

Guy M. Narbonne, FRSC
Professor and Queen's Research Chair

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Geological Sciences and Geological Engineering
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Birthdate and place: January 19, 1954; Montreal, QC, Canada

Professional Affiliations and Memberships:

Geological Association of Canada
Palaeontological Association
Paleontological Society
Royal Society of Canada
NASA Astrobiology Program

Employment:

Queen's Research Chair	Queen's University	2005-15
Professorial Fellow	University of New South Wales	2011-pres.
Honourary Associate	Monash University	2008-pres.
Associate Researcher	Royal Ontario Museum	2002-pres.
Adjunct Professor	Macquarie University	1997-pres.
Professor	Queen's University	1994-pres.
Associate Professor	Queen's University	1987-1994
Assistant Professor	Queen's University	1982-87
N.S.E.R.C. Post-doctoral Fellow	Université de Montréal	1981-82

Education:

University of Ottawa	Ph.D.	1975-1981
Brock University	B.Sc.	1971-1975

Research Interests:

Early evolution of animals and their ecosystems (Neoproterozoic - Cambrian)
Ediacaran and Paleozoic trace fossils (systematics, paleoecology, evolution)
Proterozoic and Paleozoic reefs (paleoecology, sedimentology)
Proterozoic carbonate and siliciclastic sedimentation
Proterozoic chemical oceanography

HONOURS:

Research Awards:

2010 – Elected **Fellow of the Royal Society of Canada and Canadian Academy of Science**

2009 – **Billings Medal** in Paleontology (Geological Association of Canada)

2008 – **Queen’s University Prize for Excellence in Research**

2005-2010 (renewed to 2015) – **Queen's Research Chair**

2001 – *Palaios* **Honourable Mention for “Best Paper Award”**

1998 – *Journal of Paleontology* **Honourable Mention for “Best Paper Award”**

1997 – **Canadian Sedimentology Research Group “Best Paper Award”**

1994 – **Howard Street Robinson Medal** in Precambrian Geology (Geological Association of Canada)

1990 – *Journal of Paleontology* **“Best Paper Award”**

1984 – **S.E.P.M Excellence of Presentation Award**, San Jose, CA.

1983 – **S.E.P.M. Excellence of Presentation Award**, Dallas, TX.

Distinguished Lectures:

2012 – **Geological Society of London, Fermor Keynote Lecturer**, London

2011 - **Brock University Distinguished Alumni Lecture**, St. Catharines

2009 – **Canadian Paleontology Conference, Keynote Speaker**, Sudbury, ON

2009 – **Walcott Symposium, Keynote Speaker**, 100th anniversary of the discovery of the Burgess Shale, Banff, AB

2007 – **Geological Society of London, Keynote Speaker**, 50th anniversary of the discovery of *Charnia*, Leicester, UK

2006 - **Sperry "Five Colleges" Distinguished Lecturer**, Williams College, MA

2006 - **Canadian Science Writers Association, Keynote Speaker**, St. John’s, NL

- 2006 - **Atlantic Geoscience Society, Distinguished Lecturer** (6 universities in Atlantic Canada)
- 2005 - **Palaeontological Association, Keynote Speaker**, Oxford, U.K.
- 2004 - **SCUGOG Distinguished Lecturer**, University of Western Ontario, London, ON
- 2004 - **Bernstein Distinguished Lecturer and Geologist-in-Residence**, Carleton College, WI
- 2004 - **Atlas Keynote Speaker**, University of Alberta, Edmonton, AB
- 2003 - **Pardee Keynote Speaker**, Geological Society of America, Annual Meeting, Seattle, WA
- 1995 - **G.A.C. Howard S. Robinson Distinguished Lecturer** (21 universities across Canada)
- 1995 – **Atlantic Universities Geological Conference, Keynote Speaker**
- 1993 - **Paleontological Society (U.S.A.) Distinguished Lecturer**

Teaching Awards:

- 2010 – **W.J. Barnes Teaching Excellence Award** (Arts and Science Undergraduate Society)

Others:

- 2012 – **Brock University Alumnus of Distinction** (chosen one of top 35 alumni in the history of Brock University)
- 2008 - Ediacaran fossil *Swartpuntia* (originally described by Narbonne et al., *Journal of Paleontology*, 1997) featured on a postage stamp issued by Namibia Post, 8 August 2008
- 2005 - Paleontological eponym *Streptichnus narbonnei* (Ediacaran-Cambrian trace fossil) named by Jensen and Runnegar, 2005, *Geological Magazine*, vol. 142, pp. 561-569
- 2004 - Two primary research papers selected by *Discover Magazine* as being among the top 100 scientific discoveries of the year worldwide (#42 and #46, see reference list)

PROFESSIONAL CONTRIBUTIONS:

UNESCO: International Union of Geological Sciences (I.U.G.S.) - International Geoscience Program (I.G.C.P.) - International Commission on Stratigraphy (I.C.S.):

- 2008 – pres. Scientific Board Member, UNESCO International Geoscience Program (IGCP)

- 2010-2015 Project co-leader, IGCP Project 587, “Identity, Facies, and Time: The Ediacaran-Vendian Puzzle”
- 2012 – pres. Voting Member: I.U.G.S./I.C.S. Ediacaran Subcommittee
- 2008 – pres. Voting Member: I.U.G.S./I.C.S. Precambrian Subcommittee
- 2004 – 2012. Voting Member: I.U.G.S./I.C.S. Neoproterozoic Subcommittee
- 2003 - 2008 Member and Canadian Leader: The Rise and Fall of the Vendian/Ediacaran Biota. (I.G.C.P. Project 493)
- 2001 - 2007 Member: Canadian National Committee of I.G.C.P.
- 1990 - 2004 Secretary and Voting Member: I.U.G.S./I.C.S. Subcommittee on a Terminal Proterozoic System
- 1992 - 2004 Newsletter Editor: Terminal Proterozoic System Circular (I.C.S.)
- 1992 - 1996 Member and Canadian Leader: Neoproterozoic Events and Resources (I.G.C.P. Project 320)
- 1990 - 1995 Member and Canadian Leader: Late Precambrian - Early Cambrian Event Stratigraphy (I.G.C.P. Project 303)
- 1986 - 1992 Voting Member: I.U.G.S. Working Group on the Precambrian - Cambrian boundary (I.C.S.)
- 1987 Organizer and Co-chair: "Trace Fossils, Small Shelly Fossils and the Precambrian - Cambrian Boundary". I.U.G.S. - I.C.S. Precambrian - Cambrian Boundary Working Group conference and fieldtrip, St. John's, Newfoundland

UNESCO: International Union for Conservation of Nature (I.U.C.N.):

- 2007-pres. Desktop reviews of candidates for UNESCO World Heritage Site status (Joggins, Mount Wuha, Iberian Dinosaur Coast)

Canadian Geoscience Council (C.G.C.):

- 2010-pres. Voting member, Canadian Stratigraphic Commission

Natural Sciences and Engineering Research Council (N.S.E.R.C.):

2000 - 2005 Member: N.S.E.R.C. Canada Research Chairs Review Committee

1996 - 1997 Member: N.S.E.R.C. Earth Sciences Allocation Committee

1995 - 1996 Chair: N.S.E.R.C. Solid Earth Sciences Grant Selection Committee

1993 - 1996 Member: N.S.E.R.C. Solid Earth Sciences Grant Selection Committee

Geological Society of America (G.S.A.):

2004 - 2007 Associate Editor: *Geology*

2004 - 2005 Technical Program Committee: "Earth Systems Processes II (Joint GSA-GAC meeting in Calgary, August 2005)

Society for Sedimentary Geology (S.E.P.M.):

1989 - 1996 Associate Editor: *Palaios*

1986 - 1989 Associate Editor: S.E.P.M. Visual Aids Series

1983 - 1984 Chair: S.E.P.M. Trace Fossil Research Group

1982 - 1983 Vice-chair: S.E.P.M. Trace Fossil Research Group

Geological Association of Canada (G.A.C.):

2012 Organizer and Chair: "Neoproterozoic to Cambrian Evolution of the Earth and Life: A Symposium in Memory of Hans J. Hofmann" and leader of two related field trips at GAC Annual Meeting (May 28-29)

2002 - 2004 Member: Pikaia Award Committee

2001 Organizer and Co-chair: "Late Neoproterozoic Evolution of Earth and Life", special session at G.A.C. Annual Meeting (May 30)

1996 Howard S. Robinson Distinguished Lecturer.

1990 Organizer: Canadian Paleontology and Biostratigraphy Seminar, Queen's University, Sept. 28 - Oct. 1, 102 registrants from six countries.

1987 - 1988 Chair: G.A.C. Paleontology Division

1986 - 1987 Vice-chair: G.A.C. Paleontology Division

1986 Organizer and Co-chair: "Organism - Sediment Relationships", technical session at G.A.C. Annual Meeting (May 20, 1986)

1984 - 1986 Councillor: G.A.C. Paleontology Division

Paleontological Society (P.S.):

2004-07 Schuchert Medal Committee

1993 Distinguished Lecturer

University Program Reviews:

2002 St. Francis Xavier University, Department of Earth Sciences

1999 Acadia University, Departments of Geology, Biology, and Environmental Science

1997 University of Ottawa, Department of Geology

INVITED UNIVERSITY AND KEYNOTE LECTURES:

2012 – Fermor 2012, Geological Society of London

University of Western Ontario

Geological Society of Namibia

Australian Centre for Astrobiology

Yale University

2011 - Kingston Field Naturalists

Brock University (Distinguished Alumni Lecture)

Macquarie University (Biology)

2010 – Royal Society of Canada, Division III

Australian Centre for Astrobiology

University of New South Wales

2009 – International Convention on the Cambrian Explosion, Banff, AB (Keynote address)

Cambridge University, UK

Monash University, Australia

Canadian Paleontology Conference, Sudbury, ON (Keynote address)

2008 – Princeton University, NJ

Queen’s University (“Excellence in Research” presentation)

Macquarie University, Australia

Monash University, Australia

Melbourne University, Australia

Queen’s University (Biology)

2007 - Cambridge University, UK

Oxford University, UK

Geological Society, Leicester, UK (Keynote address)

