

**CURRICULUM VITAE**  
Washington State University

**NAME:** Walden, Von P.**DATE:** 6 January 2020**RANK OR TITLE:**

Professor

**DEPARTMENT:**

Civil and Environ. Engineering

**OFFICE LOCATION AND CAMPUS ZIP:**

Paccar 460, 2910

**OFFICE PHONE:**

(509) 335-5645

**EMAIL:**

v.walden@wsu.edu

**EDUCATION BEYOND HIGH SCHOOL:****Degrees:**

Ph.D., Geophysics, 1995, University of Washington

M.S., Geophysics, 1990, University of Washington

B.S., Physics with high honors, (minor in mathematics), 1984, Utah State University

**EXPERIENCE:****Teaching, Extension and Research Appointments:**

Professor, Washington State University, Pullman, Washington, 2013-current

Fulbright Distinguished Arctic Chair, Norwegian Polar Institute, Norway, 2015

Professor, University of Idaho, Moscow, Idaho, 2012 - 2013

Associate Professor, University of Idaho, Moscow, Idaho, 2005 – 2012

Interim Project Director for Idaho EPSCoR/IDeA, September 2009 - January 2010

Assistant Professor, University of Idaho, Moscow, Idaho, 2001 – 2005

Affiliate Professor, Atmos. Science, Univ. Washington, Seattle, WA, 2002 - 2007

Research Scientist, University of Idaho, Moscow, ID, 2000-2001

Research Scientist, University of Wisconsin-Madison, Madison, WI, 1998-1999

Postdoctoral Research Associate, Univ. of Wisconsin-Madison, Madison, WI, 1997

Postdoctoral Research Associate, University of Washington, Seattle, WA, 1996

Electro-optical engineer, Quantic Industries, San Carlos, CA, 1984-1987

**TEACHING ACCOMPLISHMENTS:****Courses Developed and Taught:**

Geog 100 Physical Geography

Core 201 Global Change Summit: Facing the conseq. of global climate change

Geog 301 Meteorology

CEE 315 Fluid Mechanics

Geog 385 GIS Primer

CEE 401 Climate Change Science and Engineering

Geog 401 Climatology

Geog 404 Global Environmental Change (team-taught)

Geog 415 Data Analysis and Modeling using Computer Programming (Python)

Geog 491 Research Methods in Geography (2 weeks; team-taught)

Geog 499 Directed Study (IR properties of the atmosphere, Global Climate Change)

Geog 504 Advanced Meteorology

CEE 540 Instrumental Analysis of Environmental Contaminants

CEE 543 Advance Remote Sensing  
CEE 590 Atmospheric Radiative Transfer

**Students Advised:**

## Undergraduate Advisees:

Currently advising seven undergraduate students in civil engineering.  
Approximately 2 to 3 advisees graduate each year.

## Undergraduate Researchers:

Jensen Landon, Summer 2019-current, WSU Urbanova  
Christina Paoletti, Spring 2019, WSU Urbanova  
Yoni Rodriguez, Summer 2017-current, WSU LAR REU program  
Kristian Gubsch, Fall 2016 - Spring 2018, WSU Smart Cities, LAR REU  
Nathan Scott, Summer 2016 - Fall 2017, WSU Smart Cities Initiative  
Pyxie Star, Summer 2016 - Spring 2018, WSU LAR REU program  
Julia Schneider, Fall 2016 - Spring 2016, WSU Smart Cities Initiative  
Allison Ronan, Summer 2016, WSU LAR REU program  
Mercedes Winfrey, Summer 2016, WSU LAR REU program  
Brooke Adams, Summer 2014, WSU LAR REU program  
Taylor Mandelbaum, Summer 2014, WSU LAR REU program  
Alec Figgins, Spring 2014, Personal NSF research program  
Andrew Armour, Spring 2014, Personal NSF research program  
Paul Cantrell, 2013  
Nathan Anderson, 2011, 2012  
Alessio Spassiani, 2011  
Kyle Behrens, 2010  
Bryan Pettit, 2009  
Kenny Christian, 2009  
Ethan Davis, 2006, 2007  
Craig Tarter, 2006  
Jon Harbour, 2004

## Graduate Students (as major professor):

## Washington State University

Matthew Roetcisoender, expected Spring 2021  
Nathan Lima, Ph.D., expected Spring 2020  
Shima Bahramrash-Shams, Ph.D., expected Summer 2020  
Sarah Murphy, Ph.D., expected Summer 2020  
Marissa Grubbs, M.S., Spring 2019  
Quentin Baret, M.S., Spring 2016

## University of Idaho

Chris Cox, Ph.D., 2013 (environmental science)  
Chris Cox, M.S., Fall 2009  
Brian Harshburger, Ph.D., Fall 2009 (co-advised with Karen Humes)  
Mark Ellison, M.S., Fall 2007

Brandon Moore, M.S., Spring 2006

W. Lance Roth, M.S., 2004

University of Washington (co-advised with Prof. Steve Warren)

Michael Town, Ph.D., 2007 (atmospheric science)

Penny Rowe, Ph.D., 2005, (atmospheric chemistry)

Michael Town, M.S., 2004. (atmospheric science)

Steven Hudson, M.S., 2004. (atmospheric science)

Ashwin Mahesh, Ph.D, 1999. (geophysics)

Graduate committees served (and serving) on:

Washington State University

Neda Khosvavi, Ph.D., expected 2021

Brian Grimms, M.S., expected 2020

Bradley Luff, M.S., expected 2019

Anna Potapova, M.S., 2019

Yibo Huangfu, Ph.D., 2018

Yulong Ma, Ph.D., 2018

Madeline Fuchs, M.S., 2015

University of Idaho

Jacob Wolf, M.S., 2012

Joey Machala, M.S., 2009

Francoise Faure, Ph.D., 2008 (rapporteur only while on sabbatical)

John Zakrajsek, M.S., 2006

Carly Gibson, M.S., 2006

Troy Blandford, M.S., 2006

Yao Tang, M.S., 2005

Daniel Joswiak, M.S., 2004

Amy Haak, Ph.D., until 2003

Nate Dowse, M.S., 2003

Leon Denkhe, M.S., 2003

Charlotte Samis, M.S., 2002 (alternate for final exam)

Postdoctoral Fellows mentored:

Lana Cohen, 2014-2018

Michael Town, 2008

Penny Rowe, 2006-2008

**Grants and Contracts Awarded:****Pending:**

Promoting risk reduction among young adults with asthma during wildfire smoke events, \$382,500 - total, National Institute of Health, 1 April 2020 - 31 March 2022, (co-P.I.; Julie Postma, P.I., WSU College of Nursing)

