

# Curriculum Vitae for Jeffrey S. Munroe

## October, 2008

### Office Address:

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Title: Associate Professor

### Education and Theses:

- **Ph.D.** May 2001, University of Wisconsin-Madison: "*Late Quaternary history of the northern Uinta Mountains, northeastern Utah*" David M. Mickelson, advisor
- **M.S.** May 1996, University of Wisconsin-Madison: "*Glacial geology and soil development in the Arctic Foothills between Galbraith and Toolik Lakes, Alaska*" David M. Mickelson, advisor
- **A.B.** May 1994, Bowdoin College: "*Sedimentology and paleoenvironments of the Pleistocene Flounder Flat complex, Nushagak-Bristol Bay lowland, southwestern Alaska*" Peter D. Lea, advisor

### Classes Taught at Middlebury:

- FYSE 070, *19<sup>th</sup> Century Exploration of the American West*, Fall 2004
- ID 003, *Geologic Evolution of the Hawaiian Islands*, Winter 2003
- GEOL 033, *Paleolimnology*, Winter 2002, 2005, 2007
- GEOL 112, *Environmental Geology*, Spring 2002, 2003, 2004, 2005, 2007
- GEOL/GEOG 250, *Arctic and Alpine Environments*, Fall 2003, 2006
- GEOL/GEOG 251, *Geomorphic Processes*, Fall 2001, 2002, 2003, 2006, 2007
- GEOL 333, *Glacial Geology*, Spring 2003
- GEOL/GEOG 352, *Glacial and Quaternary Geology*, Spring 2002, 2004, 2005
- GEOL 400, *Senior Research Seminar*, Fall 2004

### Teaching and Research Experience:

- **Associate Professor**, Middlebury College, July 2008 to present
- **Assistant Professor**, Middlebury College, August 2003 to June 2008.
- **Visiting Assistant Professor**, Middlebury College, Fall 2001 to Summer 2003.
- **Research Assistant**, UW-Madison supported by US Forest Service, 1999 to 2001. Responsible for geomorphic mapping of the northern Uinta Mountains.
- **Research Assistant**, UW-Madison supported by graduate school, 1998-99. Dissertation research in northeastern Utah.
- **Physical Scientist** with US Forest Service, Summer 1998. Coordinated international field team of geologists and ecologists responsible for Forest Service land systems inventory.
- **Teaching Assistant**, UW-Madison, Spring 1998.
- **Teaching Assistant**, UW-Madison, Fall 1997.
- **Physical Scientist**, US Forest Service, Summer 1996, 1997. Conducted field mapping of soils and geomorphology for Forest Service land systems inventory.
- **Visiting Instructor of Earth Sciences**, Northland College, 1996-1997.
- **Teaching Assistant**, UW-Madison, Spring 1996.
- **Teaching Assistant**, UW-Madison, Fall 1995.

- **Field Scientist** with NSF-LAII project, Summer 1995. Conducted fieldwork for the NSF Land/Atmosphere/Ice Interactions program in northern Alaska. Field investigations included studies of soil development and permafrost active layer dynamics.
- **Field Scientist** with NSF Nushagak-Bristol Bay project, Summer 1993. Conducted fieldwork in southwestern Alaska as part of multidisciplinary study of the Quaternary sedimentary record of the Bristol Bay lowland. Investigations included description of stratigraphic sections and field relationships between stratigraphic units.

