

## **Ellen Mosley-Thompson**

### Curriculum Vitae

Distinguished University Professor, Department of Geography

Director, Byrd Polar and Climate Research Center

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Brief Bio available at: [http://research.bpcrc.osu.edu/lcecore/vitae/emt\\_brief\\_bio.pdf](http://research.bpcrc.osu.edu/lcecore/vitae/emt_brief_bio.pdf)

Last Updated on September 26, 2018

### **Key Indicators of Scholarly Excellence**

Elected Member of the National Academy of Sciences, April 27, 2009

Benjamin Franklin Medal, The Franklin Institute, April 2012

Elected Member of the American Academy of Arts and Sciences, April 2011

Dan David Prize, University of Tel Aviv, Israel, May 19, 2008

The Common Wealth Award for Science and Invention, April 20, 2002

Elected as a Fellow of the American Association for the Advancement of Science

Elected Member of the American Philosophical Society, April 2009

Elected as a Fellow of the American Geophysical Union, May 26, 2009

### **Additional Indicators of Scholarly Excellence**

H-index: 43 (January, 2018)

Citations (1981 to 2018): 7371 citations with self-cites removed

Margaret Douglas Medal, Garden Club of America, May 22, 2016

Green Energy Ohio, Pioneer of the Year (2013) Award, April 30, 2014

Joseph Sullivant Medal, The Ohio State University, December 15, 2013

Honorary Doctor of Science, University of Pennsylvania, May 13, 2013

Distinguished University Professor, The Ohio State University, 2010

Honorary Doctor of Science, Colgate University, May 17, 2009

American Alpine Club, David R. Brower Award for Outstanding Service in Mountain Conservation, February 21, 2009

Alumni Medalist Award, The Ohio State University, November 9, 2007  
Elected, OSU Sphinx Chapter Senior Member, Spring, 2007  
Roy Chapman Andrews Society, 2007 Distinguished Explorer Award  
Faculty Award for Distinguished University Service, The Ohio State University, December 17, 2005  
Distinguished Lecturer, The Ohio State University, August 24, 2004  
Distinguished Scholar Award, The Ohio State University, April 21, 2003  
Marshall University, Distinguished Alumna, for Community Achievement, April, 26, 2003  
Inducted into Ohio Women's Hall of Fame, October 7 by Governor Taft  
John C. Marshall Award, the highest award given by Marshall University (for distinguished scholarship), March 7, 2002

### *Recognitions*

The Mosley-Thompson Cirques (Antarctica) located at 78°01'S; 161°28'E were named after Ellen Stone Mosley-Thompson, glaciologist and climatologist at The Ohio State University. Since 1974, Dr. Mosley-Thompson has analyzed ice samples from Antarctica and she has conducted field research at South Pole, Siple Station, and the Plateau Remote Camp.

## Education

Ph.D., Geography (Climatology, Atmospheric Science), *The Ohio State University, Columbus Ohio, 1979*  
M.A., Geography (Climatology, Atmospheric Science), *The Ohio State University, Columbus, Ohio, 1975*  
B.S., Physics, *Marshall University, Huntington, West Virginia, 1970*

## Professional Appointments

2010-18 Distinguished University Professor, The Ohio State University  
2009-18 Director, Byrd Polar and Climate Research Center, The Ohio State University  
1995-18 Professor, Department of Geography (Atmospheric Science, Climatology) The Ohio State University  
1996-18 Senior Research Scientist, Byrd Polar and Climate Research Center, The Ohio State University  
1990-94 Associate Professor, Department of Geography (Atmospheric Science, Climatology), The Ohio State University  
1988-96 Research Scientist, Byrd Polar Research Center, The Ohio State University

- 1984-87 Senior Research Associate, Institute of Polar Studies, The Ohio State University
- 1979-83 Research Associate, Institute of Polar Studies, The Ohio State University
- 1973-79 Graduate Research Associate, Institute of Polar Studies, The Ohio State University

### Current National Service Activities

- 2016-18 AGU, Global Environmental Change Section, President
- 2015-18 AGU, Global Environmental Change Section, Fellows Committee, Chair
- 2015-18 AGU, Council Member
- 2012-18 National Academy of Sciences, U.S. National Committee for Quaternary Research

### Past Positions held with Professional Organizations

- 2010-15 National Academy of Sciences, Polar Research Board (member)
- 2009-15 NOAA Science Advisory Board, Climate Working Group (member)
- 2015 AGU, Global Environmental Change Focus Group, President-elect
- 2013-14 National Academy of Sciences, Study Group on Emerging Research Questions in the Arctic (member)
- 2012-14 AGU, Paleoceanography and Paleoclimatology Focus Group Fellows Committee, Chair
- 2010-12 AAAS, Chair Elect (2010), Chair Elect (2011), Past Chair (2012) Section E (Geology and Geography)
- 2002-05 Member, AAAS Electorate Nominating Committee for Section W (Atmospheric and Hydrospheric Sciences, Chair in 2004-2005)
- 2001-04 Member, AAAS Steering Group for Section E (Geology and Geography)
- 1998-00 AGU (American Geophysical Union), Horton Medal Selection Committee, member.
- 1992-96 AGU, Council member
- 1994-96 AGU, President: Atmospheric Sciences Section
- 1992-93 AGU, President-Elect: Atmospheric Sciences Section
- 1992-95 Member, UCAR University Relations Committee
- 1994-95 Member, UCAR: Global Change Instructional Program Advisory Committee
- 1992 AGU, Space Exploration Initiative Panel
- 1991 AGU, Editor Search, Committee for Paleoceanography

### Past International and National Committee Assignments

- 2002-06 Annals of the Association of American Geographers, Editorial Board

- 2005-06 Co-Chief Editor, Annals of Glaciology, Volume 43, 2006
- 2000-03 Editor for Atmospheric Sciences: American Geophysical Union's EOS Transactions
- 2000-03 Member, U.S. National Committee for INQUA [International Union for Quaternary Research], a scientific associate of ICSU, the International Council for Science. The Committee is organized by the National Academy of Sciences
- 2002-04 Member, National Academy of Sciences' Committee on Geography
- 2000-02 Member, National Science Foundation's Office of Polar Programs' Advisory Committee
- 2001 Member, NSF-ESH Review Panel, May
- 1999 Chair, Universities Space Research Association, Earth Science Council
- 1993-99 Member, Universities Space Research Association, Earth Science Council
- 1995-97 Member, Committee on Geophysical and Environmental Data, National Research Council
- 1994-97 Member, NSF Contractor [Antarctic Support Associates], South Pole User's Committee
- 1992-96 Chair, National Academy of Sciences' Polar Research Board's Committee on Glaciology
- 1987-93 Member, National Academy of Sciences' Board on Global Change
- 1990-94 Member, Committee on Snow, Ice and Permafrost of the American Geophysical Union
- 1990-94 Member, Ice core working group of the Polar Research Board under the National Academy of Sciences
- 1990-94 Member, U.S. Geological Survey Global Change Program Review Committee
- 1989-90 Chairperson, Working Group on Earth System History and Modeling of NAS Committee on Global change
- 1986 Elected Chairperson, Division of Polar Programs Advisory Committee
- 1984-85 Chairperson, Committee for Greenland Science Planning. (NSF-DPP)
- 1984-88 Member of Committee on Glaciology for Polar Research Board of National Academy of Sciences
- 1983-86 Member of National Science Foundation Division of Polar Programs Advisory Committee

## Memberships

American Association for the Advancement of Science  
 American Academy of Arts and Sciences (elected)  
 American Geophysical Union  
 American Meteorological Society

American Philosophical Society (elected)  
Association of American Geographers  
International Glaciological Society  
National Academy of Science (elected)  
Ohio Academy of Sciences  
Sigma Xi

### Editorial Activity

Guest Editor, Proceedings of the National Academy of Sciences (2009-14)  
Co-Editor, Abrupt Climate Change: Mechanisms, Patterns, and Impacts, Geophysical Monograph 193, American Geophysical Union, Washington, D.C.  
Editorial Board member: Polar Geography (2010 – 2017)  
Guest Editor: Annals of Glaciology, Volume 43, 2006, (Symposium on High-elevation Glaciers and Climate Records)  
Associate Editor, Polar Geography (2001 – 2009)

### Current and Past Service at Ohio State University

2018 Distinguished University Professor Selection Committee, Chair  
2017 Distinguished University Professor Selection Committee  
2015-18 Promotion and Tenure Committee, College of Arts and Sciences, Social and Behavioral Sciences Division  
2015-18 Department of Geography, Personnel Committee  
2015 University Sustainability Goals Project Report, Innovation and Research Working Group  
1996-17 Byrd Polar Research Center Executive Committee, Chair, since Oct 2009  
2013 Faculty Advisory Board for Discovery Theme: Energy & Environment  
2011 Department of Geography, Chair Search Committee  
2011-14 Presidential Committee of AAAS Fellows  
2010-15 College of Arts and Sciences Faculty Salary Grievance Committee  
2010-17 President's and Provost's Advisory Committee  
2006-13 Climate, Water and Carbon Initiative, Advisory Board Member  
2007-11 John Glenn School of Public Affairs, Advisory Committee Member  
2005-10 University Committee on Undergraduate Research, OAA  
2007-09 Faculty Advisory Committee, OSU Institute for Energy & the Environment  
2007-09 College (SBS) Promotion and Tenure Committee  
2005-09 College Budget and Planning (Strategic Advice) Committee

- 2006-08 Office of Research, Selection Committee, University Distinguished Scholar
- 2006-08 Office of Research, Selection Committee, University Distinguished Scholar
- 2004-07 Environmental Science Program: Graduate Studies Committee
- 2004-07 President's Committee for AAAS Fellows
- 1999-07 Departmental Personnel Committee, Chair from 2003-2007
- 2002-05 University Promotion and Tenure Committee
- 2005 Office of Research, Selection Committee, University Distinguished Scholar
- 1994-04 College Priorities Committee
- 2003-04 University Honors and Scholars Program Review Committee
- 2003-04 Search Committee, Dean of Social and Behavioral Sciences
- 2001-02 Provost's Advisory Committee for Budget Restructuring
- 2000-03 Advisory Committee for the VP for Research
- 2002-03 Honors and Scholars: Marshall and Rhodes Scholarship Committee (member)
- 1997-03 College Promotion and Tenure Committee (reporter for the last 3 years)

### Research Expeditions (16 total)

- 2009/10 Field leader: 6 person team to the Antarctic Peninsula for an ice core drilling project as part of the IPY project, LARISSA (NSF-funded), Dec 14, 2009 to February 26, 2010.
- 2007 Field leader: 5 person team to Greenland for an ice core drilling project and surface characterization studies in support of CReSIS objectives (NSF-funded), May 2007.
- 2004 Field team member: OSU team to Quelccaya Ice Cap, Peru, July.
- 1999 Field leader: 4 person team to Greenland for a drilling project (NASA-funded), April and May.
- 1998 Field leader: 3 person team to Greenland for a drilling project (NASA-funded), May.
- 1996 Field leader: 6-person OSU contribution to the PARCA ice core drilling program at GITS, Greenland.
- 1996 Field leader: 3 person team to South Pole Station, Antarctica to re-measure a permanent accumulation network of 240 sites, drill a 42-meter core and sample six snow pits.
- 1995 Field leader: 3 person team to South Pole Station, Antarctica to re-measure a permanent accumulation network of 240 sites and use GPS to map the surface topography.
- 1994 Field leader: 2 person team to South Pole Station, Antarctica to re-measure a permanent accumulation network of 240 sites and drill six shallow (20 meter) cores.
- 1993 Field leader: 2 person team to South Pole Station, Antarctica to re-measure a permanent accumulation network of 240 sites and determine surface elevations using pseudo-kinematic GPS.

- 1992 Field leader: 3 person team to South Pole Station, Antarctica to establish a permanent accumulation network of an array of 240 poles surveyed into 6 arms along specific grid positions.
- 1989 Field leader: 3 person glaciological team to drill ice cores at the summit of the Greenland ice sheet. May and June, 1989.
- 1988 Field leader: 3 person glaciological team to drill an intermediate depth core at Dye 3, Greenland.
- 1986 Field leader: 6 person team: Plateau Remote Camp Glacio-climatology program. The programs included drilling two 205-m cores, 13 shallow cores and excavating and sampling of two pits.
- 1985 Field leader: 6 person team: Siple Station-South Pole Station Glacio-climatology program.
- 1982 Field leader: South Pole Glacio-Climatology Program. November 2, 1982 - December 23, 1982. Extensive investigation of snow properties in series of 3-meter pits and drilling an intermediate depth ice core (~300-meters) at the South Pole Station, Antarctica.

### Funded Research Programs (53 total)

- 2018-20 Principal Investigator: Pacific decadal variability: Modulation of global- to regional-scale climate over the last millennium, NSF-AGS, Climate and Large-scale Dynamics Program.
- 2018-21 Co-Principal Investigator: A 20,000 year ice core-derived record of paleoclimate and environmental variability in the tropical Andes: Nevado Huascaran, Cordillera Blanca, NSF-AGS, Paleoclimate Program (P2C2).
- 2015-18 Co-Principal Investigator: Climate and Environmental Variability over the Last Glacial Cycle from Ice Cores in the Western Kunlun Mountains (Tibetan Plateau), NSF-GEO, Paleoclimate Program (P2C2).
- 2008-15 Principal Investigator: Collaborative Research in IPY: *Abrupt Environmental Change in the Larsen Ice Shelf System, a Multidisciplinary Approach – Cryosphere and Oceans*, NSF-OPP.
- 2008-09 Principal Investigator: MRI: *Acquisition of an inductively coupled-sector field mass spectrometer to extract atmospheric trace element histories from ice cores and to assess contemporary water quality*, NSF-ANT.
- 2008-15 Co-Principal Investigator: Collaborative Research: *Reconstructing tropical Pacific climate variability (ENSO and monsoon systems, and abrupt climate changes) from ice cores on Irian Jaya, Indonesia and Hualcán, Peru*. NSF-ATM.
- 2005-10 Co-Principal Investigator (of the OSU component) *Center for Remote Sensing of Ice Sheets (CreSIS), Science and Technology Center*, NSF-OPP. [Univ. Kansas is the lead institution].
- 2005-08 Co-Principal Investigator: *Reconstructing monsoon and climate variability from Naimona'nyi ice cores, southwestern Himalayas*, NSF-Paleoclimate Program.



