

ELLEN STONE MOSLEY-THOMPSON

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DEGREES

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

POSITIONS

2009 Director, Byrd Polar Research Center, The Ohio State University
1995-09 Professor, Department of Geography (Atmospheric Science, Climatology)
The Ohio State University
1996-09 Senior Research Scientist, Byrd Polar 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

AWARDS

2009 Elected as a Fellow of the American Geophysical Union, May 26, 2009
2009 Honorary Doctor of Science, Colgate University, May 17, 2009
2009 Elected as a Member of the National Academy of Sciences, April 27, 2009
2009 Elected as a Member of the American Philosophical Society, April 2009
2009 American Alpine Club, David R. Brower Award for Outstanding Service in
Mountain Conservation, February 21, 2009
2008 Dan David Prize, University of Tel Aviv, Israel, May 19, 2008
2007 Alumni Medalist Award, The Ohio State University, November 9, 2007
2007 Elected, OSU Sphinx Chapter Senior Member, Spring, 2007
2007 Roy Chapman Andrews Society, *2007 Distinguished Explorer Award*
2005 Faculty Award for Distinguished University Service, The Ohio State
University, Dec. 17, 2005
2004 University Distinguished Lecturer, The Ohio State University, August 24,
2004
2003 University Distinguished Scholar Award, The Ohio State University, April 21,
2003

- 2003 Marshall University, Distinguished Alumna, for Community Achievement, April, 26, 2003
- 2003 Inducted into Ohio Women's Hall of Fame, October 7 by Governor Taft
- 2003 Elected as a Fellow of the American Association for the Advancement of Science
- 2002 John C. Marshall Award, the highest award given by Marshall University (for distinguished scholarship), March 7, 2002
- 2002 The Common Wealth Award for Science and Invention (the award recognizes distinguished service to the world community), April 20, 2002

CURRENT NATIONAL SERVICE ACTIVITIES

- 2009+ NOAA Science Advisory Board, Climate Working Group
- 2008+ Member, AAAS, Electorate Nominating Committee for Geology and Geography
- 2008+ Editorial Board Member, Polar Geography
- 1996+ AAG Representative to the AAAS (Section W: Atmospheric Sciences)

RESEARCH PUBLICATIONS AND ACTIVITIES

Peer Reviewed Papers (116)

- 2009 Thompson, L.G., H.H. Brecher, E. 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.
- 2009 Buffen, A.M., L.G. Thompson, E. 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).
- 2009 Burgess, E.W., R.R. Forster, J.E. Box, E. Mosley-Thompson, D.H. Bromwich, R.C. Bales, 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)*, accepted 5 Oct, 2009, in press.
- 2009 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, E. 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).
- 2009 van der Veen, C.J., Y. Ahn, B.M. Csatho, E. Mosley-Thompson and W.B. Kraybill. Surface roughness over the northern half of the Greenland ice sheet from airborne laser altimetry, *Journal of Geophysical Research (Earth Surface)*, 114, F01001, doi:10.1029/2008JF001067.
- 2008 Wei, L., E. Mosley-Thompson, P. Gabrielli, L.G. Thompson and C. Barbante. Synchronous deposition of volcanic ash and sulfate aerosols over Greenland in 1783 from the Laki eruption (Iceland). *Geophys. Res. Lett.*, 35, L16501, doi:10.1029/2008GL035117. (Wei: graduate student)

- 2008 Kehrwald, N. M., L. G. Thompson, Y. Tandong, E. Mosley-Thompson, U. Schotterer, V. Alfimov, J. Beer, J. Eikenberg, and M. E. Davis (2008), Mass loss on Himalayan glacier endangers water resources, *Geophys. Res. Lett.*, doi:10.1029/2008GL035556, in press. (Kehrwald: graduate student): Paper was highlighted in *Nature* under Research Highlights in Dec. 11, 2008 issue, p. 679).
- 2008 Calder, C.A., Craigmile, P. F. and E. Mosley-Thompson. Spatial variation of the influence of the North Atlantic Oscillation on precipitation across Greenland. *Journal of Geophysical Research (Atmospheres)*, 113(D06112), doi.1029/2007JD009227.
- 2007 Jensen *et al.* Palaeoclimate. In: *Climate Change 2007: The Physical Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel of Climate Change* [Solomon, S., *et al.* (Eds), Cambridge University Press. Cambridge, UK and New York, NY, USA. I was a contributing author to this report.
- 2007 Duan, K., L. G. Thompson, T. Yao, M. E. Davis and E. Mosley-Thompson. A 1000 year history of atmospheric sulfate concentrations in southern Asia as recorded by a Himalayan ice core. *Geophysical Research Letters*, 34, L01810, doi:10.1029/2006GL027456.
- 2006 Thompson, L.G., E. Mosley-Thompson, H. Brecher, M.E. Davis, B. Leon, D. Les, T.A. Mashiotta, P.-N. Lin, and K. Mountain. Evidence of abrupt tropical climate change: past and present. *Proceedings of the National Academy of Sciences*, 103(28), 10536-10543.
- 2006 Mosley-Thompson, E., L. G. Thompson and P.-N. Lin. A multi-century perspective on 20th century climate change with new contributions from high Arctic and Greenland (PARCA) cores. *Annals of Glaciology*, 43, 42-48.
- 2006 Thompson, L.G., E. Mosley-Thompson, M. E. Davis, T. A. Mashiotta, K. A. Henderson, P.-N. Lin, and Y. Tandong. Ice core evidence for asynchronous glaciation on the Tibetan Plateau. *Quaternary International*, 154/155, 3-10.
- 2006 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. *Annals of Glaciology*, 43, 61-69.
- 2006 Yao, T., Z. Li, L.G. Thompson, E. Mosley-Thompson, Y. Wang, L. Tian, N. Wang, and K. Duan. $\delta^{18}\text{O}$ record in Tibetan ice reveals differences in climatic changes. *Annals of Glaciology*, 43, 1-7.
- 2006 Li, Z., R. Edwards, E. Mosley-Thompson, F. Wang, Z. Dong, X. You, H. Li, C. Li and Y. Zhu. Seasonal variability of ionic concentrations in surface snow and elution processes in snow-firn packs at the PGPI site on Ürümqi glacier No. 1, eastern Tien Shan, China. *Annals of Glaciology*, 43, 250-256.
- 2006 Grannas, A. M., W.C. Hockaday, P.G. Hatcher, L. G. Thompson and E. Mosley-Thompson. New revelations on the nature of organic matter in ice cores, *Journal of Geophysical Research-Atmospheres*, 111(D04304), doi:10.1029/2005JD006251.
- 2005 Mosley-Thompson, E., C. R. Readinger, P. Craigmile, L. G. Thompson, and C. A. Calder. Regional sensitivity of Greenland precipitation to NAO variability, *Geophysical Research Letters*, 32, L24707, doi:10.1029/2005GL024776.
- 2005 Thompson, L. G., M. E. Davis, E. Mosley-Thompson, P.-N. Lin, K. Henderson and T. A. Mashiotta, Tropical ice core records: Evidence for asynchronous glaciation on Milankovitch timescales, *Journal of Quaternary Science*, 20(7-8), 723-733.

