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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 Institution	Geology/Geophysics	Postdoct. Fellow 1999-2000
University of Maine	Geological Sciences/ Quaternary Studies	Postdoct. Res. Associate 1997-2000
Lamont-Doherty Earth Observatory	Geochemistry	External Postdoct. Fellow 1998
Oxford University	Geochemistry	Visiting Postdoct. Scientist 1999
University of Waikato	Geochemistry	Visiting Postdoct. Scientist 1999

**PRESENT POSITION**

Professor, Climate Change Institute and School of Earth and Climate Sciences, University of Maine (2012-present)

**ADDITIONAL PROFESSIONAL EXPERIENCE**

Associate Professor, Climate Change Institute and Department of Earth Sciences, University of Maine (2007-2012)

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 (2000-2004)

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, 2009/10); *Principal Investigator* (1999/00, 2000/01, 2001, 2001/02, 2002, 2002/03; 2003; 2003/04; 2004/05, 2005/06, 2006/07, 2008/09, 2010, 2010/11, 2011, 2011/12, 2012/13, 2013/14, 2014/15; 2016/17, 2017/2018, 2018/2019); **Greenland** (2004, 2005, 2006, 2010, 2011); **Patagonia** (2006, 2007, 2009, 2012, 2013); **Maine** (2005-2007, 2012, 2014-2019); **Falkland Islands** (2014, 2015, 2016, 2018, 2019)

Field Experience in New Zealand (1992, 1999, 2007), Sweden (1992), Canadian Arctic (1989)

## HONORS AND AWARDS

**Outstanding Research Award**, College of Natural Sciences, Forestry, and Agriculture, University of Maine (2019)

**United States Representative** for the Geosciences to the *Scientific Committee on Antarctic Research (SCAR)*, nominated by the Polar Research Board of the *National Academy of Sciences* (2010-2016)

**Kavli Frontiers of Science Fellow**, *National Academy of Sciences*, 2006

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

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

### *Papers*

102. Palacios, D., Stokes, C.R., Phillips, F.M., Clague, J.J., Alcalá-Reygosa, J., Andres, N., Angel, I., Blard, P.H., Briner, J.P., Hall, B.L., Dahms, D., Hein, A.S., Jomelli, V., Mark, B., Martini, M.A., Moreno, P., Riedel, J., Sagredo, E., Stansell, N.D., Vazquez-Selem, L., Vuille, M., and Ward, D.J., 2020. The deglaciation of the Americas during the last Termination. *Earth Science Reviews*, in press.
101. \*King, C., Hall, B., \*Hillebrand, T., and Stone, J., 2019. Holocene-age local last glacial maximum and subsequent deglaciation, Lake Wellman region, Hatherton Glacier, Antarctica. *Geology*, in review.
100. \*Heath, S., Lowell, T., and Hall, B., 2019. Assessing the utility of surface exposure age dating of fluctuations of the James Lobe, South Dakota: Some preliminary results. *Quaternary Research*, in review.
99. Hall, B.L., Lowell, T.V., Bromley, G.R.M., Denton, G.H., and Putnam, A.E., 2019. Holocene glacier fluctuations in northern Cordillera Darwin, southernmost Chile. *Quaternary Science Reviews* 222, doi:10.1016/quatscirev.2019.105904.
98. Bromley, G.R.M., Hall, B.L., Thompson, W.B., and Lowell, T.V., 2019. Age of the Berlin moraine complex, New Hampshire, USA, and implications for ice-sheet dynamics and climate during Termination I. *Quaternary Research*, doi:10.1017/qua.2019.66.
97. \*Zaikova, E., Goerlitz, D.S., Tighe, S.W., Wagner, N.Y., Bai, Y., Hall, B.L., Bevilacqua, J.G., Weng, M.M., Samuels-Fair, M.D., and Stewart Johnson, S., 2019. Antarctic relic microbial mat community revealed by metagenomics and metatranscriptomics. *Frontiers in Ecology and Evolution* 7, 1-22.
96. Koch, P.L., Hall, B.L., De Bruyn, M., Hoelzel, A.R., Baroni, C., and Salvatore, M.C., 2019. Implications of mummified and skeletal southern elephant seal (*Mirounga leonina*) remains along the Victoria Land Coast, Antarctica. *Marine Mammal Science*, doi:10.1111/mms.12581.
95. \*Jackson, M.S., Hall, B.L., and Denton, G.H., 2018. Asynchronous behavior of the Antarctic Ice Sheet and local glaciers during and since Termination 1, Salmon Valley, Antarctica. *Earth and Planetary Science Letters* 482,396-406.
94. \*Spector, P., Stone, J., Cowdery, S., Hall, B., Conway, H., and Bromley, G., 2017. Rapid early-Holocene deglaciation in the Ross Sea, Antarctica. *Geophysical Research Letters*, doi: 10.1002/2017GL074216.

93. Hall, B.L., Borns, H.W., Jr., Bromley, G.R.M., and Lowell, T.V., 2017. Age of the Pineo Ridge System: Implications for the behavior of the Laurentide Ice Sheet in eastern Maine, U.S.A., during the last deglaciation. *Quaternary Science Reviews* 169, 344-356.
92. \*Slemmons, K., \*Medford, A., Hall, B.L., Stone, J.R., McGowan, S., Lowell, T., Kelly, M., and Saros, J., 2017. Changes in glacial meltwater alter algal ecology in lakes of Scoresby Sund, Renland, East Greenland, throughout the Holocene: Abrupt reorganizations began 1000 years before present. *The Holocene* 27,929-940.
91. \*Lusas, A.R., Hall, B.L., Lowell, T.V., Kelly, M.A., Bennike, O., \*Levy, L.B., and \*Honsaker, W., 2017. Holocene climate and environmental history of East Greenland inferred from lake sediments. *Journal of Paleolimnology* 57, 321-341, doi:10.1007/s10933-017-9951-5.
90. Axford, Y, \*Levy, L.B., Carrio, C., Kelly, M.A., Francis, D.R., Hall, B.L., Langdon, P.G., Lowell, T.V., 2017. Timing and magnitude of early to middle Holocene warming in East Greenland inferred from chironomids. *Boreas*, in press.
89. \*Marra, K.M., Elwood Madden, M.E., Soreghan, G.S., and Hall, B.L., 2017. Chemical weathering trends in fine-grained ephemeral stream sediments of the McMurdo Dry Valleys, Antarctica. *Geomorphology* 281, 13-30.
88. Hall, B., Denton, G., Lowell, T., Bromley, G., and Putnam, A., 2017. Retreat of the Cordillera Darwin Icefield during Termination 1. *Deglaciation of the Americas from Alaska to Tierra del Fuego*. Cuadernos de Investigación Geográfica, Universidad de La Rioja, España 43, 751-766.
87. \*Bromley, G., Putnam, A., Lowell, T., Hall, B., and Schaefer, J., 2016. Comment on "Was Scotland deglaciated during the Younger Dryas?" by Small and Fabel (2016). *Quaternary Science Reviews*, in press.
86. \*Bromley, G., Schaefer, J., Hall, B., Rademaker, K., Putnam, A., Todd, C., Hegland, M., Winckler, G., Jackson, M., Strand, P., 2016. A cosmogenic <sup>10</sup>Be chronology for the local last glacial maximum and termination in the Cordillera Oriental, southern Peruvian Andes: Implications for the tropical role in global climate. *Quaternary Science Reviews*, 148, 54-67.
85. Hall, B.L., \*Bromley, G., Stone, J., and Conway, H., 2016. Holocene ice recession at Polygon Spur, Reedy Glacier, Antarctica. *The Holocene* 27, 122-129.
85. \*Levy, L., Kelly, M., Lowell, T., Hall, B., Howley, J., and Smith, C., 2016. Coeval fluctuations of the Greenland Ice Sheet and a local glacier, central East Greenland, during late-glacial and early Holocene time. *Geophysical Research Letters* doi:10.1002/2015GL067108.
83. Garcia, J.L\*., Strelin, J., Vega, R., Hall, B., and Stern, C., 2015. Deglacial ice-marginal glaciolacustrine environments and structural moraine building in Torres del Paine, south Patagonia. *Andean Geology* 42, 190-212 (includes cover illustration).
82. Hall, B., Denton, G., \*Heath, S., \*Jackson, M., and \*Koffman, T., 2015. Accumulation and marine forcing of ice dynamics in the western Ross Sea during the last deglaciation. *Nature Geoscience* 8, 625-629.
81. \*Bromley, G.R.M., Hall, B.L., Thompson, W.B., Kaplan, M.R., \*Garcia, J.L., and Schaefer, J.M., 2015. Late-glacial fluctuations of the Laurentide Ice Sheet in the White Mountains of Maine and New Hampshire, U.S.A. *Quaternary Research* 83, 522-530.
80. \*Marra, K.M., Elwood Madden, M.E., Soreghan, G.S., and Hall, B.L., 2015. BET surface area distributions in polar stream sediments: Implications for silicate weathering in a