- 2004-07 Principal Investigator: *Reconstructing Late Holocene Volcanic Aerosol Fluxes from Greenland Ice Cores Collected by the PARCA Project* (NSF-OPP-Arctic Natural Sciences).
- 2003-06 Co-Principal Investigator: *A tropical perspective on 20<sup>th</sup> Century climate change from ice core histories and glacier area and volume measurements from the Quelccaya and Coropuna ice caps in the Southern Andes of Peru*. NSF-ESH Program.
- 2003 Co-Principal Investigator: *Glacial Assessment: Past, Present and Future - Acquisition of Essential Research Instrumentation*. (NSF-MRI with Regents match)
- 2001-04 Co-Principal Investigator. *High-resolution reconstruction of the South Asian Monsoon from the Puruogangri Ice cores* (Tibet). (NSF-ESH).
- 2001-04 Co-Principal Investigator: *Ice core reconnaissance of North-Pacific climate variability and environmental history from the Bona-Churchill Ice Field, Alaska*. (NSF-OPP).
- 2001-04 Co-Principal Investigator: *Understanding recent mass changes of the Greenland Ice Sheet*. (NASA: Earth Systems).
- 2000-01 Co-Principal Investigator: *A cooperative ice core paleoclimate study of monsoon variability as archived in the Puruogangri Ice Cap in the central Tibetan Plateau*. (NSF-ESH).
- 2001 Principal Investigator: *Spatial and temporal variability of Greenland annual accumulation and climate from the PARCA cores*. (NASA-Glaciology).
- 2000-02 Co-Principal Investigator: *Ice core paleoclimatic study of East African Monsoon and ENSO variability from the ice fields of Kilimanjaro*. (NSF-ATM).
- 1999-02 Principal Investigator: *Meteorological processes controlling the spatial and temporal variability of net accumulation: Implications for the mass balance of the Greenland ice sheet*. (NASA Earth system Science Fellowship Program).
- 1998-00 Principal Investigator: *Temporal and spatial variability of net annual accumulation and climate in Greenland*. (NASA-MTPE-NRA Program).
- 1997 Co-Principal Investigator: *Temperature reconstruction by stable isotope analysis of ice cores from the poles to the tropics*. (NSF-Office of Science and Technology Infrastructure with matching Regents funds).
- 1997-00 Co-Principal Investigator: *Longevity and diversity of microorganisms entrapped in tropical and polar ice cores*. (NSF-OPP).
- 1997-00 Co-Principal Investigator: *Seasonal to centennial climatic variability from two high elevation subtropical glaciers in Bolivia*. (NOAA- Office of Global Programs).
- 1996-00 Principal Investigator: *The quantitative assessment of the Mt. Pinatubo signal in Antarctic snow*. (NSF-OPP: Antarctic Glaciology Program: OPP).
- 1996-00 Co-Principal Investigator: *A cooperative ice core paleoclimate study of monsoon variability as archived in the Dasuopu Glacier, China*. (NSF-ATM).
- 1996-99 Co-Principal Investigator: *A cooperative ice core paleoclimate study of Windy Dome ice cap on Graham Bell Island in Franz Josef Land (high Russian Arctic) with emphasis upon sea ice history*. (NASA Glaciology).
- 1995-98 Principal Investigator: *Net annual accumulation in western Greenland for the last 200 years*. (NASA Glaciology).



- 1994-99 Principal Investigator: *Holocene/Late Wisconsinan dust history from Taylor Dome, Antarctica*. (NSF-OPP: Antarctic Glaciology Program).
- 1994-99 Principal Investigator: *Reconstructing the Earth's volcanic history from high resolution polar ice cores*. (NSF-OPP: Arctic Glaciology Program).
- 1995-97 Co-Principal Investigator: *A comparative analysis of North Atlantic Climate and Atmospheric circulation variability* (with Jeffrey Rogers). (NOAA-North Atlantic Climate Program).
- 1994 Co-Principal Investigator: *Mars Pathfinder Project*. This is a subcontract to UCLA to coordinate a group of investigators to design the scientific aspects of a proposal for the Mars Pathfinder Mission.
- 1994-96 Co-Principal Investigator: *A cooperative tropical paleoclimatic ice core study in the Cordillera Blanca, Peru and its relationship to global climate variability*, Phase III: (NOAA).
- 1992-98 Principal Investigator: *Long-term trend in net mass accumulation at South Pole*. (NSF-DPP).
- 1994 Co-Principal Investigator: *Implementation of interactive environmental and meteorological computer-based modules for instruction in selected Ohio secondary schools*. Battelle Endowment for Technology and Human Affairs (internal to OSU).
- 1993 Co-Principal Investigator: *Atmospheric circulation, sea ice and climate variability around the North Atlantic*. (NOAA-North Atlantic Climate Change Program).
- 1992 Principal Investigator: *Curriculum development for Earth System Science Education* (USRA-NASA).
- 1991 Co-Principal Investigator: *1500-Year Ice Core Paleoclimatic Data Base: Quelccaya Ice Cap, Peru* (NOAA).
- 1991 Co-Principal Investigator: *A cooperative tropical paleoclimatic ice core study in the Cordillera Blanca, Peru and its relationship to global climatic variability*. Phase II. (NOAA-Paleoclimate).
- 1991 Co-Principal Investigator: *Analysis of Recent and Rapid Climate Change*. (NSF - Climate Dynamics).
- 1991 Co-Principal Investigator: *A cooperative paleoclimatic study of the Guliya ice cap, China: relationship to global climatic variability*. (NSF-Climate Dynamics: ATM).
- 1991 Co-Principal Investigator: *A cooperative paleoclimatic study of the Guliya ice cap, China: relationship to global climatic variability*. (National Geographic Society).
- 1989 Co-Principal Investigator: *A cooperative tropical paleoclimatic ice core study in the Cordillera Blanca, Peru and its relationship to global climatic variability*. Phase I. (NOAA-Paleoclimate).
- 1988 Co-principal Investigator: *A cooperative climatological-glaciological program in the Antarctic Peninsula*, Phase 1. (NSF-DPP).
- 1986 Co-principal Investigator: *A cooperative paleoclimate study of the Dunde Ice Cap and its relationship to Global Climatic Variability*. (National Geographic Society).
- 1986 Principal Investigator: *Holocene paleoclimatic Reconstruction from Greenland Ice Cores; plus a supplemental request for low-level beta counter system*. (NSF-DPP).

- 1986 Co-principal Investigator: *A cooperative paleoclimate study of the Dunde Ice Cap and its relationship to Global Climatic Variability*. (NSF- Climate Dynamics-ATM).
- 1985 Principal Investigator: *Climatological and glaciological investigation of the past 2000 years from Antarctic ice cores*. (NSF-DPP) plus REU Supplement and a Mass Spectrometer Supplement.
- 1984 Principal Investigator: *Science Planning for Greenland Glaciology*. (NSF-DPP).
- 1982 Co-principal Investigator: *A cooperative climatological-glaciological program in China*. (NAS Award).
- 1982 Principle Investigator: *Subcontract for research of the volcanic and climatic record of Antarctic ice cores* (New Mexico Institute of Mining and Technology via NSF-DPP).
- 1980 Co-principal Investigator: *Comparative Microparticle Analysis of the 385-m J-9 core, Ross Ice Shelf, Antarctica* (NSF-DPP).
- 1981 Principal Investigator: *Microparticle analysis and glaciological interpretation of the 500-m ice core, South Pole, Antarctica* (NSF- DPP).
- 1981 Principal Investigator: *Analysis of the Quelccaya Ice Cap climate record* (NOAA).

#### *State and Local Funding*

- 2005 The Ohio State University, Byrd Polar Research Center, *Cold Room Renovation Project*. Funded through a Capital Funding Request, State of Ohio and the Ohio State University. (Co-PI with Lonnie G. Thompson)

#### *Grants (successful) to support instruction and curriculum development*

- 2008 OSU Course Enhancement Grant (Teaching and Learning, University Libraries) for Geog H410, (with B. Mark).
- 2008 Technology Enhanced Learning and Research Expertise Grant (OSU), Modeling Basics (A Picture This project). Summer & Fall quarters, AY 2008/09, (with Co-PI, Dr. Carol Landis).
- 2004 Grant from Office of Honors and Scholars (OSU) to develop an Honors course, Geography 410, entitled Global Climate and Environmental Change.
- 2002 Grant from Office of Honors and Scholars (OSU) to develop a first-year graduate seminar entitled "Global climate and environmental change: Individuals matter. (with Kees van der Veen, in first year; as sole PI in second year).

### Refereed Publications (136 total)

- 2018 Thompson, L. G., T. Yao, M. E. Davis, E. Mosley-Thompson, G. Wu, S. E. Porter, B. Xu, P.-N. Lin, N. Wang, E. Beaudon, K. Duan, M. R. Sierra-Hernández, and D. V. Kenny. 2018. Ice core records of climate variability on the Third Pole with emphasis on the Guliya ice cap, western Kunlun Mountains. *Quaternary Science Reviews*, 188, 1-14.
- 2017 Thompson, L. G., M. E. Davis, E. Mosley-Thompson, E. Beaudon, S.E. Porter, S. Kutuzov, P.-N. Lin, V. N. Michalenko, and K. R. Mountain. 2017. Impacts of recent warming and the 2015/16 El Niño on tropical Peruvian ice fields. *J. Geophys. Res. Atmos.* 122. <https://doi.org/10.1002/2017JD026592>.

- Thompson, L. G., E. Mosley-Thompson, M. E. Davis, S. E. Porter, D. V. Kenny, and P.-N. Lin. 2017. Tropical ice cores document major droughts in the mid-14th and late-18th centuries linked to ENSO variability and societal disruptions. *The Himalayan Cryosphere: Past and Present*. Geological Society London, Special Publications, 462, <https://doi.org/10.1144/SP462.6>.
- 2016 Porter, S. E., C. L. Parkinson, and E. Mosley-Thompson. Bellingshausen Sea ice extent recorded in an Antarctic Peninsula ice core. *J. Geophys. Res. Atmos.*, 121, 13,886–13,900, doi:10.1002/2016JD025626.
- Tian, L., T. Yao, Y. Gao, L. Thompson, E. Mosley-Thompson, S. Muhammad, J. Zong, C. Wand, S. Jin and Z. Li. Two glaciers collapse in western Tibet. *Journal of Glaciology*, doi: 10.1017/jog.2016.122.
- Goodwin, B. P., E. Mosley-Thompson, A. B. Wilson, S. E. Porter, and M. Roxana Sierra-Hernandez. Accumulation variability in the Antarctic Peninsula: The role of large-scale atmospheric oscillations and their interactions. *J. Clim.*, 29(7), 2579-2596, doi:10.1175/JCLI-D-15-0354.1.
- Machguth, H., M. MacFerrin, D. van As, J. E. Box, C. Charalampidis, W. Colgan, R. S. Fausto, H. A. J. Meijer, E. Mosley-Thompson, and R. S. W. van de Wal. Greenland meltwater storage in firn limited by near-surface ice formation. *Nature Clim. Change*, 6, 390–393. doi:10.1038/nclimate2899.
- 2015 Kuipers Munneke, P., S. R. M. Ligtenberg, B. P. Y. Noël, I. M. Howat, J. E. Box, E. Mosley-Thompson, J. R. McConnell, K. Steffen, J. T. Harper, S. B. Das, and M. R. van den Broeke. Elevation change of the Greenland Ice Sheet due to surface mass balance and firn processes, 1960–2014. *The Cryosphere*, 9, 2009-2025, doi:10.5194/tc-9-2009-2015.
- de la Peña, S., I. M. Howat, P. W. Nienow, M. R. van den Broeke, Ellen Mosley-Thompson, S. F. Price, D. Mair, B. Noël, and A. J. Sole. Changes in the firn structure of the Greenland Ice Sheet caused by recent warming. *The Cryosphere*, 9, 1203-1211, doi:10.5194/tc-9-1203-2015.
- 2014 Porter, S. E. and Ellen Mosley-Thompson. Exploring seasonal accumulation bias in a west central Greenland ice core with observed and reanalyzed data. *J. Glac.*, 60(224), 1065-1074.
- Buffen, A.M., M.G. Hastings, L.G. Thompson, and Ellen Mosley-Thompson. Investigating the preservation of nitrate isotopic composition in a tropical ice core from the Quelccaya Ice Cap, Peru, *J. Geophys. Res. Atmos.*, 119, 2674-2697.
- 2013 Thompson, L.G., Ellen Mosley-Thompson, M.E. Davis, V.S. Zagorodnov, I.M. Howat, V.N. Mikhalenko, and P.-N. Lin. Annually resolved ice core records of tropical climate variability over the past ~1800 years. *Science*, 340(6135), 945-950.
- Box, J., N. Cressie, D. Bromwich, J. Jung, M. van den Broeke, J. van Angelen, R. Forster, C. Miège, Ellen Mosley-Thompson, B. Vinther, and J. McConnell. Greenland ice sheet mass balance reconstruction. Part I: net snow accumulation (1600-2009). *J. Climate*, 26(11), 3919-3934.
- 2012 Zagorodnov, V., O. Nagornov, T. A. Scambos, A. Muto, Ellen Mosley-Thompson, E. C. Pettit, and S. Tyufin. Borehole temperatures reveal details of 20th century warming at Bruce Plateau, Antarctic Peninsula. *The Cryosphere*, 6, 675-686.

