and climate change using stable isotopes. IPACES (International Professionals for the Advancement of Chinese Earth Sciences) 3th Annual Workshop, June 26-28, 2002, Tongji University, Shanghai, China.

Taylor[G], S. **X. Feng**, M. Williams and J. McNamera (2002) Evaluating how uncertainties in the snowmelt isotopic composition affect hydrograph separation. In "Proceedings 59th Eastern Snow Conference", June 5-7, Stowe, Vermont.

Quideau, S.A., R.C. Graham, **X. Feng**, and O.A. Chadwick (2002) Isotopic fractionation linked to soil carbon sequestration under oak and pine vegetation, submitted to the CSSS Annual meeting, Banff, Canada, May 18 - 24 2002.

Feng, X., J.W. Kirchner, C.E. Renshaw, and C. Neal (2001) Estimating whole-catchment chemical retardation factors using spectral analysis of reactive and passive chemical tracer time series [H21E-11] *Eos Trans. AGU*, 82(47), Fall Meeting Suppl.

Kirchner, J W., **X. Feng**, C.E. Renshaw, and C. Neal (2001) Spectral analysis in catchment hydrology and geochemistry [H21E-10] *Eos Trans. AGU*, 82(47), Fall Meeting Suppl.

Feng, X., and K. Tang[G] (2001) Isotopic systematics in atmosphere-soil-plant systems: Climatic

reconstruction using oxygen and hydrogen isotopes of tree rings. *Eos, Trans. AGU*, 83, No 20, S67.

Holmes[G], J., C.E. Renshaw, and **X. Feng** (2001) Stream response to storm events downstream of mine tailings: Hydrograph separation and metals Contamination. *Eos, Trans. AGU*, 83, No 20, S183.

Feng, X. (2001) Hydrology and Hydrochemistry of Seasonal Snowpacks. IPACES (International Professionals for the Advancement of Chinese Earth Sciences) 2th Annual Workshop, June 26-28, 2001, Peking University, Shanghai, China.

Taylor[G], S., **X. Feng**, and M. Williams (2001) Estimating snowmelt's isotopic composition for hydrograph separation from field, laboratory and modeling work. Submitted to Eastern Snow Conference, 2001.

Kirchner, J.W., **X. Feng**, C. Neal, B.L. Skjelkvaale, T.A. Clair, S. Langan, C. Soulsby, J.S. Kahl, and S.A. Norton (2000) Generality of--and a Proposed Mechanism for--Fractal Fluctuations in Stream Tracer Chemistry, *Eos, Trans. AGU*, 81, F554.

Faiia[G], A.M., J.L. Aronson, **X. Feng**, and G. WoldeGabriel (2000). K/Ar in clinoptilolite: K variability and rock permeability. Abstracts with Programs - Geological Society of America Annual Meeting, Reno, NV, Nov. 9-18, 2000. v. 32 (7), p. 479.

Tang[G], K. and **X. Feng**, and J. Flight[UG] (2000) Isotopic variations in precipitation, soil water and leaf water and their temporal relationships, submitted to Spring AGU. EOS, Vol.18, No.19, S122.

Sjostrom[G], D., K. Catapano[UG], M. Poage[G], **X. Feng**, C.P. Chamberlain, and G. Furniss (2000) Holocene climate change in the Montana Rocky Mountains recorded by stable isotope composition of ferricretes and ancient trees: GSA Abstracts with Programs, v.32, n.5.

Feng, X., J.W. Kirchner, C.E. Renshaw, R. Osterhuber, B. Klaue, and S. Taylor (1999) A study of solute transport mechanism using REE tracers and artificial rain storms on snow. EOS, vol. 80, no. 46, F345.

Kirchner, J.W., **X. Feng**, and C. Neal (1999) Fractal fluctuations in stream chemistry and their implications for contaminant persistence in catchments. EOS, vol. 80, no. 46, F375.

Anderson, D.R., C. Gazis[PD], K. Tang[G], and **X. Feng** (1999) Rain-shadow effects on the stable isotope character of precipitation, soil water and tree rings in the Olympic Peninsula, Washington State. EOS, vol. 80, no. 17, S149-150.

