

CURRICULUM VITAE
GLEN MICHAEL MACDONALD

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Educational Background

Ph.D.	Toronto	Botany (Geol. Minor)	1984
M.Sc.	Calgary	Geography	1980
B.A. (Hon.)	California, Berkeley	Geography	1978

Thesis Title:

Ph.D., Postglacial Plant Migration and Vegetation Development in the Western Canadian Boreal Forest.

M.Sc., Postglacial Palaeoecology of the Morley Flats and Kananaskis Valley Region, Southwestern Alberta.

Hon., The Impact of 19th Century Redwood Logging on the Bolinas Lagoon Watershed, Marin County, California.

Honors

Discover Magazine Top 100 Science Story - 2005
Cowles Award for Excellence in Publication (AAG) - 2004
Astor Visiting Lecturer, Oxford University
UCLA Distinguished Teaching Award
Cowles Award for Excellence in Publication (AAG) - 1999
University of Helsinki Medal
Elected as Visiting Fellow and Life Member, Clare Hall, Cambridge University
McMaster University Award for Teaching Excellence
McMaster Faculty of Science Award for Teaching Excellence
McMaster Departmental Undergraduate Award for Teaching Excellence
Graduation with Highest Honors and Distinction, University of California
Member of University of California Scholastic Honor Society

Professional Organizations

American Association for the Advancement of Science
American Geophysical Union
Association of American Geographers
Association of Pacific Coast Geographers
Geological Society of America
International Biogeographical Society (Founding Treasurer)

Current Status at UCLA

Full Professor - Geography
Full Professor – Ecology and Evolutionary Biology

Employment History

<u>From</u>	<u>To</u>	<u>Employer</u>	<u>Position</u>
2002	2006	UCLA	Chair
1998	Present	UCLA	Vice Chair
1995	Present	UCLA	Full Professor
1994	1995	McMaster University	Full Professor
1991	1994	McMaster University	Associate Chair
1988	1995	McMaster University	Associate Professor
1984	1988	McMaster University	Assistant Professor
1980	1984	University of Toronto	Teaching Assistant Graduate Student
1981	1981	Geological Survey of Canada	Research and Field Assistant
1980	1980	Geological Survey of Canada	Research and Field Assistant
1978	1980	University of Calgary	Teaching Assistant Graduate Student

Scholarly and Professional Activities

President

Canadian Association of Palynologists (1995)

International Coordinator

International Boreal Forest Research Association (Global Change) (1991-93)

Chair

PARCS – NSF Program (2001-2005)

Biogeography Specialty Group of the AAG (1999-2001)

IsoTrace Laboratories Board, Physics Department, University of Toronto (1993-1995)

Committee on the Future of the Association of Canadian Universities for Northern Studies

(1989)

Founding Treasurer

International Biogeographical Society (2001-2002)

Executive

IsoTrace Laboratories, Physics Department, University of Toronto (1992-1995)

Board/Committee Member

AAAS Geography-Geology Nominating Committee (2005-)

NSF ARCSS Advisory Committee (2002-2006)

NSF PALE/PARCS Steering Committee (1998-2005)

Panel to Develop a New PAGES Core Project on Arctic Climate Change (1995)

Canadian Association of Geographers Global Change Committee (1991)

North American Pollen Data Base (1991-1995)

IsoTrace Laboratories, Physics Department, University of Toronto (1990-95)

Hamilton-Wentworth Archaeological Foundation Board of Directors (1991-92)

Committee for the Professional Registration of Geoscientists (Ontario) (1990-92)

International Panel on Boreal Forest Research (Moscow) (1990-91)

Association of Canadian Universities for Northern Studies (1987-1990)

Invited Panel Member/Moderator/Workshop Participant

Royal Society Workshop Evolution and the Quaternary (2004)

Holocene Climate Change Research (2000)

NSF Earth Systems History Panel (1998-2000)

PALE Workshop on Laminated Sediments (1996)

NSF Arctic Systems Sciences All Hands Workshop (1996)

NSF ARCSS Russian Shelf Interface Planning Workshop (1996)

Ontario Ministry of Environment Fire Workshop (1995)

PAGES Multi-Proxy Workshop (1994)

NSF PALE Workshop (1993-95)

NOAA Grant Selection Panel (1994)

COHMAP Workshop (1994)