- Brown, J., J.H. Bradford, J. Harper, W.T. Pfeffer, N.F. Humphrey and Ellen Mosley-Thompson. Georadar derived estimates of firn density in the percolation zone, western Greenland ice sheet. *Journal of Geophysical Research*, 117, F01011, doi:10.1029/2011JF002089.
- 2011 Thompson, L.G., Ellen Mosley-Thompson, M.E. Davis, and H.H. Brecher. Tropical glaciers, recorders and indicators of climate change, are disappearing globally. *Annals of Glaciology*, 52(59), 23-34.
- Thompson, L.G., Ellen Mosley-Thompson, and M.E. Davis. A paleoclimatic perspective on the 21st Century glacier loss on Kilimanjaro. *Annals of Glaciology*, 52(59), 60-68.
- 2010 Gleick, P.H. and numerous authors listed alphabetically. Climate change and the integrity of science. *Science*, 328(5979), 689-690.
- Burgess, E.W., R.R. Forster, J.E. Box, Ellen Mosley-Thompson, D.H. Bromwich, R.C. Bales, and L.C Smith. A spatially calibrated model of annual accumulation rate on the Greenland ice sheet annual (1958-2007). *Journal of Geophysical Research (Earth Surface)*, 115, F2, doi:10.1029/2009JF001293.
- Thompson, L. G., H. H. Brecher, Ellen Mosley-Thompson, D. R. Hardy, and B. G. Mark. Response to Mölg et al.: Glacier loss on Kilimanjaro is consistent with widespread ice loss in low latitudes. *Proceedings of the National Academy of Sciences*, PNAS 2010 107 (17) E69-E70; doi:10.1073/pnas.1001999107.
- 2009 Thompson, L.G., H.H. Brecher, Ellen Mosley-Thompson, D.R. Hardy, and B.G. Mark. Glacier loss on Kilimanjaro continues unabated. *Proceedings of the National Academy of Sciences*, doi:10.1073/pnas.0906029106.
- Buffen, A.M., L.G. Thompson, Ellen Mosley-Thompson, and K.-I. Huh. Recently exposed vegetation reveals Holocene changes in the extent of the Quelccaya Ice Cap, Peru, *Quaternary Research*, 72(2), 157-163. (Includes cover photo).
- Jones, P.D., K.R. Briffa, T.J. Osborn, J.M. Lough, T.D. van Ommen, B.M. Vinther, J. Luterbacher, E. R. Wahl, F.W. Zwiers, M.E. Mann, G.A. Schmidt, C. M. Ammann, B.M. Buckley, K. M. Cobb, J. Esper, H. Goosse, N. Graham, E. Jansen, T. Kiefer, C. Kull, M. Küttel, Ellen Mosley-Thompson, J.T. Overpeck, N. Riedwyl, M. Schulz, A. W. Tudhope, R. Villalba, H. Wanner, E. Wolff and E. Xoplaki. High-resolution paleoclimatology of the last millennium: a review of current status and future prospects. *The Holocene*, 19(1), 3-49. (doi. DOI: 10.1177/0959683608098952).
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- Kyle, P.R., P.A. Jezek, Ellen Mosley-Thompson and L.G. Thompson. Tephra layers in the Byrd ice core and the Dome C ice core, Antarctica and their climatic importance. *Journal of Volcanology and Geothermal Research*, 11(1), 29-39.
- Thompson, L.G. and Ellen Mosley-Thompson. Microparticle Concentration Variations Linked with Climatic Change: Evidence from Polar Ice Cores. *Science*, 212(4496), 812-815.
- Thompson, L.G., Ellen Mosley-Thompson, and J.R. Petit. Glaciological and Climatological Interpretation of Microparticle Concentrations from the French 905-meter Dome C, Antarctica Core. *Sea Level, Ice, and Climatic Change (Proceedings Of the Canberra Symposium, December 1979)*. IAHS-AISH Publication No. 131, 227-237.
- 1976 Wu, P.H.L. and Ellen Mosley-Thompson. Distribution of radio activities in sugars from acetate-2-14C incubation and elemental content of some vascular plants in two diverse habitats of Glacier Bay, Alaska: *Plant & Cell Physiology*, 17, pp. 1167-1173.

### Other Publications (25)

- 2011 *Abrupt Climate Change: Mechanisms, Patterns, and Impacts*, Editors Rashid, H, L. Polyak, and E. Mosley-Thompson, Geophysical Monograph 193, American Geophysical Union, Washington, D.C.
- Rashid, H, L. Polyak, and E. Mosley-Thompson. Abrupt Climate Change Revisited. In *Abrupt Climate Change: Mechanisms, Patterns, and Impacts*, Geophysical Monograph 193, American Geophysical Union, Washington, D.C., 1-14.
- 2002 Zagorodnov, V.S., L.G. Thompson, E. Mosley-Thompson, and J. Kelley. Performance of intermediate depth portable ice core drilling system on polar and temperate glaciers. In: *Ice Core Drilling Technology, Mem. Natl Inst. Polar Res.*, Spec. Issue, 56, 67-81.
- Zagorodnov, V.S., F. Huffman, L. Thompson, and E. Mosley-Thompson. Controller for portable intermediate depth ice core drilling system. In: *Ice Core Drilling Technology, Mem. Natl Inst. Polar Res.*, Spec. Issue, 56, 321-325.
- Zagorodnov, V.S., L.G. Thompson, E. Mosley-Thompson, and J. Kelley. 2002. Ice core drilling complications. In: *Ice Core Drilling Technology. Mem. Natl Inst. Polar Res.*, Spec. Issue, 56, 196-205.
- Zagorodnov, V.S., L.G. Thompson, E. Mosley-Thompson, F. Huffman and J. Kelley. Intermediate depth ice core drilling support systems: power generators, shelters. In: *Ice Core Drilling Technology, Mem. Natl Inst. Polar Res.*, Spec. Issue, 56, 313-320.
- 1992 Thompson, L.G. and E. Mosley-Thompson. 1992. *Tropical Ice Core Paleoclimatic Records, Quelccaya, Peru: A.D. 470-1984*. BPRC Miscellaneous Publication 321, 106 pp.
- 1991 Mosley-Thompson, E. and L.G. Thompson. Spatial and temporal characteristics of the Little Ice Age: The Antarctic ice core record. In: *International Conference on the Role of the Polar Regions in Global Change*. G. Weller, C.L. Wilson and B.A.B. Severin, Eds., University of Alaska, Fairbanks, 606-610.
- Mosley-Thompson with 14 others. Global Change: The last 2000 years. In: *Global Changes of the Past*. R.S. Bradley, Ed. UCAR/OIES, Boulder, Colorado, 11-24.
- Thompson, L.G., E. Mosley-Thompson, J.L. Betancourt, and four others. 1991. Laminated ice bodies in collapsed lava tubes at El Malpais National Monument, central New Mexico. *Field Guide to Geologic Excursions in New Mexico and adjacent areas of Texas and Colorado*. New Mexico Bureau of Mines and Mineral Resources Bulletin 137, 149.
- 1987 Thompson, L.G., Thompson, P.A., and Mosley-Thompson, E., *Hindcasts of El Niño events in the 19th century*. WPS-87124, Working Paper Series of College of Business, Ohio State Univ., 31 pp.
- Mosley-Thompson, E., J.F. Paskievitch, and S.M. Gross. Ice core drilling for paleoclimatic information at Plateau Remote. *Antarctic Journal of the U.S.*, XXII(5), 78-79.
- 1986 Mosley-Thompson, E., K.R. Mountain and J.F. Paskievitch. Paleoclimatic ice core program at Siple Station. *Antarctic Journal of the U.S.*, XVI(5), 115-117.
- 1983 Mosley-Thompson, E., P.D. Kruss and T. Bain. South Pole pit stratigraphic studies. *Antarctic Journal of the U.S.*, XVIII (5), pp. 116-118.

- Mosley-Thompson, E. and L.G. Thompson. South Pole ice core processing and microparticle analyses. *Antarctic Journal of the U.S.*, XVIII (5), pp. 118-119.
- 1982 E. Mosley-Thompson and L.G. Thompson. Microparticle concentration and size distribution determinations from the J-9 core, Ross Ice Shelf. *Antarctic Journal of the U.S.*, XVII (5), pp. 83-85.
- Thompson, L.G., and E. Mosley-Thompson. Spherical particles in Antarctic Ice Cores. LPI Technical Report No. 82-03. *Workshop on Antarctic, Glaciology and Meteorites*, 54-55.
- L.G. Thompson and E. Mosley-Thompson. Spherical particles in Antarctic ice cores. Lunar and Planetary Institute Technical Report No. 82-03. *Workshop on Antarctic Glaciology and Meteorites*, pp. 54-55.
- 1981 E. Mosley-Thompson and L.G. Thompson. Microparticle record from Q-13. A Preliminary Report. *Antarctic Journal of the U.S.*, XVI(5), pp. 89-90.
- 1980 Mosley-Thompson, E. 911-Years of Microparticle Deposition at the South Pole: a Climatic Interpretation. *The Ohio State University Institute of Polar Studies Report No. 73*, Columbus, Ohio, 134 pp.
- L.G. Thompson and E. Mosley-Thompson. Glaciological interpretation of the microparticle concentration in the 905-meter Dome C core. *Antarctic Journal of the U.S.*, XV(5), pp. 71-5.
- 1979 E. Mosley-Thompson and L.G. Thompson. Microparticle deposition at South Pole. *Antarctic Journal of the U.S.*, XIV(5), pp. 91-3.
- Mosley-Thompson, E., 911 Years of Microparticle Deposition at the South Pole. A climatic Interpretation. Ph.D. dissertation. The Ohio State University.
- 1977 Mosley-Thompson, E., and L.G. Thompson. Microparticle analysis of the 101-meter South Pole core: *Antarctic Journal of the U.S.*, XII(4), 136-137.
- 1975 L.G. Thompson and E. Mosley-Thompson. Microparticles from the Byrd Station Deep Ice Core: *Antarctic Journal of the U.S.*, X(2), pp. 48-50.

#### *Government Reports (7)*

- 2014 NRC, The Arctic in the Anthropocene: Emerging Research Questions, Committee on Emerging Research Questions in the Arctic. The National Academy Press, Washington, D.C. [I am a member of this committee].
- 2009 NRC, Restructuring Federal Climate Research to Meet the Challenges of Climate Change, Committee on Strategic Advice on the U.S. Climate Change Science Program, The National Academy Press, Washington, D.C. [I am a member of this committee].
- 2007 NRC, Evaluating Progress of the U.S. Climate Change Science Program, Committee on Strategic Advice on the U.S. Climate change Science Program, The National Academy Press, Washington, D.C. [I am a member of this committee].
- 1990 NRC, Research Strategies for the U.S. Global Change Research Program, Committee on Global Change, National Academy Press. [I was Chair of the group who wrote the chapter entitled 'Earth System History and Modeling.']
- 1989 NRC, Toward an Understanding of Global Change: Initial Priorities for U.S. Contributions to the International Geosphere-Biosphere Program. Committee on Global Change, The



National Academy Press, Washington, D.C. [I was a member of the Committee on Global Change].

- 1985 Scientific Plan for Deep Ice Core Drilling in Central Greenland (GISP II). Committee for Science Planning in Greenland (Ellen Mosley-Thompson, chair).
- 1982 Analyses of the Quelccaya ice cap climate record. NOAA recent post-doctoral research award No. NA81AA- D00101. Progress report Nov. 1, 1982. Institute of Polar Studies.

### Papers Presented at Professional Meetings (66 total)

- 2016 Invited: *Climate change: The evidence, people and our options*. National Science Teachers Association Conference, December 1, Columbus, OH.
- 2014 Invited: *Global climate change: Valuable insights from concordant and discordant ice core histories*. American Geophysical Union Annual Meeting, December 15, San Francisco, California.
- Invited: *Ice core climate record: Merging the historical with the last 1000 years and beyond*. American Association for the Advancement of Science Annual Meeting, February 16, Chicago, Illinois.
- 2013 *Climate variability in the Antarctic Peninsula: Insights from the 2010 Bruce Plateau ice core*. American Geophysical Union Annual Meeting, December 12, San Francisco, California.
- 2012 Invited: Mosley-Thompson, E. and L.G. Thompson. *Global Cryospheric Loss: An Overview of the Issue*. 4<sup>th</sup> International Eco Summit, October 1, Columbus, Ohio.
- 2010 Invited: Mosley-Thompson, E. *Past and Contemporary Climate Change: Evidence from Earth's Ice Cover*. American Geophysical Union Annual Meeting, The Jule G. Charney Lecture, sponsored by the Atmospheric Sciences Section, December 16. Video archive: [http://www.agu.org/meetings/fm10/lectures/lecture\\_videos/A42D.shtml](http://www.agu.org/meetings/fm10/lectures/lecture_videos/A42D.shtml)
- Mosley-Thompson, E. *Understanding Global Climate Change: Stories from the Ice*. Annual Meeting of the Association of American Geographers, April 16, Washington, D.C.
- Mosley-Thompson, E., L.G. Thompson, H.H. Brecher, D.R. Hardy and B.G. Mark. *Abrupt climate change: It has happened before and it is happening now!* Annual Meeting of the Association of American Geographers, April 17, Washington, D.C.
- 2009 Mosley-Thompson, E. *Past and contemporary climate change: Evidence from Earth's ice cover*. 2009 Joint Assembly (AGU, etc.), May 29, Toronto, Canada.
- 2008 Mosley-Thompson, E. *Snow accumulation over East Antarctica: Implications for sea level rise*. Annual Meeting of the Association of American Geographers, April 18, Boston, Massachusetts.
- 2007 Mosley-Thompson, E. and L.G. Thompson. *Abrupt Climate Change (Past and Present): Evidence from the Ice*. Annual Meeting of the Association of American Geographers, April 18, San Francisco, California.
- 2006 Mosley-Thompson, E., and L. G. Thompson. *A 13-year net accumulation record from South Pole Station (Antarctica) reveals a slight increase over the last decade and remains well above the 900-year mean*. Annual Meeting of the American Geophysical Union, December 11, San Francisco.