- cold-arid environment. *Applied Geochemistry* 52, 31-42.
79. Bromley, G.R.M.\*, Winckler, G., Schaefer, J.M., Kaplan, M.R., Licht, K.J., and Hall, B.L., 2014. Pyroxene separation by HF leaching and its impact on helium surface-exposure dating. *Quaternary Geochronology* 23, 1-8.
78. The RAISED Consortium, 2014. A community-based reconstruction of Antarctic Ice Sheet deglaciation since the Last Glacial Maximum. *Quaternary Science Reviews* 100, 1-9.
77. Anderson, J.B., Conway, H., Bart, P.J., Kirshner, A.E., Greenwood, S.L., McKay, R.M., Hall, B.L., Ackert, R.P., Licht, K., Jakobsson, M., Stone, J.O., 2014. Ross Sea paleodrainage and deglacial history during and since the LGM. *Quaternary Science Reviews* 100, 31-54.
76. \*Bromley, G., Putnam, A., Rademaker, K., Lowell, T., Schaefer, J., Hall, B., Winckler, G., Birkel, S., and Borns, H.W., Jr., 2014. Younger Dryas deglaciation of Scotland driven by warming summers. *PNAS*, doi/10.1073/pnas.1321122111.
75. \*De Bruyn, M., Pinsky, M., Hall, B., Koch, P., Baroni, C., and Hoelzel, A.R., 2014. Rapid increase in southern elephant seal genetic variation after a founder event. *Proceedings of the Royal Society of London B*, 281, 20133078.
74. \*Lorenzini, S., Baroni, C., Baneschi, I., Salvatore, M.C., Fallick, A.E., Hall, B.L., 2014. Adelie penguin dietary remains reveal Holocene environmental changes in the western Ross Sea (Antarctica). *Palaeogeography, Palaeoclimatology, Palaeoecology* 395, 21-28.
73. \*Marra, K., Soreghan, G., Elwood-Madden, M., Keiser, L., and Hall, B., 2014. Trends in grain size and BET surface area in cold-arid versus warm-semiarid fluvial systems. *Geomorphology* 206, 483-491.
72. \*Garcia, J.L., Hall, B.L., Kaplan, M., Vega, R., and Strelin, J., 2014. Glacial geomorphology of the Torres del Paine region: Implications for glaciation, deglaciation, and paleolake history. *Geomorphology* 204, 599-616.
71. \*Levy, L., Kelly, M., Lowell, T., Hall, B., \*Hempel, L., \*Honsaker, W., \*Lusas, A., Howley, J., and Axford, Y., 2014. Holocene fluctuations of Bregne ice cap, Scoresby Sund, east Greenland: a proxy for climate along the Greenland Ice Sheet margin. *Quaternary Science Reviews*, 92, 357-368.
70. Golledge, N., Levy, R., McKay, R.M., Fogwill, C.J., White, D.A., Graham, A.G.C., Smith, J.A., Hillenbrand, C-D., Licht, K.J., Denton, G.H., Ackert, R.P., Jr., Maas, S.M., Hall, B.L., 2013. Glaciology and geological signature of the Last Glacial Maximum Antarctic ice sheet. *Quaternary Science Reviews*, 78, 225-247.
69. Lowell, T., Hall, B., Kelly, A., Bennike, O., Smith, C., and Denton, G., 2013. Reply to Miller et al., 2013. Substantial agreement on the timing and magnitude of Late Holocene ice cap expansion between east Greenland and the eastern Canadian Arctic: a commentary on Lowell et al. (2013), *Quaternary Science Reviews*, 77, 246-247.
68. Hall, B., Denton, G., Stone, J., and Conway, H., 2013. History of the grounded ice sheet in the Ross Sea sector of Antarctica during the last glacial maximum and the last termination. *Geological Society of London*, doi 10.1144/SP381.5.
67. Hall, B., Porter, C., Denton, G., Lowell, T., and Bromley, G., 2013. Collapse of Cordillera Darwin glaciers in southernmost South America during Heinrich Stadial 1. *Quaternary Science Reviews*, 62, 49-55.
66. \*Konfal, S., Wilson, T., and Hall, B., 2013. Paleoshoreline records of glacial isostatic adjustment in the Dry Valleys region, Antarctica. *Geological Society of London*, doi: 10.1144/SP381.26.

65. Lowell, T., Hall, B., Kelly, M., Bennike, O., \*Lusas, A., Smith, C., \*Levy, L., Travis, S., and Denton, G., 2013. Late Holocene expansion of Istorvet Ice Cap, east Greenland. *Quaternary Science Reviews* 63, 128-140.
64. \*Antibus, D., Leff, L., Hall, B., Baeseman, J., and Blackwood, C., 2012. Molecular characterization of ancient algal mats from the McMurdo Dry Valleys, Antarctica. *Antarctic Science* 24, 139-146.
- 63.\*Antibus, D., Leff, L., Hall, B., Baeseman, J., and Blackwood, C., 2012. Cultivable bacteria from ancient algal mats from the McMurdo Dry Valleys, Antarctica. *Extremophiles* 16,105-114.
62. \*Bromley, G.R.M., Hall, B.L., Stone, J.O., and Conway, H., 2012. Late Pleistocene evolution of Scott Glacier, southern Transantarctic Mountains: Implications for the Antarctic contribution to deglacial sea level. *Quaternary Science Reviews* 50, 1-13.
- 61.\*Stumpf, A., Elwood Madden, M., Soreghan, G., Hall, B., and Keiser, L., 2012. Glacier meltwater stream chemistry in Wright and Taylor Valleys, Antarctica: Significant roles of drift, dust, and biological processes in chemical weathering in a polar climate. *Chemical Geology* 322/323, 79-90.
60. \*Garcia, J.L., Kaplan, M.R., Hall, B.L., Schaefer, J., Vega, R.M., Schwartz, R., and Finkel, R., 2012. Glacier expansion in southern Patagonia throughout the Antarctic Cold Reversal. *Geology* 40, 859-862.
- 59.\*Bromley, G., Hall, B., Schaefer, J., Winckler, G., \*Rademaker, K., and Todd, C., 2011. Glacier fluctuations in the southern Peruvian Andes during the late-glacial period, constrained with cosmogenic <sup>3</sup>He. *Journal of Quaternary Science* 26, 37-43.
- 58.\*Bromley, G., Hall, B., \*Rademaker, K., Todd, C., and Racoviteanu, A., 2011. Late Pleistocene snowline fluctuations at Nevado Coropuna (15°S), southern Peruvian Andes. *Journal of Quaternary Science*, doi:10.1002/jqs.1455.
- 57.\*Bromley, G., Hall, B., Stone, J., Conway, H., and \*Todd, C., 2010. Late Cenozoic deposits at Reedy Glacier, Transantarctic Mountains: implications for former thickness of the West Antarctic Ice Sheet. *Quaternary Science Reviews*, 29, 384-398.
- 56.\*Burgess, S.N., Henderson, G.M., and Hall, B.L., 2010. Reconstructing Holocene conditions under the McMurdo Ice Shelf using Antarctic barnacle shells. *Earth and Planetary Science Letters*, 298, 385-393.
55. Hall, B., 2010. Holocene relative sea-level changes and ice fluctuations in the South Shetland Islands. *Global and Planetary Change* 74, 15-26.
54. Hall, B., 2010. Proglacial lakes. In: Haritashya et al., (eds.). *Encyclopedia of Snow, Ice, and Glaciers*, Springer-Verlag, Heidelberg, Germany. **[invited]** [peer-reviewed].
53. Hall, B., Denton, G., Fountain, A., Hendy, C., and Henderson, G., 2010. Antarctic lakes suggest millennial reorganizations of Southern Hemisphere atmospheric and oceanic circulation. *PNAS* 107, 21355-21359.
52. Hall, B., Baroni, C., and Denton, G., 2010. Relative sea-level changes, Schuchert Dal, East Greenland, with implications for ice extent in late-glacial and Holocene time. *Quaternary Science Reviews*, 29, 3370-3378.
51. Hall, B.L., \*Koffman, T., and Denton, G., 2010. Reduced ice extent on the western Antarctic Peninsula at 700-970 cal yr B.P. *Geology* 38, 635-638.
50. Hall, B.L., Henderson, G., Baroni, C., and Kellogg, T., 2010. Constant Holocene Southern Ocean <sup>14</sup>C reservoir ages and ice-shelf flow rates. *Earth and Planetary Science Letters* 296, 115-123.