Society of American Foresters Boreal Forest Plenary Session (Moderator) (1994)

NATO World Biomass Burning Workshop (Moderator) (1994)

Geological Survey of Canada 6ka Workshop (1991)

Editorial Board / Advisory Board

Annals of the American Association of Geographers (1996-2000)

Arctic, Antarctic and Alpine Research (2000-)

Ecological Applications (2000- 2003)

Geography Compass (2005-)

Great Lakes Geographer (1993-1997)

Journal of Biogeography (2004-)

Physical Geography (2002-)

Review of Palaeobotany and Palynology (1989-)

Quaternary International (1997-)

Guest Editor

Journal of Paleolimnology (2000)

Review of Palaeobotany and Palynology (1993)

Canadian Geographer Focus Section (1988)

Occasional Book Reviewer

Ecoscience

Palaeogeography, Palaeoclimatology, Palaeoecology

Professional Geographer

Quarterly Review of Biology

Academic Reviewer

Review of Geography Department of the University of Tennessee

Review of the Graduate Program in Geography at York University

Review and Selection of Chair for Geography at the University of Western Ontario

Academic Review of the Geography Departments of York University and Atkinson College

Scientific Reviewer

NOAA

NSERC

NSF

International Science Foundation

National Geographic Research and Exploration

National Institute for Global Environmental Change

Fonds pour la formation de chercheurs et l'aide à la recherche

Arctic

Arctic, Antarctic and Alpine Research

Canadian Geographer

Canadian Journal of Botany

Canadian Journal of Earth Sciences

Canadian Journal of Forest Research

Catena

Earth Surface Processes and Landforms

Ecology

Ecoscience

Environmental Reviews

Geographie physique et Quaternaire

Holocene

Journal of Biogeography

Nature

Palaeogeography, Palaeoclimatology,

Palaeoecology

Palynology

Quaternary Research

Radiocarbon
Swedish Government
Water, Air and Soil Pollution

Special Session Organizer

American Geophysical Union (1998)
INQUA (1995)
American Association of Geographers (1990)
Canadian Association of Geographers (1986)

Fieldtrip Organizer

Association of American Geographers (2002)
Canadian Association of Geographers (1987)
International Palynological Conference (1984)

Science Advisor

National Atlas of Canada (1989)
Operation Raleigh Canadian Arctic Expedition (1988)

Invited Speaker

Lamont-Doherty Earth Observatory, Columbia University (2006)
Stanford University (2006)
University of Wisconsin, Milwaukee - Mayer Colloquium Speaker (2006)
UC Irvine (2006)
University of Minnesota - Brown Day Lecture (2005)
University of Maryland - Annual Distinguished Speaker (2005)
Oxford University – Astor Lecture (2004)
University College London (2004)
Uppsala University (2004)
Ohio State University (2003)
Universite Laval (2002)
UC Santa Barbara (2001)
University of Arizona (2000)
UC Berkeley (1999)
University of Pennsylvania (1999)
University of Washington (1997)
University of Iowa (1997)
USC (1996)
UCLA-Biology (1996)
University of Helsinki – Helsinki Medal Lecture (1995)
McMaster University (1995)
University of Virginia (1995)
Guelph University (1995)
UCLA-Geography (1995)
Queen's University (1993)
Universite Laval (1993)

Cambridge University (1993)
University of Alberta (1991)
University of Calgary (1991)
Cambridge University (1989)
University of Toronto (1989)
University of Western Ontario (1988)
University of Waterloo (1987)
University of Alaska (1987)
University of Alberta (1986)
Guelph University (1986)
University of Calgary (1985)
York University (1985)

Interviewed Scientist

Numerous Local LA News Channels
And Newspapers (2000 -)
Discovery Channel (2004)
Science News (2004)
Toronto Star (2003)
NBC National News (2000)
Discovery Channel (2000)
Canadian Geographic (1995)
Globe and Mail (1995)
Toronto Star (1995)
Star Phoenix (1995)
Western Report (1995)
Insight (1995)
University Affairs (1995)
Courier (1994)
CHCH TV (1992)
CBC Manitoba (1991)
CBC Ideas (1989)
CBC North (1986)

Areas of Interest

Research: Biogeography, Paleoclimatology, Global Change
Teaching: Biogeography, Environmental Science
Consulting: Ecological Restoration, Palynology, Dendrochronology, Global Change,
Geography