- 2005 Reeve, J.N., B.C. Christner, L. G. Thompson and E. Mosley-Thompson. Classification of bacteria from polar and non-polar glacial ice. Chapter 15 (pp. 227-239): In: *Life in Ancient Ice*, edited by John D. Costello and Scott O. Rogers, Princeton University Press, Princeton, N.J., (ISBN: 0-691-07475-5).
- 2005 Thompson, L.G., M.E. Davis, P.N. Lin, E. Mosley-Thompson, and H.H. Brecher. Ice cores from tropical mountain glaciers as archives of climate change. In *Global Change and Mountain Regions: An Overview of Current Knowledge*. U.M. Huber, H.K.M. Bugmann, M.A. Reasoner and A. Mel (Eds.). Springer, Dordrecht, pp. 31-38.
- 2004 Hinkel, K.M., A.W. Ellis, and E. Mosley-Thompson, E. Cryosphere. In: *Geography in America at the Dawn of the 21st Century*, G. L. Gaile and C. J. Willmott (Eds.), Oxford University Press, 47-55.
- 2004 Rogers, J.C., D. Bathke, E. Mosley-Thompson, S.-H. Wang, 2004. Atmospheric circulation and cyclone frequency variations linked to the primary modes of Greenland snow accumulation. *Geophysical Research Letters*, 31, doi: 10.1029/2004GL021048.
- 2003 Mosley-Thompson, E. and L. G. Thompson. Ice core paleoclimate histories from the Antarctic Peninsula: Where do we go from here? In: *Antarctic Peninsula Climate Variability: Historical and Paleoenvironmental Perspectives*, edited by E. Domack *et al.*, *Antarctic Research Series*, Vol. 79, 115-127 (American Geophysical Union, Washington, D.C.), doi. 10.1029/079ARS10.
- 2003 Mosley-Thompson, E., T. A. Mashiotta, and L. G. Thompson. Ice core records of late Holocene volcanism: Current and future contributions from the Greenland PARCA cores. In: *Volcanism and the Earth's Atmosphere*, Geophysical Monograph 139, 153-164, doi: 10.1029/139/GM09, 2003.
- 2003 Wang, N., Thompson, L.G., Davis, M.E., Mosley-Thompson, E., Yao, T., and Pu, J. Influence of variations in NAO and SO on air temperature over the northern Tibetan Plateau as recorded by $\delta^{18}\text{O}$ in the Malan ice core, *Geophysical Research Letters*, 30(22), 2167-2170, doi:10.1029/2003GL018188.
- 2003 Thompson, L. G., E. Mosley-Thompson, M. E. Davis, P.-N. Lin, K. Henderson and T. A. Mashiotta. Tropical glacier and ice core evidence of climate change on annual to millennial time scales. *Climatic Change*, 59 (1-2), 137-155.
- 2003 Christner, B. C., E. Mosley-Thompson, L. G. Thompson and J. N. Reeve. Bacterial recovery from ancient glacial ice. *Environmental Microbiology*, 5(5), 433-436.
- 2002 Thompson, L. G., E. Mosley-Thompson, M. E. Davis, Keith A. Henderson, Henry H. Brecher, Victor S. Zagorodnov, Tracy A. Mashiotta, Ping-Nan Lin, Vladimir N. Mikhalenko, Douglas R. Hardy, and Jürg Beer. Kilimanjaro ice core records: Evidence of Holocene climate change in tropical Africa. *Science*, 298, 589-593.
- 2002 Christner, B. C., E. Mosley-Thompson, L. G. Thompson, V. Zagorodnov, and J. N. Reeve. Isolation and identification of bacteria from ancient and modern ice cores. In: *The Patagonian Icefields: A unique National Laboratory for Environmental and Climate Change Studies*, edited by G. Casassa, F. V. Sepúlveda and R. M. Sinclair, Kluwer Academic, New York, pp. 9-15.
- 2001 Mosley-Thompson, E., J. R. McConnell, R. C. Bales, Z. Li, P-N. Lin, K. Steffen, L.G. Thompson, R. Edwards, and D. Bathke. Local to regional-scale variability of Greenland accumulation from PARCA cores. *Journal of Geophysical Research (Atmospheres)*, 106(D24), 33,839-33,852.

- 2001 Mosley-Thompson, E., M. Beydoun, P.A. Dzuroff, M. Haltuch, E. Hofherr, L. Huelskamp, and C. Shaw. Book Review: *Global Warming: the Complete Briefing* (2nd Edition) by John Houghton, Cambridge University Press. In *Journal of Geoscience Education*, 49(1), 66-67. (This was a class project for a graduate seminar).
- 2001 van der Veen, C., E. Mosley-Thompson, K. C. Jezek, I.M. Whillans, and J.F. Bolzan. Accumulation rates in south and central Greenland, *Polar Geography*, 25(2), 79-162.
- 2001 Christner, B.C., E. Mosley-Thompson, L.G. Thompson, and J.N. Reeve. Isolation of bacteria and 16S rDNAs from Lake Vostok accretion ice. *Environmental Microbiology*, 3(9), 570-579.
- 2001 Bales, R.C., J.R. McConnell, E. Mosley-Thompson, and G. Lamorey. Accumulation map for the Greenland ice sheet 1971-1990. *Geophysical Research Letters*, 28(15), 2967-2970.
- 2001 Bales, R.C. E. Mosley-Thompson, J.R. McConnell. Variability of accumulation in northwest Greenland over the past 250 years, *Geophysical Research Letters*, 28(14), 2679-2682.
- 2001 Bales, R.C., J.R. McConnell, E. Mosley-Thompson and B. Csatho. Accumulation over the Greenland ice sheet from historical and recent records. *Journal of Geophysical Research (Atmospheres)* 106(D24), 33,813-33,826.
- 2001 A. Robertson, J. Overpeck, D. Rind, E. Mosley-Thompson, G. Zielinski, J. Lean, D. Koch, J. Penner, I. Tegen, and R. Healy. Hypothesized Climate Forcing Time Series for the Last 500 Years. *Journal of Geophysical Research*, 106 (D14), 14,783-14,803.
- 2001 McConnell, J., G. Lamorey, E. Hanna, E. Mosley-Thompson, R. Bales, D. Belle-Oudry, J. Burkhart, J. Kyne, Annual net snow accumulation over southern Greenland from 1975 to 1998. *Journal of Geophysical Research (Atmospheres)*, 106(D24), 33,827-33,838.
- 2001 Davis, C., J. McConnell, J. Bolzan, J. Bamber, R. H. Thomas, and E. Mosley-Thompson, Elevation changes of the Southern Greenland ice sheet from 1978 to 1988: Interpretation, *Journal of Geophysical Research (Atmospheres)*, 106(D24), 33,743-33,754.
- 2000 Thompson, L.G., T. Yao, E. Mosley-Thompson, M.E. Davis, K.A. Henderson and P.-N. Lin. A high-resolution millennial record of the South Asian Monsoon from Himalayan ice cores. *Science*, 289, 1916-1919.
- 2000 Thompson, L.G., E. Mosley-Thompson and K.A. Henderson. Ice core paleoclimate records in tropical South America since the Last Glacial Maximum. *Journal of Quaternary Science*, 15(4), 377-394.
- 2000 van der Veen, C.J., K.C. Jezek, E. Mosley-Thompson, I.M. Whillans and J.F. Bolzan. Two decades of glaciological investigations in south and central Greenland. *Polar Geography*, 24(4), 259-349.
- 2000 Cole-Dai, J., E. Mosley-Thompson, S.P. Wight, and L.G. Thompson. A 4100-year record of explosive volcanism from an East Antarctica ice core. *Journal of Geophysical Research (Atmospheres)*, 105(D19), 24,431-24,441.
- 2000 McConnell, J.R., R. J. Arthern, E. Mosley-Thompson, C. H. Davis, R. C. Bales, R. Thomas, J. F. Burkhart, and J. D. Kyne. Changes in Greenland ice sheet elevation changes attributed primarily to snow accumulation variability. *Nature*, 406(6798), 877-879.

