BRENDA L. HALL

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PROFESSIONAL PREPARATION

Bates College	Geology/Russian	B.S. 1990
University of Maine	Geological Sciences	M.S. 1992
University of Washington	Geological Sciences	Visiting Graduate Student 1995
University of Maine	Geological Sciences	Ph.D. 1997
Woods Hole Oceanographic	c	
Institution	Geology/Geophysics	Postdoct. Fellow 1999-2000
University of Maine	Geological Sciences/	
	Quaternary Studies	Postdoct. Res. Associate 1997-2001
Lamont-Doherty Earth	-	
Observatory	Geochemistry	External Postdoct. Fellow 1998
Oxford University	Earth Sciences	Visiting Postdoct. Scientist 1999
University of Waikato	Chemistry	Visiting Postdoct. Scientist
1999	-	

PRESENT POSITION

Associate Professor, Climate Change Institute and Department of Earth Sciences, University of Maine (2007-present)

ADDITIONAL PROFESSIONAL EXPERIENCE

Assistant Professor, Climate Change Institute and Department of Earth Sciences, University of Maine (2004-2007)
Research Assistant Professor, Climate Change Institute/Department of Earth Sciences, University of Maine (2001-2004)
Lecturer in Sciences and Humanities, Continuing Education Division, Husson College (Spring and May 1998)
Field Party Geologist in Antarctica (1990/91, 1991/92, 1992/93, 1993/94, 1994/95, 1995/96, 1997/98); *Principal Investigator* (1999/00, 2000/01, 2001, 2001/02, 2002, 2002/03; 2003; 2003/04; 2004/05, 2005/2006, 2006/2007, 2008/2009); Greenland (2004, 2005, 2006); Patagonia (2006, 2007, 2009); Maine (2005, 2006, 2007); Wyoming (2009)
Research Assistant, Department of Geological Sciences, University of Maine (1990-1997)
Dana Research Apprentice, Department of Geology, Bates College (1988-1990)
Teaching Assistant, Department of Geology, Bates College (1988-1990)
Field Experience in New Zealand (1992, 1999, 2007), Sweden (1992), Colorado Plateau (1988)
Field Assistant in Canadian Arctic (1989)

HONORS AND AWARDS

Kavii Frontiers of Science Fellow: *Ivational Academy of Sciences*, 2000

J. Hoover Mackin Award, Quaternary Geology and Geomorphology Division, Geological Society of America, 1996

PAPERS AND ABSTRACTS PUBLISHED OR IN PRESS (*student/postdoc)

2009

Papers

- *Bromley, G., <u>Hall, B.</u>, Stone, J., Conway, H., and *Todd, C., 2009. Late Cenozoic deposits at Reedy Glacier, Transantarctic Mountains: implications for former thickness of the West Antarctic Ice Sheet. *Quaternary Science Reviews*, in press.
- *Bromley, G., Schaefer, J., Winckler, G., <u>Hall, B</u>., *Todd, C., and *Rademaker, K., 2009. Relative timing of last glacial maximum and late glacial events in the tropical Andes. *Quaternary Science Reviews*, v. 28, p. 2514-2526.
- Burgess, S.*, Henderson, G., and <u>Hall, B</u>., 2009. Reconstructing Holocene conditions under the McMurdo Ice Shelf using Antarctic barnacle shells. *Earth and Planetary Science Letters*, submitted.
- *De Bruyn, M., <u>Hall, B</u>., Chauke, L., Baroni, C., Koch, P., and Hoelzel, A.R., 2009. Rapid response of a marine mammal species to Holocene climate and habitat change: *PLoS Genetics*, 5(7), p. 1-11. (impact factor 8.7).
- Hall, B., 2009. Holocene glacial history of Antarctica and the subantarctic islands. *Quaternary Science Reviews*, 28, 2213-2230 [invited].
- Hall, B., 2009. Proglacial lakes. In:Haritashya et al., (eds.). Encyclopedia of Snow, Ice, and Glaciers, Springer-Verlag, Heidelberg, Germany.[invited]
- *Todd, C., Stone, C., Conway, H., <u>Hall, B.</u>, and *Bromley, G., 2009. Late Quaternary evolution of Reedy Glacier, Antarctica. *Quaternary Science Reviews*, in review.

Abstracts

- Hall, B., and Denton, G., 2009. Glacial chronology from the McMurdo Sound Region, Antarctica: Implications for the history of the Ross Sea ice sheet. *Past Climates Symposium and INTIMATE Australasian Meeting*, Wellington, NZ.
- Hall, B., Stone, J., Conway, H., *Bromley, G., *Todd, C., and *Cowdery, S., 2009. History of the grounded ice sheet in the Ross Sea sector: New data from Scott and Reedy Glaciers. *Past Climates Symposium and INTIMATE Australasian Meeting*, Wellington, NZ.
- Stone, J., Conway, H., Cowdery, S., <u>Hall, B.</u>, and Bromley, G., 2009. Deglaciation of the Ross Sea: A view from Scott and Beardmore Glaciers. 16th Annual WAIS Meeting, Seattle, WA.