Courses Taught

UCLA Geography

<u>Year</u>	<u>Course</u>	<u>Units</u>	<u>Topic</u>
2004-	297	4	Evolution and Geography
2002-	2	5	Biogeography
1996-	131	4	Environmental Change
1996-	5	4	Environmental Studies
1996-	108	4	World Vegetation
1996-	217	4	Quaternary Studies
1996-	213	4	Biogeography Seminar
1996-	208	4	Advanced Biogeography

UCLA EEB

<u>Year</u>	<u>Course</u>	<u>Units</u>	<u>Title</u>
1999-	M200A	4 (team taught course)	Evolutionary Biology

McMaster

<u>Year</u>	<u>Course</u>	<u>Units</u>	<u>Title</u>
1992-94	1A6*	1 1/2	Environmental Science
1992	4V6	3	Environmental Science
1988-89	2U3*	3	Environmental Science
1987	1B6	6	Intro. Physical Geog.
1986-94	4P3-6P3*	3	Advanced Biogeography
1985-94	3P3*	3	Biogeography
1985-90	732*	2	Graduate Biogeography
1984-86	3M3	3	Glacial and Periglacial Geomorphology
1984-90	3V3	3	Remote Sensing
1984-85	2M3	3	Landforms of Canada

*New courses introduced by G.M. MacDonald

Supervisorships

UCLA

<u>Student</u>	<u>Year</u>	<u>Program</u>	<u>Theses/Project Title</u>
Abbie Tingstead	2005-	Ph.D.	Utah Paleoclimate
Dave Beilman	2002-2006	Ph.D.	Siberian Carbon

Jon Campbell	2001-2005	Ph.D.	Mesquite Ecology
Aaron Potito	2000-2005	Ph.D.	Calif. Veg. History
Sigrid Rian(Co-Chair)	2000-	Ph.D.	Malaria in Mali
Amanda Petel	1999-2005	Ph.D.	Sierra Veg. And Fire
Alex Aguilar	1998-2002	Ph.D.	Honduran Pine Dynamics
Judy King	1998-2003	M.A.	Western Drought
David Porinchu	1998-2002	Ph.D.	Sierra Paleolimnology
Sigrid Rian	1998-2000	M.A.	L.A. Basin Drought
Bruce Gervais	1997-2001	Ph.D.	Kola Treeline History
Roslyn Case	1996-2000	Ph.D.	Spatial and Temporal Patterns of Prairie Drought

McMaster

<u>Student</u>	<u>Year</u>	<u>Program</u>	<u>Theses/Project Title</u>
Michael Pisaric	1994-96	M.Sc.	Treeline History in Yakutia, Northeastern Siberia
Roslyn Case	1992-94	M.Sc.	Dendroclimatology of Prairie Drought
Katherine McLeod	1988-91	M.Sc.	Postglacial Population Dynamics of Three Boreal Conifers.
Julian Szeicz	1987-89	M.Sc.	Palaeoecology of the Ontario Oak Plains.
	1990-94	Ph.D.	Treeline History of the Mackenzie Mts., N.W.T.
Chris Larsen	1986-89	M.Sc.	Variations in Boreal Forest Fire Frequency
	1989-94	Ph.D.	Annual Pollen and Charcoal

			Deposition in a Meromictic Lake
Katrina Moser	1986-88	M.Sc.	Treeline History North of Yellowknife, N.W.T.
	1992-96	Ph.D.	Boreal Paleolimnology

Research Funding (PI or Co-PI)