- Mosley-Thompson, E., L.G. Thompson and P.-N. Lin. *A multi-century ice core perspective on 20<sup>th</sup> century climate*. Annual Meeting of the Association of American Geographers, March 8, Chicago, Illinois.
- Mosley-Thompson, E. *Ice core contributions to Quaternary Paleoenvironments: Current Status and Future Directions*, Panel discussion at the Annual Meeting of the Association of American Geographers, March 9, Chicago, Illinois.
- 2005 Mosley-Thompson, E. (presenter). *A multi-century ice core perspective on 20<sup>th</sup> century climate with new contributions from high Arctic and Greenland PARCA ice cores*. International Glaciological Society Symposium on High-elevation Glaciers and Climate Records, Lanzhou, China, September 5, 2005.
- Mosley-Thompson, E. (presenter). *Does the PDO Affect the Climate over Greenland and Complicate the Reconstruction of NAO Variability from Ice Core Records?* Association of American Geographers Annual Meeting, April 8, 2005, Denver, CO.
- 2004 Mosley-Thompson, E. *Does the PDO Affect the Climate over Greenland and Complicate the Reconstruction of NAO Variability from Ice Core Records?* American Geophysical Union Annual Meeting, December 16, San Francisco, California.
- Mosley-Thompson, E. and L. G. Thompson, *High-resolution ice cores provide a multi-century perspective on 20<sup>th</sup> century climate changes and "global warming."* 1<sup>st</sup> International CLIVAR Science Conference, June 21-25, Baltimore, Maryland.
- 2003 Mosley-Thompson, E. *Unique insights to the Earth's climate history preserved in its cryosphere*. Association of American Geographers Annual Meeting, March 18, Philadelphia, Pennsylvania.
- Mosley-Thompson, E., L. G. Thompson, H.H. Brecher, M.E. Davis, B. Leon, D. Les, P.-N. Lin, T. A. Mashiotta, and K. Mountain. *Holocene climate change in the tropics: Evidence of abrupt climate change: Past and Present*. XVI INQUA Congress, July 3, Reno, Nevada.
- Mosley-Thompson, E., T. A. Mashiotta, and L.G. Thompson. *High resolution ice core records of Late Holocene volcanism: Current and future contributions from the Greenland PARCA cores*. XVI INQUA Congress, July 31, Reno, Nevada.
- Mosley-Thompson, E. and L. G. Thompson. *Late 20<sup>th</sup> century tropical glacier retreat: A unique Holocene Phenomenon?* Association of American Geographers Annual Meeting, March 6, New Orleans, Louisiana.
- 2002 Mosley-Thompson, E., L. G. Thompson, K. A. Henderson and P.-N. Lin. *High resolution ice cores provide a multi-century perspective on 20<sup>th</sup> century climate changes and 'global warming.'* American Geophysical Union Meeting, December 8, San Francisco, California.
- Invited: Mosley-Thompson, E., T. A. Mashiotta and L. G. Thompson. *Ice core records of late Holocene volcanism: Contributions from the Greenland PARCA cores*. AGU Chapman Conference on Volcanoes and the Earth's Atmosphere held June 17 - 21 in Santorini, Greece.
- Mosley-Thompson, E. *High resolution climate histories from Greenland ice cores*. AAG Annual meeting, March 22, Los Angeles, California.
- 2001 Mosley-Thompson, E. *NAO reconstruction from Greenland ice cores: Fact or Fantasy?* AAG Annual meeting, March 3, New York, New York.

- Invited: Mosley-Thompson, E. *Greenland ice core contributions to PARCA (Program for Arctic Regional Climate Assessment)*. 2<sup>nd</sup> Wadati Conference on the Polar Regions and Global Change, March 7-8, Tsukuba, Japan.
- 2000 Mosley-Thompson, E., R.C. Bales, J.R. McConnell, L.G. Thompson and Z. Li. *Annual to decadal-scale climate variability: What do Greenland ice cores reveal?* American Association of Geographers Annual Meeting, April 7, Pittsburgh, Pennsylvania.
- 1999 Mosley-Thompson, E., R.C. Bales, J.R. McConnell, L.G. Thompson and Z. Li. *Annual to decadal-scale climate variability: What do Greenland ice cores reveal?* American Geophysical Union Annual Meeting, December 16, San Francisco, California.
- Mosley-Thompson, E. *Overview and update for PARCA: Program for Arctic Regional Climate Assessment*. IGBP PAGES / CLIVAR Workshop on Climate Variability of the Last Millennium, November 11, Venice, Italy.
- Mosley-Thompson, E., L. G. Thompson and K. A. Henderson. *Ice core paleoclimatic histories: Potential for ENSO reconstruction*. AAG 95<sup>th</sup> Annual Meeting, March 25, Honolulu, Hawaii.
- Hinkel, K. M., A.E. Ellis, E. Mosley-Thompson. *The Cryosphere: Hot Research on Cold Climates*. (To appear in *Geography in America*, Cambridge Univ. Press, in preparation), AAG 95<sup>th</sup> Annual Meeting, March 24, Honolulu, Hawaii, (EMT presenter).
- 1998 Mosley-Thompson, E. and 5 others. *Ice cores as archives for microorganisms*. American Geophysical Union Fall Meeting, San Francisco, December 6-10. *AGU Fall Meeting Abstract Volume*, 79(45), November 10, 1998, p. F61-62.
- Robinson, A.D., J.T. Overpeck, E. Mosley-Thompson and 7 others. *Hypothesized climate forcing time series for the last 500 years*. American Geophysical Union Fall Meeting, December 6-10, San Francisco, California. *AGU Fall Meeting Abstract Volume*, 79(45), November 10, 1998, p. F105.
- Participant: East Lakes Regional Meeting of the AAG. Organized a set of climate related presentations and gave one presentation, October 30.
- Mosley-Thompson, E. *Climate histories from high temporal resolution ice cores - changing paradigms*. In: *Learning About the Earth as a System*, Conference Proceedings of the Second International Conference on Geoscience Education, July 28-31, 1997, Hilo, pp. 52-58.
- Mosley-Thompson, E. and R.C. Bales. *Spatial and temporal variability of dust,  $\delta^{18}\text{O}$  and net accumulation as revealed in Greenland ice core records*. *Association of American Geographers 93rd Annual Meeting Abstract Volume*, April 25.
- 1997 *Spatial and temporal variability of dust,  $\delta^{18}\text{O}$ , and net accumulation as revealed in Greenland ice cores*. American Geophysical Union Fall Meeting, December 8.
- Invited: *Climatic and environmental information from low latitude glaciers*. European Science Conference on Polar Regions and Quaternary Climate: Coupling between Northern and Southern hemisphere climates during the last climatic cycle. September 24, Acquafredda di Maratea, Italy.
- Invited: *Climate histories from high resolution ice cores: Changing paradigms*. Second International Conference on Geoscience Education, July 31, Hilo, Hawaii.
- Late Holocene climate variability*. American Geophysical Union Spring Meeting, May 27, Baltimore, Maryland.

- Glaciological evidence of recent environmental changes.* Annual Meeting of the Association of American Geographers, April 3, Fort Worth, Texas.
- 1996 Invited: *Glaciological Evidence for Recent Warming at High Elevations.* Annual Meeting of the American Meteorological Society, February 2, Atlanta, Georgia.
- Climate histories from high resolution iced cores: changing paradigms.* Annual Meeting of the Association of American Geographers, April 13, Charlotte, North Carolina, (p. 209).
- 1995 Invited: *Late Holocene climate histories from high resolution ice cores: Old and new paradigms.* Wadati Conference on Global Change and the Polar Climate, November 9, Tsukuba Science City, Japan.
- Global climate variability over the last millennium: What do ice cores reveal?* (Abstract) American Geophysical Union, Spring Meeting, June 1, Baltimore, Maryland, p. S176.
- 1994 *Recent increase in South Pole snow accumulation.* Presented at the Int. Glaciol. Soc. Symposium on the Role of the Cryosphere in Global Change, August 7-14, Columbus, Ohio.
- Antarctic ice core histories: spatial differences and similarities.* NATO Advanced Workshop "Climatic variations and forcing mechanisms of the last 2,000 years," October 3, Italy.
- 1993 *Rapid Holocene warming and cooling events in Central East Antarctica.* American Geophysical Union Spring Meeting, May 28, Baltimore, Maryland.
- Rapid Holocene warming and cooling events in Central Antarctica.* 23rd Annual Arctic Workshop, The Ohio State University, invited (opening paper); April 1, Columbus, Ohio.
- 1992 *Climate of the last millennium: High resolution polar ice core records.* American Geophysical Union Spring Meeting, May 13, Montreal, Canada.
- 1991 Invited: *Ice cores as libraries of global climatic change.* Earth Science Seminar, NASA Goddard Space Flight Center, February 22, Greenbelt, Maryland.
- 1990 *Climate since A.D. 1450: What high resolution ice cores reveal.* American Geophysical Union Fall Meeting, December 4, San Francisco, California.
- Invited: *Global change and the role of ice cores.* 42nd Annual Deans' Conference of the Assoc. of Graduate Schools of the Assoc. of American Universities, October 9, Austin, Texas.
- Spatial and temporal characteristics of the Little Ice Age: the ice core record.* International Conference on the Role of the Polar Regions in Global Change, June 11-15, Fairbanks, Alaska.
- Invited: *Ice cores as paleoclimatic libraries.* AAAS Annual Meeting, February, New Orleans, Louisiana.
- 1989 Invited: *Paleoclimatic reconstruction from ice cores.* 40th Arctic Science Conference: Global Change, September 14, Fairbanks, Alaska.
- Little Ice Age (Neoglacial) paleoenvironmental conditions at Siple Station, Antarctica.* International Glaciological Society, August 21, Seattle, Washington.
- 1988 Invited: *Climatic and environmental history from the tropical Quelccaya ice cap, Peru and recent results from Dunde ice cap, China.* Workshop on Climate Variability of the Eastern Pacific and Western North America, March 21, Monterey, California.

- 1987 *Shallow core analyses and pit studies at Siple Station: Applications for extraction of a 500-year proxy climate record.* Symposium on Ice Analysis, March 30-April 3, Bern, Switzerland.
- Invited: *The potential of ice cores for paleoclimatic reconstruction.* Presented October 17, at The Annual Meeting of Sigma Xi, The Scientific Research Society, Long Beach, California.
- 1984 *Paleoclimatic reconstruction from South Pole ice cores: potential temporal resolution.* Presented at International Glaciological Society Symposium on Snow and Ice Chemistry and the Atmosphere, August 19-24, Peterborough, Canada.
- Quelccaya (Peru) Ice Cap: Record of major equatorial Pacific climate events (1927-1983).* Presented at International Glaciological Society Symposium on Snow and Ice Chemistry and the Atmosphere, August 19-24, Peterborough, Canada.
- 1983 *The record of explosive volcanism in Southern Hemisphere ice cores.* Presented March 18, at the Symposium on Climatic Effect of Volcanic Dust and Aerosols in the Upper Atmosphere. (AGU/AMS). Boulder, Colorado.
- 1981 *Microparticle analysis of the Q-13 and J-9 cores from the Ross Ice Shelf, Antarctica.* Presented at the Third International Symposium on Antarctic Glaciology, September 11, Columbus, Ohio.
- 1978 *Microparticle analysis of the 101-meter South Pole core.* Presented April, at the 74th Annual Meeting of the Association of American Geographers, New Orleans, Louisiana.

### Papers Co-authored at Professional Meetings (48 total since 1999)

- 2017 Thompson, L.G., T. Yao, M. E. Davis, E. Mosley-Thompson, G. Wu, S. E. Porter, B. Xu, D. V. Kenny, N. Wang, E. Beaudon, K. Duan, P.-N. Lin and R. Sierra-Hernandez. Decadal to centennial-scale climate changes over the last millennium recorded in Third Pole glaciers, with emphasis on new ice core records from the Guliya ice cap. American Geophysical Union Annual Meeting, December 12, 2017, New Orleans, Louisiana.
- Porter, S. E., E. Mosley-Thompson, L. G. Thompson and J. F. Bolzan. A Paleo Perspective on Arctic and Mid-latitude Linkages from a Southeast Alaska Ice Core. American Geophysical Union Annual Meeting, December 12, 2017, New Orleans, Louisiana.
- 2016 Thompson, L. G., T. Yao, E. Beaudon, E. Mosley-Thompson, M. E. Davis, D.V. Kenny and P-N. Lin. *Climate Changes Documented in Ice Core Records from Third Pole Glaciers, with Emphasis on the Guliya Ice Cap in the Western Kunlun Mountains over the Last 100 Years.* American Geophysical Union Annual Meeting, December 12, 2016, San Francisco, California.
- Mosley-Thompson, E., L. G. Thompson, M. E. Davis, E. Beaudon and P-N. Lin. *A Perspective on the Unprecedented Impact of the 2015/16 El Niño on the Tropical Quelccaya Ice Cap, Peru from Four Decades of Surface Sampling and Deep Drilling.* American Geophysical Union Annual Meeting, December 16, 2016, San Francisco, California.
- 2015 Thompson, L. G., T. Yao, E. Mosley-Thompson, G. Wu, M. E. Davis, L. Tian and P-N. Lin. *High-amplitude, centennial-scale climate oscillations during the last glacial in the*

*western Third Pole as recorded in the Guliya ice cap.* American Geophysical Union Annual Meeting, December 15, San Francisco, California.

Wang, N., T. Yao, L. G. Thompson and E. Mosley-Thompson. *Spatial Pattern of the Glacier Shrinkages over the Tibetan Plateau since the Little Ice Age and the Role of the Summer Freezing Level.* December 15, American Geophysical Union Annual Meeting, San Francisco, California.

Kuipers Munneke, P., S. Ligtenberg, B. Noel, I. M. Howat, J. E. Box, E. Mosley-Thompson, J. R. McConnell, K. Steffen, J. T. Harper, S. B. Das, and M. van den Broeke. Taking the firm into account: Elevation change of the Greenland Ice Sheet due to surface mass balance and firm processes, December 17, American Geophysical Union Annual Meeting, San Francisco, California.

2014 Thompson, L.G., D. Permana, E. Mosley-Thompson and M.E. Davis. *Climatic Teleconnections Recorded By Tropical Mountain Glaciers.* American Geophysical Union Annual Meeting, December 16, San Francisco, California.

Thompson, L.G, E. Mosley-Thompson, M.E. Davis, D.V. Kenny and P.-N. Lin. *Climate, ENSO and 'Black Swans' over the Last Millennium.* American Geophysical Union Annual Meeting, December 18, San Francisco, California.