- 49.\*Todd, C., Stone, J., Conway, H., Hall, B., and \*Bromley, G., 2010. Late Quaternary evolution of Reedy Glacier, Antarctica. *Quaternary Science Reviews* 29, 1328-1341.
- 48.Verleyen, E., Hodgson, D., Sabbe, K., Cremer, H., Emslie, S., Gibson, J., Hall, B., Imura, S., Kudoh, S., Marshall, G., McMin, A., Melles, M., Newman, L., Roberts, D., Roberts, S., Singh, S., Sterken, M., Tavernier, I., Verkulich, S., Van der Vyver, E., Van Nieuwenhuyze, W., Wagner, B., and Vyverman, W., 2010. Post-glacial regional climate variability along the East Antarctic coastal margin – evidence from shallow marine and coastal terrestrial records. *Earth Science Reviews* 104, 199-212.
- 47.\*Bromley, G., Schaefer, J., Winckler, G., Hall, B., \*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.
- 46.\*De Bruyn, M., Hall, B., 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).
45. Hall, B., 2009. Holocene glacial history of Antarctica and the subantarctic islands. *Quaternary Science Reviews*, 28, 2213-2230 [invited].
- 44.\*Esposito, R., Spaulding, S., McKnight, D., Van de Vijver, B., Kopalova, K., Lubinski, D., Hall, B., and \*Whittaker, T., 2008. Inland diatoms from the McMurdo Dry Valleys and James Ross Island, Antarctica. *Botany* 86, 1378-1392.
43. 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.
42. 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.
41. 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.
40. Kelly, M., Lowell, T., Hall, B., Schaefer, J., Finkel, R.C., \*Goehring, B., Alley, R., and Denton, G., 2008. A <sup>10</sup>Be 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.
- 39.\*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.
38. Hall, B., 2007. Late Holocene advance of the Collins Ice Cap, King George Island, South Shetland Islands, Antarctica. *The Holocene* 17, 1253-1258.
- 37.\*Gardner, N., Hall, B., and Wehmiller, J., 2006. Pre-Holocene raised beaches at Cape Ross, Antarctica. *Marine Geology* 229, 273-284.
36. 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* 75, 143-156.
35. 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. *Proceedings of the National Academy of Sciences* 103, 10213-10217.
34. Henderson, G.M., Hall, B.L., \*Smith, A., and \*Robinson, L.F., 2006. Control on (<sup>234</sup>U/<sup>238</sup>U) in lake water: A study in the Dry Valleys of Antarctica: *Chemical Geology* 226, 298-308.

33. Hendy, C.H., and Hall, B.L., 2006. The radiocarbon reservoir effect in proglacial lakes: Examples from Antarctica: *Earth and Planetary Science Letters* 241, 413-421.
- 32.\*Pelletier, B., and Hall, B., 2006. Evaluating Paleoindian settlement in relation to Pleistocene lake levels at Munsungun Lake, Northern Maine, USA. *Cambridge Scholars Press*.
31. Hall, B.L., and Denton, G.H., 2005. Surficial geology and geomorphology of eastern and central Wright Valley, Antarctica: *Geomorphology* 64, 25-65.
30. Baroni, C., and Hall, B.L., 2004. A new relative sea-level curve for Terra Nova Bay, Victoria Land, Antarctica: *Journal of Quaternary Science* 19, 377-396.
29. 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* 16, 330-344.
28. 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* 42, 241-263.
27. 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 <sup>226</sup>Ra/Ba dating of Holocene marine carbonate shells: *Geochimica et Cosmochimica Acta*, v. 68, 89-100.
26. Hall, B.L., 2003. An overview of late Pleistocene glaciation in the South Shetland Islands: *Antarctic Research Series*, v.79, p. 103-113.
25. 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.
24. Hall, B.L., Denton, G.H., Overturf, B., and Hendy, C.H., 2002. Glacial Lake Victoria, a high-level Antarctic lake inferred from lacustrine deposits in Victoria Valley: *Journal of Quaternary Science*, v. 17, p. 697-706.
- 23.\*Kelly, M.A., Denton, G.H., and Hall, B.L., 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.
22. 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.
21. 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.
20. 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.
19. 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.
18. 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.
17. 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.
16. Hall, B.L., and Henderson, G.M., 2000. <sup>234</sup>U/<sup>230</sup>Th dates of lacustrine carbonates at Lake Vida: Implications for the past reservoir effect: *Antarctic Journal of the United States*, v. 33, 371-374.
15. 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.

14. 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.
13. Domack, E., Hall, B.L., and Hayes, J., 1999. Accurate Antarctic dating techniques sought by Quaternary community: *EOS*, v. 80(49), p. 591,596.
12. 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.
11. 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.
10. 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.
9. Hall, B.L., 1997. Geological assessment of the stability of the Antarctic Ice Sheet: Ph.D. dissertation, University of Maine, 338 p.
8. 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.
7. 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.
6. 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.
5. 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.
4. 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.
3. 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.
2. 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.
1. 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.

### **Abstracts**

137. \*Walther, T., Hall, B., and Denton, G., 2019. Reconstruction of Koettlitz Glacier, southern McMurdo Sound, during the last glacial maximum and termination. *Geological Society of America Annual Meeting*, Phoenix, AZ.
136. \*Miles, M., Hall, B., and Denton, G., 2019. Relationship between land-terminating Walcott and Howchin Glaciers and adjacent marine-grounded Ross Sea ice in the Royal Society Range, Antarctica. *Interdisciplinary Antarctic Earth Sciences Meeting*, Julian, CA.