- 2000 Christner, B. C., E. Mosley-Thompson, L.G. Thompson, V. Zagorodnov, K. Sandman and J. N. Reeve. Recovery and identification of viable microorganisms immured in glacial ice. *Icarus*, 144, 479-485.
- 2000 Zagorodnov, V., L.G. Thompson, and E. Mosley-Thompson. Portable system for intermediate depth ice core drilling. *Journal of Glaciology*, 152, 167-172.
- 2000 McConnell, J.R., E. Mosley-Thompson, D.H. Bromwich, R.C. Bales, J.D. Kyne. Interannual variations of snow accumulation on the Greenland ice sheet (1985-1996): New Observations versus model predictions. *Journal of Geophysical Research (Atmospheres)*, 105(D3), 4039-4046.
- 2000 Masson, V., Vimeux, F., Jouzel, J., Morgan, V., Delmotte, M., Ciais, P., Hammer C., Johnsen, S., Lipenkov, V.Y., Mosley-Thompson, E., Petit, J.-R., Steig, E.J., Stievenard, M., and Vaikmae, R. Holocene climate variability in Antarctica based on 11 ice-core isotopic records, *Quaternary Research*, 54(3), 348-358.
- 2000 Thompson, L.G., K.A. Henderson, E. Mosley-Thompson, P.-N. Lin. The tropical ice core record of ENSO. In *El Niño and the Southern Oscillation: Multiscale Variability and Global and Regional Impacts*, H.F. Diaz and V. Markgraf (Eds.), University Press, Cambridge, pp. 325-356.
- 1999 Mosley-Thompson, E., J.F. Paskievitch, A.J. Gow and L.G. Thompson. Late 20th Century increase in South Pole snow accumulation. *J. Geophysical Research (Atmospheres)*, 104(D4), 3977-3886.
- 1999 van der Veen, K., E. Mosley-Thompson, A.J. Gow and B.G. Mark. Accumulation at South Pole: Comparison of two 900 year records. *Journal of Geophysical Research (Atmospheres)*, 104 (D24) 31,067-31,076.
- 1999 Cole-Dai, J. and E. Mosley-Thompson. The Pinatubo eruption in Antarctic snow and its potential value to ice core paleovolcanic records. *Annals of Glaciology*, 29, 99-105.
- 1999 Ninglian, W., Y. Tandong, Q. Dahe, L.G. Thompson, E. Mosley-Thompson, J. Cole-Di, M.E. Davis and P.-N. Lin. New evidence for enhanced cosmogenic isotope production rate in the atmosphere ~ 37 kaBP. *Annals of Glaciology*, 29,136-140.
- 1999 Smith, R., D. Ainley, K. Baker, E. Domack, S. Emslie, B. Fraser, J. Kennett, A. Leventer, E. Mosley-Thompson, S. Stammerjohn, and M. Vernet (sequence is alphabetical after first author). Marine ecosystem sensitivity to historical climate change: Antarctic Peninsula. *Bioscience*, 49(5), 395-404.
- 1999 Cole-Dai, J., E. Mosley-Thompson and Q. Dahe. Evidence of the 1991 Pinatubo volcanic eruption in south polar snow. *Chinese Science Bulletin*, 44(8), 756-761.
- 1999 Sohn, H.-G., K. Jezek, F. Baumgartner, R. Forster and E. Mosley-Thompson. Radar backscatter measurements from RADARSAT SAR Imagery of South Pole Station, Antarctica. IGARSS'99: Remote sensing of the Earth System - A challenge for the 21st Century, IEEE, 2360-2362.
- 1998 Anklin, M., R.C. Bales, E. Mosley-Thompson, and J. McConnell. Annual accumulation at two sites in Northwest Greenland during recent centuries. *Journal of Geophysical Research (Atmospheres)*, 103(D22), 28,775-28,783.
- 1998 Thompson, L.G., M.E. Davis, E. Mosley-Thompson and 8 others. A 25,000 year tropical climate history from Bolivian ice cores. *Science*, 282(5295), 1858-1864.
- 1998 Epstein, P.R., H.F. Diaz, S. Elias, G. Grabherr, N.E. Graham, W.J. Martens, E. Mosley-Thompson, and J. Susskind. Biological and physical signs of climate change: Focus on

- mosquito-borne diseases. *Bull. Am. Meteorological Soc.*, 79(3), 409-417. (alphabetical after 1st author).
- 1998 Yao, T., L.G. Thompson, Y. Shi, Q. Dahe., K. Jiao, Z. Yang, L. Tian and E. M. Thompson. Climate variation since the Last Interglaciatiion recorded in the Guliya ice core. *Science in China (Series D)*, 40(6), 662-668.
- 1997 Thompson, L.G., T. Yao, M. E. Davis, K. A. Henderson, E. Mosley-Thompson and 5 others. Tropical Climate Instability: The Last Glacial Cycle from a Qinghai-Tibetan Ice Core. *Science*, 276(5320), 1821-1825.
- 1997 Rogers, J.C., R. Hellstrom, E. Mosley-Thompson and C.C. Wang. An abrupt Spring air temperature rise over the Greenland ice sheet. *Journal of Geophysical Research*, 102(D12), 13,793-13,800.
- 1997 Cole-Dai, J., E. Mosley-Thompson and L.G. Thompson. Annually resolved Southern Hemisphere volcanic history from two Antarctic ice cores. *Journal Geophysical Research*, 102(D14), 16,761-16,771.
- 1997 Cole-Dai, J., E. Mosley-Thompson and L.G. Thompson. Quantifying the Pinatubo signal in south polar snow. *Geophysical Research Letters*, 24(21), 2679-2682.
- 1997 Thompson, L.G., V. Mikhalenko, E. Mosley-Thompson, M. Durgerov, P.N. Lin, M. Moskalevsky, M.E. Davis, S. Arkhipov and J. Dai. 1997. Ice core records of recent climate variability: Gregoriev and It-Tish ice caps in central Tien Shan, Central Asia. In: Data of Glaciological Studies, Publication 81, based on paper presented at the International Symposium on Seasonal and Long-term Fluctuations of Nival and Glacial Processes in Mountains. Tashkent, Sept., 1993. (Refereed journal volume: a Russian journal with English contributions).
- 1997 Pourchet, M., S.K. Bartarya, M. Maignan, J. Jouzel, J.F. Pingot, A.J. Aristarain, G. Furduta, V. M. Kotlyakov, E. Mosley-Thompson, N. Preiss and N.W. Young. Distribution and fall-out of ¹³⁷Cs and other radionuclides over Antarctica. *J. Glaciology*, 43(145), 435-445.
- 1996 Mosley-Thompson, E. Holocene Climate Changes Recorded in an East Antarctica Ice Core. Climatic Variations and Forcing mechanisms of the last 2,000. (Eds. P.D. Jones, R. Bradley and J. Jouzel), *NATO Advanced Research Series I*, Volume 41, 263-279.
- 1996 Yao, T., L.G. Thompson, E. Mosley-Thompson, Y. Zhihong, Z. Xingping and P-N. Lin. Climatological significance of $\delta^{18}\text{O}$ in north Tibetan ice cores. *Journal of Geophysical Research (Atmospheres)*, 101(D23), 29,531-29,538.
- 1996 Raymond, C.F., B.R. Weertman, L.Thompson, E. Mosley-Thompson, D. Peel and R. Mulvaney. Geometry, motion and mass balance of Dyer Plateau, Antarctica. *Journal of Glaciology*, 42(142), 510-518.
- 1995 Thompson, L.G., E. Mosley-Thompson, M.E. Davis, P-N. Lin, K.A. Henderson, J. Cole-Dai, J.F. Bolzan and K-b. Liu. Late Glacial Stage and Holocene tropical ice core records from Huascarán, Peru. *Science*, 269, 46-50.
- 1995 Mosley-Thompson, E., L.G. Thompson, J.F. Paskievitch, M. Pourchet, A.J. Gow, M.E. Davis and J. Kleinman. South Pole snow accumulation has increased in recent decades. *Annals of Glaciology*, 21, 131-138.
- 1995 Rogers, J. C. and E. Mosley-Thompson. Atlantic Arctic cyclones and the mild Siberian winters of the 1980s. *Geophysical Research Letters*, 22(7), 799-802.