<u>Year</u>	<u>Grantor</u>	<u>Amount</u>	<u>Title of Project</u>
2004	NSF	397,002.00	Canadian Arctic Paleoclimate
2004	NSF	300,000.00	Utah Paleoclimate
2004	NSF	349,203.00	Arctic Env. Change and Genetics
2003	NSF	583,114	Siberian Hydrology
2002	NSF	124,000	Sierra Paleoclimate
2002	NSF	238,965 (initial)	PARCS Committee Grant
1999	NSF	711,000	Siberian Carbon History
1999	NSF	180,000	Sierra Paleolimate
1997	UC Water	27,000	Colorado River Drought
1996	NSF	13,000	PALE Workshop
1996	UCLA	2,467	California Pollen
1996	NSF	100,110	N. Great Plains Paleoclimate
1996	NSF	182,010	Kola Pen. Paleoecology
1995	UCLA	2,300	Tree-ring Density Calibration
1994	PAGES	4,000	Russian Scientific Exchange
1994	NSERC	15,960	Normarski-DIC Microscope
	(Equipment)		
1993	NSERC	1,080,000	Treeline Canada-Russia
	Special		
	(Collaborative-PI)		
1993	McMaster	3,500	Northern Studies
	Committee on		
	Northern Studies		
1993	NSERC	94,500	Palaeoclimate
	(Operating)		Canada-Russia
1993	NSERC	11,300	Thin-Section Saw
	(Equipment)		
1992	NSERC	23,000	Russian Arctic Fieldwork
	(Special		
	Collaborative)		
1992	McMaster	5,500	Northern Studies
	Committee on		
	Northern Studies		
1991	NSERC	23,000	Automated Dendrochronology
	(Equipment)		System

1991	Royal Society of Canada	15,000	Planning Funds Canada-USSR Treeline Project
1991	Department of Indian and Northern Affairs	2,500	Planning Funds Canada-USSR Treeline Project
1991	McMaster President's Committee on Northern Studies	5,400	Northern Studies
1990	NSERC (Operating)	99,150	Treeline History, N.W.T.
1990	NWT Government	5,000	Palaeoecology of the Canol Road Region
1990	McMaster President's Committee on Northern Studies	6,500	Northern Studies
1989	NSERC-Royal Society Exchange Fellowship	6,500	Joint Research at Botany School Cambridge University/Visiting Fellow, Clare Hall
1988	McMaster President's Committee on Northern Studies	2,200	Northern Studies
1987-90	NSERC (Operating) (Northern Supplement)	78,810	Postglacial Plant Population Dynamics and Population Genetics in the Western NWT
1987	NSERC (Equipment)	18,400	Micro-Image Analysis System
1987	NWT Government	1,100	14C Dating Funds
1987	McMaster President's Committee on Northern Studies	4,400	Northern Studies
1985-86	NSERC (Operating) (Northern Supplement)	48,000	Postglacial Plant Population Dynamics at the Northern Treeline
1984	McMaster-Science Eng. Res. Board	15,000	Late Quaternary Palaeoecology of the Northern Great Plains
1984	McMaster-Science Eng. Res. Board	5,500	Late Quaternary Palaeoecology of the Northern Great Plains (Equipment)

NB. Canadian universities do not extract any overhead costs or pay PI salary from research grants.

LIFETIME PUBLICATIONS

Peer Reviewed

(a) Books and Monographs (2)

Moser, K.A., Smol, J.P. and MacDonald, G.M. 2004. Ecology and Distribution of Diatoms from Boreal Forest Lakes in Wood Buffalo National Park, Northern Alberta and Northwest Territories, Canada. The Academy of Natural Sciences, Philadelphia 59 p.

MacDonald, G.M. 2002 Biogeography: Space, Time and Life. John Wiley and Sons, New York. 518 p. (Cowles Award Winner)

(b) Contributions to Books (12)

Gajewski, K. and MacDonald, G.M. 2004. Palynology of North American Arctic Lakes. in R. Pienitz, M.S.V. Douglas and J.P. Smol (eds.) Long Term Environmental Change in Arctic and Antarctic Lakes. Springer, Netherlands, 89-116.

MacDonald, G.M., Edwards, T.W.D., Gervais, B., Laing, T.E., Pisaric, M.F.J., Porinchu, D.F., Snyder, J.A., Solovieva, N., Trasov, P. and Wolfe, B.B. 2004. Paleolimnological research from northern Russian Eurasia. in R. Pienitz, M.S.V. Douglas and J.P. Smol (eds.) Long Term Environmental Change in Arctic and Antarctic Lakes. Springer, Netherlands, 349-380.

MacDonald, G.M. 2002. The boreal forest. in The Physical Geography of North America, A.R. Orme (ed.) Oxford University Press, Oxford, 270-290.

MacDonald, G.M. 2001 Conifer stomata. in Tracking Environmental Change Using Lake Sediments, J.P. Smol, H.J.B. Birks and W.M. Last (eds.) Kluwer Academic Publishers, Dordrecht, 33-47.