2013 Thompson, L.G. T. Yao; E. S. Mosley-Thompson, M. E. Davis, and P-N. Lin. *Complexity of Himalayan Glacier Response Today and in the Past* (Invited). American Geophysical Union Annual Meeting, December 9, San Francisco, California.

Thompson, L.G. T. Yao; E. S. Mosley-Thompson, M. E. Davis, D.V. Kenny, and P.-N. Lin. *Two Extreme Climate Events of the Last 1000 Years Recorded in Himalayan and Andean Ice Cores: Impacts on Humans.* American Geophysical Union Annual Meeting, December 11, San Francisco, California.

de la Peña, S., I. M. Howat, M. R. van den Broeke, S.F. Price, P. W. Nienow, and E. S. Mosley-Thompson. *Melt trends above the equilibrium line of the Greenland Ice Sheet during the period of 2003-2012* (Invited). American Geophysical Union Annual Meeting, December 11, San Francisco, California.

Porter, S. E., E. Mosley-Thompson, and L. G. Thompson. *The connection between Alaska and Greenland ice cores under different climate regimes.* American Meteorological Society Annual Meeting, January, Austin, Texas.

Goodwin, B. P., E. Mosley-Thompson and M. R. Sierra-Hernandez. *Recent changes in accumulation on the Bruce Plateau, Antarctica.* American Meteorological Society Annual Meeting, January, Austin, Texas.

Miller, D. R., E. Mosley-Thompson and B. P. Goodwin. *Contemporary meteorological observations facilitate interpretation of a new multi-century long ice core from the Antarctic Peninsula.* American Meteorological Society Annual Meeting, January, Austin, Texas.

2012 Porter, S. E., E. Mosley-Thompson, and L. G. Thompson. *Evidence for Pacific climate regime shifts as preserved in a southeast Alaska ice core.* American Geophysical Union Meeting, December, San Francisco, California.

Thompson, L.G., Yao Tandong, E. Mosley-Thompson and P.-N. Lin. *Long-distance relationship between large-scale tropical SSTs and ice core-derived oxygen isotopic records in the Third Pole Region.* American Geophysical Union Meeting, San Francisco, December 2012.

- 2011 Porter, S. E. and E. Mosley-Thompson. *Extracting a history of Baffin Bay sea ice extent from west central Greenland ice cores*. American Geophysical Union Meeting, December, San Francisco, California.
- Buffen, A. M., M.G. Hastings, L.G. Thompson, and E. Mosley-Thompson. *Assessing post-depositional alteration and the integrity of ice core nitrate-N and –O Isotopic records at the Quelccaya Ice Cap, Peru*. American Geophysical Union Meeting, December, San Francisco, California.
- Thompson, L. G., E. Mosley-Thompson, and M.E. Davis. *Tropical Glaciers in the Common Era: Papua, Indonesia, Quelccaya Ice Cap, Peru and Kilimanjaro, Tanzania (Invited)*. American Geophysical Union Meeting, December, San Francisco, California.
- Thompson, L. G., T. Yao, and E. Mosley-Thompson. *Third Pole glaciers and ice core records of past, present and future climate (Invited)*. American Geophysical Union Meeting, December, San Francisco, California.
- 2010 Thompson, L.G., T. Yao, M.E. Davis and E. Mosley-Thompson. Invited. *Ice core records of past climate and evidence for present and future glacier loss across the Third Pole*. American Geophysical Union Meeting, December, San Francisco, California.
- Thompson, L.G., E. Mosley-Thompson, M.E. Davis, and P-N. Lin. Invited: *A 1700-year record of tropical sea surface temperatures and high-altitude Andean climate derived from the Quelccaya Ice Cap, Peru*. American Geophysical Union Meeting, December, San Francisco, California.
- Pettit, E.C., T.A. Scambos, R.J. Bauer, E. Mosley-Thompson, M. Truffer, and B. Blair. *Bruce Plateau, Antarctic Peninsula: Ice-core site characterization*. American Geophysical Union Meeting, December, San Francisco, California.
- Domack, E.W., B.A. Huber, M. Vernet, A. Leventer, T.A. Scambos, E. Mosley-Thompson, C.R. Smith, M.A. De Batist, and H. Yoon. *The LARsen Ice Shelf System, Antarctica, LARISSA a model for Antarctic integrated system science (AISS) investigations using marine platforms*. American Geophysical Union Meeting, December, San Francisco, California.
- 2008 Thompson, L.G., E. Mosley-Thompson, A. Buffen, D. Urmann, M.E. Davis, and P-N. Lin. *Tropical glaciers: Recorders and indicators of climate change*. American Geophysical Union Annual Meeting, December 15, San Francisco, California.
- Thompson, L.G., T. Yao, M.E. Davis, N.M. Kehrwald, and E. Mosley-Thompson. *Tibetan glaciers as integrators and sentinels of climate change*, American Geophysical Union Annual Meeting, December 15, San Francisco, California.
- Larsen, C.J.\*, E. Mosley-Thompson, L. Wei, 2008. *A 50-year proxy record of climate variability from western Greenland*, Annual Meeting of the Association of American Geographers, April 18, San Francisco, California. (\* graduate student).
- Wei. L.\* and E. Mosley-Thompson, *Synthesizing more robust ice-core-derived sulfate and nitrate aerosol histories for improved modeling of past aerosol forcing*. Annual Meeting of the Association of American Geographers, April 18, San Francisco, California. (\* graduate student)
- 2007 Thompson, L.G., E. Mosley-Thompson, *et al.*, *Abrupt Climate Change and Our Future*, Annual Meeting of the American Geophysical Union, December 12, San Francisco, California.



- Thompson, L. G., E. Mosley-Thompson, M.E. Davis, D. Urmann and A. Buffen, *Ice core evidence for amplification of the recent warming at high elevations in the tropics and the likely regional impacts*. Annual Meeting of the American Geophysical Union, December 14, San Francisco, California.
- 2006 Thompson, L. G., E. Mosley-Thompson, M. Davis and A. Buffen. *Glaciological evidence of temporal and spatial tropical climate variability*. Annual Meeting of the American Geophysical Union, December 12, San Francisco, California.
- Wei, L.\* and E. Mosley-Thompson. *Arrival of sulfate aerosols from Iceland's Laki Eruption (1783-1784 AD) to the Greenland Ice Sheet: A critical ice core dating tool*. Annual Meeting of the American Geophysical Union, December 14, San Francisco, California. (Lijia is a Ph.D candidate in the Dept. Geog., Atmospheric Science). (\* graduate student)
- Johnson, N.\*, D. Alsdorf, L. Thompson, E. Mosley-Thompson and J. Melack. *Assessment of the relationship between Andean ice core precipitation indicators and Amazon River discharge*. Annual Meeting of the American Geophysical Union, December 13, San Francisco, California. (\*Natalie Johnson is a M.S. student in Earth Sciences).
- Box, J. E., D. Bromwich, E. Mosley-Thompson and A. Herrington. *A century-plus perspective on Greenland ice sheet mass balance*. Annual Meeting of the American Geophysical Union, December 13, San Francisco, California. (Adam is an undergraduate student in SES).
- 2005 Thompson, L.G., T. Yao, M.E. Davis, E. Mosley-Thompson, P.N. Lin, T.A. Mashiotta, V.N. Mikhalenko and V.S. Zagordonov. *Holocene climate variability archived in the Puruogangri ice cape from the central Tibetan Plateau*, International Glaciological Society Symposium on High-elevation Glaciers and Climate Records, September, Lanzhou, China.
- Yao, T., Z. Li, L.G. Thompson, E. Mosley-Thompson, Y. Wang, L. Tian, N. Wang, and K. Duan.  *$\delta^{18}O$  record in Tibetan ice reveals differences in climatic changes*. International Glaciological Society Symposium on High-elevation Glaciers and Climate Records, September, Lanzhou, China.
- 2004 Thompson, L.G., E. Mosley-Thompson, P.-N. Lin, M.E. Davis, T.A. Mashiotta, H.H. Brecher, *Low-latitude mountain glacier evidence for abrupt climate changes*. American Geophysical Union Annual Meeting in December 15, San Francisco, California.
- Thompson, L.G., E. Mosley-Thompson, V. Zagorodnov, M.E. Davis, T.A. Mashiotta, and P.-N. Lin. *1500 Years of Annual Climate and Environmental Variability as Recorded in Bona-Churchill (Alaska) Ice Cores*. American Geophysical Union Annual Meeting, December 14, San Francisco, California.
- van der Veen, K., B. Csatho, Y. Ahn, W. Krabill and E. Mosley-Thompson. *Analysis of Surface Roughness Derived from Airborne Laser Altimetry on the Greenland Ice Sheet and Comparison with Stratigraphic Records*. American Geophysical Union Annual Meeting, December 13, San Francisco, California.
- Thompson, L.G., E. Mosley-Thompson, Mary E Davis, Tracy A. Mashiotta, K. A. Henderson, P.-n. Lin, and T. Yao. *Evidence for Asynchronous Glaciation: The Ice Core Record from the Tibetan Plateau*. 4th International Symposium on the Tibetan Plateau, August 4-7, Lhasa, Tibet.

- Grannas, A. M., W. C. Hockaday, P.G. Hatcher, E. Mosley-Thompson and L. G. Thompson, *Molecular-level characterization of dissolved organic material preserved in ice cores using Fourier transform ion cyclotron resonance mass spectrometry*. Organic Geochemistry Gordon Conference, August 8-13, Plymouth, New Hampshire (at Holderness School).
- Thompson, L. G., E. Mosley-Thompson, M.E. Davis, P.-N. Lin, and H. H. Brecher. *Tropical Andean ice core and glacier retreat evidence for abrupt climate change*. II International Symposium on Mass Balance of Andean Glaciers, Glacier Shrinkage in the Andes and consequences for water resources, July 6 – 9, Huaraz, Peru.
- Thompson, L. G., E. Mosley-Thompson, H. Brecher, M. Davis, P.-N. Lin, T. Mashiotta, B. Leon, D. Les, K. Mountain, *Abrupt tropical climate change: Past and present*. 1<sup>st</sup> International CLIVAR Science Conference, June 21-25, Baltimore, Maryland.
- 2003 Thompson, L. G., H.H. Brecher, M.E. Davis, B. Leon, D. Les, P.-N. Lin, T.A. Mashiotta, E. Mosley-Thompson, K. Mountain. *Holocene climate change in the tropics: Evidence of abrupt climate change: Past and present*. XVI INQUA Congress, July 31, Reno, Nevada.
- 2002 Thompson, L. G., M. E. Davis, E. Mosley-Thompson, P.-N. Lin and T. A. Mashiotta. *Ice core evidence of past changes in the hydrological cycle of the tropics and subtropics*. American Geophysical Union Meeting, December 8, San Francisco, California.
- Thompson, L. G., E. Mosley-Thompson, T. A. Mashiotta, M. E. Davis, P.-N. Lin and H. H. Brecher. *Tropical and subtropical ice core climate records of the last two millennia*. American Geophysical Union Meeting, December 9, San Francisco, California.
- 1999 Christner, B.C., E. Mosley-Thompson, L.G. Thompson, V. Zagorodnov, K. Sandman, J.N. Reeve. *Isolation and Characterization of Microorganisms from Glacial Ice*. June 1, 99th General Meeting for the American Society of Microbiology, presented by Brent Christner (M.S. student).

## Invited Lectures and Outreach Activities

1987 - 2017 (222 total)

- 2018 Invited Presentation: *Past and contemporary climate change: Evidence from Earth's cryosphere*. Ohio State ADVANCE Faculty Research Lecture, The Ohio State University, Columbus, Ohio, September 10, 2018.
- 2018 Invited Presentation: *Past and contemporary climate change: Evidence from Earth's cryosphere*. The Ohio State Sigma Xi Chapter's Annual Banquet, The Ohio State University, Columbus, Ohio, April 9, 2018, (joint with Lonnie G. Thompson).
- 2018 Invited Presentation: *Past and contemporary climate change: Evidence from Earth's cryosphere*. Dean's Distinguished Lectureship, Keynote in Geography, Rutgers University, Piscataway, New Jersey, January 26, 2018.
- 2017 Invited Presentation: *Past and contemporary climate change: Evidence from Earth's cryosphere*. Yale School of Forestry and Environmental Studies, Yale University, New Haven, Connecticut, October 4, 2017.

Invited Presentation: *Global climate change: The evidence, challenges and our options*. First Congregational Church, Columbus, OH, October 1, 2017.

Invited Presentation: *Climate change: Evidence from the ice*. OSU Alumni Association Board of Directors, Columbus, OH, September 14, 2017.

2016 Invited Presentation: *Evidence for Contemporary Climate Change Polar – Tropical Climate Connections*. Institute of Earth and Environment, Xi'an, China, August 18.

Invited Presentation: *Climate Change: The Evidence, People, and Our Options*, Institute of Tibetan Plateau Research, CAS, Beijing, China, August 19. (joint with Lonnie G. Thompson).

Invited Presentation: *Climate Change: The Evidence, People, and Our Options*. The 2016 Bernard and Susan Master "Moonlight on the Marsh" lecture series presented by the Everglades Wetland Research Park of Florida Gulf Coast University (FGCU), January 14, (joint with Lonnie G. Thompson).

2015 Invited Presentation: *What is Paleoclimatology?* The Eminence Symposium, The Ohio State University, October 25.

Invited Presentation: *Past and Contemporary Climate Change: Evidence from Earth's Ice Cover*. Sigma Xi Science Café, Thompson Library, The Ohio State University, October 7.

*Duets in the College of Arts and Sciences*. Interview with Lonnie G. Thompson and Ellen Mosley-Thompson, The Ohio State University, Columbus, Ohio

Invited Presentation: *Climate Change: A Primer and Stories from the Ice*, New Generation of Polar Researchers Symposium, May 5, Catalina Island, California.

Invited Presentation: *Global Climate Change: The Evidence, Challenges and Our Options*. Akron Roundtable, March 19, Akron, Ohio.

Invited Presentation: *Global Climate Change: The Evidence, Challenges and Our Options*. Law 8311, Climate Change Law, January 21.

Panelist. *Green Columbus: A healthy, beautiful and prosperous community*. Columbus Metropolitan Club, January 7, Columbus, Ohio.