135. \*Spoth, M., Hall, B., Lowell, T., and Diefendorf, A., 2019. Holocene variations in the Southern Hemisphere westerlies developed from lake records in the Falkland Islands. *American Geophysical Union*, San Francisco, CA.
134. \*Demirel, C., McCollom, N., \*Marra, K., Elwood Madden, A., Hall, B., Levy, J., Soreghan, G., and Elwood Madden, M., 2019. Potential biosignatures of surface alteration on Mars inferred from terrestrial analog regoliths. *Goldschmidt Conference*.
133. Stone, J., \*Gombiner, J., \*Pelto, J., and Hall B., 2019. Late Holocene deglaciation of the southern Ross Sea. *26<sup>th</sup> Annual West Antarctic Ice Sheet meeting*, Julian, CA.
132. Hall, B., Denton, G., \*Heath, S., Henderson, G., \*Jackson, M., \*Koffman, T., \*Mattas, L., \*Miles, M., and \*Walther, T., 2019. Extent and age of Ross Sea drifts during the last two glaciations, McMurdo Sound, Antarctica. *Interdisciplinary Antarctic Earth Sciences Meeting*, Julian, CA.
131. \*Walther, T., Hall, B., and Denton, G., 2019. Reconstruction of Koettlitz Glacier in the McMurdo Sound Region, Antarctica during the last glacial maximum and termination. *NE Geological Society of America*, Portland, Maine.
130. Hall, S., McKenzie, J., Hall, B.L., Meriaux, A.S., and Fortin, M.A., 2019. Glacial geochronology transecting a tropical mountain range, the Cordillera Blanca of northern Peru. *NE Geological Society of America*, Portland, Maine.
129. \*Miles, M., Hall, B., and Denton, G., 2019. Reconstructing the behavior of the land-terminating Walcott Glacier since the Last Glacial Maximum in the Royal Society Range, Antarctica. *NE Geological Society of America*, Portland, Maine.
128. Demirel, C., McCollum, N., Marra, K., Elwood Madden, A.S., Hall, B., Levy, J., Soreghan, G.S., and Elwood Madden, M.E., 2019. Potential biosignatures of surface alteration on Mars inferred from terrestrial analog regoliths. *Goldschmidt Conference*.
127. Bromley, G.R.M., Putnam, A.E., Hall, B.L., Barker, S., Rademaker, K., and Balter, A., 2019. Reconstructing the response of the British-Irish ice sheet to atmospheric temperature during Termination 1. *European Geological Union General Assembly*, Vienna, Austria, paper EGU2019-13966.
126. \*Pelto, J., Hall, B., Stone, J., and Gombiner, J., 2018. Grounding-line stabilization at the mouths of Liv and Amundsen Glaciers, southern Ross Embayment, Antarctica. *WAIS/THWAITES Meeting*, Stony Point, New York.
125. Hall, S., McKenzie, J., Hall, B.L., Meriaux, A.S., and Fortin, M.A., 2018. Transecting the Cordillera Blanca of northern Peru: a glacial geochronology determined from <sup>10</sup>Be exposure ages of moraine crest boulders. *American Geophysical Union*, Washington, DC.
124. \*Salamido, K., Kelly, M., Levy, L., Lowell, T., Hall, B., Schaefer, J., Smith, C., Schwartz, R., and Howley, J., 2018. A regional picture of late-glacial ice extents, Scoresby Sund, Greenland. *American Geophysical Union*, Washington, DC.
123. Lowell, T., Kelly, M., and Hall, B., 2018. Reorganization of the Laurentide Ice Sheet – How long does it take? *Geological Society of America*, Indianapolis, IN.
122. \*Heath, S., Lowell, T., and Hall, B., 2018. An updated chronology of the James Lobe, South Dakota, and implications for late-glacial fluctuations of the southern Laurentide margin. *Geological Society of America Abstracts with Programs*. Vol. 50, No. 4, paper 19-9.
121. Kelly, M.A., Lowell, T.V., Hall, B.L., Axford, Y., and Levy, L.B., 2017. The case for understanding Greenland Ice Sheet stability. *NSF Workshop: How stable is the Greenland Ice Sheet?* Buffalo, New York.

120. \*Hillebrand, T.R., Koutnik, M.R., Conway, H., Stone, J., \*King, C., Hall, B., Smith, B.E., Gillespie, M.K., 2017. Delayed deglaciation of Darwin Glacier, Antarctica. *Past Antarctic Ice Sheet Dynamics Conference*, Trieste, Italy.
- 119.\* Brault, E.K., Koch, P.L., Hall, B.L., Costa, D.P., McCarthy, M.D., Hoelzel, A.R., and Welch, A.J., 2017. Antarctic seal bulk and compound-specific isotope analyses reveal Holocene changes in Ross Sea biogeochemistry and pinniped ecology. *SCAR Biology Symposium*, Leuven, Belgium.
118. \*King, C., Hall, B., Stone, J., and \*Hillebrand, T., 2016. History of the last glacial maximum and subsequent recession alongside Hatherton Glacier. *Geological Society of America Annual Meeting*, Denver, CO.
117. \*King, C., Hall, B., Stone, J., and \*Hillebrand, T., 2016. Radiocarbon chronology of the last glacial maximum and subsequent recession alongside Hatherton Glacier. *23rd Annual WAIS Meeting*, Sterling, VA.
116. \*Levy, L., Kelly, M., Lowell, T., Hall, B., Howley, J., and Smith, C., 2016. Coeval fluctuations of the Greenland Ice Sheet and a local ice cap during the Younger Dryas: implications for late-glacial climate. *European Geophysical Union*, Vienna, Austria, 2016.
115. Bromley, G., Schaefer, J., Hall, B., Rademaker, K., Todd, C., and Winckler, G., 2016. A glacier-derived record of tropical temperature during Termination 1 from the Cordillera Oriental, southern Peru. *Northeast Section Geological Society of America*, March 21-23, 2016.
- 114.\*Brault, E.K.,\*Welch, A.J., \*Nye, J.W., Rosenfield, A.P., McCarthy, M.D., Hall, B.L., Hoelzel, A.R., and Koch, P.L., 2016. Ross Sea Ecosystem Responses to Climatic Changes during the Mid-to-Late Holocene as Indicated by Bulk Stable Isotope Analyses of Antarctic Seals. *Ocean Sciences Meeting*, New Orleans, LA.
113. \*King, C., Hall, B., Stone, J., and \*Hillebrand, T., 2015. The timing of the last glacial maximum and subsequent recession alongside Hatherton Glacier, Antarctica. *Interdisciplinary Antarctic Earth Science Meeting*. Sylvan Dale, CO.
112. \*Koutnik, M., Conway, H., \*Hillebrand, T., Stone, J., \*Spector, P., Hall, B., and \*King, C., 2015. Assimilating geochronological data into ice-flow models to constrain the deglaciation of Transantarctic outlet glaciers. *22nd Annual WAIS Meeting*, Loveland, CO.
111. \*King, C., Hall, B., Stone, J., and \*Hillebrand, T., 2015. The timing of the last glacial maximum in the Lake Wellman area, Hatherton Glacier, Antarctica. *22nd Annual WAIS Meeting*, Loveland, CO.
110. \*Spector, P., Stone, J., Cowdery, S., Hall, B., Conway, H., and Bromley, G., 2015. Rapid early-Holocene deglaciation of the southern Ross Sea. *22nd Annual WAIS Meeting*, Loveland, CO.
109. Hall, B., Denton, G., \*Heath, S., \*Jackson, M., and \*Koffman, T., 2015. Timing of the last glacial maximum and deglaciation in the Ross Sea. *22nd Annual WAIS Meeting*, Loveland, CO.
108. \*Brault, E.K., Koch, P.L., McCarthy, M.D., Hall, B.L., Hoelzel, A.R., \*Welch, A.J., and \*Nye, J.W., 2015. Shifts in the Ross Sea ecosystem during the mid-to-late Holocene as indicated by bulk isotopic analyses of Antarctic seals. *Marine Mammal Society Conference*, San Francisco, CA.
107. Koch, P.L., \*Brault, E.K., \*Welch, A.J., \*Nye, J.W., Niven, L., Hall, B.L., Hoelzel, A.R., 2015. Assessing the vulnerability of Antarctic seals to environmental change: Insights