**Awarded:**

Using Artificial Intelligence to Deliver Real-Time Air-Quality Health Advisories across the Pacific Northwest, \$14,130., Microsoft AI for Earth, 1 January 2020 - 31 December 2020, (P.I.; co-Is Joseph Vaughan, WSU and Matthew Kadlec, WA Dept of Ecology)

Collaborative Research: Improving research coordination at Summit Station and the Dry-Snow Zone of Greenland, \$582,734 - total; \$109,985 - WSU, National Science Foundation, 12 July 2019 - 30 June 2021, (co-P.I.; Robert Hawley, P.I., Dartmouth)

Deploying a Smart Exposure Information System: A Longitudinal Analysis of Air Quality, Children's Health, and School Absenteeism in Spokane, Washington, US, \$110,175 - total; \$50,430 - Walden, Ramboll Fonden, 1 April 2019 - 30 September 2020, (co-P.I.; P.I. - Solmaz Amiri)

NSFGEO-NERC: Collaborative Research: The Integrated Characterization of Clouds, Energy, Atmospheric state, and Precipitation at Summit, Aerosol-Cloud Experiment (ICECAPS-ACE), \$500,000 - total; \$144,184 - WSU, National Science Foundation - Arctic Observing Network, 1 August 2018 - 31 July 2020, (P.I.)

Extension of CSANR online climate visualization tool to Western Washington, \$14,976, Snohomish County, 25 August 2017 - 31 July 2018, (co-P.I., Kirti Rajagopalan, P.I., WSU)

Ensemble analysis of global change projections for US air quality using a novel combination of Lagrangian and gridded air quality models, \$523,609, Environmental Protection Agency, 15 June 2015 - 31 May 2018, (co-P.I., Brian Lamb, P.I., WSU)

Collaboration in research and teaching for the 2015 Norwegian Young Sea Ice cruise: Following the course set by Fridtjof Nansen and the voyage of the Fram, \$33,025, 2015 Arctic Chair, U.S.-Norway Fulbright Foundation for Education Exchange, July-December 2015 (recipient)

Integrated Measurements and Modeling Using US Smart Homes to Assess Climate Change Impacts on Indoor Air Quality, \$996,663, Environmental Protection Agency, 1 August 2014 - 31 July 2017, (co-P.I., Brian Lamb, P.I., WSU)

Integrated Characterization of Energy, Clouds, Atmospheric state, and Precipitation at Summit (ICECAPS), \$1,850,357 – total; \$399,647 – U. Idaho, National Science Foundation – Arctic Observing Network, 1 Oct 2013 – 30 Sept 2018. (P.I.; co-P.Is - Matthew Shupe, U. Colorado, David Turner, U. Oklahoma, and Ralf Bennartz, U. Wisconsin-Madison)

Collaborative Research: Characterizing the Roles of Atmospheric Structure and Clouds on the Radiation and Precipitation Budgets at Summit, Greenland, National Science Foundation Arctic Natural Sciences, \$243,424 (Walden portion), 1 August 2012 - 31 July 2015, (co-P.I.; P.I. - Dave Turner, U. Oklahoma)

Development of the Autonomous Arctic Infrared Observer (AAIRO), National Science Foundation Arctic Observing Network, \$200,000, 15 Aug 2011 - 31 July 2013, (P.I.)

Regional Approaches to Climate Change (REACCH), USDA NIFA program, approx. \$284,000. (Walden portion), 16 February 2011 - 15 February 2016, (Von P. Walden - co-P.I.; Sanford Eigenbrode (UI) - P.I., Large (\$20,000,000) project in Idaho, Washington and Oregon)

EPSCoR Research Infrastructure Improvement program: Inter-campus and Intra-campus Cyber Connectivity (RII C2), \$1,176,470, July 2010 - June 2012. (P.I.)

Collaborative Research: Cyberinfrastructure Development for the Western Consortium of Idaho, Nevada, and New Mexico, \$2,000,000. (to Idaho EPSCoR), 15 September 2009 - 14 September 2012. (P.I. for Idaho EPSCoR portion)

Integrated Characterization of Energy, Clouds, Atmospheric state, and Precipitation at Summit (ICECAPS), (\$1,917,000. – total; \$898,000. – U. Idaho), National Science Foundation – Arctic Observing Network, 1 May 2009 – 30 April 2014. (Walden, P.I.; co-P.Is - Matthew Shupe, U. Colorado and David Turner, U. Wisconsin-Madison)

Idaho proposal to the NSF/EPSCoR Research Infrastructure Improvement Program: Water Resources in a Changing Climate: Connections to Ecological and Human Systems, co-P.I., \$15,000,000., 1 September 2008 – 31 August 2013. (co-P.I. from 1 September 2008 – 24 September 2009, May 2010 - current; P.I. from 25 September 2009 - May 2010)

Lease of the University of Idaho Polar Atmospheric Emitted Radiance Interferometer (P-AERI) for deployment in Eureka, Canada for NOAA SEARCH, National Oceanic and Atmospheric Administration, 1 March 2008 – 30 June 2009, \$19,000. (P.I.)

Subcontract for continuation of “Validation of the Atmospheric Infrared Sounder over the Antarctic Plateau”, \$25,000, NASA JPL, April 2008 – September 2008. (P.I.)