Kremenetski, K.V., Liu, Kam-Biu and MacDonald, G.M. 1998. The late Quaternary history of pines in northern Asia. in The Pines, D. Richardson (ed.): Cambridge University Press, Cambridge, 95-106.

MacDonald, G.M., Cwynar, L.C. and Whitlock, C. 1998. The late Quaternary history of pines in northern North America. in The Pines, D. Richardson (ed.): Cambridge University Press, Cambridge, 122-136

Scott, P.A., Lavoie, C., MacDonald, G.M., Sveinbjornsson, and Wein, R.W. 1997. Climate change and the future position of the arctic treeline. in *Global Change and Arctic Terrestrial Ecosystems*, W. Oechel et al. (eds.). Springer, Berlin, 245-265.

Sugita, S., MacDonald, G.M. and Larsen, C.P.S. 1997. Reconstruction of fire disturbance and forest succession from fossil pollen in lake sediments: potential and limitations. in *Sediment records of biomass burning*, J. Clark et al. (eds.). Springer-Verlag, Berlin, 387-412.

MacDonald, G.M., 1996. Quaternary palynology in *Stratigraphic Palynology*, J. Jansonius and D.C. McGregor (eds.); American Association of Stratigraphic Palynologist, Houston, Texas, 879-910.

MacDonald, G.M. and Gajewski, K., 1992. The northern treeline of Canada in *Geographical Snapshots of North America*, D.G. Janelle (ed); Guilford Press, New York, 34-37.

Clague, J.J. and MacDonald, G.M., 1989: Paleoeology and paleoclimatology (Canadian Cordillera); in Chapter 1 of *Quaternary Geology of Canada and Greenland*, R.J. Fulton (ed.); Geological Survey of Canada, *Geology of Canada*, no. 1 (also Geological Society of America, *The Geology of North America*, v. K-1).

MacDonald, G.M., 1987. Forests of the Hamilton region: Past, present and future in *Steel City: A Geography of Hamilton and Region*, M.J. Dear, J.J. Drake and L.G. Reeds (eds.); University of Toronto Press, Toronto, 65-84.

(c) **Journal Articles (105)**

MacDonald, G.M., Beilman, D.W., Kremenetski, K.V., Sheng, Y., Smith, L.C. and Velichko, A.A. in press. Rapid Early Development of the Circumarctic Peatland Complex and Atmospheric CH₄ and CO₂ Variations

CAPE-Last Interglacial Project Members - (MacDonald listed as CAPE LIGP Member). 2006. Last Interglacial Arctic warmth confirms polar amplification of climate change, *Quaternary Science Reviews* 25: 1383-1400

Otto-Bliesner, B.L., Marshall, S.J., Overpeck, J.T., Miller, G.H., Hu, A. and CAPE Last Interglacial Project Members - (MacDonald listed as CAPE LIGP Member). 2006. Simulating Arctic Climate Warmth and Icefield Retreat in the Last Interglaciation. *Science* 311: 1751-1753.

MacDonald, G.M. and Case, R.A. 2005. Variations in the Pacific Decadal Oscillation over the past millennium. *Geophysical Research Letters*. 32: L08703, doi10.1029/2005GL022478.

Overpeck, J.T. and 20 other authors including MacDonald, G.M. 2005. Arctic system on trajectory to new state. *EOS* 86:309,312-313.

Smith, L.C., Sheng, Y., MacDonald, G.M. and Hinzman, L.D. 2005. Disappearing arctic lakes. *Science* 308: 1429. (Discover Magazine Top 100 Science Stories of 2005)

Solovieva, N., Tarasov, P.E. and MacDonald, G.M. 2005. Quantitative reconstruction of Holocene climate from the Chuna Lake pollen record, Kola Peninsula, northwest Russia. *Holocene* 15: 141-148.

Huang, C. MacDonald, G.M. and Cwynar, L.C. 2004. Holocene landscape development and climatic change in the Low Arctic, Northwest Territories, Canada. *Palaeogeography, Palaeoclimatology, Palaeoecology* 205: 221-234.