### Research Grants:

- **January, 2008:** “*SGER: Developing a chronology for Neoglaciation in Glacier National Park, Montana*” \$7,000 from the NSF Small Grants for Exploratory Research program
- **January, 2008:** “*Developing a chronology for Neoglaciation in Glacier National Park, Montana*” \$7,000 from the American Philosophical Society
- **September, 2007:** “*Glacial mapping of the Uinta Mountains*” \$5,000 from the Ashley National Forest to support GIS data processing and file editing to yield a new glacial geologic map of the Uinta Mountains
- **June, 2006:** “*Glacial mapping of the northern Uinta Mountains*” \$7,350 from the Utah Geological Survey to support compilation of existing mapping, as well as new mapping to yield a complete glacial geologic map of the Uinta Mountain region
- **April, 2006:** “*Glacial geology of the Nulhegan Basin, Vermont*” \$3,300 from Middlebury College, Ada Howe Kent fund
- **January, 2006:** “*Workshop: UINTAS 2006—the Uinta Interdisciplinary Assessment Symposium*” \$7,000 from the USDA Forest Service
- **January, 2006:** “*Workshop: UINTAS 2006—the Uinta Interdisciplinary Assessment Symposium*” \$7,000 from NSF Geomorphology and Land-Use Dynamics Program
- **September, 2005:** Supplement to “*Collaborative/RUI: Late-Quaternary Glacial and Paleoclimate History of the Uinta Mountains, Northeastern Utah*” \$12,878 from the NSF Earth Science Program
- **May, 2005:** “*Investigating soil development in alpine zones of the Green Mountains*” \$5,000 from the Lintilhac Foundation
- **August, 2004:** “*Collaborative/RUI: Late-Quaternary Glacial and Paleoclimate History of the Uinta Mountains, Northeastern Utah*” \$88,439 from the NSF Earth Science Program
- **June, 2004:** “*Investigating Alpine Soils on Mt. Mansfield, Vermont*” \$2000 from Middlebury College, Mellon Deans Discretionary Fund
- **May, 2004:** “*Collaborative: High-Resolution Records of Holocene Climate Change, Drought Variability, and Monsoon Behavior from the Uinta Mountains of Utah*” \$18,002 from the NSF Earth Systems History Program
- **December, 2003:** “*Acquisition of a Modern Thermogravimetric Analyzer for Use in Making Percent Loss-On-Ignition Measurements of Sediment Organic Content at Middlebury College*” \$30,000 from Vermont EPSCoR
- **March 2003:** “*Dating the Advances of Climatically Hyper-Sensitive Glaciers in the Southern Uinta Mountains During the Last Deglaciation*” \$2350 from the Middlebury College Undergraduate Collaborative Research Fund
- **February 2003:** \$500 from the American Alpine Club for “*Detecting Latest Holocene climate change in the northern Uinta Mountains through repeat photography*”
- **May 2002:** “*Final research planning visit for collaborative study of the extent of Late Pleistocene glaciation on the Eastern Qinghai-Xizang Plateau*” \$11,592 from NSF International Program
- **May 2002:** “*Geologic mapping of the southern Lake Fork Mtn. quadrangle, Uinta Mountains, northeastern Utah*” \$13,704 from USGS EDMAP Program

- **June 2000:** \$1500 from UW-Madison Dept. of Geology & Geophysics for summer field research
- **June 2000:** “*Investigation of latest Holocene climate change in the Uinta Mountains through repeat photography: retracing the route of the Hayden survey 130 years later*” \$300 from American Alpine Club
- **May 2000:** “*Timing and origin of the Manor Lands moraine complex in the Uinta Mountains with reference to the Pinedale/Bull Lake type locality in the Wind River Mountains, Wyoming*” \$2000 from Geological Society of America
- **April 2000:** \$600 from UW-Madison Graduate School for Vilas Fellowship
- **June 1999:** “*Investigation of a Holocene paleoclimate record from the subalpine zone of the Uinta Mountains, northeastern Utah*” \$520 from Sigma Xi
- **June 1999:** \$1500 from UW-Madison Dept. of Geology & Geophysics for summer field research
- **May 1999:** “*Field investigations of the Neoglacial sequence in the Deadhorse Lake area, northern Uinta Mountains, northeastern Utah*” \$626 from American Alpine Club
- **September 1998:** \$18,500 from UW-Madison Graduate School for 12-month research assistantship
- **June 1998:** \$1500 from UW-Madison Dept. of Geology & Geophysics for summer field research
- **May 1998:** “*Holocene spatial and temporal variations of the loess system in the eastern Uinta Mountains, northeastern Utah*” \$1750 from Geological Society of America
- **June 1995:** \$2000 from UW-Madison Dept. of Geology & Geophysics for summer field research