- University of Tennessee, USA
 University of Ottawa
 Grand opening of the Mistaken Point Interpretation Centre, NL (Keynote address)
 Humber Valley Conservation Society, NL
 Queen's University Institute for Life-Long Learning
- 2006 - Australian Centre for Astrobiology
 Macquarie University
 University of New Brunswick
 Dalhousie University
 St. Mary's University
 St. Francis Xavier University
 Acadia University
 Memorial University of Newfoundland
 Williams College (Sperry "Five Colleges" Distinguished Lecturer)
 Canadian Science Writers Association Annual Meeting (Keynote address)
- 2005 - Palaeontological Association Keynote Speaker (Oxford University, UK)
 Australian Centre for Astrobiology
 Macquarie University, Australia
 James Cook University, Australia
 University of Adelaide, Australia
- 2004 - SCUGOG Distinguished Lecturer, University of Western Ontario, London, ON
 Bernstein Distinguished Lecturer and Geologist-in-Residence, Carleton College, WI
 University of Alberta (Atlas Keynote Speaker)
 Harvard University, MA
- 2003 - McGill University (Redpath Museum, Montreal, QU)
 GSA Pardee Lecture (Seattle)
 Johnson GEOCenter (St. John's, NL)
- 2002 - Royal Ontario Museum (Toronto)
- 2000 - Macquarie University, Australia
- 1999 - Ottawa-Carleton Geoscience/Bioscience (combined)
 Cambridge University, U.K.
 Dean's Honour List Reception, Queen's University
- 1998 - University of Chicago
 Department of Biology, Queen's University
 C.I.A.R. Workshop, Santa Cruz, CA

- 1997 - University of Adelaide, Australia
Macquarie University, Australia
- 1996 - Lamont-Doherty Earth Observatory (Columbia University), NY
Logan Club, Geological Survey of Canada
Ottawa-Carleton Geoscience Centre
Williams College, MA
Harvard University, MA
- 1995 - McGill University
Concordia University
Memorial University of Newfoundland
Acadia University
Atlantic Universities Geological Conference (Keynote Address)
Brock University
McMaster University
University of Windsor
University of Waterloo
Laurentian University
University of Regina
G.S.C. Calgary
University of Calgary
University of Victoria
University of Alberta
University of Saskatchewan
Brandon University
University of Manitoba
Lakehead University
- 1994 - Harvard University, MA
Charles Darwin Festival, MA
- 1993 - University of Western Ontario
Acadia University
Dalhousie University
University of New Brunswick
- 1991 - Carleton University
University of Waterloo
- 1988 - University of Adelaide, Australia
University of Montreal

University of New Brunswick
University of Western Ontario

- 1987 - Geological Survey of Canada, Precambrian Division
Institute of Sedimentary and Petroleum Geology
- 1986 - Carleton University
McMaster University
- 1984 - Memorial University of Newfoundland

SCIENTIFIC GUEST:

- 1990 - Paleontological Institute of the U.S.S.R. Academy of Sciences.
1987 - Geological Society of China

PUBLICATIONS:

Refereed Books (1):

Fedonkin, M.A., Gehling, J.G., Grey, K., Narbonne, G.M., and Vickers-Rich, P., 2007, *The Rise of Animals: Evolution and Diversification of Kingdom Animalia*. John Hopkins Press, 344 p. Forward by Arthur C. Clarke. **[Reviewed in *Science* and in *New Scientist*. Winner of the *Victoria Premier's Literary Award in Science Writing*]**

Refereed Journal Papers (79):

Laflamme, M., Flude, L.I., and Narbonne, G.M., 2012, Ecological tiering and the evolution of a stem: the oldest stemmed frond from the Ediacaran of Newfoundland, Canada, *Journal of Paleontology* 84: 193-200.

Narbonne, G.M., 2011, When life got big. *Nature* 470: 339-340. **[Invited]**

Laflamme, M., Schiffbauer, J. D., Narbonne, G. M., and Briggs, D. E.G., 2011, Microbial biofilms and the preservation of the Ediacara biota. *Lethaia* 45: 203-213.

Silva-Tamayo, J.C., Nägler, T.F., Sial, A.N., Nogueira, A. Kyser, T.K., Riccomini, C., James, N.P., Narbonne, G.M., Villa, I.M., 2010, Global perturbation of the marine Ca isotopic composition in the aftermath of the Marinoan global glaciation. *Precambrian Research*, 182: 373-381.

- Silva-Tamayo, J. C., Nägler, T. F., Villa, I. M., Kyser, T.K., Vieira, L. C., Sial, A. N., Narbonne, G. M., and James, N. P. 2010. Global Ca isotope variations in c. 0.7 Ga old post-glacial carbonate successions. *Terra Nova* 24: 188-192.
- Narbonne, G.M. 2010. Neoproterozoic oceans and early animals. *Science* 328: 53-54. **[Invited]**
- Bamforth, E.L. and Narbonne, G.M. 2009. New Ediacaran rangeomorphs from Mistaken Point, Newfoundland, Canada, *Journal of Paleontology* 83: 897-913.
- Narbonne, G.M., Laflamme, M., Greentree, C., and Trusler, P., 2009, Reconstructing a lost world: Ediacaran rangeomorphs from Spaniard's Bay, Newfoundland. *Journal of Paleontology* 83: 503-523. **[Cover illustration]**
- Flude, L.I. and Narbonne, G.M., 2008, Taphonomy and ontogeny of a multibranching Ediacaran fossil: *Bradgatia* from the Avalon Peninsula of Newfoundland. *Canadian Journal of Earth Sciences* 45: 1095-1109.
- Laflamme, M. and Narbonne, G.M., 2008, Competition in a Precambrian world: Palaeoecology and functional biology of Ediacaran fronds. *Geology Today*, 24 (5): 182-187. **[Invited]**
- Canfield, D.E., Poulton, S.W., Knoll, A.H., Narbonne, G.M., Ross, G.M., Goldberg, T., and Strauss, H., 2008. Ferruginous conditions dominated later Neoproterozoic deep-water chemistry. *Science* 321: 949-952 (also published online 07 July 2008 [DOI: 10.1126/science.1154499] in *Science Express Reports*). **[Selected for a "Perspective in Science"]**
- Bamforth, E.L., Narbonne, G.M. and Anderson, M.M. 2008, Growth and ecology of a multi-branched Ediacaran rangeomorph from the Mistaken Point assemblage, Newfoundland. *Journal of Paleontology* 82: 763-777.
- Laflamme, M., and Narbonne, G.M., 2007, Ediacaran fronds. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 258 (3): 162-179. **[Featured in Geology Today]**
- Gehling, J.G. and Narbonne, G.M. 2007, Spindle-shaped Ediacara fossils from the Mistaken Point assemblage, Avalon Zone, Newfoundland. *Canadian Journal of Earth Sciences* 44: 367-387.
- Ichaso, A., Dalrymple, R.W., and Narbonne, G.M., 2007, Paleoenvironmental and basin analysis of the late Neoproterozoic (Ediacaran) upper Conception and St. John's Groups, west Conception Bay, Newfoundland, Canada, *Canadian Journal of Earth Sciences* 44: 25-41.
- Canfield, D.E., Poulton, S.W., and Narbonne, G.M., 2007, Late Neoproterozoic deep ocean oxygenation and the rise of animal life. *Science* 315: 92-95 (also published online 07

December 2006 [DOI: 10.1126/science.1135013] in *Science Express Reports*).
[Featured in the “News of the Week” by *Science*, *Nature*, and *New Scientist*, selected as a “Research Highlight” by *Nature*, and as the 2007 “Hot Paper in the Geosciences” by *Essential Science Indicators*]

Pyle, L.J., Narbonne, G.M., Nowlan, G.S., Xiao, S, and James, N.P., 2006, Early Cambrian metazoan eggs, embryos, and phosphatic microfossils from northwestern Canada. *Journal of Paleontology* 80: 811-825. [Selected as a "Research Highlight" by *Nature*]

Knoll, A.H., Walter, M.R., Narbonne, G.M., and Christie-Blick, N. 2006, The Ediacaran Period: A new addition to the geologic time scale. *Lethaia* 39: 13-30. [First new geologic period in 130 years]

Narbonne, G.M. 2005, The Ediacara biota: Neoproterozoic origin of animals and their ecosystems. *Annual Reviews of Earth and Planetary Sciences* 33: 13.1-13.22. (also published online as a Review in Advance of Publication January 7, 2005). [Invited]

James, N.P., Narbonne, G.M., Kyser, T.K., and Dalrymple, R.W., 2005, Glendonites in Neoproterozoic low latitude, interglacial sedimentary rocks, NW Canada: Insights into the Cryogenian ocean and Precambrian cold-water carbonates. *Geology* 33: 9-12.

Narbonne, G.M. 2004, Modular construction of complex early Ediacaran life forms. *Science* 305: 1141-1144. (also published online 15 July 2004 [DOI: 10.1126/science.1099727] in *Science Express Reports*). [Cover photograph. Selected for a “Perspective in Science” and as one of the top 100 science discoveries (#46) for 2004 by *Discover Magazine*]

Knoll, A.H., Walter, M.R., Narbonne, G.M., and Christie-Blick, N. 2004, A new period for the geologic time scale. *Science* 305: 621-622. [First new geologic period ratified in more than a century. Selected as one of the top 100 science discoveries (#42) for 2004 by *Discover Magazine*]

Laflamme, M., Narbonne, G.M. and Anderson, M.M., 2004, Morphometrics of the Ediacaran frond *Charniodiscus* from the Mistaken Point Formation, Newfoundland. *Journal of Paleontology* 78: 827-837.

Clapham, M.E., Narbonne, G.M., Gehling, J.G., Greentree, C, and Anderson, M.M. 2004, *Thectardis avalonensis*: A new Ediacaran fossil from Mistaken Point, Newfoundland. *Journal of Paleontology*, 78: 1031-1036.

Pyle, L.J., Narbonne, G.M., James, N.P., Dalrymple, R.W., and Kaufman, A.J., 2004, Integrated Ediacaran chronostratigraphy, Wernecke Mountains, northwestern Canada. *Precambrian Research* 132: 1-27.