Kaufman, D.S., Ager, T.A., Anderson, N.J., Anderson, P.M., Andrews, J.T., Bartelein, P.J., Burbaker, L.B., Coats, L.L., Cwynar, L.C., Duval, M.L., Dyke, A.S., Edwards, M.E., Eiser, W.R., Gajewski, K., Geisodottir, A., Hu, F.S., Jennings, A.E., Kaplan, M.R., Kewin, M.W., Lozhkin, A.V., MacDonald, G.M., Miller, G.H., Mock, C.J., Oswald, W.W., Otto-Blisner, B.L., Porinchu, D.F., Rühland, K., Smol, J.P., Steig, E.J., Wolfe, B.B., 2004, Holocene thermal maximum in the western Arctic (0-180° W). *Quaternary Science Reviews* 23: 529-560 .

Kremenetski, K. V., Boettger, T., MacDonald, G. M., Vaschalova, T., Sulerzhitsky, L., Hiller, A. 2004. Medieval climate warming and aridity as indicated by multiproxy evidence from the Kola Peninsula, Russia. *Palaeogeography, Palaeoclimatology, Palaeoecology* 209: 113-125

Kremenetski, K.V., MacDonald, G.M., Gervais, B.R., Borisova, O.K., Snyder, J.A. 2004. Holocene vegetation history and climate change on the northern Kola Peninsula, Russia: a case study from a small tundra lake. *Quaternary International* 122: 57-68.

Sheng, Y., Smith, L.C., MacDonald, G.M., Kremenetski, K.V., Frey, K.E., Velichko, A.A., Lee, M., Beilman, D.W. and Dubinin, P. 2004. A high-resolution GIS-based inventory of the west Siberian peat carbon pool. *Global Biogeochemical Cycles* 18 (GB3004), doi:10.1029/2003GB002190): 1-14.

Smith, L.C., MacDonald, G.M., Velichko, A.A., Beilman, D.W., Borisova, O.K., Frey, K.A., Kremenetski, K.V., and Sheng, Y. 2004. Siberian peatlands a net carbon sink and global methane source since the early Holocene. *Science* 303: 353-356.

Bloom, A.M., Moser, K.A., Porinchu, D.F. and MacDonald, G.M. 2003. Diatom inference models for surface water temperature and salinity from a 57-lake calibration set from the Sierra Nevada, California. *Journal of Paleolimnology* 29: 235-255.

Case, R.A. and MacDonald, G.M. 2003. Tree ring reconstructions of streamflow for three Canadian Prairie rivers. *Journal of the American Water Resources Association* 39: 703-716.

Case, R.A. and MacDonald, G.M. 2003. Dendrochronological analysis of the response of tamarack (*Larix laricina*) to climate and larch sawfly (*Pristiphora erichsonii*) infestations in central Saskatchewan. *Ecoscience* 10: 380-388.

Kremenetski, K.V., Velichko, A.A., Borisova, O.K., MacDonald, G.M., Smith, L.C., Frey, K.E. and Orlova, L.A. 2003. Peatlands of the Western Siberian lowlands: current knowledge on zonation, carbon content and Late Quaternary History. *Quaternary Science Reviews* 22: 703-723.

MacDonald, G., Kaufman, D., Duvall, M, and Coates, L. 2003. PARCS: Paleoenvironmental Arctic Sciences - taking the long view. *Arctic Research of the United States* 17: 50-58.

Porinchu, D.F. and MacDonald, G.M. 2003. The use and application of freshwater midges (Chironomidae: Insecta: Diptera) in geographical research. *Progress in Physical Geography* 27: 378-422.

Porinchu, D.F., MacDonald, G.M., Bloom, A.M. and Moser, K.A. 2003. Late Pleistocene and early Holocene climate and limnological changes in the Sierra Nevada California inferred from fossil midges (Insecta: Diptera: Chironomidae). *Palaeogeography, Palaeoclimatology, Palaeoecology* 198: 403-422

Seppa, H., Cwynar, L.C., and MacDonald, G.M. 2003. Post-glacial vegetation reconstruction and a possible 8200 cal. Yr BP event from the low arctic of continental Nunavut, Canada. *Journal of Quaternary Science* 18: 621-629.

Weckström, J., Snyder, J.A., Korhola, A., Laing, T.E., and MacDonald, G.M. 2003. Diatom Inferred Acidity History Of 32 Lakes On The Kola Peninsula, Russia. *Water, Air, and Soil Pollution* 149: 339-361.