2014 Invited Presentation: *The Climate, the Arctic and Glaciers: Black Swans?* Naval War College, CNO Strategic Studies Group, November 18. (Bad weather cancelled the flight so the presentation was given by Skype), (joint with Lonnie G. Thompson).

Invited Presentation: *A Matter of Dollars and Sense: Climate Change, Carbon Standards, and Public Health*, Columbus Public Health, October 30, (Part of the Climate Explorations Series).

Invited Presentation: *El Niño and Human History: The Record Written in Tropical Ice Cores*. (joint with Lonnie G. Thompson) National Science Writers Association National Meeting, October 20, Columbus, Ohio.

*Global Climate Change: Why Understanding the Scientific Enterprise Matters. Climate Change Teach-In: Understanding Climate Change Risks and Identifying Opportunities for Mitigation & Adaptation in Ohio*. Byrd Polar Research Center, May 15, The Ohio State University, Columbus, Ohio.

*Climate Change: The Evidence, People and Our Options* (joint with Lonnie G. Thompson), The Clay Center for the Arts and Sciences, Charleston, West Virginia, hosted by the Kanawha Garden Club and the Clay Center, March 10.

*Global climate change: The evidence, challenges and solutions.* Ohio Interfaith Power and Light (streamed live to Dayton, Cleveland and Cincinnati from Columbus OH), January 19.

2013 *Global climate change: The basics and what Earth's glaciers and ice sheets tell us.* Engineering 4891-10 Seminar on Sustainability, November 1, The Ohio State University, Columbus, Ohio.

*Understanding Global Climate Change: Evidence from Earth's Ice Cover.* Lifelong Learning Institute of Central Ohio Technical College, Westminster-Thurber. June 7, Columbus, Ohio.

*Past and Contemporary Climate Change: Evidence from Earth's Ice Cover*, 17<sup>th</sup> Annual W.S. Jardetzky Lecture, Lamont-Doherty Earth Observatory, Columbia University's Earth Institute, April 5, New York, New York.

*Understanding Global Climate Change: Evidence from Earth's Ice Cover*, March 20, Greater Columbus Council of Garden Clubs, Columbus, Ohio.

*Understanding Global Climate Change: Evidence from Earth's Ice Cover*, March 15, University of Dayton, Department of Geology, Dayton, Ohio.

*Understanding Global Climate Change: Evidence from Earth's Ice Cover*, January 18, Institute of Tibetan Plateau Research, Chinese Academy of Science, Beijing, China.

2012 Invited Presentation: *Understanding global climate change: Evidence from Earth's ice cover*, October 22, Worthington Presbyterian Church, McCormick Fellowship Dinner, Columbus, Ohio.

Invited Presentation: *Understanding global climate change: Stories from the ice.* Sigma Xi North Central Regional Meeting, October 13, Columbus, Ohio.

2011 Invited Presentation: *Understanding global climate change: Evidence from Earth's ice cover.* Oregon Museum of Science and Industry, August 4, Portland, Oregon.

Invited Presentation: *Understanding global climate change: Evidence from Earth's ice cover.* August 4, Department of Geology, Portland State University.

Invited Presentation: *Understanding global climate change: Stories from the ice.* Engineering 694: Seminar on Sustainability, February 28, The Ohio State University, Columbus, Ohio.

2010 Invited Presentation: *Past and contemporary climate change: Evidence from Earth's ice cover*, 5<sup>th</sup> Annual Carolina Climate Conference, October 7, given by videoconference.

Invited Presentation: *Climate change: The evidence and our options*, October 5, Midwest Groundwater Conference, Banquet Speaker.

Invited Presentation: *Unique insights to Earth's climate history preserved by its ice cover.* Geological Sciences Colloquium Presentation, September 16, Brown University, Providence, Rhode Island.

Invited presentation: *Understanding Global Climate Change: Stories from the Ice*, Ohio State University's Program 60, September 9, Fawcett Center, Columbus, Ohio.

- Invited presentation: *Understanding climate change: Stories from the ice*. June 5, Columbus State College, Lifelong Learning Institute.
- 2009 Invited presentation: *Understanding Climate Change: Stories from the Ice*. November 19, OSU Alumni Club, Buckeye Hall of Fame, Columbus Ohio.
- Invited presentation: *Ice core paleoclimatology*. Geography H410, Bryan Mark, Instructor, October 5.
- Invited presentation: *Understanding global climate and environmental change*. Worthington Presbyterian Church (a men's study group), October 26.
- Invited participant (Webinar – my first): October 15, 2009. Webinar Title: *Climate Change and Ohio's Economy: Implications of Cap and Trade for Ohioans*. My presentation: *Understanding Global Climate and Environmental Change*. Sponsor, OSU Extension's Resources for Climate Change Education, October 15.
- Invited presentation: *Understanding global climate change: Unique insights preserved in the ice*. International Studies Exchange Program, group of Brazilian students visiting OSU, May 14.
- Invited presentation: *Ice core paleoclimatology*. Geography H410, Bryan Mark, Instructor, May 11.
- Invited presentation: *Ice core paleoclimatology*, given to a geosciences class from John Carroll University (OH) visiting Byrd Polar Research Center, April 24.
- Invited presentation: *Ice core paleoclimatology*, given to an honors geosciences class from Ashland University (OH) visiting Byrd Polar Research Center, April 16.
- Invited presentation: *Understanding global climate change: Unique insights preserved in the ice*. Public Policy & Management Graduate Seminar 880, OSU, Andy Keeler, Professor, April 14.
- 2008 Invited presentation: *Understanding climate change: Stories from the ice*. University of Ashland, Ashland, Ohio, November 20.
- Invited presentation: *Understanding climate change: Stories from the ice*. Annual Meeting of the Ohio section of the American Institute of Professional Geologists, Columbus, Ohio, November 14.
- Presentation: *Ice core paleoclimatology*, College of Wooster class on global climate change visit to OSU's Byrd Polar Research Center, November 10.
- Invited presentation: *Unique insights to Earth's climate history preserved in its cryosphere*. Department of Geography Colloquium, November 7, University of California, Los Angeles, California.
- Invited presentation: *Global climate change*. Unity Dinner and Dialogue. Kuhn Honors House, The Ohio State University, Columbus Ohio, October 30.
- Invited presentation: *Ice core paleoclimatology*. Geography H410, Bryan Mark, Instructor, October 29.
- Invited Presentation: *Understanding climate change: Stories from the ice*. OSU Parent & Family Weekend, October 18 (150 parents & prospective students).
- Invited Participant, Panel discussion, The challenge of climate change, The McCormick Climate Change Conference, October 13, The Ohio State University.

Invited Presentation, *Unique insights to Earth's climate history preserved in its cryosphere*. The Edward J. Taaffe Physical Geography Colloquium, October 9, Department of Geography, The Ohio State University, as part of the Department's Centennial Celebration.

Invited Presentation: *Climate change – A polar perspective*, Department of Geology University of Otago, Dunedin, New Zealand, September 23.

Invited Participant, Café Scientifique, Topic: Climate change - unfinished business, University Staff Club, University of Otago, Dunedin, New Zealand, September 23.

Invited Presentation: *Understanding Climate Change*. 2008 Faith, Reason and World Affairs Symposium (Changing with the Climate: How Fast? How Far?) Concordia College, Moorhead, Minnesota, September 16.

Invited Presentation, *Stories from the ice: Past, present, and future climate change*, First Community Village, Columbus, Ohio, September 9.

Presentation: *Ice core paleoclimatology and Earth's disappearing ice*. City & Regional Planning Master's Program, The Ohio State University, July 17.

Invited Presentation: *Understanding climate change: Stories from the ice*. Ohio Governor Strickland's Commission on Recreation and Resources, State Department of Natural Resources, June 12.

Invited Presentation: *Stories from the Ice: Past, Present and Future*. The 2008 Sigma Xi Banquet (for the Ohio Chapter of Sigma Xi), The Blackwell, Columbus, Ohio, May 29.

Invited Presentation: *Glaciological Evidence for Global Climate Change: Implications for our Future*. Geosciences Symposium on The Past as a Clue to the Future, Department of Geophysics and Planetary Sciences, University of Tel Aviv, Israel, May 20.

Invited Presentation: *Ice Core Contributions to Our Understanding of the Climate System: Past and Present*, Geography 597.02 (Integrated Earth Systems), The Ohio State University, Dr. Francis Otieno's class, May 12.

Invited Presentation: *Understanding climate change: Stories from the ice*. Workshop for New Generation of Polar Researchers sponsored by the National Science Foundation, La Foret, Black Forest, Colorado, May 5-9.

Invited Presentation: *Global climate change: Stories from the ice*. The Climate Forum associated with the Inauguration of President David Williams, University of Alabama, Huntsville, Alabama, May 9.

Invited Presentation: *Stories from the Ice: Past. Present and Future*, The University Women's Club, OSU Faculty Club, April 7.

Invited Presentation: *Understanding global climate change: Unique insights preserved in the ice*. Public Policy & Management Graduate Seminar 880, OSU, Andy Keeler, Professor, April 1.

2007 Invited Presentation: *Understanding Climate Change: Stories from the Ice*, Noon lecture for Business Operations, The Ohio State University, December 3.

Invited Presentation: *Understanding Climate Change: Stories from the Ice*, Keynote Speaker, 2007 Environmental Conference entitled Climate Change: The Power of One, sponsored by Stark County Parks District, Massillon, Ohio, November 16.

Invited Presentation (Lunch Keynote Speaker): *Climate Change and Sustainability: An Overview* (joint with David Robinson of The Climate Project), Central Ohio Summit on Sustainability and the Environment, Mid-Ohio Planning Commission, Columbus Convention Center, Columbus, Ohio (~500 attendees), November 14.

Invited Presentation: OSU Colleges of the Arts and Sciences Renaissance Rediscovery Weekend, *Climate Changes: Stories from the Ice*, November 2.

Invited Presentation: Faculty Representative at the President's Convocation 2007 for First Year Experience (entering class of 2007), The Ohio State University, September 17.

Invited Lecture. *Understanding Climate Change*. Leadership Ohio Class XIV [Conservation in Ohio], Cambridge, Ohio [The Wilds in Cumberland, Ohio], September 14.

Invited Lecture: *A Time to Commit: Global Warming (Climate and Environmental Change): The Science*. Hadassah's 93<sup>rd</sup> National Convention, New York City, July 18.

Invited Lecture: *Antarctic Contributions to our Understanding of Climate Change: Past and Present*. International Studies 597.02 (Antarctic Marine Ecology and Policy), class lecture, The Ohio State University, Columbus, Ohio, April 30.

Invited Lecture: *Global Climate Change: Past and Present*. Covenant Presbyterian Church's Stewardship of Our Earth Sunday Morning Forum, Upper Arlington, Ohio, April 28.

Invited Lecture: *Unique Insights to the Earth's Climate History Preserved in its Cryosphere*. Public Policy and Management 880 (Climate Change and Public Policy), Dr. A. Keeler, April 3.

Invited Lecture: *Abrupt Climate Change: Past, Present and Future*. The 2007 Hammond Lecture, Department of Geography, University of Tennessee, March 29.

Invited Lecture: *Evidence for Global Climate Changes from the Earth Cryosphere*, The NSF Advance Program Lecture, Univ. of Arizona, Tucson, March 22.

Invited Lecture: *The adventure and science of glacier research*. Beloit Memorial High School, Program was primarily for middle school student from Beloit and the surrounding area: ~1000 in attendance, February 23.

Invited Lecture: *Abrupt Climate Change: Past, Present and Future*. The Roy Chapman Andrews Distinguished Explorer Award Lecture, Beloit College, Beloit, Wisconsin, February 23.

2006 Invited Lecture: *Abrupt Climate Change: It Has Happened in the Past and It Might be Happening Now!* AGU Public Lecture, Annual Meeting of the American Geophysical Union, December 11, San Francisco, California.

Invited Lecture: St. Andrews St. Andrew Presbyterian Church Adult Education Program, *Global Climate Change: Stories from the Ice*. Columbus, Ohio, December 3.

*Abrupt climate Change and Our Future*. SBS Alumni Society Sponsored Event. November 8.

Invited Lecture: *Evidence for global climate changes from the Earth cryosphere*. Microbiology 301 class lecture, Olli Tuovinen, Professor, October 10.

*Climate Change (Past, Present and Future): Stories from the Ice*. The Lifelong Learning Institute of Columbus State Community College, September 26.

Climate Change: How to Read the Evidence? and discussion of Al Gore's film: An Inconvenient Truth. St. John's Episcopal Church, Columbus, Ohio, July 18.

Panel Discussion of Al Gore's film, An Inconvenient Truth, after its opening at the Drexel Gateway Theater, Columbus, Ohio, June 21.

Brief Presentation: OSU - SBS Honors Freshmen Orientation, July 13.

Workshop presentation leader. Lead a half day workshop on Climate Change, Past, Present and Future as part of a week long summer workshop for teachers offered as Geological Sciences 850: Climate Change as Seen in the Cryosphere, June 13.

Invited Presentation: One of three faculty presenters as part of the Geography Department's participation in 2006 President's Salute to Undergraduates, May 3.

Invited Presentation: *Unique insights to the Earth's climate history preserved in its cryosphere*, in honor of the Inauguration of Stephen Kopp, President of Marshall University, April 21.

Invited Presentation. *Unique insights to the Earth's climate history preserved in its cryosphere*, given to scientists from Tomsk, Russia as part of the University Partnership sponsored by the Bureau of Education and Cultural Affairs, U.S. State Department and held at the Fisher College of Business, May 10.

Invited Lecture: *Unique insights to the Earth's climate history preserved in its cryosphere*, PPM 880 (Climate Change and Public Policy), Dr. A. Keeler, 04/11/06.

Invited Lecture: *Abrupt Climate Change and Our Future*, The Ohio State University, Media Day, Longaberger Alumni House, April 10.

Invited Lecture: *Unique insights to the Earth's climate history preserved in its cryosphere*, The Ohio State University - Lima Campus, Honors Colloquium, February 24.