- Day, E.S., James, N.P., Narbonne, G.M., and Dalrymple, R.W., 2004, A sedimentary prelude to Marinoan glaciation: the Cryogenian (Middle Neoproterozoic) Keele Formation, Mackenzie Mountains, northwestern Canada. *Precambrian Research* 133: 223-247.
- Batten, K., Narbonne, G.M., and James, N.P., 2004, Early Neoproterozoic (Tonian) ramp carbonates and microbial buildups, Little Dal Group, Northwest Territories, Canada. *Precambrian Research* 133: 249-269 (also published in *Virtual Journal of Geobiology*, v. 3, issue 9).
- Clapham, M.E., Narbonne, G.M., and Gehling, J.G., 2003, Paleoecology of the oldest-known animal communities: Ediacaran assemblages at Mistaken Point, Newfoundland *Paleobiology* 29: 527-544.
- Wood, D. A., Dalrymple, R.W., Narbonne, G.M., Gehling, J.G., and Clapham, M.E., 2003, Environmental analysis of the late Neoproterozoic Mistaken Point and Trepassey Formations, southeastern Newfoundland: paleobiological and tectonic implication. *Canadian Journal of Earth Sciences* 40: 1375-1391.
- Narbonne, G.M. and Gehling, J.G., 2003, Life after Snowball: the oldest complex Ediacaran fossils. *Geology* 31: 27-30 [**Selected as an "Editor's choice" by *Science*, "Frontiers of Science" by *New Scientist*, and as one of the top discoveries in paleontology for 2003 by *Geotimes*, *Encyclopaedia Britannica*, and *World Book Encyclopaedia***]
- Clapham, M.E. and Narbonne, G.M., 2002, Ediacaran epifaunal tiering, *Geology* 30: 627-630.
- Droser, M.L., Jensen, S., Gehling, J.G., Myrow, P.M., and Narbonne, G.M., 2002, Lowermost Cambrian ichnofabrics from the Chapel Island Formation, Newfoundland: Implications for Cambrian substrates. *Palaios* 17: 3-15.
- Sherman, A. G. James, N.P., and Narbonne, G.M., 2002, Tectonic inversion and carbonate sedimentation: Mesoproterozoic Borden Basin, northern Baffin Island. *Canadian Journal of Earth Sciences*, 38: 519-538.
- Narbonne, G.M., 2003, The critical 80% of life's epic. *Science* 301: 919.
- James, N.P., Narbonne, G.M. and Kyser, T.K., 2001 Late Neoproterozoic cap carbonates, Mackenzie Mountains, NW Canada: precipitation and global glacial meltdown. *Canadian Journal of Earth Sciences* 38: 1229-1262.
- Sherman, A.G., Narbonne, G.M., and James, N.P., 2001, Anatomy of a cyclically packaged Mesoproterozoic carbonate ramp in northern Canada. *Sedimentary Geology*, 139: 171-203.

- Gehling, J.G., Jensen, J.S., Droser, M.L., Myrow, P.M., and Narbonne, G.M., 2001, Burrowing below the basal Cambrian GSSP, Fortune Head, Newfoundland, *Geological Magazine* 138: 213-218.
- Turner, E.C., James, N.P. and Narbonne, G.M., 2000, Taphonomic controls on microstructure in Early Neoproterozoic reefal stromatolites and thrombolites. *Palaios*, 15: 87-111.
[Honourable Mention for “Best Paper Award”]
- MacNaughton, R.B., Narbonne, G.M., and Dalrymple, R.W., 2000, Neoproterozoic slope deposits, Mackenzie Mountains, NW Canada: Implications for passive-margin development and Ediacaran faunal ecology. *Canadian Journal of Earth Sciences*, 37: 997-1020.
- Gehling, J.G., Narbonne, G.M. and Anderson, M.A., 2000, The first named Ediacaran body fossil, *Aspidella terranovica*. *Palaeontology*, 43: 427-456.
- Kah, L., Sherman, A.G., Narbonne, G.M., Knoll, A.H., and Kaufman, A.J., 1999. ¹³C stratigraphy of the Proterozoic Bylot Supergroup, Baffin Island, Canada: Implications for regional lithostratigraphic correlations. *Canadian Journal of Earth Sciences*, 36: 313-332.
- MacNaughton, R.B. and Narbonne, G.M., 1999, Evolution and ecology of Neoproterozoic - Lower Cambrian trace fossils, NW Canada. *Palaios* 14: 97-115.
- Narbonne, G.M., 1998, The Ediacara biota: A terminal Neoproterozoic experiment in the history of life. *GSA Today* 8 (2): 1-6.
- James, N.P., Narbonne, G.M., and Sherman, A.G., 1998, Molar-tooth carbonates: Shallow subtidal facies of the mid- to late Proterozoic. *Journal of Sedimentary Research* 68: 716-722.
- Narbonne, G.M., Saylor, B.Z., and Grotzinger, J.P., 1997, The youngest Ediacaran fossils from southern Africa. *Journal of Paleontology* 71: 953-967. **[Honourable Mention for “Best Paper Award”]**
- MacNaughton, R.M., Dalrymple, R.W. and Narbonne, G.M., 1997, Early Cambrian braid delta deposits, Mackenzie Mountains, northwestern Canada. *Sedimentology* 44: 587-609.
- MacNaughton, R.M., Dalrymple, R.W. and Narbonne, G.M., 1997, Multiple orders of relative sealevel change in an earliest Cambrian passive margin succession, Mackenzie Mountains, northwestern Canada. *Journal of Sedimentary Research* 67: 622-637.

- Kaufman, A.J., Knoll, A.H., and Narbonne, G.M., 1997, Isotopes, ice ages, and terminal Proterozoic earth history. *Proceedings of the National Academy of Sciences* 94: 6600-6605.
- Turner, E.C., James, N.P., and Narbonne, G.M., 1997, Growth dynamics of Neoproterozoic calcimicrobial reefs, Mackenzie Mountains, northwest Canada. *Journal of Sedimentary Research* 67: 437-450.
- Narbonne, G.M. and James, N.P., 1996, Mesoproterozoic deep-water reefs from Borden Peninsula, Arctic Canada. *Sedimentology* 43: 827-848.
- Dalrymple, R.W. and Narbonne, G.M., 1996, Continental slope sedimentation in the Sheepbed Formation (Neoproterozoic; Windermere Supergroup), Mackenzie Mountains, N.W.T. *Canadian Journal of Earth Sciences* 33: 848-862. [**G.A.C.-C.S.R.G. "Best Paper Award"**]
- Narbonne, G.M. and Aitken, J.D., 1995, Neoproterozoic of the Mackenzie Mountains, northwestern Canada, *Precambrian Research*, 73: 101-121.
- Pickerill, R.K. and Narbonne, G.M., 1995, Composite and compound ichnotaxa from the Lower Ordovician of the Levis Formation (Middle Cambrian-lower Middle Ordovician) of southern Quebec. *Ichnos* 4: 53-69.
- Narbonne, G.M., Kaufman, A.J., and Knoll, A.H., 1994, Integrated chemostratigraphy and biostratigraphy of the Windermere Supergroup, northwestern Canada: Implications for Neoproterozoic correlations and the early evolution of animals, *Geological Society of America Bulletin* 106: 1281-1292.
- Narbonne, G.M. 1994, New Ediacaran (Neoproterozoic) fossils from northwestern Canada. *Journal of Paleontology* 68: 411-416.
- Sweet, N.L. and Narbonne, G.M. 1993, Occurrence of the Cambrian trace fossil *Oldhamia* in southern Quebec. *Atlantic Geology* 28: 69-73.
- Turner, E.C., Narbonne, G.M. and James, N.P., 1993, Neoproterozoic reef microstructures from the Little Dal Group, northwestern Canada. *Geology* 21: 259-262.
- Landing, E. and Narbonne, G.M., 1992, *Scenella*, and a chondrophorine from the basal Cambrian (Placentian) of Newfoundland. *Journal of Paleontology* 66: 338.
- Fejer, P. and Narbonne, G.M., 1992, Controls on Upper Devonian metre-scale cyclicity, southeast British Columbia, Canada. *Bulletin of Canada Petroleum Geology* 40: 363-380.

- Narbonne, G.M., Myrow, P., Landing, E. and Anderson, M.M., 1991, A chondrophorine (medusoid Hydrozoan) from the basal Cambrian of Newfoundland. *Journal of Paleontology* 65: 186-191.
- Narbonne, G.M. and Aitken, J.D., 1990, Ediacaran fossils from the Sekwi Brook area, Mackenzie Mountains, northwestern Canada. *Palaeontology* 33: 945-980.
- Hofmann, H.J., Narbonne, G.M. and Aitken, J.D., 1990, Ediacaran remains from inter-tillite beds in northwestern Canada. *Geology* 18: 1199-1202. [**Selected for inclusion in the "Frontiers of Science" by *New Scientist***]
- Aitken, J.D. and Narbonne, G.M., 1989, Two occurrences of Precambrian thrombolites from the Mackenzie Mountains, northwestern Canada. *Palaios* 4: 384-388.
- Landing, E., Myrow, P., Benus, A.P. and Narbonne, G.M., 1989, The Placentian Series: Appearance of the oldest skeletalized faunas in southeastern Newfoundland. *Journal of Paleontology* 63: 739-768. [**"Best Paper Award"**]
- Narbonne, G.M., Myrow, P., Landing, E. and Anderson, M.M., 1987, A candidate stratotype for the Precambrian-Cambrian boundary, Fortune Head, Burin Peninsula, southeastern Newfoundland. *Canadian Journal of Earth Sciences* 24: 1277-1293. [**Formal designation of the base of the Cambrian Period**]
- Narbonne, G.M. and Hofmann, H.J., 1987, Ediacaran biota of the Wernecke Mountains, Yukon, Canada. *Palaeontology* 30: 647-676.
- Dalrymple, R.W., Narbonne, G.M. and Smith, L., 1985, Eolian action and the distribution of Cambrian shales in North America. *Geology* 13: 607-610.
- Nowlan, G.S., Narbonne, G.M. and Fritz, W.H., 1985, Small shelly fossils and trace fossils near the Precambrian-Cambrian boundary, Wernecke Mountains, Yukon Territory, *Lethaia* 18: 233-256.
- Narbonne, G.M., 1984, Trace fossils in Upper Silurian tidal flat to basin slope carbonates of Arctic Canada. *Journal of Paleontology* 58: 398-415.
- Narbonne, G.M. and Dixon, O.A., 1984, Upper Silurian lithistid sponge reefs on Somerset Island, Arctic Canada. *Sedimentology* 31: 25-50.
- Jones, B. and Narbonne, G.M., 1984, Environmental controls on the distribution of Atrypoidae species in Upper Silurian strata of Arctic Canada. *Canadian Journal of Earth Sciences* 21: 131-144.