2008

Papers

- *Esposito, R., Spaulding, S., McKnight, D., Van de Vijver, B., Kopalova, K., Lubinski, D., <u>Hall</u>, <u>B</u>., and *Whittaker, T., 2008. Inland diatoms from the McMurdo Dry Valleys and James Ross Island, Antarctica. *Botany* 86, 1378-1392.
- Hall, B., Baroni, C., and Denton, G., 2008. The most extensive Holocene advance in East Greenland occurred in the Little Ice Age. *Polar Research* 27, 128-134.
- Hall, B., Baroni, C., Denton, G., Kelly, M., and Lowell, T., 2008. Relative sea-level change, Kjove Land, Scoresby Sund, East Greenland: Implications for seasonality in Younger Dryas time. *Quaternary Science Reviews* 27, 2283-2291.
- Jakobsson, M., Spiegelhagen, R., Thiede, J., Andreason, C., Hall, B., Ingolfsson, O., Kjaer, K., van Kolfschoten, T., Krinner, G., Long, A., Lunkka, J.P., Subetto, D., and Svendsen, J.I., 2008. Foreword to the special issue: Arctic Palaeoclimate and its Extremes (APEX). *Polar Research* 27, 97-104.
- Kelly, M., Lowell, T., Hall, B., Schaefer, J., Finkel, R.C., *Goehring, B., Alley, R., and Denton, G., 2008. A ¹⁰Be chronology of lateglacial and Holocene mountain glaciation in the Scoresby Sund region, east Greenland: Implications for seasonality during lateglacial time: *Quaternary Science Reviews* 27, 2273-2282.

*Whittaker, T., Hall, B., Hendy, C., and Spaulding, S., 2008. Holocene surface-level changes and depositional environments at Lake Fryxell, Antarctica. *The Holocene* 18, 775-786.

Abstracts

- Antibus, D.*, Baeseman, J., Leff, L., Hall, B., Blackwood, C., 2008. Cultivation-based and molecular charactization of ancient algal mats from the McMurdo Dry Valleys, Antarctica. Scientific Committee on Antarctic Research (SCAR) Meeting, St. Petersburg, Russia.
- Antibus, D.*, Leff, L., Baeseman, J., Hall, B., and Blackwood, C., 2008. Cultivation-based and microscopic characterization of ancient algal mats from the McMurdo Dry Valleys. *American Society for Microbiology*, Boston.
- Bromley, G.*, Hall, B., Stone, J., and Conway, H., 2008. Late Quaternary fluctuation of Scott Glacier in response to grounding-line retreat in the Ross Sea Embayment. 15th Annual West Antarctic Ice Sheet Meeting, Sterling, VA.
- Burgess, S.*, Henderson, G., and Hall, B., 2008. Holocene Antarctic seasonality reconstructions from Antarctic barnacle shells. *Goldschmidt Conference*.
- Hall, B., Stone, J., Bromley, G.*, Todd, C.*, and Conway, H., 2008. History of the grounded ice sheet in the Ross Sea sector, Antarctica, at and since the LGM. *American Quaternary Association Biennial meeting*, State College, PA. (invited).
- Hall, B., Stone, J., Bromley, G.*, Conway, H., and Todd, C.*, 2008. History of the grounded ice sheet in the Ross Sea sector, Antarctica, at and since the LGM. 15th Annual West Antarctic Ice Sheet Meeting, Sterling, VA.
- Hall, B., Bromley, G.*, Mietkiewicz, N.*, Stone, J., Conway, H., and Cowdery, S.*, 2008. Reconstructing Holocene ice-marginal fluctuations with relict algal mats at Reedy and Scott Glaciers. 15th Annual West Antarctic Ice Sheet Meeting, Sterling, VA.
- Kelly, M., Hall, B., Lowell, T., Schaefer, J., and Denton, G., 2008. Changes in the Greenland Ice Sheet and nearby ice caps and mountain glaciers during latest Pleistocene and Holocene time. *American Quaternary Association Biennial meeting*, State College, PA. (invited).
- Kelly, M., Lowell, T., Hall, B., Schaefer, J., and Denton, G., 2008. Changes in the Greenland Ice Sheet and nearby ice caps and mountain glaciers during latest Pleistocene and Holocene time. *Empirical Constraints on Future Sea-Level Rise Workshop*, Berne, Switzerland.

2007

Papers

Hall, B., 2007. Late Holocene advance of the Collins Ice Cap, King George Island, South Shetland Islands, Antarctica. *The Holocene*, v. 17, p. 1253-1258.