Invited Lecture: *Unique insights to the Earth's climate history preserved in its cryosphere*, Columbus Rotary Club, Convention Center, Columbus, Ohio, February 20.

Invited Lecture: *Unique insights to the Earth's climate history preserved in its cryosphere*, University of Cincinnati, Ohio, Depts. Geography and Geology, February 3.

Invited Lecture: *Climate Change: How to Read the Evidence?* The Wellington School, Columbus, Ohio, January 20.

2005 Invited Lecture: *Unique insights to the Earth's climate history preserved in its cryosphere*. Microbiology 301 class lecture, Olli Tuovinen. Professor, November 1.

Invited Lecture: *Climate Change: How to Read the Evidence?* Upper Arlington Seminar Series: Great Issues Series, Upper Arlington Municipal Center, September 28.

Open Line with Fred Anderle, WOSU Radio, September 16.

Research highlighted on Sixty Minutes Australia program, Meltdown, September.

Invited Lecture: *Unique insights to the Earth's climate history preserved in its cryosphere*, Department of Earth and Atmospheric Sciences, Georgia Institute of Technology, Atlanta, Georgia, September 22.

Invited Lecture: Stone Lab (OSU), *Evidence for climate change: Unique insights to the Earth's climate history from glaciers*, August 4.



Invited presentation (by nomination and selection): University Distinguished Lecture, The Ohio State University, *Unique insights to the Earth's climate history preserved in its cryosphere*, May 16.

Invited presentation: *Unique insights to the Earth's climate history preserved in its cryosphere*. Harvard Medical School of Public Health, April 12.

Invited participant: Briefing on U.S. Energy Scenarios for the 21st Century sponsored by the Pew Center (Washington D.C.), Founders Club, Columbus Ohio, March 31 (invited).

Invited presentation: *Glaciers, Ice Cores and Abrupt Climate Change*. Annual Meeting of the OSU Department of Ophthalmology, Hilton Inn at Easton, Columbus, March 4. (Ellen gave the first half of the talk and Lonnie gave the last half of the talk).

Invited presentation: *Unique insights to the Earth's climate history preserved in its cryosphere*. Department of Geological Sciences, The Ohio State University Colloquium, February 24.

Invited presentation: *Glaciers, Ice Cores and Abrupt Climate Change*. Winter College 2005, Naples Florida, February 19. (Ellen gave the first half of the talk and Lonnie gave the last half of the talk).

Invited presentation: *Ice cores as windows on our past and keys to our future*. Lunch & Learn Series at the OSU Research Foundation, February 8.

2004 The Ice Core Paleoclimate group hosted roughly 800 students (K through College) on various tours of our research facility. This includes slide shows, visits to the labs and Q&A sessions.

Took the BPRC lead in organizing Al Gore's visit to OSU and the Byrd Polar Research Center. Worked with the John Glenn Center to organize the Weigel Hall lecture, April 21.

2003 Invited presentation: *Two decades of glaciology on the Polar Plateau*. American Polar Society Symposium entitled Women's Roles in Polar Regions: Past, Present and Future. The Ohio State University, October 9 -10.

Participant in the OSU Honors Program Orientation for Incoming Exploratory Students, July 17.

Invited presentation: *Ice Cores: Windows on the Past - Keys to our Future*. Keynote Presentation: Environmental Molecular Science Institute, The Ohio State University, June 9.

Invited presentation: *Ice Cores: Windows on the Past - Keys to our Future*. The 8<sup>th</sup> Annual T. H. Wu Lecture, Department of Civil, Environmental Engineering and Geodetic Science, The Ohio State University, May 22.

Fireside Chat for the OSU Honor's Program, *Recent climate changes: Stories from the ice*, presented January 22.

2002 Invited Presentation: *Recent climate changes: Stories from the ice*, presented to a graduate class at the Harvard School of Public Health and Medicine, October 3.

Participation in the OSU Family Weekend: Ice Core Lecture, Tour, Video and Hands-on Activities for 100 parents and students. Five members of the ice core group hosted 70 parents and students for 2 hours (7:30 to 9:30 pm) on October 18.

Invited local presentation: Keynote Speaker at Women in Science Day at OSU sponsored by the Association for Women in Science of Central Ohio (Ohio Union). Title: *Reconstructing Earth's climate History from Ice Cores (A cool career in science)*, May 24.

Represented OSU at the Coalition for National Science Funding Exhibit and Reception at the Rayburn House Office Building in Washington, D.C., May 15, 2002.

Invited Presentation: *Climate Crazy: Not the Exception but the Rule*, presented at the University of Stockholm as one of 5 talks for Vegadagen (Vega Day) in honor of the presentation of the 2002 Vega Medal to Lonnie Thompson by the Swedish Society for Anthropology and Geography.

Invited Presentation: *Ice Cores: Windows on the Past, Keys to the Future*, presented at the University of Delaware under the sponsorship of the W.L. Gore Company (invented Goretex).

Organized and chaired a set of 5 sessions at the AAG entitled *The Changing Cryosphere* as part of my responsibilities as Chair of the AAG Cryosphere Specialty Group.

Presentation: *Ice cores: Windows on our Past and Keys to Our Future*. An invited presentation by the John Deaver Drinko Academy, Marshall University, Huntington, West Virginia, March 8.

Presentation: *Reconstructing Earth's Climate History from Ice Cores*, to the public at the Upper Arlington Library, March 12.

Presentation: *Reconstructing Earth's Climate History from Ice Cores*, to Freshmen in the First Year Experience Program at Ohio State, March 5.

Participation in OSU's Winter College event in Naples Florida where I gave a lecture entitled *Will you someday buy beachfront property in Orlando? (Or What can we learn about climate change and sea level rise from ice cores)*. February 22-23.

2001 Participation in a successful Academic Enrichment Proposal among Byrd Polar, Geography and Geological Sciences to Develop a Premier Program in Glacial Assessment and Research with Emphasis on both Physical and Human Dimensions. (50% new faculty member, 100% new research scientist and 3 years of support for three post-docs).

Invited presentation. *Deciphering Earth's climate and environmental history from ice cores*. One of two lectures comprising a seminar entitled Time Capsules of Earth's Climate History sponsored by the Land Use and Environmental Change Institute (LUECI), University of Florida, Gainesville, December 2.

Invited presentation to the Tri-Village Seratoma Club, Columbus Ohio. I provided a slide presentation and overview of the ice core research program here at OSU.

Invited Presentation and Site Visit to University of Michigan's Biological Research Station in Pellston, Michigan. Presentation: *Ice Cores: Windows on the Past - Keys to the Future* and the visit was to interact with researchers and students participating in the BART (Biosphere Atmosphere Research Training) Program.

Participated in the D.C. Climate Education Day (June 24 and 25) sponsored by the Union of Concerned Scientists. I made calls on the two Ohio Senators and three Representatives to discuss the scientific concern regarding anthropogenic climate change and the need to encourage energy conservation measures, the development of alternative energy sources, implementation of reduction measures for the emission of 4

gases (to include CO<sub>2</sub> and not just the 3 proposed by Bush) and extending the CAFÉ standards to SUVs.

Organized and executed an Interdisciplinary Seminar Series: Humans and Climate: An Historical Examination of Cultural Responses to Drought and Aridification, May. (With colleagues from Anthropology, Geography, Geological Sciences and Byrd Polar Research Center).

Attended NSF's Office of Polar Programs Advisory Committee meeting. May 3-4; November 5-6.

Served on an NSF review panel for the ATM Division's Earth System History (ESH) Program, May 7 -10.

Served as a judge for the Denman Undergraduate Research Forum (OSU) on May 21.

Hosted a Saturday afternoon seminar and tour for the Tri-State Explorer's Club members (at BPRC). This included a slide presentation and tour of the facilities, May 19.

Invited presentation: *Ice cores from high latitudes and implications for climatic change*. The 2001 Quay Hebrew Lecture, Brigham Young University, March 28.

Invited presentation: *Ice Cores as Paleoclimate Indicators: Advantages and Limitations*. Sponsored by the U. of Minnesota's NSF Research and Graduate Training Grant to the Limnological Research Center, University of Minnesota, April 3.

Invited presentation: *Ice Cores: Windows on the Past - Keys to the Future*. Department of Geological Sciences Colloquium, University of Minnesota, April 4.

2000 Invited presentation: *Ice cores: Windows on the past - Keys to the future*. London Quaternary Lecture #64, University of London, Royal Holloway, December 6.

Invited presentation: *Ice cores: Windows on the past - Keys to the future*. Department of Geography, University of Edinburgh, December 4.

Represented the Geography Department in the SBS portion of the OSU Focus Weekend. Presented a brief overview of the ice core research, October 12.

Invited Participant: Epilog (Environmental Processes of the Ice Age: Land, Oceans and Glaciers) Meeting [Ice Sheets and Sea Level at the Last Glacial Maximum], Mt. Hood Oregon, October 1-5. Presented a poster summary of global glacier retreat and chaired a session.

Attended the Annual PARCA investigators' Meeting and presented results from the current year. This is a NASA funded project. September 20-23.

Participant: Interviewed in a Dateline Discovery Special on Climate Change and Global Warming. This included footage taken in our clean rooms and cold rooms as well as the one on one interview with Chris Bryson. This was aired nationally.

Invited presentation: *Antarctica: Exploration, Ice Cores and Global Climatic Change*. Spokane Community College, Spokane, Washington, May 11.

Panel Discussant: *Think Big: How to Develop Successful Collaborative Proposals*. AAG Annual Meeting, Pittsburgh, April 5.

Seminar organizer: Interdisciplinary Seminar Series *Global Climate and Environmental Change*. Winter Quarter. (Six invited speakers from outside OSU).

- 1999 Invited presentation: The West Virginia Interfaith Global Climate Change Training Event. Jackson's Mill, Weston, WV, December 5.
- Invited presentation: *Ice Cores: Windows on the past- keys to the future*. NIST Colloquium Series, October 29.
- Participant: Earth in the Hot Seat (interviewed and footage from field and lab were used). This was aired nationally on Discovery Channel.
- 1998 Invited speaker: *Glaciological Evidence for Ancient and Recent Environmental Changes*. Annual Meeting of Glass Engineers, Columbus, Ohio, October 27.
- Invited Participant: First International Conference on Mars Polar Science and Exploration. Houston, Texas, October 18-22.
- Invited speaker: Midwest Interfaith Global Warming Conference. Josephinum, Columbus, Ohio, October 25.
- Two Invited presentations: (1) *Ice Cores: Windows on the past and key to the future*. (2) *Ice core histories from high resolution ice cores: changing paradigms*. Central Michigan University, Department of Geography, April 6.
- Invited Presentation: *Laboratory on Ice: An Antarctic Perspective*. Smithsonian Institution Classroom on the Mall Series: Polar Connections, April 16.
- Invited Presentation: *Ice Cores: Windows on the past and keys to the future*. President's Club Annual Meeting, The Ohio State University, April 18.
- Invited Presentation: *Windows on the past and keys to the future*. COSI, Columbus, Ohio, April 28.
- Workshop Leader: Chautauqua Short Course: The Polar Regions: Role in Global Change Studies, June 15-17 at Byrd Polar Research Center with funding from NSF-OPP.
- Attend Annual PARCA Workshop, Wallops Island, Virginia, October 5-6.
- Invited Participant: First International Conference on Mars Polar Science and Exploration. Houston, Texas, October 18-22.
- Invited speaker: Midwest Interfaith Global Warming Conference. Josephinum, Columbus, Ohio, October 25.
- Participant: East Lakes Regional Meeting of the AAG. Organized a set of climate related presentations and gave one presentation, October 30.
- 1997 Invited Presentation: *Glaciological evidence of recent environmental changes*. Guest lecturer in a class entitled: Human Health and Global Environmental Change held in the Harvard School of Public Health, October 9.
- Al Gore Climate Event: I provided a 5 minute presentation on the recent retreat of glaciers and introduced Vice President Al Gore at a Climate Event held at Glacier National Park, September 2. We then hiked to the Grinnell Glacier.
- Community outreach: Invited speaker at First Community Village as part of their program entitled Environmental threats to stability: the role of population growth. August 26.
- Invited Workshop Participant: Paleo-history of the Western Antarctic Peninsula. ICESS, UCSB, Santa Barbara, California, August 20 - 23.
- Organizer: Chautauqua Short Course: The Polar Regions: Role in Global Change Studies, June 23-26 at Byrd Polar Research Center with funding from NSF-OPP.

- Invited Presentation: *Ice Cores as Windows on the Past*. Woods Hole Oceanographic Institution: Geodynamics Lecture Series, April 24.
- 1996 Invited presentation to the OSU Women's Club Annual Couples Brunch: Title: *Science and Adventure: Investigating Global Change*, January 21.
- Presented lecture and activity as part of the Earthwatch Program sponsored by the Byrd Center with funding from BETHA, March 2.
- Participate in the TESH Workshop (Terrestrial Aspects of Earth System History) in Portland Oregon. Chair of the Working Group on ESH Records: High Resolution - annual to interannual time scales. Workshop was sponsored by NSF and AGU to design a science plan for the terrestrial component of the Earth System History Program of the interagency U.S. Global Change Research Program (USGCRP), March 9-12.
- Invited speaker: Institute for the Study of Planet Earth at the U. Of Arizona. Title: *Ice cores as windows on the past and keys to our future*, March 25.
- Invited speaker: Title: *Ice cores from the Antarctic: Windows on the past, keys to our future*. A special science program for high school students associated with the annual Alpheus Smith Lecture, Ohio State University, Physics Department, April 11.
- Invited speaker: *Climate Histories from high resolution ice cores*. Department of Geography, University of Wisconsin, Madison, Wisconsin, April 18.
- Invited speaker: *Ice cores: Windows on the past, keys to our future*. The Glenn Trewartha Annual Lecture, Department of Geography, University of Wisconsin, Madison, Wisconsin, April 19.
- Invited presentation: *Glaciological Evidence for Recent Environmental Changes*. The Ozone Action Round table held at the Press Club, Washington, D.C., June 24.
- Attend the WAIS (West Antarctic Ice Sheet) Workshop, September 24-27.
- Invited speaker: *Ice cores: Windows on the past, keys to our future*. Department of Geography, University of Delaware, October 11.
- Presented an overview of the role of ice cores in paleoclimate reconstruction at a NASA sponsored Workshop on Cryobot Probes for Europe and Earth, JPL, Pasadena, October 28.
- Invited Presentation: *Antarctic ice core studies*. Inter-American Institute Workshop on Climate Variability in the Americas from High Elevation Ice Cores, Bariloche, Arkansas, December 11-13.
- 1995 Invited presentation: *Holocene climate histories from polar ice cores*. Institute of Arctic and Alpine Research, October 27.
- Invited speaker: *Ice cores: Windows on the Past: Keys to our Future*. NASA Seminar on New Frontiers in Climate Research, NASA Headquarters, Washington, D.C., May 1.
- Invited speaker: *Ice cores as windows on Earth's past climate*. Ball State University, Dept. of Geology (sponsored by Association for Women Geoscientists), March 17.
- Invited speaker: *Ice cores as paleoclimatic windows on the past and possibly the future*. Bowling Green University, February 28.
- 1994 Invited Speaker: *Conducting ice core drilling programs in the Antarctic: a decadal perspective*. National Science Foundation's Antarctic Orientation Conference, September 9.