Taylor[G], S., **X. Feng**, R. Osterhuber, J.W. Kirchner, B. Klaue and C.E. Renshaw (1999), The isotopic Evolution of snow and its melt. Eastern Snow Conference, Fredericton, New Brunswick, Canada, 2-4 June 1999.

Feng, X., C.E. Renshaw, and S. Taylor[G] (1998) Impact of Uncertainty in the Isotopic Composition of Snowmelt on Hydrograph Separation of Spring Runoff. AGU Annual Fall Meeting, 1998. Eos, Transactions, a supplement, Vol. 79, pp F269.

Taylor[G], S., **X. Feng**, C.E. Renshaw, J.W. Kirchner, and R. Osterhber (1998) evolution of the isotopic composition of snow and its melt. AGU Annual Fall Meeting, 1998. Eos, Transactions, a supplement, Vol. 79, pp F269.

Tang[G], K., **X. Feng**, and G.J. Ettl (1998) The hydrogen isotopic composition of tree rings in the Olympic Peninsula area. Chinese Science Bulletin, 43, supplement: Abstracts of ICOG-9, 1998 Beijing, pp127.

Gazis[PD], C., K. Tang[G], and **X. Feng** (1998) Stable isotope variations in precipitation, soil water and soil CO_2 Chinese Science Bulletin, 43, supplement: Abstracts of ICOG-9, 1998 Beijing, pp44.

Faiia[G], A.M., and **X. Feng** (1998) Zeolite oxygen exchange kinetics. Chinese Science Bulletin, 43, supplement: Abstracts of ICOG-9, 1998 Beijing, pp138.

Taylor[G], S., **X. Feng**, R. Osterhuber, J.W. Kirchner, and B. Klaue (1998) Oxygen and Hydrogen isotope compositions of snowmelt from an isotopically well characterized snowpack. Eastern Snow Conference, June 2-4, 1998, Jackson, New Hampshire.

Taylor[G], S., **X. Feng**, and C.E. Renshaw (1998) Laboratory Studies of Snowmelt Using Stable Isotopes and Rare Earth Element Tracers. Abstracts from the International Conference on Snow Hydrology: The integration of physical, chemical and biological systems. Eds. J. Hardy, M. Albert and P. Marsh, US Army Corps of Engineers, P73.

Ettl, G.J., N. Cottone, and **X. Feng** (1998). Dendroecology of Douglas-fir in the Olympic Mountains, WA. Ecological Society Annual Meeting, Baltimore, MD.

Ettl, G.J., P.G. DelPrato, N. Cottone, K. Tang[G], and **X. Feng**(1997) Dendroecology: a tool to evaluate anthropogenic impacts on forest ecosystems. Biochemistry, Molecular Biology, and Biology Joint Research Forum, Penn State University, State College, PA, October 4, 1997.

Feng, X. (1997) The D/H ratios of tree rings in trees from world wide locations and the implications for climate change of the past 100-200 years. Extended Abstract for an invited presentation at REKIHAKU

International Symposium "Terrestrial Environmental Changes and Natural Disasters during the Last 10,000 Years" Sakura City, Japan, November 25-28, 1997, pp13-16.

Feng, X., J.C. Peterson[G], S.A. Quideau, R.A. Virginia, R.C. Graham, and L.J. Sonder (1997) Carbon isotopes in soil carbon accumulated under four single species lysimeters at the San Dimas Experimental Forest, CA. Abstracts with Programs: GSA 1997 Annual Meeting, A85.

Gazis[PD], C.A., and **X. Feng** (1997) Stable isotope studies of soil CO_2 and soil water in New Hampshire and Vermont. Abstracts with Programs: GSA 1997 Annual Meeting, A84.

Feng, X. (1996) A Calculation of Plant's Water Use Efficiency Using Carbon Isotopic Compositions in Tree Rings. EOS, Transactions, American Geophysical Union, Vol 77, No. 46 1996/Supplement, A42D-12, F125.

Tang[G], K., **X. Feng**, and G. Funkhouser (1996) The $\delta^{13}C$ of tree rings in full-bark and strip-bark bristlecone pines in the White Mountains of California. EOS, Transactions, American Geophysical Union, Vol 77, No. 46 1996/Supplement, A32A-29, F649.