### **Publications:**

1. **Munroe, J.S.**, 2008: Alpine Soils on Mt. Mansfield, Vermont, USA: Pedology, History, and Intraregional Comparison. *Soil Science Society of America Journal*, 72(2): 524-533.
2. **Munroe, J.S.**, Doolittle, J.A., Kanevskiy, M.Z., Hinkel, K.M., Jones, B.M., Shur, Y., Nelson, F.E., Kimble, J.M., 2007: Application of Ground-Penetrating Radar Imagery for Three-Dimensional Visualization of Near-Surface Structures in Ice-Rich Permafrost, Barrow, Alaska. *Permafrost and Periglacial Processes*, 18(4): 309-321.
3. **Munroe, J.S.**, Ryan, P.C., Carlson, H.A.\*, and Miller, E.K., 2007: Testing Latest Wisconsinan Ice Flow Directions in Vermont through Quantitative X-ray Diffraction Analysis of Soil Mineralogy. *Northeastern Geology and Environmental Sciences*, 29(4): 263-275.
4. **Munroe, J.S.**, 2007: Properties of Alpine Soils Associated with Well-Developed Sorted Polygons in the Uinta Mountains, Utah, U.S.A. *Arctic, Antarctic, and Alpine Research*, 39(4): 578-591.
5. **Munroe, J.S.**, 2007: Exploring Relationships Between Watershed Properties and Holocene Loss-On-Ignition Records in High-Elevation Lakes, Southern Uinta Mountains, Utah, U.S.A. *Arctic, Antarctic, and Alpine Research*, 39(4): 556-565.
6. Porinchi, D.F., Moser, K.M., and **Munroe, J.S.**, 2007: Development of a Midge-Based Summer Surface Water Temperature Inference Model for the Great Basin of the Western United States. *Arctic, Antarctic, and Alpine Research*, 39(4): 566-567.
7. Laabs, B.J.C., **Munroe, J.S.**, Rosenbaum, J.G., Refsnider, K.A., Mickelson, D.M., Singer, B.S., and Caffee, M.W., 2007: Chronology of the Last Glacial Maximum in the Upper Bear River Basin, Utah. *Arctic, Antarctic, and Alpine Research*, 39(4): 537-548.
8. **Munroe, J.S.**, Laabs, B.J.C., Moser, K.A., and Gurrieri, J.T., 2007: UINTAS 2006: the Uinta Interdisciplinary Assessment Symposium, Snowbird, Utah, May 2006—Introduction. *Arctic, Antarctic, and Alpine Research*, 39(4): 517-520.
9. **Munroe, J.S.**, 2007: In the Footsteps of Timothy O’Sullivan: Rephotographing the 1869 King Survey in the Headwaters of the Bear River, Uinta Mountains. *Utah Historical Quarterly*, 75: 238-257.
10. Roush, W.\*, **Munroe, J.S.**, and Fagre, D.B., 2007: Development of a Spatial Analysis Method Using Ground-Based Repeat Photography to Detect Changes in the Alpine Treeline Ecotone, Glacier National Park, Montana, U.S.A. *Arctic, Antarctic, and Alpine Research*, 39: 297-308.