Abstracts

- Baroni, C., and <u>Hall, B.L</u>., 2007. Late-glacial and Holocene relative sea-level change, Scoresby Sund, East Greenland. *APEX Annual Meeting*, Stockholm, Sweden, March 2007.
- Bromley, G., <u>Hall, B.</u>, Schaefer, J., and Winckler, G., 2007. Late-Quaternary glacier fluctuations and climate change at Nevado Coropuna, southern Peru. *GSA Annual Meeting*, paper 215-12.
- Fastook, J., Sayles, C., Borns, H., Dieffenbacher-Krall, A., Nurse, A., and Hall, B., 2007. Ice sheet model estimates ice mass balance over northern Maine during the Younger Dryas cold reversal. *Northeast Geological Society of America Meeting*.
- Hall, B., Baroni, C., Denton, G., Kelly, M., and Lowell, T., 2007. Late-glacial and Holocene relative sea-level change, Scoresby Sund, East Greenland, *American Geophysical Union Fall Meeting*, paper C11A-0070.
- Henderson, G., Hall, B., Baroni, C., and Kellogg, T., 2007. Holocene Southern Ocean surface radiocarbon ages: Implications for ocean circulation and ice-shelf flow rates. *American Geophysical Union Fall Meeting*, paper PP12A-05.
- Koch, P., Hall, B., Baroni, C., Newsome, S., and Salvatore, M., 2007. The distribution and ecology of southern elephant seals and Adelie penguins on the Holocene Ross Sea coast. *Journal of Vertebrate Paleontology*. v. 27 (S3), 101A.
- Lowell T Kelly M Hall R Smith C Garbart K Travic S and Denton G 2007 Organic

- Lowen, T., Keny, M., Han, D., Shhui, C., Gamar, K., Havis, S., and Denton, G., 2007. Organic remains from the Istorvet Ice Cap, Liverpool Land, East Greenland: A record of late Holocene climate change. *American Geophysical Union Fall Meeting*, paper C13A-04.
- Todd, C., Stone, J., Bromley, G., <u>Hall, B.</u>, and Conway, H., 2007. Late Quaternary evolution of Reedy Glacier, Antarctica. *GSA Annual Meeting*, paper 27-17.
- Thompson, W., Borns, H., and Hall, B., 2007. Extrapolation of the Littleton-Bethlehem (Older Dryas) and Pineo Ridge moraine systems across New Hampshire and Maine. *Geological Society of America, Northeastern Sectional Meeting*, Durham, NH, Paper 17-3.

2006

Papers

- *Gardner, N, <u>Hall, B</u>., and Wehmiller, J., 2006. Pre-Holocene raised beaches at Cape Ross, Antarctica. *Marine Geology*, v. 229, p. 273-284.
- Hall, B.L., Hendy, C.H., and Denton, G.H., 2006. Lake-ice conveyor deposits: Their geomorphology, sedimentology, and importance in reconstructing the glacial history of Antarctica: *Geomorphology*, v. 75, p. 143-156.
- <u>Hall, B.L.</u>, Hoelzel, A.R., Baroni, C., Denton, G.H., Le Boeuf, B.J., Overturf, B., and *Topf, A.L., 2006. Holocene elephant seal distribution implies warmer-than-present climate in the Ross Sea. *Proceedings of the National Academy of Sciences*, v. 103, p. 10213-10217.
- Henderson, G.M., <u>Hall, B.L</u>., *Smith, A., and *Robinson, L.F., 2006. Control on (²³⁴U/²³⁸U) in lake water: A study in the Dry Valleys of Antarctica: *Chemical Geology*, v. 226, p. 298-308.
- Hendy, C.H., and <u>Hall, B.L.</u>, 2006. The radiocarbon reservoir effect in proglacial lakes: Examples from Antarctica: *Earth and Planetary Science Letters*, v. 241, p. 413-421.
- *Pelletier, B., and <u>Hall, B.</u>, 2006. Evaluating Paleoindian settlement in relation to Pleistocene lake levels at Munsungun Lake, Northern Maine, USA. *Cambridge Scholars Press*, in press.

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- *Bromley, G., <u>Hall, B.</u>, Stone, J., Conway, H., and *Todd, C., 2006. Holocene thinning of Reedy Glacier, Transantarctic Mountains, in response to grounding-line retreat of the West Antarctic Ice Sheet. *GSA National Meeting*, Philadelphia, PA.
- Hall, B.L., Hoelzel, A.R., Baroni, C., Denton, G.H., Le Boeuf, B.J., Overturf, B., and *Topf, A.L., 2006. Holocene elephant seal distribution implies warmer-than-present climate in the Ross Sea. *Kavli Frotiers of Science Symposium, National Academy of Sciences*, Nov. 2006.
- Hall, B.L., 2006. Potential for glacial geologic research in the southern Transantarctic Mountains. Southern Transantarctic Mountains Planning Workshop, Ohio State University, September 2006.
- Jakobsson, M., Andreasen, C., Demidov, I., <u>Hall, B.</u>, Ingolfsson, O., Kjaer, K., Krinner, K., Kolfschoten, T., Long, A., Lunkka, J.P., Spielhagen, R., and Svendsen, J.I., 2006. Arctic Palaeoclimate and its Extremes (APEX). Second International Conference on Arctic Research Planning, Copehagen.
- Nurse, A., Borns, H., Hall, B., Dieffenbacher-Krall, A., and Fastook, J., 2006. Geologic and paleoecologic evidence of ice-mass advance in northern Maine during the Younger Dryas cold interval. GSA National Meeting, Philadelphia, PA.
- *Putnam, A., Ackert, R., Muhkopadhyay, S., Borns, H., Braddock, P., and <u>Hall, B</u>., 2006. Pre-LGM advances of alpine glaciers in the Ohio Range, southern Transantarctic Mountains, Antarctica. *GSA National Meeting*, Philadelphia, PA.