- Antarctic Clouds and Climate: A Study with Two Generations of NASA Earth Science Enterprise Data, \$148,843, NASA via Scripps Institute of Oceanography, March 2008 – February 2011. (co-PI. with Dr. Dan Lubin, Scripps)
- Preliminary Steps towards Understanding the Effects of Global Climate Change on Long-term Trends in Water Resources in Idaho, \$25,000., (with matching funding from IWRI (\$12,500.) and PNWRC (\$18,287.), July 2007 – June 2008.
- Subcontract for continuation of “Validation of the Atmospheric Infrared Sounder over the Antarctic Plateau”, \$50,000, NASA JPL, March 2007 – September 2008. (P.I.)
- IPY: Cloud properties across the Arctic Basin from surface and satellite measurements - An existing Arctic Observing Network, \$197,559, National Science Foundation – International Polar Year, 15 March 2007 – 28 February 2010. (co-PI. with Matthew Shupe, U. Colorado)
- Lease of the University of Idaho Polar Atmospheric Emitted Radiance Interferometer (P-AERI) for deployment in Eureka, Canada for NOAA SEARCH, National Oceanic and Atmospheric Administration, 8 March 2007 – 29 February 2008, \$45,168. (P.I.)
- Hydrometeorological Forecasting in Mountain Watersheds for 2007, \$195,300., Pacific Northwest Regional Co-laboratory, October 2006 – September 2007. (co-PI. with Karen Humes)
- Longwave Radiation Processes and Surface Energy Budget on the Antarctic Plateau, PI, \$175,000, National Science Foundation - Office of Polar Programs, 1 March 2006 – 28 February 2009. (P.I.)
- Acquisition of spectral infrared downward longwave radiances over Eureka, Canada, PI, \$35,000., National Oceanic and Atmospheric Administration (NOAA), Feb 2006 – May 2007. (P.I.)
- Improvement of Operational Streamflow Forecasting in Snowmelt Dominated Basins, Co-PI with K. Humes, \$125,859, Battelle National Laboratory, Pacific Northwest Regional Co-laboratory, 1 July 2005 - 30 June 2006.
- Idaho proposal to the NSF/EPSCoR Research Infrastructure Improvement Program: Carbon/water flux in complex landscapes, co-PI, \$66,500 for Walden, (total grant is \$1,800,000), 1 June 2005 – 31 May 2008.
- Instrumentation Support and Data Measurements for the Lexington Experiment, \$23,420., Pacific Northwest National Laboratory, March – July 2005.
- Hydro-meteorological tools for streamflow prediction in Western basins (Supplementary funding for Web Integration), Co-PI with K. Humes, \$5,782, Battelle National

- Laboratory, Pacific Northwest Regional Co-laboratory, March 2005-June 2005.
- Hydro-meteorological tools for streamflow prediction in Western basins, Co-PI with K. Humes, \$128,500, Battelle National Laboratory, Pacific Northwest Regional Co-laboratory, May 2004-May 2005.
- Extension to “Validation of the Atmospheric Infrared Sounder over the Antarctic Plateau”, PI, \$66,000, NASA, September 2004 – September 2005.
- Improved Short-term Operational Streamflow Forecasting for Snow-melt Dominated Basins, Co-PI with K. Humes, \$15,000, U.S.G.S – Idaho Water Resources Research Institute, March 2003 – February 2004.
- Improving streamflow forecasts in the Upper Snake River Basin, Co-PI with K. Humes, \$125,000, Battelle National Laboratory, Pacific Northwest Regional Co-laboratory, July 2003-May 2004.
- Improved streamflow forecasting in Idaho, Co-PI with K. Humes, \$15,000, U.S.G.S – Idaho Water Resources Research Institute, March 2003 – February 2004.
- Longwave radiation processes over the Antarctic Plateau, PI, \$97,657, National Science Foundation - Office of Polar Programs, January 2003 – December 2005.
- Validation of the Atmospheric Infrared Sounder over the Antarctic Plateau, PI, \$340,000, NASA, September 2001 – August 2004.
- Supplemental grant to “Longwave Radiation Processes on the Antarctic Plateau” for the Teachers Experiencing Antarctica (TEA) program, \$10,300, co-PI (with Steve Warren, UW), NSF – Polar Programs, April 2000 – May 2001. (Funded a high school teacher from Montana to help with our field program at South Pole Station in Dec 2000/ Jan 2001.)
- Antarctic Clouds and Climate (co-I with Drs. David Bromwich (OSU) and Dan Lubin (Scripps Oceanographic Inst.), co-I, NSF – Climate Dynamics, \$44,400, January 1999 – December 2000.
- Integrated Science Core Course development award, PI, \$2500, University of Idaho, December 1999.
- The use of the Antarctic Plateau as a natural laboratory for upper tropospheric processes, PI, \$143,351, NSF – Physical Meteorology, 1998 – 2001.
- Longwave radiation processes over the Antarctic Plateau, PI, \$176,000, NSF – Office of Polar Programs, 1997 – 2000.

**SCHOLARSHIP ACCOMPLISHMENTS:****Refereed Publications:****Articles:**

- Stillwell, R.A., R.R. Neely III, J.P. Thayer, V.P. Walden, N. Miller, and M.D. Shupe, 2019. Radiative influence of horizontally oriented ice crystals over Summit, Greenland. *J. Geophys. Res.*, accepted.
- Rowe, P., C.J. Cox, S. Neshyba and V.P. Walden, 2019. Toward autonomous surface-based infrared remote sensing of polar clouds: Retrievals of cloud microphysical properties, *Atmos. Meas. Tech.*, **12**, 5071–5086, doi: 10.5194/amt-12-5071-2019.
- \*Bahramvash Shams, S., V.P. Walden, I. Petropavlovskikh, D. Tarasick, R. Kivi, S. Oltmans, B. Johnson, P. Cullis, C.W. Sterling, L. Thölix, and Q. Errera, 2019: Variations of the vertical profile of ozone at four high-latitude Arctic sites from 2005 to 2017, *Atmos. Chem. Phys.*, **19**, 9733-9751, doi: 10.5194/acp-19-9733-2019.
- Graham, R.M., P. Itkin, A. Meyer, A. Sundfjord, G. Spreen, L.H. Smedsrud, G.E. Liston, B. Cheng, \*L. Cohen, D. Divine, I. Fer, A. Fransson, S. Gerland, J. Haapala, S.R. Hudson, M. Johansson, J. King, I. Merkouriadi, A. Peterson, C. Provost, A. Randelhoff, A. Rinke, A. Rösel, N. Sennéchaël, V. Walden, P. Duarte, P. Assmy, H. Steen, and M.A. Granskog, 2019. Winter storms accelerate the demise of sea ice in the Atlantic Sector of the Arctic Ocean, *Nature - Scientific Reports*, **9**, 9222, doi: 10.1038/s41598-019-45574-5.
- Graham R.M., \*L. Cohen, N. Ritzhaupt, B. Segger, R. Graversen, A. Rinke, V.P. Walden, M.A. Granskog, and S.R. Hudson, 2019. Evaluation of six atmospheric reanalyses over Arctic sea ice during winter and spring, *J. Climate*, **32**(14), 4121-4143, doi: 10.1175/JCLI-D-18-0643.1.
- Cox, C.J., D.C. Noone, M. Berkelhammer, M.D. Shupe, W.D. Neff, N.B. Miller, V.P. Walden and K. Steffen, 2019. Super-cooled liquid fogs over the central Greenland ice sheet, *Atmos. Chem. Phys.*, **19**, 7467-7485, doi: 10.5194/acp-19-7467-2019.
- Huangfu, Y., \*N.M. Lima, P.T. O’Keeffe, W.M. Kirk, B.K. Lamb, S.N. Pressley, B. Lin, D.J. Cook, V.P. Walden, and B.T. Jobson, 2019. Diel variation of formaldehyde levels and other VOCs in homes driven by temperature dependent infiltration rates and emission rates, *Building and Environment*, **159**, 106153, doi: 10.1016/j.buildenv.2019.05.031.
- Pettersen, C., R. Bennartz, A. Merrelli, M. Shupe, D. Turner, and V. Walden, 2018: Precipitation regimes over central Greenland inferred from 5 years of ICECAPS observations, *Atmos. Chem. Phys.*, **18**, 4715–4735, doi: 10.5194/acp-18-4715-2018.