Poage[G], M.A., C.P. Chamberlain, **X. Feng**, and X. Wang (1996) Oxygen isotope evidence of Late Miocene climate change in the southeastern Tarim Basin, Xinjiang Province, China. EOS, Transactions, American Geophysical Union, Vol 77, No. 46 1996/Supplement, T21B-19, F109.

Feng, X., G. WoldeGabriel, and J.L. Aronson (1996) Clinoptilolite-Illite/Smectite Oxygen Isotope Disequilibrium Related to the Groundwater Table at Yucca Mountain, Nevada. The 33rd Annual Meeting of the Clay Mineral Society, Program and Abstracts, p59.

Feng, X., and G. WoldeGabriel (1995) Oxygen isotopes of clinoptilolite: the oxygen isotope exchangeability in relation to the groundwater table. Fall Meeting of AGU, H21F-13, F211.

Cronin, J.R., S. Pizzarello, **X. Feng**, and S. Epstein (1994) Chemical evolution in the early solor-system: Amino-acids, aliphatic-amines, and ammonia in the murchison meteorite. Abstracts of the Papers of the American Chemical Society, 207: 14-GEOC, Part 1.

Feng, X., and S. Epstein (1994) The D/H ratios of tree-rings in 12 trees from world wide locations and the implications for climate change of the past 100-200 years. Abstracts of the Eighth International Conference on Geochronology, Cosmochronology and Isotope Geology. U.S. Geological Survey Circular 1107, p97.

Feng, X., and S. Epstein (1992) Exchangeability of exchangeable hydrogen of cellulose and determination of the D/H ratios of non-exchangeable hydrogen in cellulose. EOS, Transactions, American Geophysical Union, Vol 73, No. 43 1992/Supplement, A51A-10, p109.

Girard J.P., S.M. Savin, and **X. Feng** (1991) Interacrystalline fractionation of oxygen isotopes between hydroxyl and non-hydroxyl sites in kaolinite: thermal dehydroxylation and partial fluorination approaches. Clay Minerals Society 28th Annual Meeting, Houston, p.58.

Feng, X., and S.M. Savin (1991) Kinetics of exchange between water vapor and the framework oxygen of analcime and stilbite: a numerical model. Abstracts with Programs: GSA 1991 Annual Meeting, p. A321, No.14518.

Feng, X. and S.M. Savin (1990) Oxygen isotope studies of zeolites: Kinetics of exchange and fractionation factors. Abstracts with programs: GSA 1990 Annual Meeting, P. A251, No. 23337.

Feng, X. and S.M. Savin (1989a) Oxygen isotope studies of stilbite: Kinetics of exchange and suitability for isotopic geothermometry. Abstracts with Programs: GSA 1989 Annual Meeting, pA12, No.5458.

Feng, X. and S.M. Savin (1989b) Oxygen isotope studies of stilbite: Kinetics of exchange and suitability for isotopic geothermometry. Extended abstract in Epstein 70th Birthday Symposium, p. 16-18.

Zheng, S., **X. Feng**, and Q. Wu (1986) Stable Isotope Studies on the Mn-Nodules. Terra Cognita 6, No.2, p.116 .

INVITED TALKS

Geophysical Laboratory, Carnegie Institution of Washington, March 18, 1996
Department of Geological Sciences, University of Michigan, September 12, 1997
Department of Geological Sciences, Brown University, September 18, 1997
Department of Geology, Peking University, China, December 8, 1997
Department of Geology and Geophysics, University of Connecticut, September 14, 2000.
Institute of Geomechanics, Chinese Academy of Geological Sciences, August 2001.
Department of Geology, Peking University, China, August 2001
Department of Earth and Space Sciences, Chinese Institute of Science and Technology, August 2001.
Department of Geological Sciences, Case Western Reserve University, Oct. 2001