- from studies of seal mummies. *Society of Vertebrate Paleontology*, Dallas, TX.
106. \*Welch, A.J., Irvine, A., \*Brault, E., \*Nye, J., Koch, P.L., Hall, B.L., and Hoelzel, A.R., 2015. Temporal responses of a community of Antarctic seals to local environmental change. *Ecological Society of America*, Baltimore, MD.
  105. Funderburg, R., Elwood-Madden, M., Young, J.J., \*Marra, K., Soreghan, G., and Hall, B.L., 2014. Comparing reactive surface area of sediments in hot and cold arid climates. *American Geophysical Union Annual Meeting*, San Francisco, CA.
  104. \*Levy, L., Hammer, S., Kelly, M., Lowell, T., Hall, B., Howley, J., \*Wilcox, P., and \*Medford, A., 2014. Middle to late Holocene fluctuations of the Vindue glacier, an outlet glacier of the Greenland Ice Sheet, central East Greenland. *American Geophysical Union Annual Meeting*, San Francisco, CA.
  103. \*Hillebrand, T., \*King, C., Stone, J., Hall, B., Conway, H., and \*Koutnik, M., 2014. Late Quaternary history of Hatherton Glacier, Antarctica. *21st Annual WAIS Meeting*, Julian, CA.
  102. \*Hillebrand, T., Stone, J., Hall, B., \*King, C., and \*Koutnik, M., 2014. Late Quaternary ice elevations of Hatherton Glacier, Antarctica. *Geological Society of America Annual Meeting*, Vancouver, Abstracts with Programs v. 46 (6).
  101. Putnam, A., Schaefer, J., Denton, G., Kaplan, M., \*Koffman, T., Hall, B., Lowell, T., Barrell, D., Rowan, A., and Finkel, R., 2014. Two pulses of warming and extensive glacier recession at Southern Hemisphere middle latitudes during Heinrich Stadials 1 and 0. *Geological Society of America Annual Meeting*, Vancouver, Abstracts with Programs v. 46 (6).
  100. Elwood-Madden, M., Funderburg, R., Yoo, Y.J., Madden, A., Hall, B., \*Marra, K., and Soreghan, G., 2014. Assessing reactive surface areas in glacial sediments. *Goldschmidt Conference*.
  99. Putnam, A., Schaefer, J., Denton, G., Hall, B., Lowell, T., Porter, C., Barrell, D., Andersen, B., \*Koffman, T., \*Lennon, J., \*Rowan, A., Finkel, R., Rood, D., Schwartz, R., Vandergoes, M., Plummer, M., Brocklehurst, S., \*Kelley, S., and \*Ladig, K., 2013. Warming and extensive glacier recession at Southern Hemisphere middle latitudes during Heinrich Stadial 1. *American Geophysical Union Fall Meeting*, San Francisco, CA.
  98. Axford, Y., Bigl, M., Carrio, C., Corbett, L., Francis, D., Hall, B., Kelly, M., \*Levy, L., Lowell, T., Osterberg, E., Richter, N., Roy, E., and Schellinger, G., 2013. Insect-based Holocene (and Last Interglacial?) paleothermometry from the E and NW Greenland Ice Sheet margins: A fly's-eye view of warmth in Greenland. *American Geophysical Union Fall Meeting*, San Francisco, CA.
  97. Lowell, T., \*Wilcox, P., Hall, B., \*Medford, A., Kelly, M., and \*Levy, L., 2013. Late Holocene expansion of the Greenland Ice Sheet and implications for its current decay. *CLIVAR Meeting*, Boston, MA.
  96. Kelly, M., \*Levy, L., Lowell, T., and Hall, B., 2013. Late glacial-early Holocene fluctuations of Greenland Ice Sheet outlet glaciers and adjacent local ice caps in central east Greenland. *CLIVAR Meeting*, Boston, MA.
  95. \*Levy, L.B., Kelly, M.A., Lowell, T.V., Hall, B.L., Applegate, P., Axford, Y.L., and Howley, J.A., 2013. A comparison of Holocene fluctuations of the eastern and western margins of the Greenland Ice Sheet. *American Geophysical Union Fall Meeting*, San Francisco, CA.
  94. \*Garcia, J. L., Hall, B. L., Kaplan, M. R., Vega, R. M., Binnie, S., Hein, A. S., Gomez, G.,

- Ferrada, J. J., 2013. Geomorphological and geochronological constraints of the last glacial period in southern Patagonia, southern South America. *American Geophysical Union Fall Meeting*, San Francisco, CA.
93. \*Putnam, A., et al., 2013. Warming and extensive glacier recession at Southern Hemisphere middle latitudes during Heinrich Stadial 1. *American Geophysical Union Fall Meeting*, San Francisco, CA.
92. \*Garcia, J.L., Garcia, V., Kaplan, M., Hall, B., Schaefer, J., Schwartz, R., and Finkel, R., 2013. Fluctuaciones glaciales del Campo de Hielo Sur durante el Holoceno Medio-Tardío a partir de dataciones  $^{14}\text{C}$  y  $^{10}\text{Be}$ . National Conference on Geography; Chillán, Chile.
91. Elwood Madden, M., \*Marra, K., Keiser, L., \*Stumpf, A., Soreghan, G., Elwood Madden, A., and Hall, B., 2013. Influence of climate-related physical weathering processes on chemical weathering: Comparing stream solute/sediment geochemistry and sediment surface area in glacial and non-glacial catchments. *Catchment Science: Interactions of Hydrology, Biology & Geochemistry Gordon Conference*, Andover, NH.
90. \*Bromley, G., Hall, B.L., Thompson, W., \*Garcia, J.L., Kaplan, M., and Schaefer, J., 2012. Age of the Androscoggin Moraine, western Maine and eastern New Hampshire, from  $^{10}\text{Be}$  surface exposure-age dating. *Northeast Geological Society of America Meeting*, Bretton Woods, New Hampshire.
89. \*Medford, A., Hall, B.L., Lowell, T., Kelly, M., \*Levy, L., \*Wilcox, P., and Axford, Y., 2013. Holocene glacial history of Renland, East Greenland, reconstructed from lake sediments. *Northeast Geological Society of America Meeting*, Bretton Woods, New Hampshire.
88. \*Wilcox, P., Lowell, T., Hall, B.L., Kelly, M., Medford, A., Levy, L., and Axford, Y., 2013. Holocene stratigraphy of lakes in Graben Land, East Greenland: implications for an expanded ice sheet. *Northeast Geological Society of America Meeting*, Bretton Woods, New Hampshire.
87. \*Bromley, G., Schaefer, J.M., Winckler, G., Hall, B.L., Todd, C.E., and \*Rademaker, K., 2012. A glacial record of the last termination in the southern tropical Andes. *American Geophysical Union Annual Meeting*, San Francisco, CA.
86. \*Konfal, S., Wilson, T., Bevis, M., Kendrick, E., and Hall, B., 2012. GPS and paleoshoreline record of solid earth deformation in Southern Victoria Land, Antarctica. *SCAR Open Science Conference*, Portland, Oregon.
85. \*Jackson, M., Hall, B., and Denton, G., 2012. History of the Ross Sea ice sheet in Salmon Valley during the last glaciation. *19<sup>th</sup> Annual West Antarctic Ice Sheet Meeting*, Pack Forest Park, Washington.
84. \*Dengler, E., Hall, B., Stone, J., and Conway, H., 2012. Late Cenozoic glacial history of Shackleton Glacier, Antarctica. *19<sup>th</sup> Annual West Antarctic Ice Sheet Meeting*, Pack Forest Park, Washington.
83. \*Allard, S., Hall, B., and Denton, G., 2011. History of the Ross Sea ice sheet based on glacial and lake records from Marshall Valley, Antarctica. *18<sup>th</sup> West Antarctic Ice Sheet Annual Meeting*, Loveland, CO.
82. Baroni, C., Lambert, D., Millar, C., Swaminathan, S., Lorenzini, S., Salvatore, C., and Hall, B., 2011. Ancient DNA sequences of Adelie penguins provide a window on Antarctic biota evolution since Late Pleistocene. *11<sup>th</sup> International Symposium on Antarctic Earth Sciences*, Edinburgh, Scotland, July 2011.

- 81.\*Garcia, J.L., Kaplan, M., Hall, B., and Schaefer, J., 2011. Reconstructing the last glacial processes and environments in Torres del Paine, Southern Chile, as inferred from local glacial landforms and sediments. *International Quaternary Association Congress*, Berne, Switzerland, July, 2011.
- 80.\*Garcia, J.L., Kaplan, M., Hall, B., and Schaefer, J., 2011. Evidence for Antarctic signature in past glacial fluctuations in South Patagonia, Chile. *International Quaternary Association Congress*, Berne, Switzerland, July, 2011.
79. Hall, B., Kelly, M., Lowell, T., Baroni, C., Bennike, O., \*Honsaker, W., \*Levy, L., and \*Lusas, A.R., 2011. Late glacial and Holocene ice fluctuations, Scoresby Sund, East Greenland. *International Quaternary Association Congress*, Berne, Switzerland, July, 2011.
78. Hall, B., Porter, C., Denton, G., Lowell, T., and \*Bromley, G., 2011. Deglaciation of Cordillera Darwin, southern Chile, during the last termination. *International Quaternary Association Congress*, Berne, Switzerland, July, 2011.
77. Hall, B., Porter, C., and Denton, G., 2011. Holocene ice fluctuations at Ventisquero Marinelli, Cordillera Darwin, South America. 2011. *International Quaternary Association Congress*, Berne, Switzerland, July, 2011.
76. Hall, B., 2011. History of the Antarctic Ice Sheet in the Ross Sea sector at and since the last glacial maximum. *11<sup>th</sup> International Symposium on Antarctic Earth Sciences*, Edinburgh, Scotland, July 2011 [invited].
75. Kelly, M., Lowell, T., Hall, B., and Schaefer, J., 2011. A comparison of late glacial-early Holocene fluctuations of Greenland Ice Sheet outlet glaciers with nearby mountain glaciers in central east Greenland. *International Quaternary Association Congress*, Berne, Switzerland, July, 2011.
- 74.\*Koffman, T., Hall, B., and Denton, G., 2011. Reduced ice extent on the western Antarctic Peninsula at 700-970 years ago. *International Quaternary Association Congress*, Berne, Switzerland, July, 2011.
- 73.\*Koffman, T., Hall, B., and Denton, G., 2011. New radiocarbon dates from glacial deposits in Miers Valley constrain the past behavior of the Antarctic Ice Sheet. *18<sup>th</sup> Annual West Antarctic Ice Sheet meeting*, Loveland, CO.
- 72.\*Konfal, S., Wilson, T., and Hall, B., 2011. Record of glacial-isostatic crustal uplift in southern Victoria Land, Antarctica, from paleoshorelines and POLENET GPS data. *11<sup>th</sup> International Symposium on Antarctic Earth Sciences*, Edinburgh, Scotland, July 2011.
- 71.\*Levy, L., Kelly, M., Lowell, T., Hall, B., 2011. Holocene fluctuations of Bregne Ice Cap, Scoresby Sund, eastern Greenland. *American Geophysical Union*, San Francisco, CA.
70. Lowell, T., Kelly, M., Hall, B., Bennike, O., \*Honsaker, W., \*Levy, L., and \*Lusas, A.R., 2011. Late Holocene ice cap activity in East Greenland and implications for the Greenland ice sheet. *International Quaternary Association Congress*, Berne, Switzerland, July, 2011.
69. Maurice, L.D., Day, C.C.\*, Porter, C.T., Martin, K.E., Hall, B.L., Henderson, G.M., 2011. Stalagmite  $\delta^{18}\text{O}$  from southern Chile (50°S): five new samples covering the last 13 ka. *Kr6, 6<sup>th</sup> International Conference: Climate Change – the Karst Record*, University of Birmingham, UK, June 26-29, 2011.
- 68.\*Stumpf, A.R., Elwood Madden, M.E., Soreghan, G.S., and Hall, B.L., 2011. Chemical weathering and geochemical modeling within glacial meltwater streams, Wright and Taylor Valley, Antarctica. *GSA National Meeting*, abstract 196241.