2005

Papers:

Hall, B.L., and Denton, G.H., 2005. Surficial geology and geomorphology of eastern and central Wright Valley, Antarctica: *Geomorphology*, v. 64, p. 25-65.

Abstracts:

- *Bromley, G., <u>Hall, B.</u>, Stone, J., *Todd, C., Conway, T., and Conway, M., 2005. Post-LGM evolution of Reedy Glacier, Antarctica, as an indicator of current ice-sheet stability. *12th-Annual WAIS Meeting*, Sterling, VA.
- Hall, B.L., Henderson, G., Baroni, C., and Kellogg, T., 2005. The Holocene radiocarbon reservoir effect in the western Ross Sea. 12th-Annual WAIS Meeting, Sterling, VA.
- Hall, B.L., *Bromley, G., Conway, H., Stone, J., and *Todd, C., 2005. Relict algal mats at Reedy Glacier: Radiocarbon dating at 86S. 12th-Annual WAIS Meeting, Sterling, VA.
- Kelly, M., <u>Hall, B.</u>, Lowell, T., Shaefer, J., Denton, G., and Broecker, W., 2005. A chronology of mountain glaciation in Scoresby Sund, Greenland. *GSA National Meeting*, Salt Lake City, Utah.
- Stone, J., *Todd, C., Conway, H., <u>Hall, B</u>., and *Bromley, G., 2005. Grounding-line incursion into the southernmost Ross Sea- a comparison of lower Scott and Reedy Glaciers. 12th-Annual WAIS Meeting, Sterling, VA.
- *Todd, C., Stone, J., Conway, H., *Bromley, G., and <u>Hall, B.</u>, 2005. Evolution of Reedy Glacier from the last glacial maximum to present. *12th-Annual WAIS Meeting*, Sterling, VA.

2004

Abstracts:

- *Bromley, G.R.M., and <u>Hall, B.L</u>., 2004, Reconstructing Late-Quaternary ice-surface profiles of Reedy Glacier Part 1: 11th Annual WAIS Meeting, Sterling, VA.
- Hall, B.L., 2004. LGM ice-surface elevations along the Transantarctic Mountains front: 11th Annual WAIS Meeting, Sterling, VA.
- Hall, B.L., 2004. Millennial-scale changes of Lake Vanda, Antarctica: GSA Annual Meeting Abstracts with Programs, v. 36.
- *Todd, C., Stone, J., Conway, H., <u>Hall, B.</u>, and *Bromley, G., 2004. Reconstructing Late-Quaternary ice-surface profiles of Reedy Glacier – Part 2: 11th Annual WAIS Meeting, Sterling, VA.
- *Whittaker, T.E., <u>Hall, B.L.</u>, Hendy, C.H., Henderson, G.M., Spaulding, S.A., Berger, G.W., 2004, Recent and Abrupt Variations in Depositional Environment in Lake Fryxell, Dry Valleys, Antarctica, *GSA Annual Meeting Abstracts with Programs*, v. 36.

Papers:

- Baroni, C., and <u>Hall, B.L</u>., 2004. A new relative sea-level curve for Terra Nova Bay, Victoria Land, Antarctica: *Journal of Quaternary Science*, v. 19, p. 377-396.
- Hall, B.L., and *Perry, E.R., 2004. Variations in ice-rafted detritus on beaches in the South Shetland Islands: A possible climate proxy: *Antarctic Science*, v. 16, p. 330-344.
- Hall, B.L., Baroni, C., and Denton, G.H., 2004. Holocene relative sea-level history of the southern Victoria Land coast, Antarctica: *Global and Planetary Change*, v. 42, p. 241-263.
- Staubwasser, M., Henderson, G.M., Berkman, P.A., and Hall, B.L., 2004. Ba, Ra, Th, and U in marine mollusc shells and the potential of ²²⁶Ra/Ba dating of Holocene marine carbonate shells: *Geochimica et Cosmochimica Acta*, v. 68, p. 89-100.

2003

Papers:

Hall, B.L., 2003. An overview of late Pleistocene glaciation in the South Shetland Islands: *Antarctic Research Series*, v.79, p. 103-113.

Abstracts:

- Hall,B.L., 2003. Chronology of proglacial and lateral lakes in the Dry Valleys: *INQUA Congress*, Reno, NV.
- Hall, B.L., and Baroni, C., 2003. Holocene deglaciation of Terra Nova Bay. 10th Annual WAIS *meeting*, Sterling, VA.
- Hall, B.L., Denton, G.H., and Overturf, B., 2003. Evidence for millennial-scale fluctuations of closed-basin lakes in the Drv Vallevs. *GSA Abstracts with Programs*. National Meeting.

