

Ellen Mosley-Thompson is a Distinguished University Professor in the Department of Geography and Director of the Byrd Polar Research Center at The Ohio State University. She uses the chemical and physical properties preserved in ice cores collected from the polar ice sheets and high mountain glaciers to reconstruct the Earth's complex climate history. These records indicate that Earth's climate has moved outside the range of natural variability experienced over at least the last 2000 years. Ellen has led nine expeditions to Antarctica and six to Greenland to retrieve ice cores. Ellen served as the PI and field team leader for the ice core drilling project on Bruce Plateau (Antarctic Peninsula) which was part of LARsen Ice Shelf System Antarctica (LARISSA), a U.S. contribution to the International Polar Year. Areas of special interest include abrupt climate change, glaciology, glacier retreat, volcanism, and Holocene climate variability. Ellen holds a B.S. degree in physics and a M.A. and Ph.D. in climatology and atmospheric science.

Complete Vita available at http://bprc.osu.edu/Icecore/vitae/emt_cv.pdf

Short Vita (updated January 2012)

ELLEN MOSLEY-THOMPSON

Professor, Department of Geography
Research Scientist, Byrd Polar Research Center
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DEGREES

Ph.D., 1979, Geography (Climatology), The Ohio State University

M.A., 1975, Geography (Climatology), The Ohio State University

B.S., 1970, Physics, Marshall University

POSITIONS

2010-11 Distinguished University Professor, The Ohio State University

2009-11 Director, Byrd Polar Research Center, The Ohio State University

1995-11 Professor, Department of Geography (Atmospheric Science, Climatology)
The Ohio State University

1990-94 Associate Professor, Department of Geography (Climatology), The Ohio State
University.

1988-06 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

- 2012 Awarded the Benjamin Franklin Medal, The Franklin Institute, April, 2012
- 2011 Elected as a Member of the American Academy of Arts and Sciences, April 2011
- 2010 Designated as a Distinguished University Professor
- 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

- 2012 National Academy of Sciences, U.S. National Committee for Quaternary Research (member)
- 2010+ National Academy of Sciences, Polar Research Board (member)
- 2009+ NOAA Science Advisory Board, Climate Working Group (member)
- 2010+ AAAS, Committee on Sections, representing Section E (member)
- 2010+ AAAS, Chair Elect, Section E (Geology and Geography); Chair in 2012
- 2008+ AAAS, Electorate Nominating Committee (Fellow Nominations)
- 1996+ AAG Representative to the AAAS (Section W: Atmospheric & Hydrospheric Sciences)

RESEARCH PUBLICATIONS AND ACTIVITIES

Peer Reviewed Papers: (122 peer-reviewed papers) Citations: 3201

Research Grants: (50 total grants awarded)

Field Programs (16 programs: 9 to Antarctica; 6 to Greenland; 1 to Peru)

Selected Peer Reviewed Papers (2011 - 2006 only)

- 2011 Thompson, L.G. E. Mosley-Thompson, M.E. Davis, and H.H. Brecher. Tropical glaciers, recorders and indicators of climate change, are disappearing globally. *Annals of Glaciology*, 52(59), 23-34.
- 2011 Thompson, L.G. E. Mosley-Thompson, and M.E. Davis. A paleoclimatic perspective on the 21st Century glacier loss on Kilimanjaro. *Annals of Glaciology*, 52(59), 60-68.
- 2010 Gleick, P.H. and numerous authors listed alphabetically. Climate change and the integrity of science. *Science*, 328(5979), 689-690.
- 2010 Burgess, E.W., R.R. Forster, J.E. Box, E. Mosley-Thompson, D.H. Bromwich, R.C. Bales, and L.C Smith. A spatially calibrated model of annual accumulation rate on the Greenland ice sheet annual (1958-2007). *Journal of Geophysical Research (Earth Surface)*, 115, F2, doi:10.1029/2009JF001293, 2010.
- 2010 L. G. Thompson, H. H. Brecher, E. Mosley-Thompson, D. R. Hardy, and B. G. Mark. Response to Mölg et al.: Glacier loss on Kilimanjaro is consistent with widespread ice loss in low latitudes. *Proceedings of the National Academy of Sciences*, PNAS 2010 107 (17) E69-E70; doi:10.1073/pnas.1001999107 .
- 2009 Thompson, L.G., H.H. Brecher, 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 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 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.

CURRENT SERVICE AT OHIO STATE UNIVERSITY

- 2011 Department of Geography, Chair Search Committee
- 2010-11 College of Arts and Sciences Faculty Salary Grievance Committee
- 2010-11 President's and Provost's Advisory Committee
- 2006-11 Climate, Water and Carbon Initiative, Advisory Board Member
- 1996-11 Byrd Polar Research Center Executive Committee, Chair, since Oct 2009
- 2007-11 John Glenn School of Public Affairs, Advisory Committee Member