- Kirk, W.M., M. Fuchs, Y. Huangfu, \*N. Lima, P. O’Keeffe, B. Lin, T. Jobson, S. Pressley, V.P. Walden, D. Cook, and B. Lamb, 2018: Indoor air quality and wildfire smoke impacts in the Pacific Northwest, *Science and Technology for the Built Environment*, **24**(2), 149–159, doi: 10.1080/23744731.2017.1393256
- Lin, B., Y. Huangfu, N. Lima, B. Jobson, M. Kirk, P. O’Keeffe, S. Pressley, V. Walden, B. Lamb, and D. Cook, 2017: Analyzing the Relationship between Human Behavior and Indoor Air Quality, *J. Sensors and Acuator Networks*, **6**(3), 13–18, doi:10.3390/jsan6030013.
- Walden, V.P., S.R. Hudson, \*L. Cohen, \*S.Y. Murphy, and M.A. Granskog, 2017: Atmospheric components of the surface energy budget over young sea ice: Results from the N-ICE2015 campaign, *J. Geophys. Res. Atmos.*, **122**, doi: 10.1002/2016JD026091.
- \*Cohen, L., S.R. Hudson, V.P. Walden, R.M. Graham, and M.A. Granskog, 2017: Meteorological conditions in a thinner Arctic sea ice regime from winter through summer during the Norwegian young sea ICE expedition (N-ICE2015), *J. Geophys. Res. Atmos.*, **122**, doi:10.1002/2016JD026034.
- Graham, R.M., A. Rinke, \*L. Cohen, S.R. Hudson, V.P. Walden, M.A. Granskog, W. Dorn, M. Kayser, and M. Maturilli, 2017: A comparison of two Arctic atmospheric winter states during N-ICE2015 and SHEBA, *J. Geophys. Res. Atmos.*, **122**, 5716–5737, doi:10.1002/2016JD025475.
- Rowe, P.M., C.J. Cox, and V.P. Walden, 2016: Towards autonomous surface-based infrared remote sensing of polar clouds: cloud height retrievals, *Atmos. Meas. Tech.*, **9**, 3641–3659, doi:10.5194/amt-9-3641-2016.
- Uttal, T., Sandra Starkweather, James Drummond, Timo Vihma, Alexander P. Makshtas, Lisa S. Darby, John F. Burkhart, Christopher J. Cox, Lauren Schmeisser, Thomas Haiden, Marion Maturilli, Matthew Shupe, Gijs de Boer, Auromeet Saha, Andrey Grachev, Sara Crepinsek, Lori Bruhwiler, Barry Godison, Bruce McArthur, Von Walden, Edward J. Dlugokencky, Ola Persson, Glen Lesins, Tuomas Laurila, John Ogren, Robert Stone, Charles N. Long, Sangeeta Sharma, Andreas Massling, David D. Turner, Diane Stanitski, Eija Asmi, Mika Aurela, Henrik Skov, Kostas Eleftheriadis, Aki Virkkula, Andrew Platt, Eirik J. Førland, Yoshihiro Iijima, Ingeborg E. Nielsen, Michael H. Bergin, Lauren Candlish, Nikita S. Zimov, Sergey A. Zimov, Norman T. O’Neill, Pierre Fogal, Rigel Kivi, Elena Konopleva-Akish, Johannes Verlinde, Vasily Kustov, Brian Vassel, Vikto Ivakhov, Yrjö Viisanen, and Janet Intrieri, 2016: International Arctic Systems for Observing the Atmosphere: An International Polar Year Legacy Consortium, *Bull. Amer. Met. Soc.*, **97**(6), doi: 10.1175/BAMS-D-14-00145.1.

- Cox, C.J., P.M. Rowe, S.P. Neshyba, and V.P. Walden, 2016: A synthetic data set of high-spectral resolution infrared spectra for the Arctic atmosphere, *Earth Syst. Sci. Data*, **8**, 199-211, doi:10.5194/essd-8-199-2016.
- \*Cox, C.J, V.P. Walden, P.M. Rowe, and M.D. Shupe, 2015: Humidity trends imply increased sensitivity to clouds in a warming Arctic, *Nature Commun.*, **6**:10117 doi: 10.1038/ncomms10117.
- Miller, B.G., \*C.J. Cox, R.J. Hougham, V.P. Walden, K.B. Eitel, and A.D. Albano, 2015. Adventure learning as a curricular approach that transcends geographies and connects people to place, *The Curriculum Journal*, **26**, doi: 10.1080/09585176.2015.1043925.
- Klos, P.Z., J. Abatzoglou, J. Blades, M.A. Clark, M. Dodd, T.E. Hall, A. Haruch, P. Higuera, J.D. Holbrook, V.S. Jansen, A. Lankford, A. Lamar, T. Link, T. Magney, A.J.H. Meddens, L. Mitchell, \*B. Moore, P. Morgan, B. Newingham, R. Niemeyer, B. Soderquist, A.A. Suazo, C. Teston, K.T. Vierling, V.P. Walden, and C. Walsh, 2015: Indicators of climate change in Idaho: An assessment framework for coupling biophysical change and social perception, *Weather, Climate and Society*, **7**, 238-254, doi: 10.1175/WCAS-D-13-00070.1
- Miller, N.B., M.D. Shupe, \*C.J. Cox, K. Steffen, V.P. Walden, and D.D. Turner, 2015. Cloud radiative forcing at Summit, Greenland, *J. Climate*, **28**, 6267–6280, doi: <http://dx.doi.org/10.1175/JCLI-D-15-0076.1>
- Lubin, D., B.H. Kahn, M.A. Lazzara, P. Rowe, and V.P. Walden, 2015. Variability in AIRS-retrieved cloud amount and thermodynamic phase over west versus east Antarctica influenced by the SAM, *Geophys. Res. Lett.*, **42**, doi: 10.1002/2014GL062285.
- \*Cox, C.J., V.P. Walden, G.P. Compo, P.M. Rowe, M.D. Shupe, and K. Steffen, 2014: Downwelling longwave flux over Summit, Greenland, 2010-2012: Analysis of surface observations and evaluation of ERA-Interim using wavelets, *J. Geophys. Res.*, **119**, 12,317–12,337, doi:10.1002/2014JD021975.
- Overland, J., J. Key, E. Hanna, I. Hanssen-Bauer, B.-M. Kim, J. Walsh, M. Wang, U. Bhatt, Y. Liu, R. Stone, C. Cox, and V. Walden, 2014: [The Arctic] The lower atmosphere: air temperature, clouds and surface radiation [in “State of the Climate in 2013”]. *Bull. Amer. Meteor. Soc.*, **95** (7), S115–S120.
- Adam, J.C. plus 39 co-authors, 2014: BioEarth: Envisioning and developing a new regional earth system model to inform natural and agricultural resource management, *Climatic Change*, **123**, 1-17 doi: 10.1007/s10584-014-1115-2
- \*Cox, Christopher J., David D. Turner, Penny M. Rowe, Matthew D. Shupe, Von P. Walden, 2014: Cloud Microphysical Properties Retrieved from Downwelling Infrared