Invited Speaker: *Ice cores as paleoclimatic windows on the past and possibly the future*. Outstanding Women in the Geosciences Lecture Series, Pennsylvania State University, October 18.

Invited Speaker: *Ice cores as paleoclimatic windows on the Earth's past climate*. Honors Program, Dept. of Geological Sciences, The Ohio State University, Mansfield, Ohio, October 20.

Invited Speaker: *High resolution ice core histories from Antarctica*. Physics Institute, University of Berne, Switzerland, October 11.

Visiting scientist and lecturer for the National Youth Science Camp, Bartow, West Virginia. Provided science lecture and discussions with 100 high school seniors (top two science students from each state), July 2.

IAI (Inter-American Institute for Global Change Research) Planning Meeting, NSF, Arlington, Virginia, June 3.

Poster presented: *Recent increase in South Pole snow accumulation*, American Geophysical Union, Spring meeting, Baltimore, May 27.

Invited speaker: (1) *How ice cores tell us about the Earth's past climate* to Physical Geography class, (2) *Ice cores: A key to the Earth's past climate* to major donors to the Science '93 Initiative at the President's home, April 14, Marshall University.

Invited Speaker: *Recent changes in snow accumulation at South Pole*. Univ. Wash. (Seattle) Quaternary Research Center's Seminar Series (Is the climate warming? Examining recent climatic change), March 1.

UCAR, University Relations Committee meeting. Scripps, La Jolla, California, April 4-6.

1993 Invited Participant: Workshop: Polluted or Pristine? Scientific, cultural and policy implications of pre-industrial anthropogenic impact on the global carbon cycle. The East-West Center, Honolulu, Hawaii, September 17-19.

Invited Speaker: *Role of ice core studies in Global Change Research*. Dept. of Space Physics and Astronomy's Earth System Science Colloquium, Rice University, Houston, Texas, March 15,16.

Invited Speaker: *A Geographer's view of Global Change*. Geological Sciences Alumni Society Seminar, The Ohio State University, September 11.

1992 Invited Speaker: *Ice cores as paleoclimatic libraries*. Distinguished lecture series. Department of Geology and Geophysics, University of Utah, Salt Lake City, Utah, May 29.

General audience presentation: *Ice cores as a window on the past*. Cultural Arts Commission of Upper Arlington, Columbus, March 12, 1992.

Panel member for the American Geophysical Union's Space Exploration Initiative.

Invited participant. American Geophysical Union Leadership Conference. May 8-11.

1991 First Planning Meeting of the Pilot Cooperative University -Based Program in Earth System Science Education sponsored by NASA, Washington, October 2-3, 1991.

Invited speaker. National Science Foundation Division of Polar Programs Young Scholars Program, Louisiana Universities Marine Center, Chauvin, Louisiana, October 4-6.

- Invited participant (2.5 days) in the Program for Leadership in Earth Science Education (under auspices of an NSF grant): July 18-20, at The Ohio State University.
- Invited participant in U.S. Global Change Research Program Task Group on Education Workshop sponsored by the Committee on Earth and Environmental Sciences (under FCCSET), Univ. of Rhode Island, July 14-17.
- 1990 Invited speaker: Kent State University. Geography Colloquium Series. *Ice cores as paleoenvironmental libraries: Contributions to global change research*. November 16.
- 1989 Invited participant in the UCAR-OIES Institute on Global Change. *Explaining records of the past*. July 23 - August 5.
- Invited Speaker: *Paleoclimate and ice cores*. University of Dayton, March 31.
- Invited Speaker: *Glaciological studies at Siple Station, Antarctica: ice core 500-year paleoclimatic record*. Purdue University, April 18.
- Invited Speaker: (1) *Role of ice cores in global change*, (2) *Paleoclimatic reconstruction from Antarctic ice cores*. University of Minnesota, March 2.
- Invited Speaker: *The drought of '88: its future impact*. Annual convention of Farm and Power Equipment Retailers. Columbus, Ohio, January 26.
- 1988 Invited Speaker: *Ice cores: paleoclimatic libraries*. General Motors Research Laboratories, Warren Michigan, October 25.
- Ice core analyses: Understanding past, present and future global weather*. Annual Meeting of the Oregon Academy of Science and Sigma Xi, Portland, Oregon, February 5 (invited).
- Invited Speaker: *Global change and the role of ice core paleoclimatology*. Wooster Sigma Xi Club, Wooster, Ohio, April 28.
- Invited Speaker: *Paleoclimatic reconstruction from ice cores*. Annual meeting of Northern Michigan University Sigma Xi, Marquette, Michigan, April 6.
- Invited Speaker: *Potential of ice cores for paleoclimatic reconstruction*, Wittenberg University, Springfield, Ohio, February 11.
- 1987 Invited Speaker: *Reconstruction of paleoclimate from ice cores*. NASA Colloquium, October 23.

## Selection of Online Videos

Byrd Polar and Climate Research Center: Ice core freezer expansion campaign:  
<https://vimeo.com/239886926> (2017)

CNN International Interview with Christine Amanpour, 2012  
<https://www.youtube.com/watch?v=p48A5QLI1ZM>

Alumni Distinguished Achievement Award, College of Arts and Sciences, The Ohio State University, 2012, <https://www.youtube.com/watch?v=me5dRTLpBEU>

WOSU Public Media, Interviews with Lonnie G. Thompson and Ellen Mosley-Thompson, 2011

(1) Lonnie and Ellen Mosley-Thompson Describe Drilling Expeditions  
<https://www.youtube.com/watch?v=vzx6B1Lg2Qs>

- (2) Ice Core Discoveries at Byrd Polar Research Center  
<https://www.youtube.com/watch?v=78ZBp1tih1A>
- (3) Global Climate Change Research at Byrd Polar Research Center  
<https://www.youtube.com/watch?v=jbNs0V-bjCk>
- (4) Collecting History Before it Melts Away  
<https://www.youtube.com/watch?v=gWSBkedAMZE>

Ice Core Research and Preservation, WOSU Public Media, 2010

[https://www.youtube.com/watch?v=miRC3pf\\_42U](https://www.youtube.com/watch?v=miRC3pf_42U)

<https://www.youtube.com/watch?v=YCatVJgOHKq>

Inspiring West Virginians – The Ice Hunters, Documentary Profile, West Virginia Public Broadcasting, 2010, <https://www.youtube.com/watch?v=eNmYLvvE7iQ>

NSF sponsored LARISSA Ice Core Drilling Project, Antarctic Peninsula  
<https://vimeo.com/album/3884206/video/127510785>

### Mentor and Advisor

- 2013 Bradley Goodwin, PhD student (ASP), Dissertation title: Recent environmental changes on the Antarctic Peninsula in an Ice Core from the Bruce Plateau, graduated August, 2013.
- 2013 Stacy Porter, PhD, Atmospheric Sciences, Department of Geography, Dissertation title: Assessing Whether Climate Variability in the Pacific Basin Influences the Climate over the North Atlantic and Greenland and Modulates Sea Ice Extent, graduated May 2013.
- 2012 Lindsey Higgins, M.A. student (Geography, Climatology, Thesis title: Construction and Analysis of an Ice Core-Derived Melt History from West Central Greenland (1765-2006), graduated June 2012.
- 2008 Lijia Wei, Ph.D. Atmospheric Sciences, Department of Geography, Dissertation title: Statistical analysis of the atmospheric sulfate history recorded in Greenland ice cores, graduated December 14, 2008.
- 2004 Deborah Bathke: Ph.D. Dissertation title: Meteorological controls on the variability of net accumulation over Greenland, March, 2004.
- 2003 Chris Readinger, M.S. Atmospheric Science (Geography), Thesis title: The North Atlantic and Pacific Oscillations and their imprint on Greenland's climate record, September, 2003.
- 2003 Jeff Johnson, M.A. Geography, Thesis title: Volcanic signatures in Greenland ice cores: An investigation of the volcano-climate connection with an emphasis on the Laki Eruption, December, 2003.
- 2000 Todd Albert: M.A. Geography, Thesis title: Investigations of the recent changes of the tropical Quelccaya Ice Cap, Peru.
- 1997 Neil Mackinnon: M.A. Geography, Thesis title: The application of remote sensing and geographic information system technologies to the monitoring of montane glaciers: A case study of the Quelccaya Ice Cap, Peru.



- 1995 Bryan Mark: M.A., Geography: Thesis Title: Temporal and spatial analysis of South Pole snow accumulation.
- 1995 Robert Hellstrom: M.S. Geography - Atmospheric Science, Thesis title: The abrupt spring temperature rise and pressure increase over the Greenland ice sheet.
- 1993 Beatrice English: M.S., Atmospheric Sciences Program, Thesis Title: Contemporary meteorological regime over the Tibetan Plateau: Evidence for ENSO and monsoonal variability.
- 1992 Pauline Deutz: M.A., Department of Geography: (Co-Advisor with Jeff Rogers), 1992. Thesis Title: Variations in the concentration, size distribution and morphology of microparticles preserved in a central Greenland ice core over the last 150 years.

### *General Examination Committees*

- 2017 Jerry Zhou, PhD, Atmospheric Sciences (Geography)
- 2015 Dan D'Amico, PhD, Atmospheric Sciences (Geography)
- 2014 Donaldi Permana, School of Earth Sciences
- 2011 Jeff La Frenierre, PSE, Geography
- 2009 Kyung-In Huh, Geography
- 2005 April Luginbuhl-Mather, PSE, Geography
- 2005 Daniel Temple, Anthropology, Graduate School Representative
- 2005 Man Xu, Ph.D., Chemistry, ESGP
- 2005 Jason Davis, M.A., PSE, Geography
- 2003 Sheng-Hung Wang, PhD, Atmospheric Sciences (Geography)
- 2002 Brent Christner, PhD, Microbiology, Committee Member
- 2002 Kevin Weakley, PhD, Atmospheric Sciences (Geography)
- 2002 Jill Coleman, PhD, Climatology (Geography)
- 2001 Lin Li, PhD, Atmospheric Sciences (Geography)
- 2001 Zhichang Guo, Atmospheric Sciences (Geography)
- 2001 Debroah Bathke, Atmospheric Sciences (Geography), chair
- 1998 Robert Hellstrom, PhD, Atmospheric Sciences (Geography)
- 1997 Wu, Ph.D. Atmospheric Sciences Program
- 1997 Maurice McHugh, PhD, Geography
- 1997 Hongxing Liu, PhD, Geography
- 1997 Chung-Chieh Wang, PhD, Atmospheric Sciences (Geography)
- 1996 Cindy Sorrensen, PhD, Geography
- 1994 Jorge Carrasco, Ph.D. Atmospheric Sciences Program
- 1994 Carol Landis, PhD, Ed Studies: Advisor: Dr. Vic Mayer
- 1993 Timothy R. Boyer, M.A. (Climatology)

- 1993 John Kelley, Ph.D. Atmospheric Science Program  
 1993 Una NiChaoimh, Ph.D. Atmospheric Sciences Program

*Thesis or Dissertation Committees*

- 2018 Lingwei Li, M.S. Atmospheric Sciences (Geography)  
 2018 Jeffrey Gunderson, M.A., Geography  
 2018 Forrest Schoessow, PhD, Geography  
 2017 Jerry Zhou, M.S. PhD, Atmospheric Sciences (Geography)  
 2015 Dan D'Amico, PhD, Atmospheric Sciences (Geography)  
 2014 Kyung-In Huh, PhD, Geography  
 2014 Jeff La Frenierre, PhD, Geography,  
 2013 Scott Reinemann, PhD, Department of Geography (climatology), Committee Member  
 2013 Alicia Campbell, M.S. Environmental Science, Committee Member  
 2003 Ryan Fogt, M.S., Atmospheric Sciences (Geography), Committee Member  
 2002 Brent Christner, PhD, Microbiology, Committee Member  
 2002 Kwan Song, M.S., Environmental Science Graduate Program, Committee Member  
 2000 Rob Hellstrom, PhD, Geography, Committee Member  
 2000 Sandra Passchier, PhD, Geological Sciences (External Examiner)  
 1999 Firooza Pavri, PhD, Geography, Committee Member  
 1999 Maurice McHugh, PhD Geography, Committee Member  
 1999 Brent Christner, PhD, Microbiology, Committee Member  
 1998 Chung-Chieh Wang, PhD, Atmospheric Sciences (Geography), Committee Member  
 1998 Cindy Sorrensen, PhD, Geography, Committee Member  
 1997 Norman Kerle, MA, Geography, Committee Member  
 1996 Frances Herlihy, MS, Geological Sciences (Advisor: Larry Krissek)  
 1995 Cindy Sorrensen, MA, Geography, Committee Member  
 1994 Merlin Marshall, PhD, Geography, Committee Member  
 1994 Paul Kinder, MA, Geography, Committee Member  
 1994 Joy Dingle, MA, Geography, Committee Member  
 1993 Timothy R. Boyer: MA, Geography, Committee Member  
 1993 Una NiChaoimh: PhD, Geography: Atmospheric Sciences Program, Committee Member