- Hofmann, H.J., Fritz, W.H. and Narbonne, G.M., 1983, Ediacaran (Precambrian) fossils from the Wernecke Mountains, northwestern Canada. *Science* 221: 455-457.
- Dixon, O.A., Narbonne, G.M. and Jones, B., 1981, Event correlation in Late Silurian rocks of the Canadian Arctic. *American Association of Petroleum Geologists, Bulletin* 65: 303-311.
- Narbonne, G.M., Gibling, M.R. and Jones, B., 1979, Polarichnus, a new trace fossil from Siluro-Devonian strata of Arctic Canada. *Journal of Paleontology* 53: 133-141.
- Jones, B., Oldershaw, A.E. and Narbonne, G.M., 1979, Nature and origin of rubbly limestone in the Upper Silurian Read Bay Formation of Arctic Canada. *Sedimentary Geology* 24: 227-252.
- Thomas, A.T. and Narbonne, G.M., 1979, Silurian trilobites from Arctic Canada. *Geological Magazine* 116: 1-19.
- McGregor, D.C. and Narbonne, G.M., 1978, Upper Silurian trilete spores and other microfossils from the Read Bay Formation, Cornwallis Island, Canadian Arctic. *Canadian Journal of Earth Sciences* 15: 1292-1313.
- Gibling, M.R. and Narbonne, G.M., 1977, Siluro-Devonian sedimentation on Somerset and Cornwallis Islands, Arctic Canada. *Bulletin of Canadian Petroleum Geology* 25: 1145-1156.
- Narbonne, G.M., 1977, Stratigraphic setting of the type specimen of *Carpocrinus arcticus* Frest and Strimple from the Late Silurian of Somerset Island, Arctic Canada. *Canadian Journal of Earth Sciences* 14: 2168.

Refereed Book Chapters (10):

- Narbonne, G.M., Xiao, S., Shields, G., 2012, Ediacaran Period. Chapter 18 in: Gradstein, F, Ogg, J., and Ogg, G. (eds.), **Geologic Timescale 2012**, Elsevier, pp. 427-449.
- Laflamme, M., Schiffbauer, J. D., and Narbonne, G. M., 2011, Deep-Water Microbially Induced Sedimentary Structures (MISS) in Deep Time: The Ediacaran Fossil *Ivesheadia*, In Noffke, N. (ed.), Microbial Mats in Siliciclastic Sediments, *SEPM Special Publication* 101: 111-123.
- Laflamme, M., Narbonne, G.M., Greentree, C., and Anderson, M.M., 2007, Morphology and taphonomy of an Ediacaran frond: *Charnia* from the Avalon Peninsula of Newfoundland, In: P. Vickers-Rich and P. Komarower (eds.), *Geological Society Special Publication* 286: 237-257.

- Narbonne, G.M. , James, N.P., Rainbird, R.H. and Morin, J., 2000, Early Neoproterozoic (Tonian) patch reef complexes, Victoria Island, Arctic Canada. , in Grotzinger, J.P. and James, N.P., eds., Carbonate Sedimentation and Diagenesis in the Evolving Precambrian World, *SEPM Special Publication 67*, 163-178.
- Turner, E.C, Narbonne, G.M. and James, N.P., 2000, Framework composition of Early Neoproterozoic calcimicrobial reefs and associated microbiolites, Mackenzie Mountains, N.W.T, in Grotzinger, J.P. and James, N.P., eds., Carbonate Sedimentation and Diagenesis in the Evolving Precambrian World, *SEPM Special Publication 67*: 221-254.
- Sherman, A.G., James, N.P. and Narbonne, G.M., 2000, Sedimentology of a Late Mesoproterozoic muddy carbonate ramp, northern Baffin Island, Arctic Canada, in Grotzinger, J.P. and James, N.P., eds., Carbonate Sedimentation and Diagenesis in the Evolving Precambrian World, *SEPM Special Publication 67*: 275-294.
- Narbonne, G.M. and Arbuckle, S.M., 1989, Lower Cambrian algal-archaeocyathan reef mounds from the Wernecke Mountains, Yukon Territory. In H.H.J. Geldsetzer, N.P. James, and G.E. Tebbutt (eds.), Reefs - Canada and Adjacent Areas. *Canadian Society of Petroleum Geologists, Memoir 13*: 156-160.
- Narbonne, G.M. and Dixon, O.A., 1989, Sponge-dominated reef mounds in the Douro Formation (Upper Silurian) of Somerset Island, N.W.T. In H.H.J. Geldsetzer, N.P. James and G.E. Tebbutt (eds.), Reefs - Canada and Adjacent Areas. *Canadian Society of Petroleum Geologists, Memoir 13*: 339-343.
- Narbonne, G.M. and Myrow, P., 1988, Trace fossil biostratigraphy in the Precambrian-Cambrian boundary interval. In Landing, E. et al. (eds.), Trace fossils, small shelly fossils, and the Precambrian-Cambrian boundary. *New York State Museum Bulletin 463*: 72-76.
- Narbonne, G.M. and Dixon, O.A., 1982, Physical correlation and depositional environments of Upper Silurian rubbly limestone facies in the Canadian Arctic Islands. In: A.F. Embry and H.R. Balkwill (eds.), Arctic Geology and Geophysics. *Canadian Society of Petroleum Geologists, Memoir 8*: 135-146.

Non-refereed Scientific Papers (6):

- MacNaughton, R.B., Narbonne, G.M., and Dalrymple, R.W., 1999, A re-examination of the type section of the Backbone Ranges Formation, Mackenzie Mountains, NW Canada: Stratigraphic and tectonic implications. In Cook, F. and Erdmer, P. (compilers), Slave-Northern Cordillera Lithospheric Evolution (SNORCLE) Transect and Cordilleran Tectonics Workshop Meeting, *Lithoprobe Report No. 69*: 99-111.

Osborne, D.T., Narbonne, G.M. and Carrick, J., 1986, Stratigraphy and economic potential of Precambrian-Cambrian boundary strata, Wernecke Mountains, east-central Yukon. *Yukon Geology* 1: 131-138.

Narbonne, G.M., Hofmann, H.J. and Aitken, J.D., 1985, Precambrian-Cambrian boundary sequence, Wernecke Mountains, Yukon Territory. *Geological Survey of Canada, Paper* 85-1A: 603-608.

Fritz, W.H., Narbonne, G.M. and Gordey, S.P., 1984, Strata and trace fossils near the Precambrian-Cambrian boundary, Mackenzie, Selwyn and Wernecke Mountains, Yukon and Northwest Territories. Reply. *Geological Survey of Canada, Paper* 84-1B: 409-412.

Fritz, W.H., Narbonne, G.M. and Gordey, S.P., 1983, Strata and trace fossils near the Precambrian-Cambrian boundary, Mackenzie, Selwyn and Wernecke Mountains, Yukon and Northwest Territories. *Geological Survey of Canada, Paper* 83-1B: 365-375.

Jackson, G.D., Ianelli, T.R., Narbonne, G.M. and Wallace, P.J., 1978, Upper Proterozoic sedimentary and volcanic rocks of northwestern Baffin Island. *Geological Survey of Canada, Paper* 78-14: 15 p.

Field Guides (10):

Narbonne, G.M., Laflamme, M., and Thomas, R., 2012, When Life Got Big: Glaciation, Oxidation, and the Mistaken Point biota of Newfoundland, GAC Field Trip Guidebook B1, 78 p.

Myrow, P., and Narbonne, G.M., 2012, The Dawn of the Paleozoic on the Burin Peninsula, GAC Field Trip Guidebook A2, 42 p.

Narbonne, G.M. and Laflamme, M., 2009, Neoproterozoic Glaciation, Oxygenation, and the Rise of Animals in Avalonian Newfoundland, NASA Astrobiology Institute, Field Trip Guidebook, 76p.

Narbonne, G.M., Bamforth, E.L., McIlroy, D.M., and Ward, C., 2007, Earth's Earliest Animals: The Mistaken Point Fossils of Newfoundland. Canadian Paleontology Conference, Field Trip Guidebook, 35 p.

Narbonne, G.M., Greentree, C., Boyce, D., Bamforth, E., Flude, L., and Ward, C. 2006. Earth's earliest animals: The Mistaken Point fossils of Newfoundland. *Canadian Science Writers' Association 35th Annual Conference*. Field Trip Guidebook. June 27th, 2006, 17 pp.

- Narbonne, G.M., Dalrymple, R.W., Laflamme, M., Gehling, J.G. and Boyce, W.D. (eds.), 2005. Life after Snowball: The Mistaken Point biota and the Cambrian of Avalon. *North American Paleontological Convention, Guidebook*, 100 pp. (Field Guide).
- Narbonne, G.M., 2002, Life after Snowball: The Mistaken Point biota and the early evolution of animals. *Geological Association of Canada (Newfoundland Section), Guidebook*, 49 pp.
- Narbonne, G.M., Dalrymple, R.W., and Gehling, J.G. (eds.), 2001, Neoproterozoic fossils and environments of the Avalon Peninsula, Newfoundland. *Geological Association of Canada, Guidebook B5*, 100 pp. (Field Guide).
- Landing, E., Narbonne, G.M. and Myrow, P. (eds.), 1988, Trace fossils, small shelly fossils and the Precambrian-Cambrian boundary, *New York State Museum, Bulletin 463*, 80 pp. (Proceedings and Field Guide).
- Myrow, P., Narbonne, G.M. and Hiscott, R.N., 1988, Storm-shelf and tidal deposits of the Chapel Island and Random formations, Burin Peninsula: facies and trace fossils. *Geological Association of Canada, Guidebook B6*, 108 pp. (Field Guide).

Citations and Memorials (4):

- Narbonne, G.M., 2010, Hans Jorg Hofmann 1936-2010, *Transactions of the Royal Society of Canada*, published online.
- Narbonne, G.M., Schopf, J.W., and Walter, M.R., 2010, Hans J. Hofmann 1936-2010, memorial published in *Geolog* 39 (2): 13-14.
- Narbonne, G.M., 1997. Noel P. James. "Best Paper" citation in *Journal of Sedimentary Research*.
- Narbonne, G.M. 1995. Andrew H. Knoll. "Best Paper" citation in *Journal of Sedimentary Research*, B65: 499.

Theses:

- Ph.D. Stratigraphy, reef development and trace fossils of the Upper Silurian Douro Formation in the southeastern Canadian Arctic Islands, University of Ottawa, 1981, 259 p.
- B.Sc. Paleocology of the Silurian Rochester Formation in southern Ontario, Brock University, 1975, 25 p.

Selected Conference Abstracts:

Narbonne, G.M. 2009, When life got big: The Ediacara Biota and the rise of animals. International Conference on the Cambrian Explosion (a celebration of the 100's anniversary of the discovery of the Burgess Shale), Banff, AB. **Invited keynote address.**

Narbonne, G.M. 2009, When life got big: The Ediacara Biota and the rise of animals. Canadian Paleontology Conference, Sudbury, ON. **Invited keynote address.**

Narbonne, G.M., Laflamme, M., Greentree, C., and Trusler, P., 2009, Reconstructing a lost world: Ediacaran rangeomorphs from Spaniard's Bay, Newfoundland. International Conference on the Cambrian Explosion (a celebration of the 100's anniversary of the discovery of the Burgess Shale), Banff, AB

Laflamme, M., Schiffbauer, J.D., Narbonne, G.M., and Briggs, D.E.G., 2009. Ediacaran soft-bodied preservation by microbe-particle interactions. *Geological Society of America Abstracts with Programs*, 41 (7): 629. Portland, OR.