- 1995 Mosley-Thompson, E., L.G. Thompson, J.F. Paskievitch, M. Pourchet, A.J. Gow, M.E. Davis and J. Kleinman. South Pole snow accumulation has increased in recent decades. *Annals of Glaciology*, 21, 131-138.
- 1995 Thompson, L.G., E. Mosley-Thompson, M.E. Davis, P.N. Lin, V. Mikhalenko, and J. Dai. A 1000 year ice core climate record from the Guliya Ice Cap, China and its relationship to global climate variability. *Annals of Glaciology*, 21, 175-181.
- 1995 Yao, T., L.G. Thompson, K. Jiao, E. Mosley-Thompson and Z. Yang. Recent warming as recorded in the Qinghai-Tibet cryosphere. *Annals of Glaciology*, 21, 196-200.
- 1995 Dai, J., L.G. Thompson, and E. Mosley-Thompson. A 495-year record of atmospheric chloride, nitrate, and sulfate: Results of chemical analysis of ice cores from Dyer Plateau, Antarctic Peninsula. *Annals of Glaciology*, 21, 182-188.
- 1995 Davis, M.E., L.G. Thompson, E. Mosley-Thompson, P-N. Lin, V.N. Mikhalenko, and J. Dai. Recent climate records from ice cores from the Cordillera Blanca, Northern Peru. *Annals of Glaciology*, 21, 225-230.
- 1995 Lin, P.N., L.G. Thompson, M.E. Davis and E. Mosley-Thompson. 1000 years of climatic change in China: Ice core $\delta^{18}\text{O}$ evidence. *Annals of Glaciology*, 21, 189-195.
- 1994 Thompson, L.G., D.A. Peel, E. Mosley-Thompson, R. Mulvaney, J. Dai, P.N. Lin, M.E. Davis and C.F. Raymond. Climate since A.D. 1510 on Dyer Plateau, Antarctic Peninsula: Evidence for recent climate change. *Annals of Glaciology*, 20, 420-426.
- 1994 Mosley-Thompson, E. and L.G. Thompson. Dust in polar ice sheets. *Analusis* (invited), 22(8), 44-46.
- 1994 Thompson, L.G., M.E. Davis and E. Mosley-Thompson. Glacial records of global climate: A 1500-year tropical ice core record of climate. *Human Ecology*, 22(1), 83-95.
- 1993 Mosley-Thompson, E., L.G. Thompson, J. Dai, M.E. Davis, and P.N. Lin. Climate of the last 500 years: high resolution ice core records. *Quaternary Science Reviews*, 12, 419-430.
- 1993 Thompson, L.G., E. Mosley-Thompson and five others. "Recent warming": ice core evidence from tropical ice cores with emphasis upon Central Asia. *Global and Planetary Change*, 7, 145-156.
- 1993 Feng, Z., L.G. Thompson, E. Mosley-Thompson, J. Dai, M.E. Davis and P.N. Lin. Temporal and spatial variations of climate in China during the past 10,000 years. *The Holocene*, 3(2), 174-180.
- 1993 Dai, J., E. Mosley-Thompson, and L.G. Thompson. Ice cores as unique means of retrieving records of chemical compounds in the atmosphere: Evidence of an undocumented tropical eruption in the early 19th century. Chapter 14. In: *Sampling and Analysis of Airborne Pollutants*, E.G. Winegar (Ed.), CRC Press Inc., Boca Raton, FL., 227-241.
- 1992 Thompson, L.G., E. Mosley-Thompson and P.A. Thompson. Reconstructing interannual climate variability from tropical and subtropical ice-core records. Chapter 16 In: H. Diaz and V. Markgraf (Eds.), *El Niño, Historical and Paleoclimatic Aspects of the Southern Oscillation*, Cambridge University Press, 295-322.
- 1992 Thompson, L.G. and E. Mosley-Thompson. Evidence of changes in climate and environment in 1816 as recorded in ice cores from Quelccaya ice cap, Peru, the Dunde ice cap, China, and Siple Station, Antarctica. IN: *The Year Without a Summer? World Climate in 1816.*, C.R. Harington, Ed., Canadian Museum of Nature, Ottawa, Canada, 479-492.

- 1992 Mosley-Thompson, E. Paleoenvironmental conditions in Antarctica since A.D. 1500: ice core evidence. In: *Climate Since A.D. 1500*, R.S. Bradley and P.D. Jones, Eds., Routledge, Chapman and Hall, London, 572-591.
- 1991 Dai, J., E. Mosley-Thompson and L.G. Thompson. Ice core evidence for an explosive tropical volcanic eruption 6 years prior to Tambora. *Journal of Geophysical Research*, 96(D9), 17361-17366.
- 1991 Mosley-Thompson, E., J. Dai, L.G. Thompson, P.M. Grootes, J.K. Arbogast, and J.F. Paskievitch. Glaciological studies at Siple Station (Antarctica) Potential ice core paleoclimatic record. *Journal of Glaciology*, 37(125), 11-22.
- 1991 Shimada, I., C.B. Schaaf, L.G. Thompson and E. Mosley-Thompson. Cultural impacts of severe droughts in the prehistoric Andes: Application of a 1,500-year ice core precipitation record. *World Archaeology: Archaeology and Arid Environments*, 22(2), 247-270.
- 1991 Shimada, I., C. Schaaf, L.G. Thompson and E. Mosley-Thompson. Implicaciones culturales de una gran sequia del siglo vi d.C. en los Andes Peruanos. *Boletin De Lima*, 77, 33-56.
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- 1990 Thompson, L.G., E. Mosley-Thompson, and 8 others. Glacial Stage ice core records from the subtropical Dundee ice cap, China. *Annals of Glaciology*, 14, 288-297.
- 1989 Thompson, L.G., E. Mosley-Thompson and 8 others. 100,000 year climate record from Qinghai-Tibetan Plateau ice cores. *Science*, 246(4929), 474-477.
- 1989 Grootes, P.M., M. Stuiver, L.G. Thompson and E. Mosley-Thompson. Oxygen isotope ratio changes in tropical ice, Quelccaya, Peru. *Journal of Geophysical Research*, 94(D1), 1187-1194.
- 1989 Thompson, L.G. and E. Mosley-Thompson. One half millennium of tropical climatic variability recorded in the stratigraphy of the Quelccaya ice cap, Peru. In: *Aspects of Climate Variability in the Pacific and the Western Americas* (Ed. D.H. Peterson), AGU Geophysical Monograph, 55, 15-31.
- 1988 Thompson, L.G., M. Davis, E. Mosley-Thompson and K-b. Liu. Pre-Incan agricultural activity recorded in dust layers in two tropical ice cores. *Nature*, 336, 763-765.
- 1988 Thompson, L.G., E. Mosley-Thompson, X. Wu and Z. Xie. Wisconsin/Würm Glacial Stage ice in the subtropical Dundee ice cap, China. *GeoJournal* (invited paper), 17(4), 517-523.
- 1988 Thompson, L.G., X. Wu, E. Mosley-Thompson and Z. Xie. Climatic ice core records from the Dundee ice cap, China. *Annals of Glaciology*, 10, 178-182.
- 1987 Palais, J.M., P.R. Kyle, E. Mosley-Thompson, and E. Thomas. Correlation of a 3,200 year old tephra in ice cores from Vostok and South Pole Stations, Antarctica. *Geophysical Research Letters*, 14(8), 804-807.
- 1987 Thompson, L.G. and E. Mosley-Thompson. Evidence of abrupt climatic during the last 1,500 years recorded in ice cores from the tropical Quelccaya ice cap, Peru. In: *Abrupt Climatic Change - Evidence and Implications*. (W. Berger, Editor). D. Reidel Publishing Co., 99-110.

- 1986 Thompson, L.G., E. Mosley-Thompson, W. Dansgaard and P.M. Grootes. The "Little Ice Age" as recorded in the stratigraphy of the tropical Quelccaya ice cap. *Science*, 234, 361-364.
- 1985 Mosley-Thompson, E., P.D. Kruss, L.G. Thompson, M. Pourchet and P.M. Grootes. Paleoclimatic reconstruction from South Pole ice cores: potential temporal resolution. *Annals of Glaciology*, 7, 26-33.
- 1985 Thompson, L.G., E. Mosley-Thompson, J.F. Bolzan and B.R. Koci. A 1500 year record of climate variability recorded in ice cores from the tropical Quelccaya Ice Cap. *Science*, 229, (471), 971-973.
- 1984 Thompson, L.G., E. Mosley-Thompson and B.M. Arno. Major El Niño-Southern Oscillation events recorded in stratigraphy of the tropical Quelccaya Ice Cap. *Science* 226(4670), 50-52.
- 1984 Thompson, L.G., E. Mosley-Thompson, P. Grootes, and M. Pourchet. Tropical glaciers: potential for ice core paleoclimatic reconstructions. *Journal of Geophysical Research*, 89(D3), 4638-4646.
- 1982 Thompson, L.G., J.F. Bolzan, H.H. Brecher, P.D. Kruss, E. Mosley-Thompson and K.C. Jezek. Geophysical investigation of the tropical Quelccaya Ice Cap. *Journal of Glaciology*, 28(98), p. 57-69.
- 1982 Mosley-Thompson, E. and L.G. Thompson. Microparticle analysis of the Ross Ice Shelf Q-13 core and preliminary analysis of the J-9 core. *Annals of Glaciology*, 3, p. 211-215.
- 1982 Thompson, L.G. and E. Mosley-Thompson. Spatial distribution of microparticles within antarctic snowfall. *Annals of Glaciology*, 3, p. 300-306.
- 1982 Mosley-Thompson, E. and L. G. Thompson. Nine centuries of microparticle deposition at the South Pole. *Quaternary Research*, 17(1), pp. 1-13.
- 1981 Thompson, L.G. and E. Mosley-Thompson. Temporal variability of microparticle properties in polar ice sheets. *Journal of Volcanology and Geothermal Research*, 11(1), 11-27.
- 1981 Kyle, P.R., P.A. Jezek, E. 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.
- 1981 Thompson, L.G. and E. Mosley-Thompson. Microparticle Concentration Variations Linked with Climatic Change: Evidence from Polar Ice Cores. *Science*, 212(4496), 812-815.
- 1981 Thompson, L.G., E. 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 E. 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 Published Collections (23)

- 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.
- 2002 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.
- 2002 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.
- 2002 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.
- 1991 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.
- 1991 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.
- 1987 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.
- 1983 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.
- 1982 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.