- Radiance Measurements Made at Eureka, Nunavut, Canada (2006–09). *J. Appl. Meteor. Climatol.*, **53**, 772–791. doi: <http://dx.doi.org/10.1175/JAMC-D-13-0113.1>
- Key, J., Y. Liu, R. Stone, C. Cox, and V. Walden, 2013: Cloud cover and surface radiation budget. Arctic Report Card: Update for 2013, M. O. Jeffries et al., Eds., NOAA Rep., 17–19. [Available online at: [http://www.arctic.noaa.gov/reportcard/clouds\\_radiation.html](http://www.arctic.noaa.gov/reportcard/clouds_radiation.html).]
- Rowe, P.M., S. Neshyba, and V.P. Walden, 2013: Radiative consequences of temperature dependence of infrared refractive indices for supercooled water clouds, *Atmos. Chem. Phys.*, **13**, 11925–11933.
- Bennartz, R., M.D. Shupe, D.D. Turner, V.P. Walden, K. Steffen, \*C.J. Cox, M.S. Kulie, N.B. Miller and C. Pettersen, 2013: July 2012 Greenland melt extent enhanced by low-level liquid clouds, *Nature*, **496**, 83–86, doi: 10.1038/nature12002.
- Miller, N.B., D.D. Turner, R. Bennartz, M.D. Shupe, M.S. Kulie, M. Cadetdu, and V.P. Walden, 2013: Surface-based inversions above central Greenland, *J. Geophys. Res.*, **118**, 495–506, doi: 10.1029/2012JD018867.
- Shupe, M.D., D.D. Turner, V.P. Walden, R. Bennartz, M.P. Cadetdu, B.B. Castellani, \*C.J. Cox, D.R. Hudak, M.S. Kulie, N.B. Miller, R.R. Neely III, and W.D. Neff, 2013: High and Dry: New observations of tropospheric and cloud properties above the Greenland Ice Sheet, *Bull. Amer. Met. Soc.*, **94**, 169–186, doi: 10.1175/BAMS-D-11-00249.1.
- \*Harshburger, B.J., V.P. Walden, K.S. Humes, \*B.C. Moore, T.R. Blandford, and A. Rango, 2012: Generation of ensemble streamflow forecasts using an enhanced version of the Snowmelt Runoff Model (SRM), *J. Amer. Water Res. Assoc.*, **48**(4), 643–655.
- \*Cox, C.J., V.P. Walden, and P.M. Rowe, 2012: A comparison of the atmospheric conditions at Eureka, Canada and Barrow, Alaska (2006–2008), *J. Geophys. Res.*, **117**, D12204, doi: 10.1029/2011JD017164.
- Mariani, Z, K. Strong, M. Wolff, P. Rowe, V. Walden, P.F. Fogal, T. Duck, G. Lesins, D.S. Turner, \*C. Cox, E. Eloranta, J.R. Drummond, C. Roy, D.D. Turner, D. Hudak, and I.A. Lindenmaier, 2012: Infrared measurements in the Arctic using two Atmospheric Emitted Radiance Interferometers, *Atmos. Meas. Tech.*, **5**, 329–344; doi:10.5194/amt-5-329-2012.
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- Cox, C.J., D. Noone, M. O'Neill, V.P. Walden, M.D. Shupe, and M. Berkelhammer, 2014: Microphysical properties of diamond dust, fog, and blowing snow over the central Greenland Ice Sheet, CIRES Research Symposium, 23-27 June 2014, Boulder, CO. (given by Cox)
- Miller, B., J. Hougham, C.J. Cox, C.J., V.P. Walden, and K. Eitel, 2014: Adventure Learning @ the Learning Sciences, CIRES Research Symposium, 23-27 June 2014, Boulder, CO. (given by Miller)
- Cox, C.J., D. Noone, M. O'Neill, V.P. Walden, M.D. Shupe, M. Berkelhammer, and W.D. Neff, Properties of diamond dust, fog, and blowing snow over the Greenland Ice Sheet, CIRES Science Rendezvous, Boulder, Colorado. May 2014.
- Cox, C.J., D. Noone, M. O'Neill, V.P. Walden, and M.D. Shupe, 2014: Microphysics and prevalence of surface-based clouds at Summit Station, Greenland: 2012-2013, 44th International Arctic Workshop, 15-16 March 2014, Boulder, CO. (given by Cox)

(Abstracts prior to 2014 are available upon request.)

### **Talks at Professional Meetings:**

- Walden, V.P., 2017: The Arctic: Physical characteristics and basic features of Arctic Climate, 1st (AC)3 Science Conference on Arctic Amplification, 26-28 March 2017, University of Bremen, Bremen, Germany (invited talk by Von P. Walden)
- Walden, V.P., 2017: The importance of surface energy fluxes in the Arctic: From sea ice to the top of Greenland, 1st (AC)3 Science Conference on Arctic Amplification,

26-28 March 2017, University of Bremen, Bremen, Germany (invited talk by Von P. Walden)

Invited talk on *The role of clouds on the surface energy budget of Greenland: Results from the ICECAPS experiment at Summit Station*, 2016 International Radiation Symposium, Auckland, New Zealand, 18 April 2016. Co-authors: V.P. Walden, R. Bennartz, M. Shupe, D. Turner, M. Cadeddu, B. Castellani, C. Cox, D. Hudak, M. Kulie, N. Miller, W. Neff, R.R. Neely III, C. Pettersen, P. Rowe, R. Stillwell, and E. Willmot.

Invited talk on *Ground-based Measurements in Support of Remote Sensing in Antarctica*, 1998 AMS Polar Meteorology and Oceanography Symposium, Dallas, TX.

