

David Zachary Smith

Home

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Work

Wright Center for Science

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EDUCATION

1981 BA Geology, Susquehanna University, Selinsgrove, Pennsylvania
Minor: Environmental Studies
Senior Research Paper: Stream Geochemistry

1985 MA Earth Science Education, University of Northern Colorado, Greeley, Colorado
Projects: Geomorphology
Lacustrine Sediment Core Analysis

EXPERIENCE

2002 - present Program Coordinator, Wright Center for Science Education, Tufts University
Medford, Massachusetts

2001 - 2002 Senior Curriculum Developer, TERC, Cambridge, Massachusetts

2000 - 2001 Paleoclimate Program Coordinator, Climate Change Institute,
University of Maine, Orono, Maine

2000 - 2001 Assistant Field Leader on the US International Trans-Antarctic Scientific Expedition
for the Climate Change Institute, University of Maine, Orono, Maine
2000 field program lasted three months in Antarctica.

1999 - 2000 Educational Program Coordinator, Climate Change Research Center,
University of New Hampshire, Durham, New Hampshire

1998 - 2000 New Hampshire Science Teachers Association Board of Directors

1996 - 1999 Fieldstone Estates Condominium Association Board of Directors
New Market, New Hampshire

1998 - 1999 Research Fellow, Wright Center for Innovative Science Education,
Tufts University, Medford, Massachusetts
Projects included: Climate/glaciology student text, http://www.tufts.edu/as/wright_center/
and other educational materials

1998 Project Designer, University of New Hampshire, Climate Change Research Center
Greenland Ice Core Project 2 Climate Card,
(http://www.tufts.edu/as/wright_center/iecws/materials/online_activities/climate_card/pages/page01a.htm)* recommended by DLESE and WGBH

1991-1998 Science Teacher, The Derryfield School, Manchester, New Hampshire
Teaching responsibilities: 8th grade Earth Science, Algebra 1,

Geology of New England, Astronomy, Surveying/Geology Field Methods,
Engineering and Design, Environmental Studies, Meteorology
Additional responsibilities: 8th Grade Head Class Advisor
Coaching responsibilities: crew, ski jumping, outing club, middle school girls' soccer,
ultimate frisbee team (new team at Derryfield, initiated, organized and coached)

- 1990 -1991* Science Teacher/ Lower School Science Advisor, Glen Urquhart, School,
Beverly Farms, Massachusetts
Teaching responsibilities: 8th grade Physical Science, 2nd grade science class
Additional responsibilities: Advisor to lower school faculty on science
- 1988 -1990* Science Teacher, Cardigan Mountain School, Canaan, New Hampshire
Teaching responsibilities: 9th grade Biology, 9th grade Earth Science,
8th grade Introduction to Physical Science (IPS), 6th Grade Advanced Topics in Physics
Coaching responsibilities: skiing (alpine and nordic), baseball,
Outing Club (rock climbing, hiking)
- 1981-1983* Oilfield Geologist, Geoservices, Inc., Denver, Colorado
Responsibilities: daily onsite monitoring of wildcat oil wells

AWARDS

- 2007* Berger Family Endowment Grant Co-PI, \$48,000.00
- 2006* LEF Foundation Grant Co-PI, \$5,500.00
- 1998* Wright Fellowship, Wright Center for Innovative Science Education,
Tufts University, Medford, Massachusetts
- 1997, 1998* Aquanaut Program Grant
Through NOAA and the University of Connecticut, to work with the University of
Connecticut, Avery Point Facility - collected bioacoustic data on Stellwagen Bank
- 1997* The Derryfield School Enrichment Grant, \$300.00 to write a field guide for student
geology field work in New Hampshire
- 1996* The Derryfield School Enrichment Grant, \$1,200.00 that was used to spend 2 weeks
in the North Cascades National Park, Washington, with the head geologist, John Reidel, to work
on on-going park projects (stream studies/glaciology)
- 1995* New Hampshire Geological Society Teacher Award for \$300.00 to purchase
classroom materials
- 1995, 1996* National Science Foundation Math and Science Teacher Grant
for participation on the Juneau Icefield Research Program, Juneau, Alaska
- 1994* Earth Watch Teacher Education Award for participation in geologic inventory
Oregon Caves National Monument, Oregon
- 1990* Cardigan Mountain School Enrichment Grant for NOLS Educator's Course
- 1980* Most Valuable Player Award, Susquehanna University Swimming and Diving Team
- 1976* Eagle Scout