11. **Munroe, J.S.**, Farrugia, G.\*, and Ryan, P.C., 2007: Parent Material and Chemical Weathering in Alpine Soils on Mt. Mansfield, Vermont, USA. *Catena* 70:39-48.
12. **Munroe, J.S.**, Laabs, B.J.C., Shakun, J.D.\*, Singer, B.S., Mickelson, D.M., Refsnider, K., and Caffee, M. 2006: Latest Pleistocene Advance of Alpine Glaciers in the Southwestern Uinta Mountains, Utah, USA: Evidence for the Influence of Local Moisture Sources. *Geology* 34: 841-844.
13. Colgan, P.M., **Munroe, J.S.**, and Zhou, S., 2006: Cosmogenic Nuclide Evidence for the Limited Extent of Late Glacial Maximum Glaciers in the Tanggula Shan of the Central Tibetan Plateau. *Quaternary Research*, 65: 336-339.
14. **Munroe, J.S.**, 2006: Investigating the Spatial Distribution of Summit Flats in the Uinta Mountains of Northeastern Utah, USA. *Geomorphology*, 75: 437-449.
15. **Munroe, J.S.**, Laabs, B.J.C., and Carson, E.C., 2006: "Quaternary Landscape Change and Modern Process in Western North America. *Geomorphology*, 75: 281-282.
16. **Munroe, J.S.**, 2005: Glacial Geology of the Northern Uinta Mountains. in Dehler et al., eds., Uinta Mountain Geology: Salt Lake City, Utah, Utah Geological Association Publication 33.
17. **Munroe, J.S.**, Laabs, B.J.C., Pederson, J.L., and Carson, E.C., 2005: From Cirques to Canyon Cutting: New Quaternary Research in the Uinta Mountains. in Pederson, J. L., and Dehler, C. M., eds., Interior Western United States: Geological Society of America Field Guide 6, p. 53-78.
18. Carson, E.C. and **Munroe, J.S.**, 2005: Tree-ring Based Reconstruction of Streamflow for Ashley Creek, Northeastern Utah: Implications for Paleohydrology of the Southern Uinta Mountains. *The Holocene*, 14(4): 602-611.
19. **Munroe, J.S.**, 2003: Estimates of Little Ice Age Climate Inferred Through Historical Rephotography, Northern Uinta Mountains, U.S.A. *Arctic, Antarctic and Alpine Research*, 35(4): 489-498.
20. Bockheim, J.G., O'Brien, J.D., **Munroe, J.S.**, and Hinkel, K.M., 2003: Factors Affecting the Distribution of *Populus balsamifera* on the North Slope of Alaska, U.S.A. *Arctic, Antarctic and Alpine Research*, 35(3): 331-340.
21. **Munroe, J.S.**, 2003: Holocene Timberline and Palaeoclimate of the Northern Uinta Mountains, Northeastern Utah, U.S.A. *The Holocene*, 13(2): 175-185.
22. **Munroe, J.S.** and Mickelson, D.M., 2002: Last Glacial Maximum Equilibrium-Line Altitudes and Paleoclimate, Northern Uinta Mountains, Northeastern Utah, U.S.A. *Journal of Glaciology*, 48(161): 257-266.
23. **Munroe, J.S.**, 2002: Timing of Post-Glacial Cirque Reoccupation in the Northern Uinta Mountains, Northeastern Utah, U.S.A. *Arctic, Antarctic and Alpine Research*, 34(1): 38-48.
24. **Munroe, J.S.** and Bockheim, J.G., 2001: Soil Development in Low-Arctic Tundra of the Northern Brooks Range, Alaska. *Arctic, Antarctic and Alpine Research*, 33(1): 78-87.
25. Bockheim, J.G., **Munroe, J.S.**, Douglass, D.C., and Koerner, D., 2000: Soil Development along an Elevational Gradient in the Southeastern Uinta Mountains, Utah, USA. *Catena*, 39: 169-185.

\*Student co-author

### Abstracts:

1. Laabs and **Munroe**, 2008: "Glacial and Pluvial Records of the Angel Lake Glaciation in Northeastern Nevada and Inferences of Latest Pleistocene Climate" Geological Society of America Conference.
2. Laabs, Bash, Refsnider, Becker, **Munroe**, Mickelson and Singer, 2007: "Cosmogenic Surface-Exposure Age Limits for Latest-Pleistocene Glaciation and Paleoclimatic Inferences in the American Fork Canyon, Wasatch Mountains, Utah, U.S.A." American Geophysical Union Conference.
3. Porinchi, Reinemann, Potito, Moser, MacDonald, **Munroe**, Mark, and Box, 2007: "Evidence of Regional Warming During the 20<sup>th</sup> Century in Alpine and Subalpine Lakes in the Western United States" American Geophysical Union Conference.