Narbonne, G.M., Laflamme, M. Bamforth, E.L., Flude, L.I., and Gehling, J.G., 2008, Growth and development of early Ediacarans. 33rd International Geological Congress, Abstract 1342928, Oslo.

Narbonne, G.M., 2008, The Gaskiers glaciation as a significant divide in Ediacaran history and stratigraphy. 33rd International Geological Congress, Abstract 1342961, Oslo.

Bingham-Koslowski, N., Narbonne, G.M., and Laflamme, M., 2008, Slicing through the Ediacaran enigma: Sedimentological and Morphological analysis of Ediacaran discs from the Mackenzie Mountains, NW Canada. Canadian Paleontology Conference, Proceedings 6: 11 (Winnipeg).

Narbonne, G.M., 2007, Solving Darwin's Dilemma: The Mistaken Point fossils of Newfoundland. Canadian Paleontology Conference Proceedings No. 5: p. 12. St. John's, NL.

Narbonne, G.M., and James, N.P., 2007, Cryogenian (middle Neoproterozoic) reefs from northwestern Canada. *Geological Society of America Abstracts with Programs* 39 (6): 331. Denver, CO.

Bamforth, E.L., and Narbonne, G.M. 2007. Pectinates: An Early Experiment in Multicellular Life from the Ediacaran of Newfoundland. *Geological Society of America Abstracts with Programs* 39 (6): 332. Denver, CO.

Bamforth, E.L., and Narbonne, G.M. 2007. Network rangids: an early experiment in multicellular life from the Ediacaran of Newfoundland (oral presentation). Canadian Paleontology

Conference Proceedings No. 5: Pg. 8. St. John's, NL.

- Bamforth, E.L., and Narbonne, G.M. 2007. Pectinates: An Early Experiment in Multicellular Life; A multi-branched rangeomorph from the Ediacaran of Newfoundland (oral presentation). Sixth Annual Advances in Earth Science Research Conference (AESRC), Abstracts Volume (electronic). Ottawa, ON.
- Bamforth, E.L., and Narbonne, G.M. 2007. Pectinates: An Early Experiment in Multicellular Life; A multi-branched rangeomorph from the Ediacaran of Newfoundland (oral presentation). Alberta Palaeontological Society (APS) Eleventh Annual Symposium, Abstracts Volume: 2-3. Calgary, AB.
- Laflamme, M. and G. M. Narbonne. (2007). A new multifoliate rangeomorph frond from the Ediacaran of Newfoundland and northwestern Canada. 51st Annual Meeting of the Palaeontological Association, Uppsala, Sweden.
- Laflamme, M. and G. M. Narbonne. (2007). Tiering in Ediacaran Fronds from Mistaken Point Newfoundland, Atlantic Geosciences Society Annual Meeting and Colloquium, Moncton, New Brunswick. February 2007. .
- Bamforth, E. and Narbonne, G.M., 2006, Pectinates: Comb-shaped rangeomorphs from the Ediacaran of Newfoundland, *Canadian Paleontology Conference, Proceedings*, vol. 4, p. 5. (Montreal)
- Bamforth, E. and Narbonne, G.M., 2006, A study of pectinates: Comb-like fossils from Mistaken Point, Canada. *Alberta Paleontological Society, 10th Annual Symposium*, p. 4. (Calgary)
- Flude, L. and Narbonne, G.M., 2006, Bush-shaped rangeomorphs from the Ediacaran of Newfoundland, *Canadian Paleontology Conference, Proceedings*, vol. 4, p. 18. (Montreal)
- Laflamme, M. and G. M. Narbonne. (2006). Ediacaran Rangeomorph Fronds from Mistaken Point Newfoundland, Canada, *Canadian Paleontology Conference* p. 25. (Montreal).
- Laflamme, M. and G. M. Narbonne. (2006). Complex multifoliate Ediacaran fronds from Mistaken Point, Newfoundland, Canada. *Geological Society of America Annual Meeting*, vol. 38, no. 7, p. 303. (Philadelphia, PA).
- Laflamme, M. and G. M. Narbonne. (2006). Ecology and Taxonomy of Ediacaran Fronds. *Annual Meeting of the Geological Association of Canada and the Mineralogical Association of Canada*, vol. 31, p. 81. (Montreal).

- Laflamme, M. and G. M. Narbonne. (2006). Ediacaran Fronds: A taxonomic Investigation. *Adams Club Graduate Student Symposium*. (Montreal).
- Laflamme, M. and G. M. Narbonne. (2006). Classifying Ediacaran Fronds. *5th Annual Advances in Earth Sciences Research Conference*. (Kingston)
- Narbonne, G.M., 2005, The Mistaken Point biota: Ecology and evolution of the earliest Ediacarans, *Geological Society of America Annual Meeting, Abstracts with Programs* Vol. 37, No. 7. Salt Lake City, Utah. USA. **Invited Keynote Address**.
- Narbonne, G.M., 2005, Rangeomorphs, a forgotten construction in the Ediacaran evolution of animals. *North American Paleontology Convention*, Vol. 25, Supplement to number 2, p. 89. Halifax, NS. Canada.
- James, N.P., Narbonne, G.M. Kyser, T.K., and Dalrymple, R.W., 2005, Comparative ooid sedimentology: A cautionary tale. *Geological Society of America Annual Meeting, Abstracts with Programs* Vol. 37, No. 7. Salt Lake City, Utah. USA.
- Laflamme, M., G. M. Narbonne, C. Greentree, and J. G. Gehling. (2005). Taphonomy of an Ediacaran Frond: Charnia from the Mistaken Point Biota of Newfoundland, *Geological Society of America Annual Meeting, Abstracts with Programs* Vol. 37, No. 7. Salt Lake City, Utah. USA.
- Laflamme, M., G. M. Narbonne, C. Greentree, J. G. Gehling, and M. M. Anderson. (2005). The Ediacaran Frond Charnia from the Avalon Zone, Newfoundland, *North American Paleontology Convention*, Vol. 25, Supplement to number 2, p. 72. Halifax, NS. Canada.
- Laflamme, M., G. M. Narbonne, C. Greentree, M. M. Anderson, and J. G. Gehling. (2005). The Earliest Representatives of the Ediacaran Frond Charnia, Mistaken Point Biota, Newfoundland. Fourth annual *Advances in Earth Science Research Conference* (AESRC), p. 20. Ottawa, ON. Canada.
- Narbonne, G.M. 2004. Earth's earliest Ediacarans: The Mistaken Point biota. Geological Association of Canada/Mineralogical Association of Canada Joint Annual Meeting, St. Catharines, ON, *GAC/MAC Abstracts 29*: GS11-01, p. 478.
- Narbonne, G.M. 2004. Neoproterozoic glaciations and the early evolution of animals. American Geophysical Union Joint Meeting, Montreal, *EOS Transactions* 85 (17), Abstract GP23A-05 (Invited)
- Narbonne, G.M., 2004. The Mistaken Point Assemblage: Ecology and evolution of the Earth's earliest Ediacarans. Abstract volume for IGCP493 Workshop - The Rise and Fall of the Vendian Biota, 30-31 August, Prato, Italy, p. 84 (Invited)

- Laflamme, M. and Narbonne, G.M., 2003. Morphometric analysis of *Charniodiscus* from the Neoproterozoic Mistaken Point Formation, Newfoundland. *Geological Society of America*, Annual Meeting (Seattle, WA).
- Narbonne, G.M., Gehling, J.G., and Clapham, M.E., 2003, Life after Snowball: the Mistaken Point Biota and the origin of animal ecosystems, *Geological Society of America*, Annual Meeting, (Seattle, WA). **GSA Pardee Keynote Speaker**
- Pyle, L.J., Narbonne, G.M., James, N.P., Dalrymple, R.W., and Kaufman, A.J., 2003, Terminal Proterozoic post-rift history of the northwestern margin of Laurentia, *Geological Association of Canada*, Annual Meeting (Vancouver, BC).
- Laflamme, M. and Narbonne, G.M., 2003, Morphometric analysis of the Ediacaran frond *Charniodiscus* from Mistaken Point, Newfoundland. *47th Annual Meeting of The Palaeontological Association* (Leicester, England).
- Batten, K., Narbonne, G.M., and James, N.P., 2002, Tonian microbial buildups and sea-level change: Proterozoic Little Dal Group, Northwest Territories, Canada. *Geological Society of America Abstracts with Program*, v. 34, no. 6, p. 65. (Denver, CO).
- Clapham, M.E., and Narbonne, G.M. 2002. Ecological succession in the Neoproterozoic. *Geological Society of America Abstracts with Program*, v. 34, no. 6, p. 335. (Denver, CO).
- Clapham, M.E., and Narbonne, G.M. 2002. Ediacaran epifaunal tiering. First International Palaeontology Congress. IPC 2002, *Geological Society of Australia*, Abstracts Volume 68, p. 34-35 (Sydney, AUS).
- Clapham, M.E., and Narbonne, G.M. 2002. Ediacaran epifaunal tiering. *Geological Association of Canada Annual Meeting*, Abstracts Volume 27, p.21 (Saskatoon, SK).
- Clapham, M.E., Narbonne, G.M., and Gehling, J.G. 2002. Community ecology of Ediacaran fossil assemblages at Mistaken Point, Newfoundland. *Society for Integrative and Comparative Biology 2002 Annual Meeting*, Program and Abstracts, p. 151-152 (Anaheim, CA).
- Clapham, M.E., Narbonne, G.M., Gehling, J.G., Dalrymple, R.W, and Wood, D., 2002. Ediacaran ecosystems from Mistaken Point, Newfoundland. In: *The Events Leading to the Cambrian Explosion of Animal Life*, Royal Ontario Museum (Toronto, ON)
- Day, E., James, N.P. and Narbonne, G.M., 2002, A tropical carbonate ramp between Snowball glaciations: the late Neoproterozoic Keele Formation, Mackenzie Mountains, NWT, *Geological Society of America Abstracts with Program*, v. 34 (6) p. 335. (Denver, CO).