CERTIFICATIONS

2002 Maine Registered Wilderness/Fishing/Sea Kayak Guide
2007 First Aid/CPR – current

WORKSHOPS/PRESENTATIONS

2007 Presenter – NSTA, Denver

2007 Presenter- Climate Change Activities, New England Environmental Educator Association fall conference, Smithfield, ME

2007 Presenter- Climate Change Records, M.A.G.I.C., Milton Academy, Milton, MA

2007 Presenter- Climate Change Records, Cambridge Science Day 2007
In cooperation with the Swiss Consulate, Cambridge, MA

2007 Presenter – Provincetown Art Institute
Collaboration between Art and Science, Provincetown, MA

2007 Presenter – Climate Reconstruction Using Foraminifera
Contained in Deep Sea Sediments – student activity, Woods Hole Oceanographic Institute, Woods Hole, MA

2006 Presenter – Climate Change exhibit materials, Harvard Museum of Natural History, Cambridge, Massachusetts

2006 Presenter - Climate Change Basics/New England Science Center Collaborative Backpack
Peabody Museum, New Haven, Connecticut

2006 Presenter - NASA Chandra Earth and Space Science and Art,
Twin Falls, Idaho

2005 Presenter – University of New Hampshire Climate Change Research Center-
AIRMAP/INHALE projects, Durham, New Hampshire

2005 Presenter - Maine Science Teacher Association annual teacher workshop
GISP2 Climate Card, Farmington, Maine

2005 Co-presenter - NSTA regional Hartford, Connecticut
Pollen Dating Activity, with Deb Avalone-King, Maine DEP

2005 Co-presenter - New England Science Center Collaborative,
Climate Change Backpack, with Peter Arnold - Chewonki Foundation

2005 Co-presenter - New England Science Center Collaborative,
Climate Change Back Pack, with John Anderson, Boston Aquarium,
Sea Coast Science Center, Portsmouth, New Hampshire

2003, 2004,
2005, 2006 Organized and directed multi-year teacher workshop series on international
environmental change: Glacier National Park, Montana; Wells National Estuarine Research
Reserve, Wells, Maine; Caribbean Marine Research Center, Lee Stocking Island, The Bahamas;
Bermuda Biological Station for Research, Bermuda
http://www.tufts.edu/as/wright_center/iecws/index.html

2001 Presenter - Environmental Clean-up in the 21st Century education conference, Netherthorpe
School, Derbyshire, UK. “Practical Climate Change Student Activities”

1999, 2000, Organized and directed three, four-day Climate Change workshops for teachers,

- 2001 Wolfeboro, New Hampshire, Orono, Maine
- 1999, 2000, 2004, 2005 Organized and directed four, one-day Climate Change/Air Quality workshops for teachers, sponsored by the Climate Change Research Center, University of New Hampshire Durham, New Hampshire
- 2000 Presenter- Canadian Climate Change Communications Conference, Toronto, Canada, March 2000
- 1992 Critical Skills Workshop, Antioch College, New Hampshire

PUBLICATIONS

- 2007 Smith, Z., (2007, September), A Record of Climate Change, *The Science Teacher*, 74, No. 6, 48-53.
- 2007 Oceans Effect on Weather and Climate, lead author, NSTA SciPack, http://www.nsta.org/store/product_detail.aspx?id=10.2505/6/SCP-OCW.0.1
- 2007 Climate Reconstruction Using Foraminifera Contained in Deep Sea Sediments – student activity http://www.tufts.edu/as/wright_center/foram_activity/index.html
- 2006 Climate Change museum exhibit student activities, Harvard Museum of Natural History, Cambridge, Massachusetts
- 2005 Origins of Life museum exhibit student activities, Harvard Museum of Natural History, Cambridge, Massachusetts
- 2004 Greenland Ice Sheet Project 2: A Record of Climate Change
http://www.tufts.edu/as/wright_center/iecws/materials/online_activities/climate_card/pages/page01a.htm
- 2004 Greenland Ice Sheet Project 2: A Record of Climate Change, WGBH Teacher Domain, <http://www.teachersdomain.org/resources>
- 2000 Author, EarthKAM Bingo; Delta, Delta, Where is the Delta; and Where There is Smoke, Is there a volcano? <http://www.earthkam.ucsd.edu/public/educators/activities/index.shtml>
- 1998 Author, Glaciers, Climate, and the Landscape, http://www.tufts.edu/as/wright_center
- 1998 Co-author of Life and Climate, Global System Science Project, Boston Museum of Science, Boston, MA, Published by NASA, 1999