Wolfe, B.B., Edwards, T.W.D., Jian, H., MacDonald, G.M., Gervais, B.R., and Snyder, J.A. 2003. Effect of varying oceanicity on early- to late-Holocene paleohydrology, Kola Peninsula, Russia: isotopic evidence from treeline lakes. *Holocene* 13: 153-160.

Gervais, B.R. and MacDonald, G.M. 2002. *Pinus sylvestris* treeline development and movement on the Kola Peninsula of Russia: pollen and stomate evidence. *Journal of Ecology*.

Moser, K.A., Smol, J.P., MacDonald, G.M. and Larsen, C.P.S. 2002. 19th century eutrophication of a remote boreal lake: a consequence of climatic warming? *Journal of Paleolimnology* 28: 269-281.

Porinchu, D.F., MacDonald, G.M., Bloom, A.M. and Moser, K.A. 2002. The modern distribution of chironomid subfossils (Insecta: Diptera) in the Sierra Nevada, California: potential for paleoclimatic reconstructions. *Journal of Paleolimnology* 28: 255-275.

CAPE Project Members - (MacDonald listed as CAPE Project Member) 2001. Holocene paleoclimate data from the Arctic: testing models of global climate change. *Quaternary Science Reviews* 20: 1275-1287.

Gervais, B.R. and MacDonald, G.M. 2001. Modern pollen and stomate deposition in lake surface sediments from across the treeline on the Kola Peninsula, Russia. *Review of Paleobotany and Palynology* 114: 223-237.

Gervais B.R. and MacDonald G.M. 2001 Tree-ring and summer-temperature response to volcanic aerosol forcing at the northern tree-line, Kola Peninsula, Russia. *The Holocene* 11: 499-505.

Hidalgo, H.G., Dracup, J.A., MacDonald, G.M. and King, J.A. 2001. Comparison of tree species sensitivity to high and low extreme hydrologic events. *Physical Geography* 22: 115-134.

Pisaric, M.F.J., MacDonald, G.M., Cwynar, L.C., and Velichko, A.A. 2001. Modern pollen and conifer stomates from north-central Siberian lake sediments: their usage in interpreting late Quaternary fossil pollen assemblages. *Arctic, Antarctic and Alpine Research* 33: 19-27.

Pisaric, M.F.J., MacDonald, G.M., Velichko, A.A. and Cwynar, L.C. 2001. The late-glacial and postglacial vegetation history of the of the northwestern limits of Beringia, from pollen, stomates and macrofossil evidence. *Quaternary Science Reviews* 20: 235-245.

Szeicz, J.M. and MacDonald, G.M. 2001. Montane climate and vegetation dynamics in easternmost Beringia during the Late Quaternary. *Quaternary Science Reviews* 20: 247-257.

Wolfe, S.A., Huntley, D.J., David, P.P., Ollerhead, J., Sauchyn, D.J. and MacDonald, G.M. 2001. Late 18th century drought-induced sand dune activity, Great Sand Hills, Saskatchewan. *Canadian Journal of Earth Sciences* 38: 105-117.

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Administrative Responsibilities

UCLA

Chair (2002-2006)

Vice Chair (1998-2002)

Graduate Advisor (1997-2002)

Graduate Committee (1995-2002)

General Education Committee (1996-2002)

Institute of the Environment, Research Committee (1995-)

Library Committee (1995-1996)

McMaster

Various Departmental Committees via Associate Chair Position (1991-1995)

Associate Chair (1991-1995)

Committee on Relationship Between Geography and Geology (1994-1995)

Geography Environmental Program Co-ordinator (1993-1995)

Chair, Departmental Search Committee (1993-1994)

Committee on Future of Geography at McMaster (1993-1994)

Science and Engineering Tenure and Promotions Committee (1991-1992)

Committee to Select Chair of Geography (1991)

Chair, Departmental Undergraduate Committee (1991-1995)
Committee to Create an Environmental Program in Geography (1990-1991)
University Awards Committee (1990)
Undergraduate Awards Committee (1989)
University Hiring Committee for Liaison Officer (1989)
Departmental Graduate Committee (1989; 1991-1995)
University Graduate Council (1988-1990)
Chair, President's Committee on Northern Studies (1987-1990)
Faculty of Science Orientation Day Organizer (1986)
Departmental Library Representative (1984-1989)
Departmental Open House Organizer (1985)

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