- 1982 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.
- 1980 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.
- 1979 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 (6)

- 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.

Research Grants: (total: 50 awards)

- 2008-11 Principal Investigator: Collaborative Research in IPY: Abrupt Environmental Change in the Larsen Ice Shelf System, a Multidisciplinary Approach – Cryosphere and Oceans, NSF-OPP, awarded September, 2007 with a May 2008 start date.
- 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.
- 2008-11 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 20th 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 Dundee 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 Dundee 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. \$370,000. (Co-PI with Lonnie G. Thompson)

Papers Presented at Professional Meetings

- 2009 Mosley-Thompson, E. Past and contemporary climate change: Evidence from Earth's ice cover. 2009 Joint Assembly (AGU, etc.), Toronto, CA, May 29, 1009.
- 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, MA.
- 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, CA.

- 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, 2006, San Francisco.
- 2006 E. Mosley-Thompson, L.G. Thompson and P.-N. Lin. A multi-century ice core perspective on 20th century climate. Annual Meeting of the Association of American Geographers, March 8, Chicago, IL.
- 2006 E. Mosley-Thompson, 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, IL.
- 2005 E. Mosley-Thompson (presenter). A multi-century ice core perspective on 20th 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.
- 2005 E. Mosley-Thompson (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, San Francisco, CA., Dec. 16, 2004.
- 2004 Mosley-Thompson, E. and L. G. Thompson, High-resolution ice cores provide a multi-century perspective on 20th century climate changes and “global warming.” 1st International CLIVAR Science Conference, Baltimore, MD, June 21-25, 2004.
- 2004 Mosley-Thompson, E. Unique insights to the Earth’s climate history preserved in its cryosphere. Association of American Geographers Annual Meeting, Philadelphia, March 18, 2003.
- 2003 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, Reno, Nevada, July 31, 2003.
- 2003 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, Reno, Nevada, July 31, 2003.
- 2003 Mosley-Thompson, E. and L. G. Thompson. Late 20th century tropical glacier retreat: A unique Holocene Phenomenon? Association of American Geographers Annual Meeting, New Orleans, March 6, 2003.
- 2002 Mosley-Thompson, E., L. G. Thompson, K. A. Henderson and P.-N. Lin. High resolution ice cores provide a multi-century perspective on 20th century climate changes and ‘global warming.’ American Geophysical Union Meeting, San Francisco, December 8, 2002.
- 2002 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.
- 2002 Mosley-Thompson, E. High resolution climate histories from Greenland ice cores. AAG Annual meeting in Los Angeles, March 22, 2002.

- 2001 Mosley-Thompson, E. NAO reconstruction from Greenland ice cores: Fact or Fantasy? AAG Annual meeting in New York, March 3, 2001.
- 2001 Invited: Mosley-Thompson, E. Greenland ice core contributions to PARCA (Program for Arctic Regional Climate Assessment. 2nd Wadati Conference on the Polar Regions and Global Change, Tsukuba, Japan, March 7-9.
- 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, Pittsburgh, April 7, 2000.
- 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, San Francisco, December 16, 1999.
- 1999 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, Venice, Italy, November 11, 1999.
- 1999 Mosley-Thompson, E., L. G. Thompson and K. A. Henderson. Ice core paleoclimatic histories: Potential for ENSO reconstruction. AAG 95th Annual Meeting, Honolulu, March 25, 1999.
- 1999 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 95th Annual Meeting, Honolulu, March 24, 1999, (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.
- 1998 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, San Francisco, December 6-10. *AGU Fall Meeting Abstract Volume*, 79(45), November 10, 1998, p. F105.
- 1998 Participant: East Lakes Regional Meeting of the AAG. Organized a set of climate related presentations and gave one presentation, October 30.
- 1998 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.
- 1998 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, 1998.
- 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, 1997.
- 1997 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. Acquafredda di Maratea, Italy, September 24.
- 1997 Invited: Climate histories from high resolution ice cores: Changing paradigms. Second International Conference on Geoscience Education, Hilo, Hawaii, July 31.

- 1997 Late Holocene climate variability. American Geophysical Union Spring Meeting, Baltimore, May 27, 1997.
- 1997 Glaciological evidence of recent environmental changes. Annual Meeting of the Association of American Geographers, Fort Worth, Texas, April 3.
- 1996 Invited: Glaciological Evidence for Recent Warming at High Elevations. Annual Meeting of the American Meteorological Society (Atlanta), Feb. 2, 1996, p.
- 1996 Climate histories from high resolution iced cores: changing paradigms. Annual Meeting of the Association of American Geographers (Charlotte), April 13, 1996 (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, Tsukuba Science City, Japan, Nov. 9.
- 1995 Global climate variability over the last millennium: What do ice cores reveal? (Abstract) American Geophysical Union, Spring Meeting (Baltimore), June 1, 1995, 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, Columbus, Ohio, August 7-14.
- 1994 Antarctic ice core histories: spatial differences and similarities. NATO Advanced Workshop "Climatic variations and forcing mechanisms of the last 2,000 years" (Italy), October 3, 1994.
- 1993 Rapid Holocene warming and cooling events in Central East Antarctica, American Geophysical Union Spring Meeting, (Baltimore), May 28, 1993.
- 1993 Rapid Holocene warming and cooling events in Central Antarctica. 23rd Annual Arctic Workshop: The Ohio State University: invited (opening paper); April 1, 1993.
- 1992 Climate of the last millennium: High resolution polar ice core records. American Geophysical Union Spring Meeting, (Montreal), May 13, 1992.
- 1991 Invited: Ice cores as libraries of global climatic change. Earth Science Seminar, NASA Goddard Space Flight Center, Greenbelt, Maryland, February 22, 1991.
- 1990 Climate since A.D. 1450: What high resolution ice cores reveal. American Geophysical Union Fall Meeting, (San Francisco), December 4, 1990.
- 1990 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. Austin, TX, October 9, 1990.
- 1990 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, Fairbanks, AK, June 11-15, 1990.
- 1990 Invited: Ice cores as paleoclimatic libraries. AAAS Annual Meeting, New Orleans, LA, February, 1990.
- 1989 Invited: Paleoclimatic reconstruction from ice cores. 40th Arctic Science Conference: Global Change. Fairbanks, AK, September 14, 1989.
- 1989 Little Ice Age (Neoglacial) paleoenvironmental conditions at Siple Station, Antarctica. International Glaciological Society, Seattle, WA, August 21, 1989.
- 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, Monterey, CA, March 21, 1988.
- 1987 Shallow core analyses and pit studies at Siple Station: Applications for extraction of a 500-year proxy climate record. Symposium on Ice Analysis, Bern, Switzerland, March 30-April 3.
- 1987 Invited: The potential of ice cores for paleoclimatic reconstruction. Presented October 17, 1987, at The Annual Meeting of Sigma Xi, The Scientific Research Society, Long Beach, CA.
- 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, Peterborough, Canada, 19-24, August.
- 1984 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, Peterborough, Canada, 19-24, August.
- 1983 The record of explosive volcanism in Southern Hemisphere ice cores. Presented March 18, 1983 at the Symposium on Climatic Effect of Volcanic Dust and Aerosols in the Upper Atmosphere. (AGU/AMS). Boulder, CO.
- 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, Columbus, OH, Sept. 11.
- 1978 Microparticle analysis of the 101-meter South Pole core. Presented April, 1978 at the 74th Annual Meeting of the Association of American Geographers, New Orleans, LA.

Papers Co-authored at Professional Meetings (1999 to present)

- 2009 Mosley-Thompson, E. Past and contemporary climate change: Evidence from Earth's ice cover. American Geophysical Union, Joint Assembly, Toronto, Canada, May 26, 2009. (invited presentation as part of my induction as an AGU Fellow)
- 2008 Thompson, L.G., E. Mosley-Thompson, A. Buffen, D. Urmann, M.E. Davis, and P-N. Lin. Tropical Glaciers: Records and Indicators of Climate Change. American Geophysical Union Annual Meeting, San Francisco, December 15, 2008.
- 2008 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, San Francisco, December 15, 2008.
- 2008 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, CA. (* graduate student).
- 2008 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, CA. (* 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, 2007, San Francisco.