Seattle, WA, p. 464.

- <u>Hall, B.L.</u>, Hendy, C.H., and Denton, G.H., 2003. Lake-ice conveyor deposits: Their geomorphology, sedimentology, and importance in reconstructing the glacial history of Antarctica: *Binghamton Geomorphology Symposium*, Binghamton, NY (**invited**).
- Hall, B.L., Hendy, C.H., and Denton, G.H., 2003. Chronology of proglacial and lateral lakes in the Dry Valleys: *INQUA Congress*, Reno, NV (**invited**).
- *Whittaker, T., <u>Hall, B</u>., Hendy, C., Henderson, G., Spaulding, S., and Berger, G., 2003. Recent and abrupt variations in depositional environment in Lake Fryxell, Dry Valleys, Antarctica: *GSA Abstracts with Programs*, National Meeting, Seattle, WA, p. 414.

2002

Papers:

- Hall, B.L., and Denton, G.H., 2002. Holocene history of the Wilson Piedmont Glacier along the southern Scott Coast, Antarctica: *The Holocene*, v. 12, p. 619-627.
- Hall, B.L., Denton, G.H., Overturf, B., and Hendy, C.H., 2002. Glacial Lake Victoria, a highlevel Antarctic lake inferred from lacustrine deposits in Victoria Valley: *Journal of Quaternary Science*, v. 17, p. 697-706.
- *Kelly, M.A., Denton, G.H., and <u>Hall, B.L.</u>, 2002. Late Cenozoic paleoenvironment in southern Victoria Land, Antarctica, based on a polar glaciolacustrine deposit in western Victoria Valley: *GSA Bulletin*, v.114, p. 605-618.

Abstracts:

- Hall, B.L., 2002. Glaciation and relative sea-level changes in the South Shetland Islands: International Workshop on Antarctic Peninsula Climate Variability: A Historical and Paleoenvironmental Perspective, Clinton, New York (invited).
- Hall, B.L., and Baroni, C., 2002. Deglaciation of the Victoria Land Coast, Antarctica: AGU Spring Meeting Abstracts, Washington, D.C.
- Hall, B.L., and Baroni, C., 2002. Relative sea-level change and deglaciation of Terra Nova Bay, Antarctica: 9th Annual WAIS Meeting, Sterling, VA.
- Henderson, G.M., *Robinson, L.F., *Smith, A., Matthews, I., Barker, D., and <u>Hall, B.L.</u>, 2002. Weathering control of river and ocean (²³⁴U/²³⁸U): *Goldschmidt Geochemistry Conference*, Davos, Switzerland.

2001

Papers:

- Hall, B.L., Denton, G.H., and Overturf, B., 2001. Glacial Lake Wright, a high-level Antarctic lake during the LGM and early Holocene: *Antarctic Science*, v.13, p. 53-60.
- Hall, B.L., and Henderson, G.M., 2001. Use of TIMS uranium-thorium dating to determine past reservoir effects in lakes: Examples from Antarctica: *Earth and Planetary Science Letters*, v. 193, p. 565-577.

Abstracts:

- *Gardner, N., and <u>Hall, B.L</u>., 2001. Deglaciation of the western Ross Sea: Part 2, the northern Scott Coast: 2001 WAIS Meeting, Sterling, VA.
- Hall, B.L., and Denton, G.H., 2001. Relative sea-level changes along the Scott Coast, Antarctica: *Antarctic Neotectonics Conference*, ANTEC, Siena, Italy.
- Hall, B.L., 2001. Geomorphological evidence of neotectonics and glacial isostasy: *Antarctic Neotectonics Conference*, ANTEC, Siena, Italy (**invited**).
- Hall, B.L., 2001. Deglaciation of the western Ross Sea: Part 1, the southern Scott Coast: 2001 WAIS Meeting, Sterling, VA.

2000

Papers:

Denton, G.H., and Hall, B.L., editors, 2000. Glacial and Paleoclimatic History of the Ross Ice

Drainage System of Antarctica: Geografiska Annaler, v. 82A, p. 139-432.

- Hall, B.L., and Denton, G.H., 2000. Radiocarbon chronology of Ross Sea drift, eastern Taylor Valley, Antarctica: Evidence for a grounded ice sheet in the Ross Sea at the last glacial maximum: *Geografiska Annaler*, v. 82A, p. 305-336.
- Hall, B.L., and Denton, G.H., 2000. Extent and chronology of the Ross Sea ice sheet and the Wilson Piedmont Glacier along the Scott Coast at and since the last glacial maximum: *Geografiska Annaler*, v. 82A, p. 337-363.
- Hall, B.L., Denton, G.H., and Hendy, C.H., 2000. Evidence from Taylor Valley for a grounded ice sheet in the Ross Sea, Antarctica: *Geografiska Annaler*, v. 82A, 275-303.
- Hall, B.L., and Henderson, G.M., 2000.²³⁴U/²³⁰Th dates of lacustrine carbonates at Lake Vida: Implications for the past reservoir effect: *Antarctic Journal of the United States*, v. 33, 371-374.
- Hendy, C.H., Sadler, A.J., Denton, G.H., and Hall, B.L., 2000. Proglacial lake-ice conveyors: A new mechanism for deposition of drift in polar environments: *Geografiska Annaler*, v. 82A, p. 249-270.