4. **Munroe**, 2007: "Investigating Post-Glacial Environmental Gradients with Lacustrine Sedimentary Records: An Example from the Uinta Mountains of Northeastern Utah, U.S.A." International Quaternary Association Congress, Quaternary International 167/168: 295.
5. Corbett\*, Almena-Aliste, **Munroe**, Elder, and Trubek, 2007: "Vermont Terroir: Investigating the Relationship Between the Sensory Properties of Maple Syrup and the Bedrock Type on which the Maple Trees Grow." Institute of Food Technologists Annual Meeting Book of Abstracts.
6. **Munroe**, 2007: "Glacial Geology of the Nulhegan Basin Area, Northeastern Vermont, USA" Northeastern Section Meeting, Geological Society of America Abstracts with Programs 39(1): 55.
7. Rodgers\* and **Munroe**, 2007: "Post-glacial Lake Sediment Records from Northeastern Vermont, USA" Northeastern Section Meeting, Geological Society of America Abstracts with Programs 39(1): 91.
8. **Munroe**, Farrugia\*, and Ryan, 2006: "Parent Material and Chemical Weathering in Alpine Soils on Mt. Mansfield, Vermont, USA" Geological Society of America Abstracts with Programs, 38(7): 69.
9. Corbett\* and **Munroe**, 2006: "Vermont Terroir: Investigating the Relationship Between Maple Syrup Chemistry and Bedrock Lithology" Geological Society of America Abstracts with Programs, 38(7): 357.
10. Colgan, Shangzhe, Xu, Douglass, Refsnider, Mickelson, and **Munroe**, 2006: "Cosmogenic Radionuclide <sup>10</sup>Be Exposure Ages for Two Glacial Advances in the Boduizangbu and Palongzangbu river valleys, Southeastern Tibetan Plateau" Geological Society of America Abstracts with Programs, 38(7): 71.
11. **Munroe**, 2006: "Lacustrine Loss-On-Ignition Records from the Southern Uinta Mountains" American Quaternary Association, Program and Abstracts of the 19th biennial meeting, 19, 128.
12. **Munroe**, 2005: "Lacustrine Loss-On-Ignition Records from the Southern Uinta Mountains" Geological Society of America Abstracts with Programs, 37(7): 432.
13. Laabs, **Munroe**, Shakun\*, and Caffee, 2005: "New Evidence of Synchronicity Between Deglaciation in the Uinta Mountains and the Fall of Lake Bonneville" Geological Society of America Abstracts with Programs, 37(7): 335.
14. Carson, **Munroe**, and Laabs, 2005: "Radiocarbon Constraints on Timing of Deglaciation and Deposition of Post-glacial Valley-fill Sediments from Dry Gulch, Uinta Mountains, Northeastern Utah" Geological Society of America Abstracts with Programs, 37(7): 424.
15. Farrugia\* and **Munroe**, 2005: "Investigating Alpine Pedogenesis on Mt. Mansfield, Vermont" Northeastern Section Meeting, Geological Society of America Abstracts with Programs, 37(1): 23.
16. Colgan, **Munroe**, and Zhou, 2004: "Evidence for Multiple Glaciations of the Tanggula Shan of the Central Tibetan Plateau." Geological Society of America Abstracts with Programs, 36(5): 498.
17. **Munroe**, 2003: "A Lacustrine Sedimentary Record of the Holocene Climatic Optimum in the Uinta Mountains, Northeastern Utah." Geological Society of America Abstracts with Programs, 35(6): 541.
18. Shakun\* and **Munroe**, 2003: "Last Glacial Maximum Equilibrium-line Altitudes and Paleoclimate, Northeastern Utah." Geological Society of America Abstracts with Programs, 35(6): 541.
19. Laabs and **Munroe**, 2003: "Cosmogenic-Exposure Age Limits on the Last Glacial Maximum in the South-Central Uinta Mountains, Northeastern Utah." Geological Society of America Abstracts with Programs, Seattle Meeting, 35(6): 541.
20. Carson, **Munroe**, and Laabs, 2003: "Post-glacial Environmental Change in the Uinta Mountains, Utah" Rocky Mountain Anthropological Conference, Boulder, Colorado.
21. **Munroe**, Colgan, and Zhou, 2003: "Past and Present Glacier Extent in the Tanggula Shan of the Qinghai-Tibetan Plateau, China." International Quaternary Association Congress, 16: 169.
22. **Munroe** and Laidlaw\*, 2002: "A 5000-year Record of Fire and Sedimentary Response for the Uinta Mountains, Northeastern Utah." Geological Society of America Abstracts with Programs, 34(6): 469.
23. **Munroe**, 2002: "Application of Historical Rephotography for Quantifying Post-Little Ice Age Changes in Timberline Forests, Northern Uinta Mountains, Northeastern Utah." American Quaternary Association, Program and Abstracts of the 17th biennial meeting, 17: 103.
24. **Munroe**, 2001: "Reconstructed Late Pleistocene Glacier Equilibrium Line Altitudes Provide Evidence for Lake-effect Snow from Lake Bonneville." Geological Society of America Abstracts with Programs, 33(6): 440.
25. Carson and **Munroe**, 2001: "Dendrochronology-based Reconstruction of Streamflow for Ashley Creek and Whiterocks River, Uinta Mountains, Northeastern Utah." Geological Society of America Abstracts with Programs, 33(6): 216.
26. **Munroe**, 2000: "Post-Last Glacial Maximum History of the Northern Uinta Mountains Inferred from Upper Subalpine Geomorphology, Palynology and Radiocarbon Dating." Geological Society of America Abstracts with Programs, 32(7): 16.