Department of Geophysics, Peking University, China, June 14, 2002
Biogeomon, the 4th International Symposium on Ecosystem Behavior, Reading University, United Kingdom, August 17-21, 2002
Department of Geology, the University of Hong Kong, December 2, 2002
Department of Geological Sciences, University of Oregon, February 26, 2003
2003 Gordon Research Conference on Catchment Science: Interactions of Hydrology, Biology and Geochemistry, July 20-25, 2003
Department of Plant Nutrient, School of Sources and Environment, Chinese Agriculture University, China, June 3, 2004
Institute of Earth Environment, Chinese Academy of Science, Xi'an, China, June 7, 2004.
Panel Meeting on Computation in Earth System Science, July 10-12, 2004, Beijing, China.
Department of Earth and Environmental Sciences, Rensselaer Polytechnic Institute, November 3, 2004.
Kirchner, J.W., Feng, X. and Neal, C. (2004) The Fine Structure of Water-Quality Dynamics: The Wave of the Future in Catchment Hydrochemistry? Eos Trans. AGU, 85(47), Fall Meet. Suppl., Abstract H51G-02 INVITED.
Department of Geological Sciences, Brown University, April 10, 2006.
Department of Earth Science, China University of Geoscience, Wuhan, China, August 7, 2006.
Department of Hydrogeology, Nanjing University, China, July 30, 2007.
Department of Geography, Peking University, China, August 4, 2007.
Barrow Arctic Science Consortium, Barrow, Alaska, July 19, 2008.
Center of Environmental Sciences, Peking University, China, December 22, 2008.
College of Resources and Environment, China Agriculture University, Beijing, China, December 17, 2008.
Eureka Users Workshop, Ottawa, Canada, January 13-15, 2009.
The Institute of Arid and Cold Region's Research, Lanzhou, China, July 9, 2010.
Center of Marine Sciences, Peking University, China, September 7, 2011.
School of Geological Sciences, China University of Geosciences, Beijing China, September 9, 2011.
US Arctic Research Commission Meeting, Hanover NH, October 7, 2011
Arctic and Antarctic Research Institute of Russia, St. Petersburg, July 1, 2012
College of Resources and Environment, China Agricultural University, Beijing, China, June 10, 2013
The 3rd Young Investigator Conference (EITA-YIC 2013): "Leadership, Innovation, Growth" Massachusetts Institute of Technology, Cambridge, Massachusetts, U.S.A., August 1, 2013
Department of Geomorphology and Quaternary Geology, College of Urban and Environmental Sciences, Peking University, Beijing, China, August 15, 2016.
Institute of Ocean Research, Peking University, China, September August 16, 2016.
Institute of Applied Geosciences, the National Taiwan Ocean University, Keelung, Taiwan, February 24, 2017.
Department of Geosciences, the National Taiwan University, Taipei, Taiwan, March 17, 2017.
China Agricultural University, Beijing, China, October 20, 2023
Department of Physics, University of Otago, Dunedin, New Zealand, May 8, 2024.

INVITED CONFERENCES

REKIHAKU International Symposium – Terrestrial Environmental Changes and Natural Disasters during the Last 10,000 years, Japan, November 1997.
National Science Foundation CAREER Program Symposium, Washington, D.C., January 1999.
Forum for Young Scientists, China Association for Science and Technology, August 2001.
The 167th Xiangshang Science Conference: "Active Tectonics, Environments and Natural Hazards", Xiangshang, Beijing, August 2001.
Biogeomon, the 4th International Symposium on Ecosystem Behavior, Reading University, United Kingdom, August 17-21, 2002
2003 Gordon Research Conference on Catchment Science: Interactions of Hydrology, Biology and Geochemistry, July 20-25, 2003
Panel Meeting on Computation in Earth System Science, July 10-12, 2004, Beijing, China.
Eureka Users Workshop, Ottawa, Canada, January 13-15, 2009.
International Workshop on Changes in Surface and Ground Water in the Tarim River Basin, Xi'an, China, November 23-27, 2009.
The 3rd Young Investigator Conference (EITA-YIC 2013): "Leadership, Innovation, Growth"

Massachusetts Institute of Technology, Cambridge, Massachusetts, U.S.A., August 1-2, 2013.
New England CUAHSI Regional Meeting 2013, April 25, 2013.