- 2007 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, 2007, San Francisco.
- 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, 2006, San Francisco.
- 2006 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, 2006, San Francisco. (Lijia is a Ph.D candidate in the Dept. Geog., Atmospheric Science). (* graduate student)
- 2006 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, 2006, San Francisco. (Natalie Johnson is an M.S. student in Earth Sciences). (* graduate student)
- 2006 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, 2006, San Francisco. (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, Lanzhou, China, September.
- 2005 Yao, T., Z. Li, L.G. Thompson, E. Mosley-Thompson, Y. Wang, L. Tian, N. Wang, and K. Duan. $\delta^{18}\text{O}$ record in Tibetan ice reveals differences in climatic changes. International Glaciological Society Symposium on High-elevation Glaciers and Climate Records, Lanzhou, China, September.
- 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 San Francisco, CA, December 15, 2004.
- 2004 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 in San Francisco, CA, December 14, 2004.
- 2004 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 in San Francisco, CA, December 13, 2004.
- 2004 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, Lhasa, Tibet, August 4-7, 2004.

- 2004 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, Plymouth, NH (at Holderness School), August 8 - 13, 2004.
- 2004 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. Huaraz, Peru, July 6 - 9, 2004.
- 2004 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. 1st International CLIVAR Science Conference, Baltimore, MD, June 21-25, 2004.
- 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, Reno, Nevada, July 31, 2003.
- 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, San Francisco, December 8, 2002.
- 2002 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, San Francisco, December 9, 2002.
- 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).

FIELD PROGRAMS

- 2009 Field leader: 6 person team to the Antarctic Peninsula for an NSF sponsored 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: OSU contribution to the PARCA ice core drilling program at GITS, Greenland.
- 1996 Field leader: three man 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: three man 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: two man 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: two man 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: three man 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-man glaciological team to drill ice cores at the summit of the Greenland ice sheet. May and June, 1989.
- 1988 Field leader: 3-man glaciological team to drill an intermediate depth core at Dye 3, Greenland.
- 1986 Field leader: 6-man 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-man 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 at the South Pole Station, Antarctica.

INVITED PRESENTATIONS (PROFESSIONAL, OUTREACH AND PUBLIC MEDIA)

- 2009 Invited presentation: Ice core paleoclimatology. Geography H410, Bryan Mark, Instructor, October 5, 2009.
- 2009 Invited presentation: Understanding global climate and environmental change. Worthington Presbyterian Church (a men's study group), October 26, 2009.
- 2009 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, 2009.
- 2009 Invited presentation: Understanding global climate change: Unique insights preserved in the ice. International Studies Exchange Program, group of Brazilian students visiting OSU, May 14, 2009.
- 2009 Invited presentation: Ice core paleoclimatology. Geography H410, Bryan Mark, Instructor, May 11, 2009.
- 2009 Invited presentation: Ice core paleoclimatology, given to an geosciences class from John Carroll University (Ohio) visiting Byrd Polar Research Center, April 24, 2009.
- 2009 Invited presentation: Ice core paleoclimatology, given to an honors geosciences class from Ashland University (Ohio) visiting Byrd Polar Research Center, April 16, 2009.

- 2009 Invited presentation: Understanding global climate change: Unique insights preserved in the ice. Public Policy & Management Graduate Seminar 880, OSU, Andy Keeler, Professor, April 14, 2009.
- 2008 Invited presentation: Understanding climate change: Stories from the ice. University of Ashland, Ashland, Ohio, November 20, 2008.
- 2008 Invited presentation: Understanding climate change: Stories from the ice. Annual Meeting of the Ohio section of the American Institute of Professional Geologists, Columbus, OH, November 14, 2008.
- 2008 Presentation: Ice core paleoclimatology, College of Wooster class on global climate change visit to OSU's Byrd Polar Research Center, November 10, 2008.
- 2008 Invited presentation: Unique insights to Earth's climate history preserved in its cryosphere. Department of Geography Colloquium, University of California, Los Angeles, CA, November 7, 2008.
- 2008 Invited presentation: Global climate change. Unity Dinner and Dialogue. Kuhn Honors House, OSU, Columbus OH, October 30, 2008.
- 2008 Invited presentation: Ice core paleoclimatology. Geography H410, Bryan Mark, Instructor, October 29, 2008.
- 2008 Invited Presentation: Understanding climate change: Stories from the ice. OSU Parent & Family Weekend, October 18, 2008 (150 parents & prospective students).
- 2008 Invited Participant, Panel discussion, The challenge of climate change, The McCormick Climate Change Conference, The Ohio State University, October 13, 2008.
- 2008 Invited Presentation, Unique insights to Earth's climate history preserved in its cryosphere. The Edward J. Taaffe Physical Geography Colloquium, Department of Geography, The Ohio State University, as part of the Department's Centennial Celebration, October 9, 2008.
- 2008 Invited Presentation: Climate change – A polar perspective, Department of Geology University of Otago, Dunedin, New Zealand, September 23, 2008.
- 2008 Invited Participant, Café Scientifique, Topic: Climate change - unfinished business, University Staff Club, University of Otago, Dunedin, New Zealand, September 23, 2008.
- 2008 Invited Presentation: Understanding Climate Change. 2008 Faith, Reason and World Affairs Symposium (Changing with the Climate: How Fast? How Far?) Concordia College, Moorhead, MN, September 16, 2008.
- 2008 Invited Presentation, Stories from the ice: Past, present, and future climate change, First Community Village, Columbus, Ohio, September 9, 2008.
- 2008 Presentation: Ice core paleoclimatology and Earth's disappearing ice. City & Regional Planning Master's Program, Ohio State, July 17, 2008.
- 2008 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, 2008.
- 2008 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, OH, May 29, 2008.
- 2008 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, 2008.
- 2008 Invited Presentation: Ice Core Contributions to Our Understanding of the Climate System: Past and Present, Geography 597.02 (Integrated Earth Systems), OSU, Dr. Francis Otieno's class, May 12, 2008.
- 2008 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 to 9, 2008.
- 2008 Invited Presentation: Global climate change: Stories from the ice. The Climate Forum associated with the Inauguration of President David Williams, University of Alabama, Huntsville, May 9, 2008.
- 2008 Invited Presentation: Stories from the Ice: Past. Present and Future, The University Women's Club, OSU Faculty Club, April 7, 2008.
- 2008 Invited Presentation: Under standing global climate change: Unique insights preserved in the ice. Public Policy & Management Graduate Seminar 880, OSU, Andy Keeler, Professor, April 1, 2008.
- 2007 Invited Presentation: Understanding Climate Change: Stories from the Ice, Noon lecture for Business Operations, The Ohio State University, December 3, 2007.
- 2007 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's District, Massillon OH, Nov. 16, 2007.
- 2007 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 OH (~500 attendees), Nov. 14, 2007.
- 2007 Invited Presentation: OSU Colleges of the Arts and Sciences Renaissance Rediscovery Weekend, Climate Changes: Stories from the Ice, November 2, 2007.
- 2007 Invited Presentation: Faculty Representative at the President's Convocation 2007 for First Year Experience (entering class of 2007), The Ohio State Univ., Sept. 17, 2007.
- 2007 Invited Lecture. Understanding Climate Change. Leadership Ohio Class XIV [Conservation in Ohio], Cambridge Ohio [The Wilds in Cumberland, Ohio], Sept. 14, 2007.
- 2007 Invited Lecture: A Time to Commit: Global Warming (Climate and Environmental Change): The Science. Hadassah's 93rd National Convention, New York City, July 18, 2007.
- 2007 Invited Lecture: Antarctic Contributions to our Understanding of Climate Change: Past and Present. International Studies 597.02 (Antarctic Marine Ecology and Policy), class lecture, OSU, Columbus, OH, April 30, 2007.
- 2007 Invited Lecture: Global Climate Change: Past and Present. Covenant Presbyterian Church's Stewardship of Our Earth Sunday Morning Forum, Upper Arlington, OH, April 28, 2007.
- 2007 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, 2007.