Invited talk on *Climate Studies over the Antarctic Plateau*, 1997 Polar Processes and Global Climate conference, Orcas, Island, WA.

Invited talk on *Comparisons of spectral radiance measurements from South Pole to radiative transfer model calculations*, 1996 International Radiation Symposium, Fairbanks, AK.

Presentations at AIRS Science Team Meetings:

Walden, V.P., B. Halter, W.L. Roth, R.S. Stone, and D.C. Tobin. Validation of AIRS over the Antarctic Plateau: Low radiance, low humidity, and thin clouds. 8 November 2001, AIRS Validation Team Meeting, NASA JPL, Pasadena, CA.

Walden, V.P., B. Halter, W.L. Roth, R.S. Stone, and D.C. Tobin. An Update on AIRS Validation Activities at Dome C, Antarctica. 25-27 February 2003, AIRS Science Team Meeting, Camp Springs, MD.

Walden, V.P., B. Halter, W.L. Roth, R.S. Stone, and D.C. Tobin. An Update on AIRS Validation Activities at Dome Concordia, Antarctica. March 2004, AIRS Science Team Meeting, Greenbelt, MD.

Plus numerous talks and posters at various conferences: AGU, AMS, EGU, AAG, ...

### **Field Programs:**

Norwegian Young Sea Ice Field Campaign 2015 (N-ICE2015), January - June 2015, Collaborative project with the Norwegian Polar Institute with S.R. Hudson and M.A. Granskog to measure atmospheric forcing over young sea ice north of Svalbard, co-P.I.

Summit Station, Greenland, May 2010-current, Collaborative project under NSF's Arctic Observing Network program with M.D. Shupe from the University of Colorado and D.T. Turner from the University of Wisconsin-Madison to measure atmospheric and cloud properties over the Greenland Ice Sheet, P.I.

Plaine Morte Glacier, February-April 2008, Collaborative project with the Laboratory of Environmental Fluid Mechanics, Ecole Polytechnique Federale de Lausanne to study the surface energy balance of snow surfaces and post-processing of stable water isotopes in snow after deposition.

Eureka, Canada, March 2006, Collaborative project with NOAA's Study for Environmental Arctic Change (SEARCH) to monitor Arctic cloud properties, P.I.

Dome C, Antarctica, Dec 2003 - Jan 2004, Validation for NASA's AIRS instrument, P.I.

Dome C, Antarctica, Dec 2002 - Jan 2003, Validation for NASA's AIRS instrument, P.I.

South Pole Station, Antarctica, January 2001, South Pole Atmospheric Radiation and Cloud Lidar Experiment (SPARCLE), co-P.I.

South Pole Station, Antarctica, December 1999, South Pole Atmospheric Radiation and Cloud Lidar Experiment (SPARCLE), co-P.I.

South Pole Station, Antarctica, January 1992, Fieldwork for graduate studies.

South Pole Station, Antarctica, November 1990 – February 1991, Fieldwork for graduate studies.

**Awards:**

2015 Distinguished Arctic Chair, U.S-Norway Fulbright Foundation for Educational Exchange, July-December 2015.

Excellence in Research and Creative Activity Award, University of Idaho Research Office, April 2012.

President's Mid-Career Award, University of Idaho President's Office, April 2012.

Honorable mention for Best Student paper, AMS conference on Atmospheric Radiation, Nashville, TN, 1994.

**SERVICE:****Major University Committee Assignments:**

## Washington State University

Faculty Senate representative for CEE department, Fall 2018-current  
 Center for Environmental Research, Education and Outreach (CEREO)  
 Member of Executive Committee, Fall 2015-current

## Department of Civil and Environmental Engineering

Faculty Search Committee, Lab for Atmospheric Research, Fall 2016-Spr 2017  
 Committee on Undergraduate Education, Fall 2015-current  
 Faculty Search Committee, Water Resources, Fall 2014-Spring 2015  
 Faculty Search Committee (Chair), Water Resources, Fall 2013-Spring 2014  
 Faculty Search Committee (Chair), Environmental Engineering, Fall 13-Spr 14  
 Committee on Infrastructure and Web Design, Fall 2013-current  
 Committee on Undergraduate Advising, Fall 2014-current

## University of Idaho

Search Committee for Dean of the College of Science, 2012 - 2013  
 Member of Faculty Advisory Committee on International Studies Curriculum,  
 Fall 2006.  
 Faculty representative to the Borah Symposium Committee, 2003 – 2006  
 Chairperson of the Borah Symposium Committee, 2005/2006  
 Faculty Advisor to the UI Bluegrass Club, 2005 – 2006  
 Faculty judge for 2003 Graduate Student Research Exhibition, Sciences, Earth  
 Resources, and Environmental Sciences Division.

## College of Science

Austin Distinguished Lecture Committee, 2011 - 2013  
 Faculty rep. to the Tenure and Promotion Committee, 2006 - 2009  
 Faculty rep. to the College of Science Scholarship Committee, 2001 – 2006

## Department of Geography

Department Chair search committee, Geography, Fall 2011  
 Faculty search committee, Geography, Fall 2010  
 Faculty search committee 1, Geography, Spring 2009 (chair)  
 Faculty search committee 2, Geography, Spring 2009  
 Chaired the Review Committee for Chairperson Harley Johansen, Fall 2007  
 Faculty advisor to the Geography Student Club, 2001 – 2006  
 Faculty search committee, Geography, Spring 2006  
 Faculty search committee, Geography, Spring 2004  
 Faculty tenure/promotion for Dr. Karen Humes, fall 2002

**Professional and Scholarly Organizations** (including memberships, committee



assignments, editorial services, offices held and dates)

**Memberships:**

American Geophysical Union (AGU), since 1992.

American Meteorological Society (AMS), since 1992.

**Leadership:**

Member of the Science Coordination Office (SCO) for Summit Station, Greenland. (provides advice and guidance to researchers and the National Science Foundation regarding science activities in Greenland).

Co-Editor, Special issue of Atmospheric Chemistry and Physics on the ACLOUD/PASCAL field experiments, April 2018-current.

Member of the Scientific Advisory Board for the German Research Foundation (DFG, Deutsche Forschungsgemeinschaft) Transregional Collaborative Research Center (SFB/TR 172) to study *Arctic Amplification: Climate Relevant Atmospheric and Surface Processes, and Feedback Mechanisms (AC)<sup>3</sup>*, 2017-current.

Member for the Knowledge-to-Action Steering Committee for the International Arctic Systems for Observing the Atmosphere (IASOA), 2011-current.