COURSES TAUGHT

Ears 3	Elementary Oceanography
Ears 18 (changed from EARS 28)	Environmental Geology
Ears 73/173	Environmental Isotope Geochemistry
Ears 17/117 (changed from EARS 36/115)	Analysis of Environmental Data
Ears 201	Geochemical Models in Earth Sciences
Ears 202	Geochemical Tracers
Ears 119	Stable Isotope Geochemistry
Ears 118	Advanced Analysis of Environmental Data
Ears 113	Watershed Hydrochemistry
Ears 45/46/47	Field methods
Ears 121	Graduate Seminar
Ears 88	Culminating Experience
Ears 87	Independent Research

ADVISING AND MENTORING

Undergraduate

Thesis and independent projects

Ann Melander (1996-1997) Trace metal deposition around Claremont Incinerator.

Mark Wenzel (1997-1998) Oxygen and hydrogen isotope studies of meteoric water.

Kathleen G Catapano (1998 – 1999) Reconstruction of Holocene climates in the Yellowstone region using hydrogen isotopes in wood cellulose (Co-advisor with C. Page Chamberlain)

Katharine Maher (1998-1999) Forest vitality and metal pollution along an acidified watershed, Cooke City, Montana (Co-advisor with C. Page Chamberlain)

Andrew S. Perlstein (1999-2000) Isotopic composition of soil water in Mink Brook watershed.

Raymond H.R. Dums (2000-2001) Determining the flowpaths of water through a natural soil column (Co-advisor with Carl Renshaw)

Cheryl Peyser (2000-2001) A study of water percolation through soil using stable isotopes (Co-advisor with Carl Renshaw)

Valisa E. Nez (2000-2001) A simulation of contaminant transport in unsaturated media using sand columns (Co-advisor with Carl Renshaw)

Molly C. Redmond (2001-2002) Reconstruction of climate change of Tasmania Australia using oxygen and hydrogen isotopes of tree rings.

Elizabeth S. Winston (2002-2003) Arsenic mobility in soil.

Ian D. Turnbull (2003-2004) Global Seasonal Variations in Precipitation $\delta^{18}O$

Allison L. Reddington (2003-2004) Reconstruction of Paleohumidity for the North American Continent using Oxygen and Hydrogen Isotopes in Wood Cellulose.

Ross J. Markwort (2004) Independent project, Environmental Reconstruction of Ethiopia during the African Humid Period (Coadvising with Jim Aronson and Gary Johnson)

Merrick H. Johnston (2002-2005) Tracing atmospheric pollutant along Storm Tracks in Northwest Alaska.

Eleanor E. Campbell (2005) Changes in stable carbon isotope signatures in three temperate lakes associated with autumn lake destratification (Co-advisor with Cottingham).

Kelly K. Everhart (2008-2009) Isotopic variations in atmospheric water vapor.

Maria A. Vishnevskiy (2009-2010) Inter-storm isotopic variations and the mechanisms.

Ivy N. Ddamba (2012-2013) Inter-annual variation of hydrological processes in Kangerlussauq, Greenland

Shelby D. Hinds (2014) Health effects of exposure to arsenic: its epidemiology, and the associated environmental and hydrological implications

Joshua L. Perez (2014-2016) Independent project: A study of atmosphere-snow isotopic exchange at the Summit of Mt. Washington.

Mary Margaret Stoll (2015-2016) Independent project (provided funding): Fresh water contribution to sea ice.

Mary Margaret Stoll (2017-2018) Thesis of Dartmouth Thayer School of Engineering: Microstructural, Chemical, and Isotopic Characterization of Sea Ice from Barrow, Alaska.
Elena E. Bird (2017-2018) Independent project: soil carbon storage, efflux, and leaching within different contained soil and vegetation typologies.