- 67.\*Bromley, G.R.M., Hall, B., Schaefer, J., Winckler, G., Todd, C., and \*Rademaker, K., 2010. A late-glacial advance in the arid tropical Andes: Cosmogenic <sup>3</sup>He data from Nevado Coropuna, Peru. *Abstracts with Programs, Geological Society of America National Meeting*, paper 94-2.
- 66.\*Garcia, J.L., Kaplan, M., Hall, B., Schaefer, J., Vega, R., Finkel, R., Schwartz, R., and Denton, G., 2010. Extensive glacier extent during the Antarctic Cold Reversal in South Patagonia at 51°S, and its implications for the southern South American late-glacial climate. *Abstracts with Programs, Geological Society of America National Meeting*, paper 94-1.
- 65.\*Garcia, J.L., Hall, B.L., Kaplan, M.R., Schaefer, J.M., Vega, R.M., Schwartz, R., and Finkel, R.C., 2010. Was the late-glacial advance at ~14.0 ka B.P. in Torres del Paine (Patagonia, 51S) the most extensive glacial pulse of Oxygen Isotope Stage 2? *American Geophysical Union Fall Meeting*, San Francisco, CA, GC21A-0860.
64. Hall, B., Stone, J., Conway, H., \*Bromley, G., and \*Cowdery, S., 2010. Deglaciation of the Ross Sea – Implications for the behavior of the West Antarctic Ice Sheet and sea-level change. *PALSEA Conference*, Bristol, United Kingdom [**invited**].
- 63.\*Honsaker, W., Lowell, T.V., Sagredo, E., Kelly, M.A., and Hall, B.L., 2010. Polar ice caps: A canary for the Greenland Ice Sheet. *American Geophysical Union Fall Meeting*, San Francisco, CA, C23B-0613.
62. Kelly, M.A., Lowell, T.V., Hall, B.L., and Schaefer, J.M., 2010. A comparison of late glacial to early Holocene fluctuations of Greenland Ice Sheet outlet glaciers with nearby mountain glaciers in central east Greenland. *American Geophysical Union Fall Meeting*, San Francisco, CA, C41B-07.
- 61.\*Stumpf, A., Soreghan, G., Madden, M., and Hall, B., 2010. Preliminary analysis of chemical weathering in glacial meltwater streams of Wright and Taylor Valleys, Antarctica. *Abstracts with Programs, Geological Society of America National Meeting*, paper 26-17.
60. 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.
59. 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.
58. Stone, J., Conway, H., \*Cowdery, S., Hall, B., and \*Bromley, G., 2009. Deglaciation of the Ross Sea: A view from Scott and Beardmore Glaciers. *16<sup>th</sup> Annual WAIS Meeting*, Seattle, WA.
- 57.\*Antibus, D., Baeseman, J., Leff, L., Hall, B., Blackwood, C., 2008. Cultivation-based and molecular characterization of ancient algal mats from the McMurdo Dry Valleys, Antarctica. *Scientific Committee on Antarctic Research (SCAR) Meeting*, St. Petersburg, Russia.
- 56.\*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.
- 55.\*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. *15<sup>th</sup> Annual West Antarctic Ice Sheet Meeting*, Sterling, VA.

54. \*Burgess, S., Henderson, G., and Hall, B., 2008. Holocene Antarctic seasonality reconstructions from Antarctic barnacle shells. *Goldschmidt Conference*.
53. 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)**.
52. 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. *15<sup>th</sup> Annual West Antarctic Ice Sheet Meeting*, Sterling, VA.
51. 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. *15<sup>th</sup> Annual West Antarctic Ice Sheet Meeting*, Sterling, VA.
50. 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)**.
49. 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.
48. Lowell, T., Kelly, M., Hall, B., and Denton, G., 2008. Recent expansion and retreat of independent glaciers in Greenland. *American Geophysical Union annual meeting*, San Francisco, CA, paper C41B-0521.
47. Baroni, C., and Hall, B.L., 2007. Late-glacial and Holocene relative sea-level change, Scoresby Sund, East Greenland. *APEX Annual Meeting*, Stockholm, Sweden, March 2007.
46. \*Bromley, G., Hall, B., Schaefer, J., and Winckler, G., 2007. Late-Quaternary glacier fluctuations and climate change at Nevado Coropuna, southern Peru. *GSA Annual Meeting*, paper 215-12.
45. 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*.
44. 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.
43. 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.
42. 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.
41. Lowell, T., Kelly, M., Hall, B., Smith, C., Garhart, K., Travis, 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.
40. \*Todd, C., Stone, J., \*Bromley, G., Hall, B., and Conway, H., 2007. Late Quaternary evolution of Reedy Glacier, Antarctica. *GSA Annual Meeting*, paper 27-17.

39. 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.
38. \*Bromley, G., Hall, B., 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.
37. 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 Frontiers of Science Symposium, National Academy of Sciences*, Nov. 2006.
36. Hall, B.L., 2006. Potential for glacial geologic research in the southern Transantarctic Mountains. *Southern Transantarctic Mountains Planning Workshop*, Ohio State University, September 2006.
35. Jakobsson, M., Andreasen, C., Demidov, I., Hall, B., 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*, Copenhagen.
34. 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.
33. \*Putnam, A., Ackert, R., Mukhopadhyay, S., Borns, H., Braddock, P., and Hall, B., 2006. Pre-LGM advances of alpine glaciers in the Ohio Range, southern Transantarctic Mountains, Antarctica. *GSA National Meeting*, Philadelphia, PA.
32. \*Bromley, G., Hall, B., 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. *12<sup>th</sup>-Annual WAIS Meeting*, Sterling, VA.
31. Hall, B.L., Henderson, G., Baroni, C., and Kellogg, T., 2005. The Holocene radiocarbon reservoir effect in the western Ross Sea. *12<sup>th</sup>-Annual WAIS Meeting*, Sterling, VA.
30. Hall, B.L., \*Bromley, G., Conway, H., Stone, J., and \*Todd, C., 2005. Relict algal mats at Reedy Glacier: Radiocarbon dating at 86S. *12<sup>th</sup>-Annual WAIS Meeting*, Sterling, VA.
29. Kelly, M., Hall, B., 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.
28. Stone, J., \*Todd, C., Conway, H., Hall, B., and \*Bromley, G., 2005. Grounding-line incursion into the southernmost Ross Sea- a comparison of lower Scott and Reedy Glaciers. *12<sup>th</sup>-Annual WAIS Meeting*, Sterling, VA.
27. \*Todd, C., Stone, J., Conway, H., \*Bromley, G., and Hall, B., 2005. Evolution of Reedy Glacier from the last glacial maximum to present. *12<sup>th</sup>-Annual WAIS Meeting*, Sterling, VA.
26. \*Bromley, G.R.M., and Hall, B.L., 2004, Reconstructing Late-Quaternary ice-surface profiles of Reedy Glacier – Part 1: *11<sup>th</sup> Annual WAIS Meeting*, Sterling, VA.
25. Hall, B.L., 2004. LGM ice-surface elevations along the Transantarctic Mountains front: *11<sup>th</sup> Annual WAIS Meeting*, Sterling, VA.
24. Hall, B.L., 2004. Millennial-scale changes of Lake Vanda, Antarctica: *GSA Annual Meeting Abstracts with Programs*, v. 36.