- James, N.P. and Narbonne, G.M., 2002, Proterozoic reef evolution. Geological Society of America Abstracts with Program, v. 34, no. 6, (Denver, CO).
- Laflamme, M., Narbonne, G.M., and Gehling, J.G. 2002. Morphometric analysis of Charniodiscus from the Neoproterozoic Mistaken Point Formation, Newfoundland. Canadian Paleontology Conference, vol. 12, p. 30. (Ottawa, ON).
- Narbonne, G.M. and Gehling, J.G., 2002, Life after Snowball: the oldest complex Ediacaran fossils. First International Palaeontology Congress. IPC 2002, Geological Society of Australia, Abstracts Volume 68, p. 78 (Sydney, AUS).
- James, N.P., Narbonne, G.M. and Kyser, T.K., 2001 Late Neoproterozoic cap carbonates, Mackenzie Mountains, NW Canada: Precipitation and global glacial meltdown. *Geological Association of Canada/Mineralogical Association of Canada, Annual Meeting, Abstracts 26: 72* (St. John's, NL).
- Clapham, M.E., Narbonne, G.M., and Gehling, J.G. 2001, Community ecology of Ediacaran fossil assemblages at Mistaken Point, Newfoundland. Canadian Paleontology Conference 2001, 11: 10-13 (London, ON).
- Clapham, M.E., Narbonne, G.M., and Gehling, J.G. 2001, Population structure, diversity, and species abundance models of Ediacaran communities at Mistaken Point, Newfoundland. Geological Association of Canada/Mineralogical Association of Canada, Annual Meeting, Abstracts 26: 26 (St. John's, NL).
- Wood, D.A., Dalrymple, R.W., Narbonne, G.M., Clapham, M.E. and Gehling, J.G., 2001, Sedimentology and taphonomy of Ediacaran fossils at Mistaken Point, Newfoundland. Geological Association of Canada/Mineralogical Association of Canada, Annual Meeting, Abstracts 26: 165 (St. John's, NL).
- Wood, D.A., Narbonne, G.M., Dalrymple, R.W., Clapham, M.E. and Gehling, J.G., 2001, Paleocological implications of oriented Ediacaran fossils in the Late Neoproterozoic Mistaken Point and Trepassy formations, southeastern Newfoundland. *Canadian Paleontology Conference 2001, 11: 64* (London, ON).
- Clapham, M.E., Narbonne, G.M., and Gehling, J.G. 2001. Community ecology of Ediacaran fossil assemblages at Mistaken Point, Newfoundland. *Society for Integrative and Comparative Biology Annual Meeting Abstracts Volume*, p. 151-152.
- Clapham, M.E., Narbonne, G.M., and Gehling, J.G. 2001, Population structure, diversity, and species abundance models of Ediacaran communities at Mistaken Point, Newfoundland.

Geological Association of Canada/Mineralogical Association of Canada, Annual Meeting, Abstracts 26: 26 (St. John's, NF).

- Narbonne, G.M. and Gehling, J.G., 1998, Is *Aspidella* the first described Ediacaran body fossil? *Geological Society of America, Abstracts with Program 28: 233.* (Toronto, ON).
- Narbonne, G.M., Saylor, B.Z. and Grotzinger, J.P., 1997, Disappearance of the Ediacara biota: Evidence from Swartpunt, Namibia. *GAC/MAC Abstracts Volume 22: 107-108.*
- Grotzinger, J.P., Bowring, J.P., Saylor, B.Z., Kaufman, A.J., and Narbonne, G.M. 1997, New constraints on early animal evolution. *GAC/MAC Abstracts Volume 22: 59.*
- James, N.P., Narbonne, G.M., and Sherman, A.G., 1997, Molar-tooth carbonates: Shallow subtidal facies of the mid- to late-Proterozoic. *CSPG-SEPM Joint Convention, Abstracts with Program, 145*
- MacNaughton, R.B., Dalrymple, R.W., and Narbonne, G.M., 1997, Cambrian wave-dominated coastal deposits, Mackenzie Mountains, northwestern Canada: Sedimentation in the absence of terrestrial vegetation. *CSPG-SEPM Joint Convention, Abstracts with Program, 178.*
- MacNaughton, R.B., Dalrymple, R.W., and Narbonne, G.M., 1997, Multiple orders of relative sea-level change on a Lower Cambrian siliciclastic passive margin, northwestern Canada. *CSPG-SEPM Joint Convention, Abstracts with Program, 179.*
- Sherman, A.G., Narbonne, G.M., and James, N.P., 1997, Facies model for a Mesoproterozoic carbonate ramp, Victor Bay Formation, Borden Peninsula, northern Canada. *CSPG-SEPM Joint Convention, Abstracts with Program, 254.*
- Turner, E.C., Narbonne, G.M., and James, N.P., 1997, Framework composition of Neoproterozoic reefs from northwestern Canada. *CSPG-SEPM Joint Convention, Abstracts with Program, 279.*
- Narbonne, G.M., Saylor, B.Z. and Grotzinger, J.P. 1995. The youngest Ediacara-type fossils in southern Africa. *Geological Society of America, Abstracts with Program 27: 268.* G.S.A. Annual Meeting, New Orleans.
- Narbonne, G.M. and James, N.P., 1994, Mesoproterozoic stromatolite reef complex, Borden Basin, northern Baffin Island. Geological Association of Canada Annual Meeting, Program with Abstracts 19: A82.
- Narbonne, G.M., Kaufman, A.J. and Knoll, A.H., 1994, Integrated chemostratigraphy and biostratigraphy of the Windermere Supergroup, northwestern Canada: Implications for

- Neoproterozoic correlations and the early evolution of animals. Geological Association of Canada Annual Meeting, Program with Abstracts 19: A82
- Narbonne, G.M. and Dalrymple, R.W., 1992, Taphonomy and ecology of deep-water Ediacaran organisms from northwestern Canada. Fifth North American Paleontological Convention, Abstracts and Program: 219 (Chicago). Invited.
- Narbonne, G.M. and Aitken, J.D., 1992, Neoproterozoic of the Mackenzie Mountains northwestern Canada. 29'th International Geological Congress, Abstracts 1: 240 (Kyoto). Invited.
- MacNaughton, R.B. and Narbonne, G.M., 1992, The Neoproterozoic - Cambrian boundary in the Mackenzie Mountains, northwestern Canada. Geological Society of America, Abstracts with Program 24 (7): A113 (Cincinnati). Invited.
- Turner, E.C., Narbonne, G.M. and James, N.P., 1992, Microstructures and microfabrics of the Neoproterozoic Little Dal Reefs, Mackenzie Mountains, N.W.T., Canada. Canadian Paleontology Conference, Program with Abstracts 2: 25 (Ottawa).
- MacNaughton, R.B. and Narbonne, G.M., 1992, Ichnology of a Neoproterozoic - early Cambrian siliciclastic succession, Mackenzie Mountains, N.W.T., Canada. Canadian Paleontology Conference, Program and Abstracts 2: 17-18 (Ottawa).
- Narbonne, G.M., 1991, Biological innovation in the late Precambrian and Early Cambrian: Perspective from northwestern Canada. Event Markers in Earth History: 57 (IGCP Workshop, Calgary).
- Dixon, O.A., Graf, G.C. and Narbonne, G.M., 1991, Upper Silurian ramp facies and mudmound succession, Canadian Arctic Islands. Geological Society of America, Abstracts with Program 23(3): 10 (Toledo, OH).
- Narbonne, G.M., 1990, Windermere megafossil biostratigraphy. Late Proterozoic Glaciation, Rifting and Eustasy, as illustrated by Windermere Supergroup (GAC Nuna Research Conference): 35-36 (Invermere and Valemont, BC). Invited special address.
- Hofmann, H.J., Narbonne, G.M. and Aitken, J.D., 1990, Inter-tillite Ediacaran fossils from northwestern Canada. Geological Society of America, Abstracts with Program 22 (7): A127-128 (Dallas, TX). Invited.
- Narbonne, G.M., Hofmann, H.J. and Aitken, J.D., 1990, Windermere biostratigraphy and the Precambrian-Cambrian boundary in Western Canada. III International Symposium on the Cambrian System, Abstracts: 139 (Novosibirsk, U.S.S.R.). Invited.

- Hofmann, H.J. and Narbonne, G.M., 1990, Early Vendian megafossils from inter-tillite beds in Windermere supergroup, northwestern Canada. III International Symposium on the Cambrian System, Abstracts: 112 (Novosibirsk, U.S.S.R.).
- Hofmann, H.J., Narbonne, G.M. and Aitken, J.D., 1990, Early Ediacaran-type organisms. Canadian Paleontology and Biostratigraphy Seminar, Program and Abstracts: 30 (Kingston, Ontario).
- Narbonne, G.M., 1989, Affinities of Ediacaran fossils from northwestern Canada. Canadian Paleontology and biostratigraphy Seminar, Program and Abstracts: 40 (Halifax).
- Narbonne, G.M., Hofmann, H.J. and Aitken, J.D., 1989, Ediacaran biota of northwestern Canada. Abstracts of the 28th International Geological Congress: (Washington).
- Narbonne, G.M. and Aitken, J.D., 1989, Ediacaran biota of Mackenzie Mountains, N.W.T. - Evolutionary and ecologic implications. Geological Association of Canada, Program with Abstracts 14: A101 (Montreal).
- Fejer, P. and Narbonne, G.M., 1989, Controls on carbonate deposition and packaging, Upper Devonian, S.E. British Columbia. Geological Association of Canada, Program with Abstracts 14: A19 (Montreal).
- Dixon, O.A., Graf, G.G., Narbonne, G.M. and Packard, J.J., 1989, Upper Silurian reefs in the Boothia Uplift region, Canadian Arctic. Geological Association of Canada, Program with Abstracts 14: A62-63 (Montreal).
- Narbonne, G.M. and Hofmann, H.J., 1988, Nature and affinities of the Vendian megafossil Beltanelliformis from the Wernecke Mountains, northwestern Canada. AAAS Publication 87-30: 14 (Annual Meeting of the American Association for the Advancement of Science, Boston, MA). Invited.
- Narbonne, G.M. and Hofmann, H.J., 1988, Stratigraphic distribution of the Ediacaran fauna in northwestern Canada. Fifth International Symposium on Fossil Cnidaria, Programme, p. 54 (Brisbane, Australia).
- Narbonne, G.M., Landing, E., Myrow, P. and Anderson, M.M., 1988, The Precambrian-Cambrian transition in the Chapel Island Formation, Burin Peninsula, southeastern Newfoundland, Canada. New York State Museum Bulletin 463: 16 (International Precambrian-Cambrian Boundary Working Group Meeting, St. John's, Newfoundland).
- Narbonne, G.M., Hofmann, H.J., Fritz, W.H. and Nowlan, G.S., 1988, Trace fossil zonation across the Precambrian-Cambrian boundary, Wernecke Mountains, Yukon, Canada. New