27. Brugger and **Munroe**, 2000: "Climate Required for Holocene Glaciation in the Uinta Mountains, Utah." Geological Society of America Abstracts with Programs, 32(7): 17.
28. **Munroe**, 2000: "Sedimentology and Paleoenvironments of Holocene Valley Fills from the Upper Henrys Fork River Basin, Uinta Mountains, Northeastern Utah." American Quaternary Association, Program and Abstracts of the 16th biennial meeting, 16: 87.
29. **Munroe**, 2000: "Radiocarbon Dates Provide Constrains on the Extent of Neoglaciation in the Uinta Mountains, Northeastern Utah." Geological Society of America Abstracts with Programs, 32(5): 34.
30. **Munroe**, 1999: "Structural Controls on Dynamics of Alpine Glaciers of the Northern Uinta Mountains During the Smiths Fork and Blacks Fork Glaciations." Geological Society of America Abstracts with Programs, 31(7): 367.
31. **Munroe** and Douglass, 1998: "Physical and Chemical Evidence for Eolian Additions to Subalpine Soils in the Eastern Uinta Mountains, Northeastern Utah." Geological Society of America Abstracts with Programs, 30(7): 138.
32. Douglass and **Munroe**, 1998: "Soils in the Glaciated Headwaters of South Fork Ashley Creek, Uinta Mountains, Northeastern Utah." Geological Society of America Abstracts with Programs, 30(2): 15.
33. **Munroe** and Douglass, 1998: "Anomalous Hummocky Lateral Moraines in the Eastern Uinta Mountains, Northeastern Utah: Evidence for Extensive Mass-Wasting-Derived Supraglacial Debris?" Geological Society of America Abstracts with Programs, 30(2): 15.
34. **Munroe**, 1996: "Glacial Geology and Soil Development in the Arctic foothills Between Galbraith and Toolik Lakes, Alaska." American Quaternary Association, Program and Abstracts of the 14th biennial meeting, 14: 112.
35. **Munroe**, 1994: "Sedimentology and Paleoenvironments of the Pleistocene Flounder Flat Complex, Nushagak-Bristol Bay Lowland, Southwestern Alaska." Geological Society of America Abstracts with Programs, 26(3): 64.

\*Student co-author

### **Research Collaborators:**

- James Bockheim, University of Wisconsin-Madison
- Eric Carson, San Jacinto College
- Patrick Colgan, Grand Valley State University
- Ken Hinkel, University of Cincinnati
- Ben Laabs, SUNY Geneseo
- Glen MacDonald, University of California-Los Angeles
- David Mickelson, University of Wisconsin-Madison
- Katrina Moser, University of Western Ontario
- Fritz Nelson, University of Delaware
- David Porinchu, The Ohio State University
- Peter Ryan, Middlebury College
- Zhou Shangzhe, South China Normal University
- Yuri Shur, University of Alaska-Fairbanks