Abstracts:

Hall, B.L., 2000. Extensive lakes in the Dry Valleys (Antarctica) at the last glacial maximum: Implications for past lakes on Mars: Second International Conference on Mars Polar Science and Exploration, Reykjavik, Iceland.

1999

Papers:

- Conway, H., Hall, B.L., Denton, G.H., Gades, A.M., and Waddington, E.D., 1999. Past and future grounding-line retreat of the West Antarctic Ice Sheet: *Science*, v. 286, p. 280-283.
- Domack, E., Hall, B.L., and Hayes, J., 1999. Accurate Antarctic dating techniques sought by Quaternary community: *EOS*, v. 80(49), p. 591,596.
- Hall, B.L., and Denton, G.H., 1999. New relative sea-level curves for the southern Scott Coast, Antarctica: Evidence for Holocene deglaciation of the western Ross Sea: *Journal of Quaternary Science*, v. 14, p. 641-650.

Abstracts:

- Conway, H., Hall, B.L., Denton, G.H., Gades, A.M., and Waddington, E.D., 1999. Holocene deglaciation of the Ross Sea Embayment: Implications for the stability of the West Antarctic Ice Sheet: *West Antarctic Ice Sheet Initiative*, 6th Annual Meeting, Sterling, VA.
- Hall, B.L., and Denton, G.H., 1999. Radiocarbon chronology of the Ross Sea ice sheet, lake-level fluctuations, and relative sea-level changes, Dry Valleys region, Antarctica: *Applications of Radiocarbon in Antarctic Research Workshop*, Woods Hole Oceanographic Institution, Woods Hole, MA (invited).

1998

Papers:

- Berkman, P.A., Andrews, J.T., Björck, S., Colhoun, E.A., Emslie, S.D., Goodwin, I.D., Hall,
 B.L., Hart, C.P., Hirakawa, K., Igarashi, A., Ingólfsson, Ó., López-Martínez, J., Lyons,
 W.B., Mabin, M.C.G., Quilty, P.G., Taviani, M., and Yoshida, Y., 1998. Circum-Antarctic coastal environmental shifts during the late Quaternary reflected by emerged marine deposits: *Antarctic Science*, v. 10(3), p. 345-362.
- Hall, B.L., and Denton, G.H., 1998. Age of the Hjorth Hill moraine: *Antarctic Journal of the United States*, v. 33, in press.
- Ingólfsson, Ó, Hjort, C., Berkman, P.A., Björck, S., Colhoun, E., Goodwin, I.D., Hall, B., Hirakawa, K., Melles, M., Möller, P., and Prentice, M.L., 1998. Antarctic glacial history since the Last Glacial Maximum: an overview of the record on land: *Antarctic Science*, v. 10(3), p. 326-344.

Abstracts:

Hall, B.L., and Denton, G.H., 1998. Millennial-scale oscillations of closed-basin Antarctic lakes: Mechanisms of Millennial-Scale Climate Change, AGU Chapman Conference: Snowbird, Utah.

Hall, B.L., and Denton, G.H., 1998. Deglacial chronology of the western Ross Sea from terrestrial data: *The West Antarctic Ice Sheet, AGU Chapman Conference*, Orono, Maine.

1997

- Hall, B.L., 1997. Geological assessment of the stability of the Antarctic Ice Sheet: Ph.D. dissertation, University of Maine, 338 p.
- Hall, B.L., and Denton, G.H., 1997. Deglacial chronology of the western Ross Sea: West Antarctic Ice Sheet Initiative, 4th Annual Meeting, Sterling, VA.
- Hall, B.L., Denton, G.H., Lux, D.R., and Schlüchter, C., 1997. Pliocene paleoenvironment and East Antarctic Ice Sheet behavior: Evidence from Wright Valley. *Journal of Geology*, v. 105, p. 285-294.

1996

- Hall, B.L., and Denton, G.H., 1996. Deglacial chronology for the western Ross Sea: Implications for the behavior of the West Antarctic Ice Sheet: *Geological Society of America Annual Meeting Abstracts with Programs*, v. 28(7), p. A-57.
- Hall, B.L., and Denton, G.H., 1996. Deglacial chronology for the western Ross Sea: *Antarctic Journal of the United States*, v. 31, p. 78-80.

1995

Hall, B.L., and Denton, G.H., 1995. Late Quaternary lake levels in the Dry Valleys, Antarctica: *Antarctic Journal of the United States*, v. 30, p. 52-53.

