MOLLY SCHAUFFLER
Assistant Research Professor
Climate Change Institute, Department of Earth Sciences and
Center for Science and Mathematics Education Research
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Formal Education

University of Massachusetts	Botany	B.S. May 1978
University of Maine	Botany and Plant Pathology	M.S. December 1993
University of Maine	Plant Science, Paleoecology	Ph.D. December 1998

Professional experience

University of Maine Assistant Research Professor, Current appointments: Department of Earth Sciences, University of Maine Center for Science and Mathematics Education Research, and University of Maine Climate Change Institute. (2003 – present)

National Science Foundation Post-doctoral Research Fellow, Science, Math, Engineering, and Technology Education (PFSMETE). *Using community-based environmental research as a tool for reforming science education in small communities in Maine.* (1999 - 2003)

Post-doctoral Research Associate: George Mitchell Center for Environmental and Watershed Studies and Institute for Quaternary Studies, University of Maine. Paleo-vegetational reconstructions for a collaborative study: *Inferring regional patterns and responses in N and Hg biogeochemistry using two sets of gauged paired-watersheds in Acadia National Park*. (1998 – 1999)

Graduate Teaching Assistant, Biology, University of Maine (1991-1993)

Secondary science teacher, Sandy Spring Friends School, Sandy Spring, MD (1978 – 1980)

Research publications

Schauffler, M., S. Vidito, S., Johnson, K., G. L. Jacobson, Jr., J. S. Kahl, 2005. Paleoecological history of forest disturbance in two upland watersheds in Acadia National Park. Chapter in *Establishing paired gauged watersheds at Acadia National Park for long-term research on acidic deposition, nitrogen saturation, forest health, and mercury biogeochemistry (1998-2002)*, J. S. Kahl et al., Eds.

Schauffler, M. and G. L. Jacobson Jr., 2002. *Persistence of coastal spruce refugia during the Holocene in northern New England, USA, detected by stand-scale pollen stratigraphies*, Journal of Ecology 90: 235-250.

Schauffler, M., G. L. Jacobson, Jr., S. A. Norton, A. L. Pugh IV. 1996. *Capture of road-salt aerosols in an acidic peatland in central Maine*. Ecological Applications 6: 263.

Davis, R. B., D. S. Anderson, S. S. Dixit, M. Schauffler, P. G. Appleby, 2005. Responses of two New Hampshire (USA) lakes to human impacts in recent centuries. Journal of Paleolimnology, *in press*.

Lindbladh, M., G. L. Jacobson, Jr., M. Schauffler 2003. *The postglacial history of three Picea species in New England, USA.* Quaternary Research

Synergistic Activities

Developed and delivered graduate seminar course (SMT 507: Research-related Curriculum Development in Science and Mathematics) for pre-service and in-service teachers participating as research interns at the Jackson Laboratory, funded by Howard Hughes Medical Institute (Spring semesters 2004 - 2010).

Science program coordinator, University of Maine Hutchinson Center, Belfast, ME (2009-present)

Created the Maine Environmental Monitoring and Assessment Program (MEMAP) Directory (http://library.umaine.edu/memap), as a tool to help teachers, researchers, and other citizens locate and access environmental monitoring data that are relevant to Maine. (Development is ongoing) (2003 – present).

Created and delivered five workshops for teachers "Working with online environmental data", funded by US EPA (2004)

Developed and delivered graduate science education course for in-service and pre-service teachers, "Integrated Methods in Earth Sciences Education: Monitoring Environmental Change" (2000, 2001, 2003, 2005, 2007, 2009)

Thesis Advisor for Masters in Science Teaching students. (Center for Science and Mathematics Education Research, 2003 – 2010).

Organized and convened various workshops for teachers on research-based inquiry teaching strategies. (June 2005 - 2009)

Advisory Board member for the GENIQUEST Project (Genomics Inquiry through Quantitative Trait Loci Exploration with SAIL Technology): is an exploratory NSF DRK12 project to develop curricular materials for teaching advanced high-school biology students the science of Quantitative Trait Loci (QTL) genetics analysis. (Maine Mathematics and Science Alliance, 2006-2009).

Inquiry-based Dynamic Earth Applications of Supercomputing (IDEAS) NSF ITEST # 0737583 to University of Maine). Goal: Provide middle school teachers skills in computer modeling and data visualization and Earth systems content (climate in particular) and opportunity to develop instructional lessons & materials. (Key personnel) (2007-2010).

Math-Science Partnership: Connecting Climate to Curriculum. Collaboration with Challenger Learning Center of Maine and UMaine School of Marine Sciences and Climate Change Institute. Goal: provide middle & high school teachers fundamentals of climate science and opportunity to develop and implement instruction about climate across all subjects (Key personnel) (2007-2010).