### **Awards and Recognition:**

- Nominated for Perkins Teaching Award, Middlebury College, December 2002; February, 2007
- University of Wisconsin-Madison Distinguished Research Paper Award, 2003
- University of Wisconsin-Madison Vilas Fellowship, 2000-2001 academic year
- GSA Quaternary Geology and Geomorphology Division Mackin Award, Honorable Mention, October 1999
- Stanley Tyler Excellence in Teaching award, UW-Madison Department of Geology & Geophysics, May 1996

### **Middlebury College Senior Thesis Students:**

- Holly Carlson '02: *"XRD and Mineral Quantification as a Means of Determining Ice Flow Directions"*
- Fred Coriell '02: *"Reconstruction of a Paleoflood Chronology for the Middlebury River Gorge using Tree Scars as Flood Stage Indicators"*
- Anna Cotton '02: *"Stratigraphy and Sedimentology of a Paraglacial Alluvial Fan near Hancock, Vermont"*
- Jamie Laidlaw '02: *"A mid-to late-Holocene Record of Fire Frequency for the Northwestern Uinta Mountains Inferred from Charred Plant Remains in Lacustrine Sediment"*
- Jeremy Shakun '03: *"Determination of Equilibrium-Line Altitudes for Glaciers Formed During the Last Glacial Maximum, Uinta Mountains, Utah"*
- Daniela Salaverry '03: *"Assessment of the Recent Retreat of Glaciers in the Tanggula Shan Range, Tibetan Plateau, China"*
- Will Roush '03.5: *"Envisioning Glacier National Park's Changing Alpine Environment Through Repeat Photography"*
- Colin Rodgers '04: *"Latest Holocene Atmospheric Deposition of Trace Metals in a Pristine Alpine Lake"*
- Gianina Farrugia '05: *"Investigating Alpine Pedogenesis on Mt. Mansfield, Vermont"*
- Lee Corbett '07: *"Multi-Proxy Climate Reconstruction on Lake Sediment from the Uinta Mountains, Utah"*
- Logan Duran '07.5: *"Grain Size Analysis of Lacustrine Sediment Deposited Near a Rock Glacier & a GIS Analysis of Rock Glacier Location in the Uinta Mountains, Utah"*
- Chris Rodgers '07: *"Holocene Climatic Reconstruction Using Loss on Ignition Analysis in Northeastern Vermont"*
- Tim Cavanaugh '08: *"Application of Photospectrometry for Paleoclimate Interpretations from Lacustrine Sediment Records"*
- Andrew Peters '08: *"Investigating Post-Glacial Drought Records from the Western Uinta Mountains Through XRD and ICP-AES Analysis of Lacustrine Sediment"*

### **Other Students:**

- Joel Siderius, U. Utah, M.S. '03: *"An investigation of alpine treeline in the Uinta Mountains, northeastern Utah, U.S.A. using age establishment analysis"*
- Ben Laabs, U. Wisconsin-Madison, Ph.D. '04: *"Late Quaternary history of the southern Uinta Mountains, Utah"*

### **Middlebury Service**

#### Invited Talks

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| 2008 | Presenter as part of <u>Eloquent Vistas: The Art of 19<sup>th</sup> Century Landscape Photography from the George Eastman House Collection</u> at Middlebury College, April 3: <i>"Rephotographing 19<sup>th</sup> Century Government Surveys in the Western U.S."</i> |
| 2008 | Panel participant in <u>The Symposium on Climate Change Research</u> at Middlebury College, March, 10.   |
| 2007 | Presenter in Faculty Lecture Series, November 29: <i>"Lake Coring and Paleoclimate Reconstruction: Student Research Experience from New England to the Rocky Mountains"</i>  |

- 2007            Presenter in Howard E. Woodin Environmental Studies Colloquium, April 12: “*Maples in the Landscape: Exploring the Geologic Basis of a Terroir for Maple Syrup in Vermont*”
- 2007            Presenter at Middlebury Maple Dinner sponsored by Slow Food U.S.A., April 5
- 2006            Presenter in Geology Department Lecture Series, November 3: “*Climate Records from Utah’s High Uintas Wilderness: Evidence from Lake Sediment Cores*”
- 2002            Presentation to Geology Department, December 11: “*Investigating the Glacial History of the Tibetan Plateau*”