- 2007 Invited Lecture: Abrupt Climate Change: Past, Present and Future. The 2007 Hammond Lecture, Department of Geography, University of Tennessee, March 29, 2007.
- 2007 Invited Lecture: Evidence for Global Climate Changes from the Earth Cryosphere, The NSF Advance Program Lecture, Univ. of Arizona, Tucson, March 22, 2007.
- 2007 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, Feb. 23, 2007.
- 2007 Invited Lecture: Abrupt Climate Change: Past, Present and Future. The Roy Chapman Andrews Distinguished Explorer Award Lecture, Beloit College, Beloit, WI, February 23, 2007.
- 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, 2006, San Francisco.
- 2006 Invited Lecture: St. Andrews St. Andrew Presbyterian Church Adult Education Program, Global Climate Change: Stories from the Ice. Columbus, OH., December 3.
- 2006 Abrupt climate Change and Our Future. SBS Alumni Society Sponsored Event. November 8, 2006.
- 2006 Invited Lecture: Evidence for global climate changes from the Earth cryosphere. Microbiology 301 class lecture, Olli Tuovinen. Professor, 10/10/2006.
- 2006 Climate Change (Past, Present and Future): Stories from the Ice. The Lifelong Learning Institute of Columbus State Community College, September 26, 2006.
- 2006 Climate Change: How to Read the Evidence? and discussion of Al Gore's film: An Inconvenient Truth. St. John's Episcopal Church, Columbus OH, July 18, 2006.
- 2006 Panel Discussion of Al Gore's film, An Inconvenient Truth, after its opening at the Drexel Gateway Theater, Columbus OH, June 21, 2006.
- 2006 Brief Presentation: OSU - SBS Honors Freshmen Orientation, July 13, 2006.
- 2006 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, 06/13/2006.
- 2006 Invited Presentation: One of three faculty presenters as part of the Geography Department's participation in 2006 President's Salute to Undergraduates, 05/03/2006.
- 2006 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, 04/21/2006.
- 2006 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, 05/10/2006
- 2006 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.
- 2006 Invited Lecture: Abrupt Climate Change and Our Future, The Ohio State University, Media Day, Longaberger Alumni House, 04/10/2006.

- 2006 Invited Lecture: Unique insights to the Earth's climate history preserved in its cryosphere, The Ohio State University - Lima Campus, Honors Colloquium, 02/24/2006.
- 2006 Invited Lecture: Unique insights to the Earth's climate history preserved in its cryosphere, Columbus Rotary Club, Convention Center, Columbus, OH 02/20/2006
- 2006 Invited Lecture: Unique insights to the Earth's climate history preserved in its cryosphere, University of Cincinnati, OH, Depts. Geography and Geology, 02/03/2006.
- 2006 Invited Lecture: Climate Change: How to Read the Evidence? The Wellington School, Columbus, OH, 01/20/06.
- 2005 Invited Lecture: Unique insights to the Earth's climate history preserved in its cryosphere. Microbiology 301 class lecture, Olli Tuovinen. Professor, 11/1/2005.
- 2005 Invited Lecture: Climate Change: How to Read the Evidence? Upper Arlington Seminar Series: Great Issues Series, Upper Arlington Municipal Center, September 28, 2005.
- 2005 Open Line with Fred Anderle, WOSU Radio, September 16, 2005.
- 2005 Research highlighted on Sixty Minutes Australia program, Meltdown, Sept., 2005.
- 2005 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, GA, September 22, 2005.
- 2005 Invited Lecture: Stone Lab (OSU), Evidence for climate change: Unique insights to the Earth's climate history from glaciers, August 4, 2005.
- 2005 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, 2005.
- 2005 Invited presentation: Unique insights to the Earth's climate history preserved in its cryosphere. Harvard Medical School of Public Health, April 12, 2005.
- 2005 Invited participant: Briefing on U.S. Energy Scenarios for the 21st Century sponsored by the Pew Center (Washington DC), Founders Club, Columbus OH, March 31, 2005 (invited).
- 2005 Invited presentation: Glaciers, Ice Cores and Abrupt Climate Change. Annual Meeting of the OSU Department of Ophthalmology, Hilton Inn at Easton, Columbus, March 4, 2005. (Ellen gave the first half of the talk and Lonnie gave the last half of the talk).
- 2005 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, 2004.
- 2005 Invited presentation: Glaciers, Ice Cores and Abrupt Climate Change. Winter College 2005, Naples Florida, February 19, 2005. (Ellen gave the first half of the talk and Lonnie gave the last half of the talk).
- 2005 Invited presentation: Ice cores as windows on our past and keys to our future. Lunch & Learn Series at the OSU Research Foundation, February 8, 2005.
- 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.

- 2004 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, 2003.
- 2003 Participant in the OSU Honors Program Orientation for Incoming Exploratory Students, July 17.
- 2003 Invited presentation: Ice Cores: Windows on the Past - Keys to our Future. Keynote Presentation: Environmental Molecular Science Institute, The Ohio State University, June 9, 2003.
- 2003 Invited presentation: Ice Cores: Windows on the Past - Keys to our Future. The 8th Annual T. H. Wu Lecture, Department of Civil, Environmental Engineering and Geodetic Science, The Ohio State University, May 22, 2003.
- 2003 Fireside Chat for the OSU Honor's Program, "Recent climate changes: Stories from the ice" presented January 22, 2003.
- 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, 2002.
- 2002 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.
- 2002 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, 2002.
- 2002 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.
- 2002 Invited Presentation: "Climate Craziiness: 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, April 24.
- 2002 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).
- 2002 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.
- 2002 Presentation "Ice cores: Windows on our Past and Keys to Our Future. An invited presentation by the John Deaver Drinko Academy, Marshall University, Huntington, WV, March 8, 2002.
- 2002 Presentation "Reconstructing Earth's Climate History from Ice Cores" to the public at the Upper Arlington Library, March 12, 2002.
- 2002 Presentation "Reconstructing Earth's Climate History from Ice Cores" to Freshmen in the First Year Experience Program at Ohio State, March 5, 2002.

- 2002 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, 2002.
- 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).
- 2001 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.
- 2001 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.
- 2001 Invited Presentation and Site Visit to University of Michigan's Biological Research Station in Pellston, Michigan. Presentation was entitled "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.
- 2001 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 CO₂ and not just the 3 proposed by Bush) and extending the CAFÉ standards to SUVs.
- 2001 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).
- 2001 Attended NSF's Office of Polar Programs Advisory Committee meeting (May 3 and 4; November 5 and 6).
- 2001 Served on an NSF review panel for the ATM Division's Earth System History (ESH) Program (May 7 through 10).
- 2001 Served as a judge for the Denman Undergraduate Research Forum (OSU) on May 21.
- 2001 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).
- 2001 Invited presentation: Ice cores from high latitudes and implications for climatic change. The 2001 Quay Hebrew Lecture, Brigham Young University, March 28, 2001.
- 2001 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, 2001.

- 2001 Invited presentation: Ice Cores: Windows on the Past - Keys to the Future. Department of Geological Sciences Colloquium, University of Minnesota, April 4, 2001.
- 2000 Invited presentation: Ice cores: Windows on the past - Keys to the future. London Quaternary Lecture #64, University of London, Royal Holloway, December 6, 2000.
- 2000 Invited presentation: Ice cores: Windows on the past - Keys to the future. Department of Geography, University of Edinburgh, December 4, 2000.
- 2000 Represented the Geography Department in the SBS portion of the OSU Focus Weekend. Presented a brief overview of the ice core research, October 12, 2000.
- 2000 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, 2000. Presented a poster summary of global glacier retreat and chaired a session.
- 2000 Attended the Annual PARCA investigators' Meeting and presented results from the current year. This is a NASA funded project. September 20-23, 2000.
- 2000 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.
- 2000 Invited presentation: Antarctica: Exploration, Ice Cores and Global Climatic Change. Spokane Community College, Spokane WA, May 11, 2000.
- 2000 Panel Discussant: Think Big: How to Develop Successful Collaborative Proposals. AAG Annual Meeting, Pittsburgh, April 5, 2000.
- 2000 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, 1999.
- 1999 Invited presentation: Ice Cores: Windows on the past- keys to the future. NIST Colloquium Series, October 29, 1999.
- 1999 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, OH, October 27.
- 1998 Invited Participant: First International Conference on Mars Polar Science and Exploration. Houston, Texas, October 18-22.
- 1998 Invited speaker: Midwest Interfaith Global Warming Conference. Josephinum, Columbus, OH, October 25.
- 1998 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.
- 1998 Invited Presentation: Laboratory on Ice: An Antarctic Perspective. Smithsonian Institution Classroom on the Mall Series: Polar Connections, April 16.
- 1998 Invited Presentation: Ice Cores: Windows on the past and keys to the future. President's Club Annual Meeting, The Ohio State University, April 18.
- 1998 Invited Presentation: Windows on the past and keys to the future. COSI, Columbus, OH, April 28.