Program Committee Member of the 2015 REACCH International Meeting on Climate Change and Cereal Production in Semi-Arid Regions of the World, Minneapolis, MN, Nov 2015.

Chair and Organizer for the 2012 Pacific Northwest Climate Science Conference, Boise, Idaho, 1-2 October 2012.

**Committee Assignments:**

AMS Polar Meteorology and Oceanography committee, 2011- 2018

Member of organization committee for the Arctic Observing Network (AON) P.I. meeting, November 2009.

Member of the NASA EOS AIRS Validation Science Team, 2001-2005.

Scientific Steering Committee for the Antarctic Regional Interactions Meteorology Experiment (RIME).

Served on the meeting organization committee for the AMS Polar Meteorology and Oceanography committee, 1998-2001.

**Frequent reviewer for:**

Refereed journals (J. Geophys. Res., J. Climate, Water Resources Research...)  
 Proposals (NSF Office of Polar Programs, NSF Physical Meteorology)

**External Reviewer:**

Reviewed promotion package of a colleague from the Byrd Polar Research Center  
 from Research Associate to Research Scientist (Sep 2004)

**Outreach Service:** (Including popular press, interview articles, newspaper articles,  
 workshops-seminars-tours organized, Extension impact statements)

**Press Articles:**

- "The miracle and wonderment of the ice crystal", by Shawn Vestal, The  
 Spokesman Review, provided technical consultation, [http://www.spokesman.com/  
 stories/2019/feb/12/shawn-vestal-the-miracle-and-wonderment-of-the-ice/](http://www.spokesman.com/stories/2019/feb/12/shawn-vestal-the-miracle-and-wonderment-of-the-ice/) (12 February  
 2019)
- "What do clouds do?", WSU Dr. Universe interview, [https://askdruniverse.wsu.edu/  
 2019/01/18/what-do-clouds-do/](https://askdruniverse.wsu.edu/2019/01/18/what-do-clouds-do/) (18 January 2019)
- "Driving Smart City Innovation with an Active Network," Smart Cities Dive,  
 Internet, United States of America. (December 12, 2017).
- "For Spokane, being a smart city starts with a better way to measure air quality,"  
 statescoop.com, Internet, United States of America. (December 7, 2017).
- "Spokane Circuit City (front page feature)," Spokesman Review, Newspaper,  
 United States of America. (December 6, 2017).
- "A Living Laboratory"; "Smart Cities Enable Smart Health Care.," Spokane  
 University District Magazine 2017 - Put Your Paddle In, Magazine, United  
 States of America. (October 2017).
- "Sen. Cantwell and Rep. DelBene seek \$220M/year in federal funds for 'smart  
 city' programs," Geekwire, Internet, United States of America. (October 2,  
 2017).
- "Streetlight Sensors Measure Spokane Air Quality," Spokane Public Radio, Radio,  
 United States of America. (August 10, 2017).
- "Urbanova smart streetlights pilot hits milestone," SmartCitiesWorld.net, Internet,  
 United Kingdom. (August 7, 2017).
- "Connecting Communities: Smart Cities, Enabling Technologies and the Grid,"  
 EEI - Critical Consumers Issues Forum, Internet, United States of America.  
 (July 25, 2017).
- "WSU CleanTech Expertise Helps News & Established Industry," WSU Economic  
 Development Blog, Internet, United States of America. (July 24, 2017).
- "A Smart City Living Laboratory in Spokane," We Stand for Energy, Internet,  
 United States of America. (July 19, 2017).
- "Urbanova, Avista Pair on Smart City Pilot," Electric, Light & Power, Internet,  
 United States of America. (June 25, 2017).
- "Meet the Streetlights that Save Energy, Fight Crime and Improve Health," Smart  
 Cities Council, Internet, United States of America. (June 22, 2017).

- "Urbanova Reaches Milestone with Smart and Connected Streetlights Pilot," LED Inside, Internet, United States of America. (June 22, 2017).
- "Urbanova Smart Streetlight Pilot Employs Itron's OpenWay Riva," Metering & Smart Energy International, Internet, United States of America. (June 22, 2017).
- "Air Quality Sensors Deployed in U District Smart City Laboratory," Washington State University, Internet, United States of America. (June 21, 2017).
- "What's Next for Smart Energy? Urbanova May Provide Answers," Smart Cities Council, Internet, United States of America. (May 4, 2017).
- National Press Conference during the 2016 American Geophysical Union (AGU) annual meeting on results from the Norwegian Young Sea Ice Field Campaign
- "Cold World, Hot Science: Antarctica provides UI researchers a climate to explore", by Ray Doering, The University of Idaho Magazine, Fall 2004. (Popular piece that profiles a former graduate student, Lance Roth, and our NASA project)
- "University of Idaho geography team heads to Antarctica", By Chuck Oxley, Associated Press Writer, 22 November 2003.
- "UI research team travels to Antarctica Plateau", UI Register, vol. 15, no. 25, 5 December 2003.
- "UI research team goes to Antarctica, monitors satellite", by Katie Whittier, The University of Idaho Argonaut, vol. 105, no. 29, 9 December 2003.

### **Outreach:**

- Invited lecture entitled "Lessons learned from some very cold places", Honors Student Advisory Council Distinguished Lecture, WSU Honors College, 27 March 2018.
- Four-hour IGERT Workshop on Climate Change (with lab exercises on using downscaled climate model output), University of Idaho, Moscow, ID, 8 August 2011.
- Lecture entitled "Lessons learned from some very cold places", Biogeosciences Seminar Series, University of Idaho, Moscow, ID, 26 April 2011.
- Lecture and Computer Demo entitled "Data Sets for Downscaled Climate Model Output", Senior civil engineering course (Brian Lamb), Washington State University, Pullman, WA, 10 March 2011.
- Seminar entitled "Recent Advances in Understanding Arctic Clouds", Department of Geography, University of Idaho, Moscow, Idaho, 9 February 2011.
- Seminar entitled "Data Sets for Downscaled Climate Model Output for Idaho EPSCoR", EPSCoR Track 2 Cyber-seminar, Moscow, Idaho, 3 December 2010 (web broadcast to Boise, Idaho Falls, and Pocatello).
- Seminar entitled "Idaho EPSCoR: Overview of Science Team Activities", Idaho Climate and Water meeting, Boise, Idaho, 2 November 2010.
- Lecture entitled "Climate Change 101: What is it, and how will it affect the Palouse?" for course on Society and Natural Resources (Lauren Fins), UI, Moscow, Idaho, 27 October 2010.
- Seminar entitled "Lessons learned from some very cold places", Pacific

Northwest National Lab, Richland, WA, 4 October 2010.