1994

Hall, B.L., and Denton, G.H., 1994. Late Wisconsin/Holocene history of the Wilson Piedmont Glacier: *Antarctic Journal of the United States*, v. 29, p. 20-22.

1993

- Denton, G.H., Sugden, D.E., Marchant, D.R., Hall, B.L., and Wilch, T.I., 1993. East Antarctic Ice Sheet sensitivity to Pliocene climatic change from a Dry Valleys perspective: *Geografiska Annaler*, v. 75A, p. 155-204.
- Hall, B.L., Denton, G.H., Lux, D.R., and Bockheim, J.G., 1993. Late Tertiary paleoclimate and ice-sheet dynamics inferred from surficial deposits in Wright Valley, Antarctica: *Geografiska Annaler*, v. 75A, p. 239-268.

1992

- Hall, B.L., and Denton, G.H., 1992. Minor expansion of alpine glaciers in Wright Valley, Antarctica: Antarctic Journal of the United States, v. 27, p. 55-57.
- Hall, B.L., 1992. Surficial geology and geomorphology of eastern Wright Valley, Antarctica: Implications for Plio-Pleistocene ice-sheet dynamics: Master of Science thesis, University of Maine, 405p.

FUNDED RESEARCH GRANTS

Collaborative Research – Greenland Proposal Collaborative Research – STAMS proposal

A southern hemisphere perspective on the ice ages from Torres del Paine, Chile (10/1/2008-9/30/2009; \$22,000) *National Geographic Society*

Reconstructing late Quaternary climate change in the Tropics (3/1/2009-2/28/2010; \$15,000) *Comer Science and Education Foundation*

Collaborative Research: Abandoned elephant seal colonies in Antarctica: Integration of genetic, isotopic, and geologic approaches toward understanding Holocene environmental change (12/1/2007-8/30/2009; \$56,544) *National Science Foundation*

Grounding-line retreat in the southern Ross Sea Embayment: Constraints from Scott Glacier (8/1/2007-7/31/2010; \$193,418) *National Science Foundation*

Holocene and late-glacial ice extent in Cordillera Darwin (9/1/2007-8/31/2008; \$18,300) *Comer Science and Education Foundation*

Holocene ice fluctuations, Cordillera Darwin, South America (1/1/2007-12/31/2008; \$64,650) *Comer Science and Education Foundation*

The science behind climate change: A journey to Reedy Glacier (3/13/2007-8/31/2009; \$74,500) *National Science Foundation*

Age of wood emerging from retreating glaciers (1/1/2007-12/31/2008; \$10,471) *Comer Science and Education Foundation*

A history of ice recession, Scoresby Sund, Greenland, from relative sea-level data (1/1/2007-12/31/2008; \$22,450) *Comer Science and Education Foundation*

Supplemental funding for trip to Scoresby Sund, East Greenland (8/1/2006-7/31/2006; \$25,000), *Comer Science and Education Foundation* [administered by Lamont-Doherty Earth Observatory]

Dating Late-Glacial moraines using relative sea-level data, Scoresby Sund, East Greenland (1/1/2006-12/31/2006; \$22,450) *Comer Science and Education Foundation*

Holocene ice extent in the Cordillera Darwin (8/1/2006-7/31/2007; \$16,780), *Comer Science and Education Foundation*

Chronology of late Holocene moraines, Cordillera Darwin: Implications for the global extent and character of the Little Ice Age (1/1/2006-12/31/2006; \$50,000), *Comer Science and Education Foundation*

Is Bolling warming recorded by the southeastern margin of the Laurentide Ice Sheet? (6/1/2005-5/31/2006; \$39,959), *National Science Foundation*

Collaborative Research: Abandoned elephant seal colonies in Antarctica: Integration of genetic, isotopic, and geologic approaches toward understanding Holocene environmental change (9/1/2005-8/31/2008; \$375,410) *National Science Foundation*

Women in Earth Sciences Speaker Series (with A. Kelley, L. Brothers) (9/1/2005-5/31/2006; \$2000) *Women in the Curriculum Committee, University of Maine*

Dating Late-Glacial moraines using relative sea-level data, Scoresby Sund, East Greenland (1/1/2005-12/31/2005; \$26,500) *Comer Science and Education Foundation*

Paleoecological reconstruction of northern Maine lakes using Chironomids (non-biting midges) (1/1/2005-12/31/2005; \$500) *Center for Teaching Excellence, University of Maine*

Collaborative Research: Chronology of ice fluctuations in the South Shetland Islands at and since the last glacial maximum (6/1/2004-5/31/06; \$27,059) *National Science Foundation*

An assessment of variability in Southern Ocean radiocarbon reservoir ages from paired ¹⁴C and

U/Th dating of solitary corals (12/01/2003-11/30/2004) *National Environment Research Council (U.K.)* Co-investigator with Dr. Gideon Henderson (in-kind grant for 40 AMS radiocarbon dates)