Woman In Science Interns: Christine DeLorenzo (1996), Candice E. Buckley (1996), Jennifer Flight (1997), Emily K. Lesher (1998), Sara Szkola (1999), Emily Schaller (1999), Jennifer C. Miller (2000), Reiko Harigaya (2002), Kristina M. Conner (2005); Shreoshi Majumdar (2007 and 2008); Kelly S. Aho (2008), Suzanne Kelson (2009), Yuhan Xue (2010), Sarah S. Errafay (2011), Leah Shin (2014), Madeleine C. McDermott (2016)

Presidential Fellow: Jessica T. Rush (2008); Florence T. Ling (2009); Aryeh J. Drage (2010); Nicole L. Kanayurak (2012); Joshua L. Perez (2015)

Research Assistant: Kelly K. Everyhart (2006), Natalie L. O'Rourke (2007), Christina M. Supino (2008-2009), Aryeh J. Drager (2009-2010), Christina M. Supino (2010-2011); Reed W. Wommack (2011-2012); Jing Wei Pan (2011-2012); Nicolina (Nina) S. Mascia (2012-2013); Nicole L. Kanayurak (2013); Yuhan Xue (2013); Ivy N. Ddamba (2012-2013), Josh L. Perez (2013-2015), Mariana J. Webb (2015)

Undergraduate

Primary Advisor/Co advisor

Jennifer Peterson (M.S. 1997)
Kuilian Tang (Ph.D 2000)
Susan Taylor (Ph.D 2001)
James Holmes (M.S. 2001, Coadvisor)
Kelsey Sinclair (M.S. 2001, Coadvisor)
Margaret Quinn (M.S. 2001, Coadvisor)
Anthony Faiia (Ph.D 2002)
Christine K. Wong (M.S. 2002, Coadvisor)
Valisa E. Nez (M.S. 2003)
Raymond H. R. Dums (M.S. 2003)
Jamie L. DeLemos (M.S. 2003)
Yong Shu (Ph.D. 2007)
Jeonghoon Lee (Ph.D. 2008)
Ye Wang (M.S. Left the program in 2008 before finishing)
Alexis L. Coplin (M.S. 2009)
Kelly K. Everhart (M.S. 2011)
Derek A. Smith (Ph.D. 2013)
Alex M. Lauder (M.S. 2013)
Annie L. Putman (M.S. 2013)
Naixin Fan (M.S. 2015)
Urshula Bajracharya (M.S. 2016)
Ben G. Kopec (Ph.D. 2016)
Bingjie Ouyang (Ph.D. 2019)
Vinitra Nathan (M.S Left program in 2023 before finishing)

Graduate Advisory/Thesis Defense Committee Member

Hans Manske (M.S, 1998)
Stephen Peters (M.S. 1999)
Michael A. Poage (Ph.D. 2000)
James F. Hogan (PhD. 2000)
Jennifer L. Marcer (Ph.D 2002)
Derek J. Sjostrom (Ph.D 2002)
James M. Kaste (Ph.D. 2004)
Zhaohui Zhang (Ph.D. 2002

Yali Sun (Ph.D. 2002, External examiner at the University of Hong Kong.
Andrew W. Schroth (Ph.D. 2007)
Andrew Quicksall (Ph.D. 2008)
Rebekka M. Stucker (M.S. 2006)
Rasmus Andreasen (Ph.D. 2007)
D. Bradley Bate (M.S. 2007)
Cynthia Chen (Ph.D. 2009)
Samantha L Saalfield (Ph.D. 2009)
Jing Sun (M.S. 2010)
Lynne M. Zummo (M.S. 2010)
Yingzhe Wu (M.S. 2011)
Rachel A. Neurath (M.S. 2011)
Laura B. Levy (Ph.D. 2014)
Jennifer B. Bailard (Ph.D. withdraw in 2011)
Gifford J. Wong (Ph.D. 2016)
Jie Yang (M.S. 2013)
Lee Corbett (Ph.D., left the program in 2013 unfinished)
Danielle J. Niu (M.S. 2014)
Gayathri Janakiraman Paramasivan (M.S. 2017)
Dominic A. Winski (Ph.D. 2018)
Lina Taenzer (M.S. 2019)
Rebecca K. Rossi (M.S. 2021)
Danielle Niu (Ph.D. 2021)
Ji-Hye Seo (Ph.D. 2021)
James F. Busch (Ph.D. 2022)
Joshua F. Landis (Ph.D. 2024)
Siddhartha Bharadwaj (Ph.D. Expected 2024)
Tianran Zhang (Ph.D. Expected 2024)
Carolynn Harris (Ph.D. Expected 2025)
Jiawen Li (Ph.D. Expected 2026)
Reina Harding (Ph.D. Expected 2028)