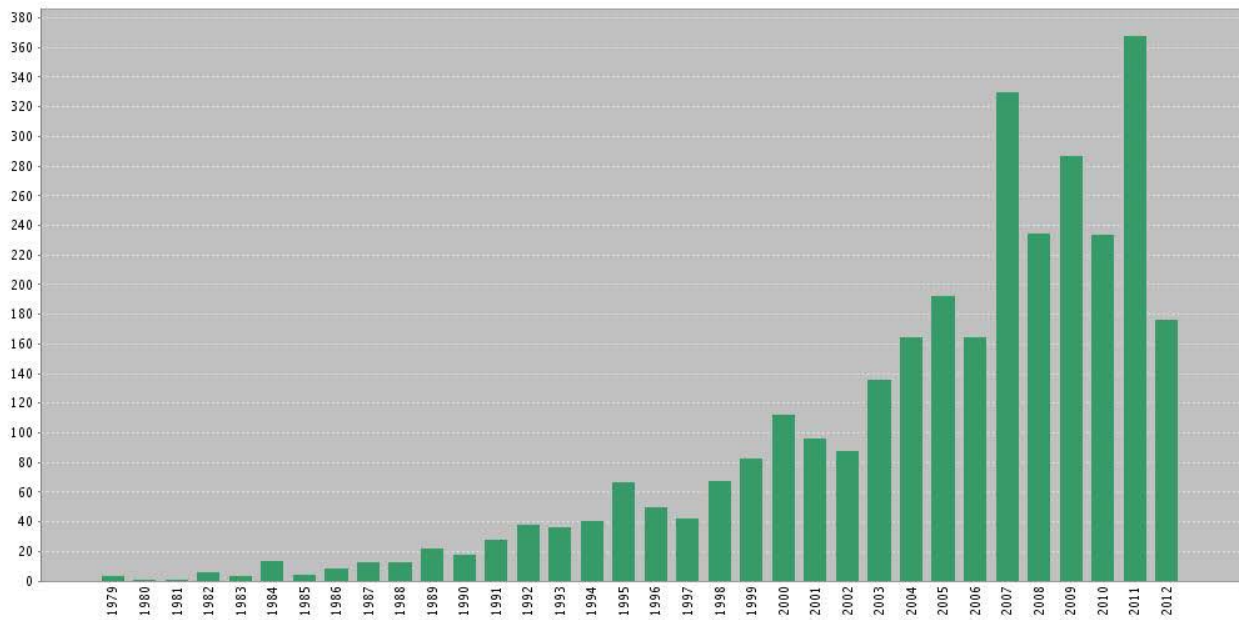
- York State Museum Bulletin 463: 15 (International Precambrian-Cambrian boundary Working Group Meeting, St. John's, Newfoundland).
- Landing, E., Narbonne, G.M., Benus, A.P. and Myrow, P., 1988, Avalonian Sub-trilobitic small shelly fossils: Facies and diagenetic restrictions on the correlation of the lowest Cambrian. New York State Museum Bulletin 463: 13 - 14 (International Precambrian-Cambrian Boundary Working Group Meeting, St. John's, Newfoundland).
- Narbonne, G.M., 1987, Trace fossil evolution through the Precambrian-Cambrian transition. Canadian Paleontology and Biostratigraphy Seminar: 6-7 (London, Ontario) **Invited Keynote Address**.
- Narbonne, G.M., Myrow, P., Landing, E. and Anderson, M.M., 1987, Trace fossil zonation of the Chapel Island Formation, burin Peninsula, southeastern Newfoundland, Canada. International Symposium on Terminal Precambrian and Cambrian Geology, Abstracts: 57-58. (Yichang, China). Invited.
- Narbonne, G.M. Hofmann, H.J., Fritz, W.H. and Nowlan, G.S., 1987, The Precambrian Cambrian transition in the Wernecke Mountains, Yukon, Canada. International Symposium on Terminal Precambrian and Cambrian Geology, Abstracts: 56-57. (Yichang, China).
- Narbonne, G.M. and Dixon, O.A., 1987, Faunal succession in Upper Silurian sponge reefs, Somerset Island, N.W.T. Canadian Reef Symposium: 46. (Banff, Alberta).
- Landing, E., Narbonne, G.M., Benus, A.P. and Myrow, P., 1987, Etcheminian - Lowest Cambrian series in Avalon. Geological Society of America, Abstracts with Program 19 (1): 24. (Pittsburg, PA).
- Narbonne, G.M. and Hofmann, H.J., 1986, Ediacaran biota of the Wernecke Mountains, Yukon, Canada. Proceedings of the North American Paleontological Conference IV: A32-33 (boulder, CO).
- Landing, E., Narbonne, G.M., Myrow, P., Benus, A.P. and Anderson, M.M., 1986, A sub-trilobitic Cambrian stage for Avalon: the Etcheminian. New York State Museum Bulletin 462: 1718 (Canadian Paleontology and Biostratigraphy Seminar, Albany).
- Narbonne, G.M. and Hofmann, H.J., 1986, Vendian biota of the Wernecke Mountains, Yukon, Canada. New York State Museum Bulletin 462: 25 (Canadian Paleontology and Biostratigraphy Seminar, Albany).

- Dewing, K.E., Zaitlin, B.A., Narbonne, G.M. and Dalrymple, R.W., 1986, Zonation of trace-producing organisms from the Cobequid Bay - Salmon River Estuary. GAC/MAC/CGU Program with Abstracts 11: 110 (Ottawa).
- Osborne, D.T. and Narbonne, G.M., 1986, Stratigraphy and sedimentology of Precambrian-Cambrian boundary strata, Wernecke Mountains, Yukon, Canada. GAC/MAC/CGU Program with Abstracts 11: 110 (Ottawa).
- Hofmann, H.J. and Narbonne, G.M., 1986, Taphonomy of discoidal Vendian megafossils, Yukon, Canada. GAC/MAC/CGU Program with Abstracts II: 82 (Ottawa).
- Narbonne, G.M., Fritz, W.H., Nowlan, G.S. and Hofmann, H.J., 1984, Faunal evolution across the Precambrian-Cambrian boundary, Yukon Territory, Canada, S.E.P.M. Midyear Meeting Abstracts 1: 59 (San Jose). **S.E.P.M. Excellence of Presentation Award.**
- Narbonne, G.M. and James, N.P., 1984, Ichnology of the Cambro-Ordovician cow Head Group, western Newfoundland, S.E.P.M. Midyear Meeting Abstracts 1: 58 (San Jose).
- Nowlan, G.S. and Narbonne, G.M., 1984, Biostratigraphic significance of protoconodonts, associated phosphatic microfossils and trace fossils near the Precambrian-Cambrian boundary, Yukon Territory, Canada, Geological Society of American Abstracts with Program, 16(3): 184 (Binghamton).
- Narbonne, G.M. and Packard, J.J., 1983, Trace fossils in Siluro-Devonian tidal flat to distal basin slope carbonates of Arctic Canada. American Association of Petroleum Geologists, Bulletin 67(3): 524 (Dallas). **S.E.P.M. Excellence of Presentation Award.**
- Narbonne, G.M. and Fritz, W.H., 1983, The Precambrian-Cambrian transition in the Wernecke Mountain, Yukon Territory. Canadian Paleontology and Biostratigraphy Seminar: 21 (Toronto).
- Narbonne, G.M. and Hofmann, H.J., 1982, Late Ordovician and Early Silurian trace fossils from Anticosti Island, Quebec. Paleontological Contributions from the University of Oslo 280: 36 (IV International Symposium on the Ordovician System, Oslo, Norway).
- Narbonne, G.M. and Packard, J.J., 1982, Trace fossils in Siluro-Devonian carbonates on Somerset, Griffith, Cornwallis and Devon Island, Arctic Canada. Journal of Paleontology 56, Supplement 2: 20 (North American Paleontological Convention III, Montreal).
- Narbonne, G.M., 1980, Selective preservation of trace fossils in fine-grained limestones from the Upper Silurian of Arctic Canada. Geological Society of America Abstracts with Program 12(7): 490 (Atlanta).

Narbonne, G.M. and Dixon, O.A., 1978, Paleocology of Upper Silurian lithistid sponge bioherms from Somerset Island, Arctic Canada. Palaeontological Association Circular 94a: 7 (Keele, England).

Narbonne, G.M. and Dixon, O.A., 1978, Silurian lithistid sponge bioherms from Arctic Canada. Geological Society of America/Geological Association of Canada/Mineralogical Association of Canada 3: 462 (Toronto).

Scientific Citations of Refereed Journal Papers (from ISI, accessed 18 August 2012):



Results found:	79
Sum of the Times Cited:	3153
Average citations per item:	39.91
h-index:	29

RESEARCH FUNDING (PRINCIPAL INVESTIGATOR ONLY):

2010-2015	Queen's University	Research Chair	\$20,000/year
2009-2014	N.S.E.R.C.	Discovery Grant	\$78,000/year
2005-2010	Queen's University	Research Chair	\$20,000/year
2004-2009	N.S.E.R.C.	Discovery Grant	\$75,300/year
2004-2009	N.S.E.R.C.	Northern Supplement	\$10,000/year
1999-2004	N.S.E.R.C.	Discovery Grant	\$73,500/year
1994-99	N.S.E.R.C.	Operating Grant	\$53,000/year
1997-98	Lithoprobe	Grant	\$27,250/year
1996	P.C.S.P.	Logistical Support	\$18,260 value
1995	P.C.S.P.	Logistical Support	\$28,000 value
1991-94	N.S.E.R.C.	Operating Grant	\$41,400/year
1994	P.C.S.P.	Logistical Support	\$22,320 value
1993	P.C.S.P.	Logistical Support	\$17,100 value
1992	I.C.G.P.	Travel Grant	\$1,100
1989-91	N.S.E.R.C.	Operating Grant	\$28,000/year
1990	Q.U.A.R.C.	Conference Grant	\$1,365
1988-89	Q.U.A.R.C.	Research Grant	\$4,800
1987-88	N.S.E.R.C.	Equipment Grant	\$38,300
1987-88	N.S.E.R.C.	Conference Grant	\$6,250
1987-88	I.G.C.P.	Grant	\$3,500
1985-88	N.S.E.R.C.	Operating Grant	\$21,200/year
1986-87	I.G.C.P.	Grant	\$1,500
1985-86	I.G.C.P.	Grant	\$1,000
1984-85	I.G.C.P.	Grant	\$1,800
1984-85	N.S.E.R.C.	Operating Grant	\$21,125
1984-85	N.S.E.R.C.	Northern Supplement	\$8,500
1984-85	Q.U.A.R.C.	Grant	\$6,000
1984-85	D.I.A.N.D.	Contract	\$6,500
1983-84	N.S.E.R.C.	Operating Grant	\$19,080
1983-84	Q.U.A.R.C.	Grant	\$3,030
1982-83	E.M.R.	Research Agreement	\$4,000

N.S.E.R.C. = Natural Sciences and Engineering Research Council of Canada

I.G.C.P. = International Geological Correlation Programme

Q.U.A.R.C. = Queen's University Advisory Research Committee

D.I.A.N.D. = Department of Indian Affairs and Northern Development

E.M.R. = Energy, Mines and Resources

P.C.S.P. = Polar Continental Shelf Project

SUPERVISION:

Graduate Students:

Burzynski, G., Paleobiology of Ediacaran fossils from Newfoundland, Ph.D. thesis, 2011-pres.