23. \*Todd, C., Stone, J., Conway, H., Hall, B., and \*Bromley, G., 2004. Reconstructing Late-Quaternary ice-surface profiles of Reedy Glacier – Part 2: *11<sup>th</sup> Annual WAIS Meeting*, Sterling, VA.
22. \*Whittaker, T.E., Hall, B.L., 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.
21. Hall, B.L., 2003. Chronology of proglacial and lateral lakes in the Dry Valleys: *INQUA Congress*, Reno, NV.
20. Hall, B.L., and Baroni, C., 2003. Holocene deglaciation of Terra Nova Bay. *10<sup>th</sup> Annual WAIS meeting*, Sterling, VA.
19. Hall, B.L., Denton, G.H., and Overturf, B., 2003. Evidence for millennial-scale fluctuations of closed-basin lakes in the Dry Valleys. *GSA Abstracts with Programs*, National Meeting, Seattle, WA, p. 464.
18. Hall, B.L., 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**).
17. 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**).
16. \*Whittaker, T., Hall, B., 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.
15. 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**).
14. Hall, B.L., and Baroni, C., 2002. Deglaciation of the Victoria Land Coast, Antarctica: *AGU Spring Meeting Abstracts*, Washington, D.C.
13. Hall, B.L., and Baroni, C., 2002. Relative sea-level change and deglaciation of Terra Nova Bay, Antarctica: *9<sup>th</sup> Annual WAIS Meeting*, Sterling, VA.
12. Henderson, G.M., \*Robinson, L.F., \*Smith, A., Matthews, I., Barker, D., and Hall, B.L., 2002. Weathering control of river and ocean ( $^{234}\text{U}/^{238}\text{U}$ ): *Goldschmidt Geochemistry Conference*, Davos, Switzerland.
11. \*Gardner, N., and Hall, B.L., 2001. Deglaciation of the western Ross Sea: Part 2, the northern Scott Coast: *2001 WAIS Meeting*, Sterling, VA.
10. Hall, B.L., and Denton, G.H., 2001. Relative sea-level changes along the Scott Coast, Antarctica: *Antarctic Neotectonics Conference*, ANTEC, Siena, Italy.
9. Hall, B.L., 2001. Geomorphological evidence of neotectonics and glacial isostasy: *Antarctic Neotectonics Conference*, ANTEC, Siena, Italy (**invited**).
8. Hall, B.L., 2001. Deglaciation of the western Ross Sea: Part 1, the southern Scott Coast: *2001 WAIS Meeting*, Sterling, VA.
7. 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.
6. 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, 6<sup>th</sup> Annual Meeting*, Sterling, VA.
5. 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**).
4. 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.
  3. 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.
  2. Hall, B.L., and Denton, G.H., 1997. Deglacial chronology of the western Ross Sea: *West Antarctic Ice Sheet Initiative, 4<sup>th</sup> Annual Meeting*, Sterling, VA.
  1. 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.

## FUNDED RESEARCH GRANTS

### Grants Obtained since Appointment to a Faculty Position at Maine in 2000.

Dollar amounts refer to **Maine** portion of the grants only.

#### *Pending*

Collaborative Research: Timing of the Termination in Southernmost South America. (09/01/2020-08/31/2023; \$510,600, PI) *National Science Foundation*

Holocene expansion of East Antarctic ice into the Transantarctic Mountains (09/01/2020-08/31/2023; \$399,805) *National Science Foundation*

#### *Funded Proposals since 2000 (\$4,501,583)*

NSF-NERC: Geological History Constraints on the Magnitude of Grounding Line Retreat in the Thwaites Glacier System (09/01/2018-08/31/2022, \$246,566, PI) *National Science Foundation*

When was the last glacial maximum in the South Atlantic? (01/01/2018-12/31/2018, \$36,575, PI) *National Geographic Society*

Response of the Antarctic Ice Sheet to the Last Great Global Warming. (09/01/2017-08/31/2020; \$382,267, PI) *National Science Foundation*

Collaborative Research: High-resolution reconstruction of Holocene deglaciation in the Ross Embayment (09/01/2015-08/31/2018, \$183,642; co-PI) *National Science Foundation*

The termination of the last ice age in the Falkland Islands (1/1/2015-12/31/2015; \$20,625, PI) *National Geographic Society*

Deglacial history of the Falkland Islands: Implications for understanding the end of the last ice age (1/1/2014-12/31/2014; \$11,500, PI) *Faculty Research Fund*

Collaborative Research: Assessing the Antarctic contribution to sea-level changes during the last deglaciation: Constraints from Darwin Glacier (9/1/2013-8/31/2016; \$200,803, PI) *National Science Foundation*

Collaborative Research: Exploring the vulnerability of Southern Ocean pinnipeds to climate change – an integrated approach (9/1/2012-2/28/2017; \$292,223, PI) *National Science Foundation*

Putting the West Antarctic Ice Sheet into context (9/1/2011-8/31/2014; \$367,994, co-PI) *National Science Foundation*

Sensitivity of the Antarctic Ice Sheet to climate change over the last two glacial/interglacial cycles

(9/1/2010-8/31/2013; \$354,181, PI) *National Science Foundation*

Collaborative Research: Timing and structure of the last glacial maximum in Peru  
(9/1/2010-8/31/13; \$217,013, PI) *National Science Foundation*

ARRA: Collaborative Research: Sensitivity of local glaciers in East Greenland (7/1/2009-6/30/12; \$189,774, PI) *National Science Foundation*

ARRA: Collaborative Research: Constraints on the last Ross Ice Sheet from glacial deposits in the southern Transantarctic Mountains  
(9/1/2009-8/31/13; \$273,136, PI) *National Science Foundation*

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

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

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

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

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

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

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

Supplemental funding for trip to Scoresby Sund, East Greenland (8/1/2006-7/31/2006; \$25,000, PI), *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, PI) *Comer Science and Education Foundation*

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

Women in Earth Sciences Speaker Series (with A. Kelley, L. Brothers) (9/1/2005-5/31/2006; \$2000, co-PI) *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, PI) *Comer Science and Education Foundation*

Paleoecological reconstruction of northern Maine lakes using Chironomids (non-biting midges) (1/1/2005-12/31/2005; \$500, co-PI) *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, PI) *National Science Foundation*

An assessment of variability in Southern Ocean radiocarbon reservoir ages from paired  $^{14}\text{C}$  and U/Th dating of solitary corals (12/01/2003-11/30/2004, PI) *National Environment Research Council (U.K.)* (in-kind grant for 40 AMS radiocarbon dates)

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

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

Teachers Experiencing Antarctica Supplement

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

Deglacial Chronology of the Northern Scott Coast from Relative Sea-Level Curves

(9/1/2000-8/31/2004; \$173,641, PI) *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, PI) *National Science Foundation*

#### **CURRENT/RECENT COLLABORATIONS**

Richard Alley – Pennsylvania State University

Yarrow Axford – Northwestern University

Carlo Baroni – Università di Pisa, Pisa, Italy

Ole Bennike – Geological Survey of Denmark and Greenland

Harold Borns, Jr. – University of Maine

Howard Conway – University of Washington

Daniel Costa – University of California, Santa Cruz

Mark de Bruyn – University of Sydney

George Denton – University of Maine

Andrew Fountain – Portland State University

Gideon Henderson – Oxford University, U.K.

Chris Hendy – University of Waikato, Hamilton, New Zealand

Rus Hoelzel – University of Durham, U.K.