Lecture entitled “Lessons learned from some very cold places”, Society and Natural Resources course, UI, Moscow, Idaho, 27 October 2010.

Seminar entitled “Lessons learned from some very cold places”, EE seminar series, UI, Moscow, Idaho, 16 September 2010.

Seminar entitled “Can we engineer our way out of climate change?” for Energy Ethics course, UI, Moscow, Idaho, 24 March 2010.

Invited public lecture entitled “Climate Change 101: What it is, and how it will affect Idaho.” for Nez Perce Fisheries Annual Meeting, Lewiston, Idaho, 4 February 2010.

Seminar entitled “Climate Change 101: What is it, and how will it affect the Palouse?” for UI Honors course on Natural Resources (Lauren Fins), UI, Moscow, Idaho, 7 December 2009.

Seminar entitled “Climate Change 101: What is it, and how will it affect the Palouse?” for UI Honors course on Energy (Tom Bitterwolf), UI, Moscow, Idaho, 7 December 2009.

Seminar entitled “Climate Change 101: What is it, and how will it affect the Palouse?” for National “350 Teach-In”, UI, Moscow, Idaho, 4 November 2009.

Seminar entitled “Climate Change 101: What is it, and how will it affect the Palouse?” for National “350 Teach-In”, UI, Moscow, Idaho, 4 November 2009.

Seminar entitled “Water Resources in a Changing Climate” for Boise Climate and Water meeting, Water Center, Boise, Idaho, 22 October 2009.

Seminar entitled “Fractional cloud cover and longwave cloud radiative forcing over Eureka, Canada” for UI Geography department, UI, Moscow, Idaho, 12 October 2009.

Seminar entitled “Water Resources in a Changing Climate” for UI Geography department, UI, Moscow, Idaho, 28 Sept 2009.

Invited Panelist, brief presentation of “Climate Change 101: What is it?”, then served on panel discussion for NW Philosophy conference, WSU, Pullman, WA, 1 May 2009.

Seminar entitled “Climate Change 101: What is it?” for UI Globalization course, UI, Moscow, Idaho, 10 March 2009.

Seminar entitled “Lessons Learned from some Very Cold Places” for Optical Technology Center, Montana State University, Bozeman, MT, 19 February 2009.

Seminar entitled “Climate Change 101: What is it?” for National Global Warming Teach-In, UI, Moscow, Idaho, 5 February 2009.

Lecture on climate change, entitled “Understanding the Complexity of Earth’s Climate”, and served on expert panel, for Friends of the Sandpoint Library, via teleconference from UI, 4 December 2008.

Seminar on climate change entitled “Climate Change in Idaho: Impacts and Vulnerability” for UI Law School students, UI Law School, 27 October 2008.

Lecture entitled “Water Resources in a Changing Climate: Connections to

- Ecological and Human Systems”, and served on expert panel, for President’s Sustainability Conference, Boise, Idaho, 21 October 2008.
- Talk entitled “Water Resources in a Changing Climate: Connections to Ecological and Human Systems” for annual Idaho Climate and Water Forecasts for the 2009 Water Year, Boise, Idaho, 16 October 2008.
- Talk entitled “Water Resources in a Changing Climate: Connections to Ecological and Human Systems” for planning meeting at Idaho Dept of Water Resources, Boise, Idaho, 15 October 2008.
- Seminar entitled “Water Resources in a Changing Climate: Connections to Ecological and Human Systems” for IWRII fall seminar, UI, Moscow, Idaho, 23 September 2008.
- Presentation entitled “Water Resources in a Changing Climate: Connections to Ecological and Human Systems” to CATIE and Tropical Foundation Board of Representatives, UI, Moscow, Idaho, 8 August 2008.
- Seminar (invited), “Properties of polar clouds: Lessons learned from some very cold places”, EPFL EFLUM seminar, 27 June 2008.
- Lecture on state-wide EPSCoR proposal, entitled “Water Resources in a Changing Climate: Connections to Biological and Human Systems”, for the Idaho Environment Summit, Boise, Idaho, 13 August 2007.
- Lecture on climate change, entitled “Climate Change in Idaho: Past, present, and future”, for the UI University Seminar Series, Moscow, Idaho, 31 August 2007.
- Panel member for community forum on climate change in Boise, Boise River Conference, Boise, Idaho, 8 August 2007.
- Lecture on climate change, entitled “Climate Change in Idaho: Impacts and Vulnerability”, for the Association of Idaho Cities, Coeur d’Alene, Idaho, 14 June 2007.
- Lecture entitled “An Update on Climate Change” for IDWR Climate Change sub-committee meeting, Boise (via telecon), 12 April 2007.
- Lecture entitled “Can we engineer our way out of climate change?” for League of Women Voters, Moscow, Idaho, 11 April 2007.
- Lecture entitled “Update on Climate Change” for Freshman honors course in Globalization, U. Idaho, 22 March 2007.
- Lecture entitled “Update on Climate Change” for Geography 100, U. Idaho, 2 March 2007.
- Lecture entitled “Update on Climate Change” for Moscow High School Environmental Club, plus Question and Answer session, 14 February 2007.
- Lecture entitled “Global Climate Change: The Basics” for Moscow, Idaho Community Forum on Climate Change, 1 February 2007.
- Lecture entitled “Can we engineer our way out of climate change?” for Rangeland Ecology and Management department at University of Idaho, 13 October 2006.
- Lecture entitled “Can we engineer our way out of climate change?” for Mechanical and Materials Engineering department at Washington State University, 5 October 2006.

- Lecture on climate change and the Arctic, entitled “North by Northeast”, for four science classes at Moscow Junior High School, 3 October 2006, (contact: Jim LaForture, MJHS).
- Panel member for community forum on climate change (in response to a documentary film entitled “An Inconvenient Truth”, 20 August 2006).
- Mentor for students at Moscow Junior High School working on alternative fuels for the Toshiba Explora-vision project, January 2006 (contact: Kathy Dawes, MJHS).
- Invited speaker for The University Interdisciplinary Colloquium, 20 Sep 2005, “Lessons Learned from a Frozen Continent: Performing research in Antarctica”
- Organizer, primary speaker, and panel member for community forum on potential climate change (in response to a major motion picture entitled “The Day After Tomorrow”, Summer 2004).
- Slide-show presentation at assembly on Antarctica for McDonald Elementary School, Fall 2000. Also, corresponding with students and teachers via email while performing field work in Antarctica.
- Slide-show presentation on Antarctica for 2<sup>nd</sup>-grade class at McDonald Elementary School, Fall 1999. Corresponded with students and teachers via email while performing field work in Antarctica.