- 1998 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.
- 1998 Attend Annual PARCA Workshop, Wallops Island, VA, October 5-6.
- 1998 Invited Participant: First International Conference on Mars Polar Science and Exploration. Houston, Texas, October 18-22.
- 1998 Invited speaker: Midwest Interfaith Global Warming Conference. Josephinum, Columbus, OH, October 25.
- 1998 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.
- 1997 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, 1997. We then hiked to the Grinnell Glacier.
- 1997 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.
- 1997 Invited Workshop Participant: Paleo-history of the Western Antarctic Peninsula. ICESS, UCSB, Santa Barbara, CA, August 20 - 23.
- 1997 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.
- 1997 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.
- 1996 Presented lecture and activity as part of the Earthwatch Program sponsored by the Byrd Center with funding from BETHA, March 2.
- 1996 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.
- 1996 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.
- 1996 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.
- 1996 Invited speaker: Title: Climate Histories from high resolution ice cores. Department of Geography, University of Wisconsin, Madison, WI., April 18.
- 1996 Invited speaker: Ice cores: Windows on the past, keys to our future. The Glenn Trewartha Annual Lecture, Department of Geography, University of Wisconsin, Madison, WI., April 19.

- 1996 Invited presentation: Glaciological Evidence for Recent Environmental Changes. The Ozone Action Round table held at the Press Club, Washington, D.C., June 24.
- 1996 Attend the WAIS (West Antarctic Ice Sheet) Workshop, September 24-27.
- 1996 Invited speaker: Ice cores: Windows on the past, keys to our future. Department of Geography, University of Delaware, October 11.
- 1996 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.
- 1996 Invited Presentation: Title: Antarctic ice core studies. Inter American Institute Workshop on Climate Variability in the Americas from High Elevation Ice Cores, Bariloche, AR, Dec. 11-13.
- 1995 Invited presentation: Holocene climate histories from polar ice cores. Institute of Arctic and Alpine Research, October 27.
- 1995 Invited speaker: Ice cores: Windows on the Past: Keys to our Future. NASA Seminar on New Frontiers in Climate Research, NASA Headquarters, Washington, DC, May 1.
- 1995 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.
- 1995 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, Sept., 9.
- 1994 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.
- 1994 Invited Speaker: Ice cores as paleoclimatic windows on the Earth's past climate. Honors Program, Dept. of Geological Sciences, The Ohio State Univ. (Mansfield Campus), October 20.
- 1994 Invited Speaker: High resolution ice core histories from Antarctica. Physics Institute, University of Berne, Switzerland, October 11.
- 1994 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.
- 1994 IAI (Inter-American Institute for Global Change Research) Planning Meeting, NSF, Arlington, Va., June 3.
- 1994 Poster presented: Recent increase in South Pole snow accumulation, American Geophysical Union, Spring meeting, Baltimore, May 27.
- 1994 Invited speaker, Marshall University: two talks: "How ice cores tell us about the Earth's past climate" to Physical Geography class, "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.
- 1994 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.

- 1994 UCAR, University Relations Committee meeting. Scripps, La Jolla, Ca., 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.
- 1993 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, TX, March 15,16.
- 1993 Invited Speaker: A Geographer's view of Global Change. Geological Sciences Alumni Society Seminar, The Ohio State University, Sept. 11.
- 1992 Invited Speaker: Ice cores as paleoclimatic libraries. Distinguished lecture series. Department of Geology and Geophysics, University of Utah, Salt Lake City, UT, May 29.
- 1992 General audience presentation: Ice cores as a window on the past. Cultural Arts Commission of Upper Arlington, Columbus, March 12, 1992.
- 1992 Panel member for the American Geophysical Union's Space Exploration Initiative.
- 1992 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.
- 1991 Invited speaker. National Science Foundation Division of Polar Programs Young Scholars Program, Louisiana Universities Marine Center, Chauvin, LA, Oct., 4-6, 1991.
- 1991 Invited participant (2.5 days) in the Program for Leadership in Earth Science Education (under auspices of an NSF grant): July 18-20, 1991 at The Ohio State University.
- 1991 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, 1991.
- 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, 1989.
- 1989 Invited Speaker: Paleoclimate and ice cores. University of Dayton, March 31, 1989.
- 1989 Invited Speaker: Glaciological studies at Siple Station, Antarctica: ice core 500-year paleoclimatic record. Purdue University, April 18, 1989.
- 1989 Invited Speaker (two talks): Role of ice cores in global change. Paleoclimatic reconstruction from Antarctic ice cores. University of Minnesota, March 2, 1989.
- 1989 Invited Speaker: The drought of '88: its future impact. Annual convention of Farm and Power Equipment Retailers. Columbus, Ohio, January 26, 1989.
- 1988 Invited Speaker: Ice cores: paleoclimatic libraries. General Motors Research Laboratories, Warren Michigan, October 25, 1988.
- 1988 Ice core analyses: Understanding past, present and future global weather. Annual Meeting of the Oregon Academy of Science and Sigma Xi, Portland, OR, February 5, 1988 (invited).

- 1988 Invited Speaker: Global change and the role of ice core paleoclimatology. Wooster Sigma Xi Club, Wooster, OH, April 28, 1988.
- 1988 Invited Speaker: Paleoclimatic reconstruction from ice cores. Annual meeting of Northern Michigan University Sigma Xi, Marquette, MI, April 6, 1988.
- 1988 Invited Speaker: Potential of ice cores for paleoclimatic reconstruction, Wittenberg University, Springfield, OH, February 11, 1988.
- 1987 Invited Speaker: Reconstruction of paleoclimate from ice cores. NASA Colloquium, Oct. 23, 1987.

PROFESSIONAL SERVICE

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.

Current Editorial Activity

Editorial Board member: *Polar Geography*
 Guest Editor, *Proceedings of the National Academy of Sciences* (2009)

Past Editorial Activity

Guest Editor: *Annals of Glaciology*, Volume 43, 2006, (Symposium on High-elevation Glaciers and Climate Records)
 Associate Editor, *Polar Geography* (2001 – 2009)

Past Positions held with Professional Organizations

- 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, US 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

Current and Past Service at Ohio State University

- 2007-09 John Glenn School of Public Affairs, Advisory Committee Member
- 2007-09 Faculty Advisory Committee, OSU Institute for Energy & the Environment
- 2007-09 College (SBS) Promotion and Tenure Committee
- 2006-09 Climate, Water and Carbon Initiative, Advisory Board Member
- 2005-09 College Budget and Planning (Strategic Advice) Committee
- 2005-09 University Committee on Undergraduate Research, OAA
- 1996-09 Byrd Polar Research Center Executive 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)

Memberships

- American Association for the Advancement of Science
- American Geophysical Union
- American Meteorological Society
- Antarctican Society
- Association of American Geographers
- International Glaciological Society
- Ohio Academy of Sciences
- Sigma Xi

STUDENT INTERACTIONS

Students Advised

- 2008 Lijia Wei, Ph.D. Atmospheric Sciences, Department of Geography, Thesis 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

- 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

- 2003 Ryan Fogt, M.S., Atmospheric Sciences (Geography)
2002 Brent Christner, PhD, Microbiology, Committee Member
2002 Kwan Song, M.S., Environmental Science Graduate Program, Committee Member
2000 Rob Hellstrom, PhD, Geography
2000 Sandra Passchier, PhD, Geological Sciences (External Examiner)
1999 Firooza Pavri, PhD, Geography
1999 Maurice McHugh, PhD Geography
1999 Brent Christner, PhD, Microbiology
1998 Chung-Chieh Wang, PhD, Atmospheric Sciences (Geography)
1998 Cindy Sorrensen, PhD, Geography
1997 Norman Kerle, MA, Geography
1996 Frances Herlihy, MS, Geological Sciences (Advisor: Larry Krissek)
1995 Cindy Sorrensen, MA, Geography
1994 Merlin Marshall, PhD, Geography
1994 Paul Kinder, MA, Geography

- 1994 Joy Dingle, MA, Geography
- 1993 Timothy R. Boyer: MA, Geography
- 1993 Una NiChaoimh: PhD, Geography: Atmospheric Sciences Program

Grants 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).