Collaborative Research: Quaternary history of Reedy Glacier (6/1/2003-5/31/2006; \$140,817) *National Science Foundation*

Research Initiative Award: Holocene Southern Ocean ventilation and radiocarbon reservoir effect from AMS radiocarbon and uranium-thorium dates of coral (2003) *NOSAMS Laboratory, Woods Hole Oceanographic Institution* (in-kind grant for 15 AMS radiocarbon dates)

REU Supplement: Millennial-scale fluctuations of Dry Valleys lakes (7/1/2003-8/31/2005; \$6000) *National Science Foundation*

Collaborative Research: Millennial-scale fluctuations of Dry Valleys lakes: A test of regional climate variability and the interhemispheric (a)synchrony of climate change (9/1/2002-8/31/2005; \$275,742) *National Science Foundation*

Teachers Experiencing Antarctica Supplement (9/1/2002-8/31/2003; \$11,150) *National Science Foundation*

Logistical Supplement: AMS Radiocarbon Chronology of Glacier Fluctuations in the South Shetland Islands during the Last Glacial/Interglacial Hemicycle: Implications for Global Climate Change (11/2002-12/2002) National Science Foundation

Deglacial Chronology of the Northern Scott Coast from Relative Sea-Level Curves (9/1/2000-8/31/2004; \$173,641) *National Science Foundation*

AMS Radiocarbon Chronology of Glacier Fluctuations in the South Shetland Islands during the Last Glacial/Interglacial Hemicycle: Implications for Global Climate Change (1/1/2000-12/31/2003; \$97,393) *National Science Foundation*

REU Supplement: AMS Radiocarbon Chronology of Glacier Fluctuations in the South Shetland Islands during the Last Glacial/Interglacial Hemicycle: Implications for Global Climate Change (1/1/2001-12/31/2003; \$5000) *National Science Foundation*

POWRE: High-Resolution Chronology of Millennial-Scale Lake-Level Fluctuations in the Dry Valleys (Antarctica) from Uranium-Thorium and Radiocarbon Dating (9/1/1998-12/31/2000; \$74,943) *National Science Foundation*

Deglacial Radiocarbon Chronology of the Western Ross Sea from Relative Sea-Level Curves (12/1/1996-11/30/1998; \$27,550) *National Science Foundation*

OTHER SIGNIFICANT PROFESSIONAL ACTIVITIES

Center for Teaching Excellence Mentor (2008-2009)
Dissertation committee external examiner, Lund Unviversity, Sweden, for L. Hakansson.
Teaching Glacial Geology (ERS 441), Cosmogenic Isotopes (ERS-602), Quaternary Stratigraphy (ERS-602), and Paleoclimate Proxies (ERS-602)
Primary advisor (current) for 4 graduate students (Bromley, Garhart, Chase, Garcia); committee member for 6 additional graduate students (Birkel, Kelley, Perry, A. Putnam, Rademaker, Pingree)

REII etudente (Faloon Doughty Feeig)

Thirteen undergraduates employed as field or laboratory assistants (or both) since 2000.

- Departmental Committees Graduate Committee (Climate Change Institute and Earth Sciences
 - 2005-present); Policy Advisory Committee (Climate Change Institute 2007), Peer Review Committee (Climate Change Institute - 2008/2009)
- Search Committees: Earth Sciences Chair (2007); Mineralogy (2006), Geochemistry (2008), Geotechnical Engineering (2008), Paleoecology and Plant Ecology (2008)
- Elementary school student outreach (1992-present)
- Panel review for the National Science Foundation (2 panels each year, 2004, 2005, 2006)
- Invited Participant, Antarctic Integrated System Science development workshop, 2007
- Proposal review for the National Science Foundation, National Geographic Society, Italian Antarctic Program, New Zealand Antarctic Research Program (1997-present)
- Manuscript review for Science, Geografiska Annaler, Journal of Quaternary Science, Antarctic Science, Marine Ecology Progress Series, Antarctic Research Series, Quaternary Research, Quaternary Science Reviews, GSA Today, GSA Bulletin, Journal of Applied

Radioactivity, Geology, Radiocarbon, Geoderma, Arctic, Antarctic, and Alpine Research, International Symposium for Antarctic Earth Science

- Convener, Symposium for 2003 INQUA Congress, Reno, NV
- Invited Speaker and Panelist, NSF- Maryland Science Center Shackleton Event (2003 event shortened by weather)
- Rapporteur and writer, Transantarctic Mountains Workshop (2006)
- Member of West Antarctic Ice Sheet Initiative governing committee (2003-present)
- Panelist, Antarctic Peninsula Climate Variability conference, Hamilton, NY (2002)
- Chair and rapporteur, session at Antarctic Neotectonics conference, Siena, Italy (2001)
- Chair, session at Applications of Radiocarbon in Antarctic Research workshop, Woods Hole, MA (1999)
- Invited Speaker (Oxford University, 2004; Johns Hopkins University, 2006; Colby College, 2007; University of Michigan, 2008)
- Featured story, National Science Foundation website (2009)