Committee Contributions

- 2007            Reviewer of Fulbright Applications
- 2003-2007      Member of Environmental Council
- 2007            Member of Anti-Idling subcommittee of Environmental Council
- 2006            Member of Carbon-Neutrality subcommittee of Environmental Council
- 2004-2005      Member of Pedestrian Campus subcommittee of Environmental Council
- 2003-2004      Member of Environmental Assessment subcommittee of Environmental Council

Geology Department

- 2002 – 2005    Organized Geology Department lecture series
- 2003 – 2005    Organized dinners for Geology Majors and a visiting lecturer at Cook Commons
- 2003, ‘04, ‘06   Organized and ran Fall Family Weekend field trip to Ausable Chasm near Plattsburg, NY, for Geology students and their families.

Other

- 2001 – 2008    Affiliate of Environmental Studies Program
- 2008            Faculty Affiliate for Men’s Cross Country team
- 2004 & 2001    Prepared vegan dinner and educational/nutritional materials for Weybridge House

**Professional Service**

Invited Lectures

- 2007            Invited lecture at Utah State University, February 5: “*Late Quaternary Glacial History and Paleoclimate of the Uinta Mountains*”
- 2007            Guest lecture to Windham Co. Sugarmakers Association, December 4: “*Investigating the Geologic Basis of a Terroir for Vermont Maple Syrup*”
- 2007            Presentation a UVM-Extension Maple School in Bristol, January 13: “*Investigating the Geologic Basis of a Terroir for Vermont Maple Syrup*”

- 2006 Invited lecture at Glacier National Park/U.S. Geological Survey Northern Rocky Mountains Science Center, August 8: “*Climate Signals from Lake Cores, Uinta Mountains, Utah*”
- 2006 Presentation at Shelburne Farms, October 17: “*Maples in the Landscape: The Terroir of Maple Syrup*”
- 2003 Presented in Ashley National Forest speaker series, March 26: “*Investigating the Glacial History of the Uinta Mountains*”

Guest Editorships

- 2006 – 2007 Guest editor of special issue of *Arctic, Antarctic, and Alpine Research* (v. 39, no. 4): “UINTAS 2006: The Uinta Interdisciplinary Assessment Symposium”
- 2005 - 2006 Guest editor of special issue of *Geomorphology* (v. 75, no. 3-4): “Quaternary Landscape Evolution and Modern processes in Western North America”

Conference Contributions

- 2005 – 2006 Organized **UINTAS 2006: the Uinta Interdisciplinary Assessment Symposium**. This three-day conference at Snowbird, Utah, brought together academic researchers, U.S. Forest Service land managers, and state and federal scientists with an interest in the Uinta Mountains. The main objectives were to increase communication between the various entities working in the Uintas and to discuss directions for future collaborative research endeavors. A total of 40 people attended, 19 oral presentations were given, and numerous new posters and maps were displayed. Funding was provided by grants I procured from the NSF and the U.S. Forest Service.
- 2006 Prepared white paper outlining potential *High Uintas Environmental Observatory* as an outgrowth of the UINTAS 2006 conference, and facilitated discussion and consideration of the Observatory concept.
- 2005 Co-leader of a three-day fieldtrip (20 participants) to view results of recent research on the glacial and fluvial geomorphology of the Uinta Mountains, October 13-15: “From Cirques to Canyon Cutting: New Quaternary Research in the Uinta Mountains”
- 2003 Co-Chaired Theme Session on “Records of Quaternary Landscape Change in the Rocky Mountains” at the Geological Society of America annual meeting in Seattle, Washington.

Reviewing

- 2001 – 2008 Peer-reviewer for *Arctic, Antarctic, and Alpine Research, Boreas, Geology, Geomorphology, Quaternary Research, The Holocene*, the Geological Society of America, and the National Science Foundation

**Professional Memberships:**

- American Quaternary Association
- Geological Society of America
- Sigma Xi
- U.S. Permafrost Association