

Ellen Mosley-Thompson is a Professor and Distinguished University Scholar in the Department of Geography and a Senior Research Scientist in 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 the Earth's climate has moved outside the range of natural variability experienced over at least the last 2000 years. Ellen has led eight expeditions to Antarctica and six to Greenland to retrieve ice cores. She established Antarctica's most extensive and longest running snow accumulation network at South Pole Station. Ellen is the PI for the upcoming ice core drilling project on Bruce Plateau (Antarctic Peninsula) as part of the U.S. contribution to the International Polar Year. 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 November 17, 2009)

ELLEN STONE MOSLEY-THOMPSON

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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

2009 Director, Byrd Polar Research Center, The Ohio State University
1995-09 Professor, Department of Geography (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

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
- 2001+ Member, AAAS Steering Group for Section E (Geology and Geography)
- 2000+ Associate Editor: Polar Geography
- 1996+ AAG Representative to the AAAS (Section W: Atmospheric Sciences)

RESEARCH PUBLICATIONS AND ACTIVITIES

Peer Reviewed Papers: (*117 peer-reviewed papers*)

Research Grants: (*50 total grants awarded*)

Field Programs (*15 programs: 8 to Antarctica; 6 to Greenland; 1 to Peru*)

Selected Peer Reviewed Papers (2009 - 2006 only)

- 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

- 2007-09 John Glenn School of Public Affairs, Advisory Committee Member
- 2006-09 Climate, Water and Carbon Initiative, Advisory Board Member
- 2005-09 College Budget and Planning Committee
- 2005-09 University Committee on Undergraduate Research, OAA
- 1996-09 Byrd Polar Research Center Executive Committee