Mike Kaplan – Lamont-Doherty Earth Observatory of Columbia University

Meredith Kelly – Dartmouth College

Paul Koch – University of California, Santa Cruz

Thomas Lowell – University of Cincinnati

Joerg Schaefer – Lamont-Doherty Earth Observatory of Columbia University

Lynn Soreghan – University of Oklahoma

Sarah Spaulding – University of Colorado/USGS

John Stone – University of Washington

Woodrow Thompson – Maine Geological Survey

Andreanna Welch - University of Durham, U.K.

Gisela Winckler – Lamont-Doherty Earth Observatory of Columbia University

## **ADVISING**

### *Postdocs*

Gordon Bromley (2012-2014)

Laura Corrigan (2008-2009)

Mark De Bruyn (2006-2008)

### *Ph.D. students*

#### Primary Advisor

Juan Luis Garcia (2011)

Gordon Bromley (2010)

Courtney King (2017)

Scott Braddock (in progress, co-advised with S. Campbell)

#### Committee Member

Cassandra Stirpe (in progress)

Catherine Hamley (in progress)

Dulcinea Groff (2018)

Peter Strand (in progress)

Kristen Marra (2016), University of Oklahoma

Toby Koffman (2014)

Kurt Rademaker (2012)

Aaron Putnam (2011)

Sean Birkel (2010)

#### External Examiner

Chantel Nixon (2012), University of Alberta

Lena Håkansson (2008), University of Lund, Sweden

### *M.S. Students*

#### Primary Advisor

Tessa Walther (in progress)

Meghan Spoth (in progress)

Maraina Miles (in progress)

Jill Pelto (2018)

Scott Braddock (2014)

Jennifer Lennon (2014)

Margaret Jackson (2013)

Elizabeth Dengler (2013)

Toby Koffman (2013)

Aaron Medford (2013)

Stephanie Allard Heath (2012)

Amanda Lusas (2011)

Audrey Bamberg (2006)

Aaron Putnam (2006)

Gordon Bromley (2005)

Thomas Whittaker (2004)  
Nathan Gardner (2002)

Committee Member

Laura Mattas (in progress)  
Cassandre Stirpe (2018)  
Alexandra Balter (2018)  
Mariah Radue (2018)  
Elise Hartill (2019)  
Catherine Hamley (2016)  
Colin Dowey (2015)  
Peter Strand (2014)  
Paul Wilcox (2013), University of Cincinnati  
Katherine Pingree (2010)  
Randall Perry (2009)  
Samuel Kelley (2009)  
Alice Doughty (2008)  
Bert Pelletier (2007)  
Sarah Millicich, University of Waikato, New Zealand (2005)  
Jacob Croall, University of Waikato, New Zealand (2005)  
Sean Birkel (2005)  
Colby Smith (2003)

*B.S. Students*

Honors Thesis

Laura Mattas (2019)  
Zachary Mason (2016)  
Jillian Pelto (2015)  
Laura Poppick (2011), Bates College (external examiner)  
Richard Becker (2003)  
Nicole Ritchie (in progress – committee member)

REU Students

Jill Pelto (2013-2015)  
Alex Introne (2013)  
Brenda Chase (2007)  
Alice Doughty (2006)  
Megan Essig (2005)  
Katrina Faloon (2004)

Undergraduate Field Assistants taken to Antarctica (and elsewhere, if noted)

Tyler Pollock (2017)  
Laura Mattas (2017, 2018)  
Jill Pelto (2014 - Antarctica, 2015 - Falkland Islands)  
Alex Introne (2013 - Tierra del Fuego)  
Audra Norvaisa (2012)

Peter Strand (2011)  
Patrick Ryan (2011)  
Glenn McKenney (2010)  
Calvin Mako (2010)  
Robin Arnold (2010)  
Nathan Mietkiewicz (2008)  
Brenda Chase (2006)  
Alice Doughty (2005)  
Katrina Faloon (2003)  
Erica Hofstee (2003)  
Amber Hawkins Whittaker (2002)  
Aaron Schlosser (2002)  
Sean Birkel (2002)  
Alex Roy (2001, 2003)  
Ethan Perry (2001)  
Colby Smith (2000)  
Peter Marcotte (2000)

#### **OTHER SIGNIFICANT NATIONAL AND INTERNATIONAL PROFESSIONAL ACTIVITIES**

Teaching Glaciers and our Landscape (ERS 441/541), Quaternary Stratigraphy (ERS-553),  
Paleoclimate Proxies (ERS-602), and Problems in Quaternary Geology (ERS-602)  
Center for Teaching Excellence Mentor (2008-2009)  
Elementary and middle school student outreach (1992-present)

U.S. Representative to the Scientific Committee on Antarctic Research, nominated by the Polar  
Research Board of the National Academy of Sciences, 2010-2016  
Outside Expert, for faculty hire in Sweden (2017)  
UM representative (alternate) to the University of the Arctic council (2017-present)  
Member of West Antarctic Ice Sheet Initiative governing committee (2003-2010)

Invited Participant, Redesign and construction of US Antarctic base at McMurdo Station (2017)  
Invited Participant, Accelerator Mass Spectrometry for Cosmogenic Dating Workshop, Irvine,  
CA (2014)  
Invited Speaker, Deep-field Planning Workshop, Julian, CA (2019)  
Invited Speaker, Ice-Sheet Model-Data Workshop, Grenoble, France (2014)  
Invited Speaker, Transantarctic Mountains Workshop, Indianapolis, IN (2012)  
Convener, Symposium for INQUA Congress, Bern, Switzerland (2011)  
Invited Participant, NSF Antarctic Integrated System Science development workshop (2007)  
Invited rapporteur and writer, Transantarctic Mountains Workshop (2006)  
Invited Speaker and Panelist, NSF- Maryland Science Center Shackleton Event (2003)  
Convener, Symposium for 2003 INQUA Congress, Reno, NV  
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, 2011; Johns Hopkins University, 2006; Colby College, 2007; University of Michigan, 2008; Dartmouth College, 2010; University of Oklahoma, 2011; IAES – Edinburgh, 2011, University of California - Santa Cruz, 2016)

Panel review for the National Science Foundation (2 panels each year, 2004, 2005, 2006, 1 panel 2017, 2018, 2019)

Proposal review for the National Science Foundation, National Geographic Society, Italian Antarctic Program, New Zealand Antarctic Research Program, CONICYT (Chile), NERC (UK), US-Israel Binational Science Foundation, American Philosophical Society (1997-present)

Manuscript reviews for *Science*, *Nature Communications*, *Scientific Reports*, *Geografiska Annaler*, *Journal of Quaternary Science*, *Antarctic Science*, *Marine Ecology Progress Series*, *Antarctic Research Series*, *The Holocene*, *Geological Society of London*, *Quaternary Research*, *Quaternary Science Reviews*, *GSA Today*, *GSA Bulletin*, *Geology*, *Journal of Applied Radioactivity*, *Geology*, *Radiocarbon*, *Geoderma*, *Arctic*, *Antarctic*, and *Alpine Research*, *International Symposium for Antarctic Earth Science*, *Remote Sensing of the Environment*, *Earth and Planetary Science Letters*, *Global Change Biology*, *Permafrost and Periglacial Processes*, *Earth Science Reviews*

### ***Service to Departmental and University Committees***

Departmental Committees –

Graduate Committee (CCI and ERS – 2005-present)

Policy Advisory Committee (CCI - 2007)

Peer Review Committee (CCI – 2008/2009, 2009/2010, 2010/2011(chair), 2012/2013 (chair), 2013/2014, 2014/2015, 2016/2017, 2017/2018, 2019/2020 (chair); ERS 2009/2010, 2010/2011, 2012/2013 (chair), 2013/2014, 2014/2015, 2015/2016, 2016/2017, 2017-2018 (chair), 2019-2020

Joint Peer Review Committees with Anthropology, Biology, and SSI 2008/2009, 2009/2010, 2010/2011, 2012/2013, 2014, 2016, 2017)

Climate and Culture Degree Program committee (2009, 2010)

Search Committees: Mineralogy (2006), Earth Sciences Chair (2007), Geochemistry (2008), Geotechnical Engineering (2008), Paleoecology and Plant Ecology (2008), Glaciology (2017)

University Committees: Faculty Research Grants Committee (2009, 2010, 2011, 2014, 2015, 2016)