Carbone, C., Evolution of behavioural complexity in the Ediacaran and Early Cambrian, M.Sc. thesis, 2011-pres.

Mason, S., Small Ediacaran fronds from Mistaken Point, M.Sc. thesis, 2009-pres.

Flude, L., Ediacaran rangeomorph fossils from Mistaken Point, M.Sc. thesis, 2005-2009.
Occupation After Graduation – Environmental consultant, Golder Consulting, Calgary

Bamforth, E., Multifoliate Ediacaran fossils from Mistaken Point, M.Sc. thesis, 2005-2008
Occupation After Graduation - Ph.D. student, McGill University

Laflamme, M., Ediacaran fronds of the Mistaken Point biota, Newfoundland. Ph.D. thesis, 2003-2007.
Occupation After Graduation – Post-doctoral Fellow, Queen's University and South Australia Museum (currently Assistant Professor, University of Toronto, Mississauga)

Ichaso, A., 2004, Sedimentology and basin analysis of the Conception and St. John's Groups, Conception Bay North, Newfoundland. M.Sc. thesis, (co-supervised by R.W. Dalrymple), 2001-2004.
Occupation After Graduation - Ph.D. student, Queen's University

Clapham, M.E., 2002. Community ecology of the Mistaken Point biota, Newfoundland. M.Sc. thesis, Department of Geological Sciences, Queen's University.
Occupation After Graduation - Ph.D. student, University of Southern California (currently Assistant Professor, University of California, Santa Cruz).

Day, E.S. 2002. Sedimentology and stratigraphy of the Cryogenian (Middle Neoproterozoic) Keele Formation, Mackenzie Mountains, Northwest Territories. M.Sc. thesis, Department of Geological Sciences, Queen's University (co-supervised by N.P. James)
Occupation After Graduation - Exploration Geologist, Talisman Resources

Batten, K.L. 2002. Early Neoproterozoic ramp carbonates and microbialites Little Dal Group, Mackenzie Mountains, NWT, M.Sc. thesis, Department of Geological Sciences, Queen's University. (co-supervised by N.P. James)
Occupation After Graduation - Ph.D. student, Carleton University (currently carbonate specialist, PetroCanada)

- Wood, D., 2002. Sedimentology of the Mistaken Point and Trepassey formations, Newfoundland M.Sc. thesis, Department of Geological Sciences, Queen's University (co-supervised by R.W. Dalrymple)
Occupation After Graduation - Exploration Geologist, Mobil Canada
- Sherman, A.G. 2001. Sedimentology, sea-level history, and tectonic context of a Mesoproterozoic carbonate ramp. Baffin Island, Nunavut. Ph.D., Department of Geological Sciences, Queen's University, 173 p. (co-supervised by N.P. James)
Occupation After Graduation - Carbonate specialist, Shell Canada
- Turner, E.C. 1999. Growth dynamics, framework composition, and microstructure of giant early Neoproterozoic calcimicrobial reefs, Little Dal Group, Mackenzie Mountains, N.W.T. Ph.D., Department of Geological Sciences, Queen's University, 276 p. (co-supervised by N.P. James). **C.S.P.G. Best Ph.D. Thesis Award**
Occupation After Graduation: Geological Survey of Canada Project Geologist, Nunavut. (presently Associate Professor, Laurentian University).
- MacNaughton, R.B. 1997. An integrated study of the sedimentology, sequence stratigraphy and ichnology of Neoproterozoic-Cambrian transitional strata, Mackenzie Mountains, Northwestern Canada. Ph.D., Department of Geological Sciences, Queen's University, 240 p. (co-supervised by R.W. Dalrymple).
Occupation After Graduation: Research Scientist, Geological Survey of Canada, Calgary
- McFarlane, R.B. 1992. Stratigraphy, paleoenvironmental interpretation, and sequences of the Middle Ordovician Black River Group, Kingston, Ontario, Canada. M.Sc., Department of Geological Sciences, Queen's University, 181 p. (co-supervised by N.P. James).
Occupation After Graduation: Exploration Geologist, Amoco Canada.
- Osborne, D.T. 1990. Stratigraphy and sedimentology of a Precambrian-Cambrian boundary succession, Wernecke Mountains, Yukon Territory, Canada. M.Sc., Department of Geological Sciences, Queen's University, 389 p.
Occupation After Graduation: Exploration Geologist, Chevron Canada.
- Fejer, P.E. 1989. Controls on carbonate deposition and packaging, Upper Devonian, south-east British Columbia. M.Sc., Department of Geological Sciences, Queen's University, 170 p.
Occupation After Graduation: Project Geologist, Norcen Resources.

Post-doctoral Fellows:

- Dr. Marc Laflamme, 2007 – 2008 (with J.G. Gehling, South Australia Museum), Exquisitely preserved Ediacaran fronds from Newfoundland and Australia
Occupation after PDF: NSERC and Bateman Research Fellow, Yale University.
 Currently Assistant Professor, University of Toronto, Mississauga

Dr. Leanne Pyle, 2002 - 2004 (with N.P. James), Ediacaran carbonates from the Wernecke Mountains, eastern Yukon
Occupation after PDF: Research Associate, University of Victoria and Research Scientist, Geological Survey of Canada.

Dr. A-C. Pierson-Wickmann, 2000-2003 (with T.K. Kyser and N.P. James), Cryogenian geochemistry, Mackenzie Mountains, NT.
Occupation after PDF: Assistant Professor, University of Rennes, France

Dr. J.G. Gehling, 1999-2000 (William E. White Post-doctoral Fellow), The Mistaken Point biota, Newfoundland.
Occupation after PDF: Research Scientist at the South Australia Museum, Adelaide and Adjunct Professor at Queen's University, Kingston and Monash University, Australia.

Dr. R.B. MacNaughton, 1997-1999 (Lithoprobe PDF; with R.W. Dalrymple), Neoproterozoic sedimentology, Mackenzie Mountains, NT.
Occupation after PDF: Research Scientist, Geological Survey of Canada, Calgary.

Undergraduate Theses Supervised:

Calla Carbone (2011) Ecology of Ediacaran fossils from Bonavista Peninsula, Newfoundland
Location after Graduation: MSc studies at Queen's University

N. Bingham-Koslowski (2008) Ediacaran discs from the Mackenzie Mountains, NW Canada
Location after Graduation: MSc studies at Queen's University

A. Dececchi (2005) Ecological examination of the world's oldest-known fossil communities: Mistaken Point, Newfoundland
Location after Graduation: PhD studies at McGill University

S. Villeneuve (2004) Stratigraphy, sedimentology, paleobiology, and U-Pb dating of the Drook Formation, Newfoundland
Location after Graduation: Environmental consultant

R.A. Sala (2001) Sedimentology and stratigraphy of the Neoproterozoic Briscal Formation, southern Avalon Peninsula, Newfoundland.
Location after Graduation: MSc studies at Memorial University of Newfoundland

S. Wong (1999) Paleoenvironmental and paleoecological reconstruction of a Middle Ordovician limestone, Kingston, ON
Location after Graduation: MSc studies at University of Manitoba

- J.M.R. Beamish (1998) Microfacies, environmental interpretation, and paragenesis of the Devonian (Emsian/Eifelian) Blue Fjord Formation, SE Bathurst Island, Arctic Canada
Location after Graduation: Canadian oil industry
- R.E. Lamond (1997) The Ordovician geology of Wolfe Island, Ontario
Location after Graduation: PhD studies, University of Utah
- N. Quickert (1996) Site mapping, evaluation and paleoenvironmental interpretation of the Black River Group Collins Bay Quarry surface in Kingston Township, Ontario, Canada
Location after Graduation: MSc studies, Dalhousie University
- J. Russel (1995) A stromatolite bioherm complex of the Black River Group (Middle Ordovician), Kingston, Ontario
Location after Graduation: MSc studies, St. Francis Xavier University
- J. Harrington (1995) The origin and diagenesis of Neohelikian grainstones in the Victor Bay Formation, northwest Baffin Island, Canada
Location after Graduation: Canadian petroleum industry
- N. Sweet (1991) The occurrence of the trace fossil Oldhamia in eastern Quebec, and its biostratigraphic significance
Location after Graduation: Canadian petroleum industry
- R. Boyes (1989) Ichnological and lithological evidence of small-scale cycles in the March Point Formation (Middle Cambrian), western Newfoundland
Location after Graduation: Canadian petroleum industry
- K. Eyvindson (1986) A paleoecological investigation of a Pleistocene fossil assemblage, Alexandra Fiord, Ellesmere Island, Northwest Territories.
Location after Graduation: MSc studies, McMaster University
- K. Dewing (1986) Organism zonation in a macrotidal estuary, Cobequid Bay - Salmon River, Bay of Fundy, Canada.
Location after Graduation: MSc studies, Laurentian University
- A. Maher (1986) A statistical analysis of grain-size distribution, Cobequid Bay - Salmon River Estuary (Bay of Fundy) Nova Scotia.
- J. Carrick (1985) Paragenetic history of an Upper Precambrian dolostone from the Wernecke Mountains, Yukon Territory, Canada.
- S. Arbuckle (1985) Algal-archaeocyathid bioherms of the Lower Cambrian Sekwi Formation, Goz Lake, Yukon Territory.

W. Slavin (1984) Diagenetic history of a Keg River Reef from the Zama Field, Alberta.

N. Richards (1984) Ichnology of the March Point Formation (Middle Cambrian), Port-au-Port Peninsula, Western Newfoundland.

S. Martell (1983) Stratigraphy and paleoecology of Middle Ordovician rocks, McKendry Quarry, Kingston, Ontario.

CONTRIBUTIONS OF MY STUDENTS AND POST-DOCTORAL FELLOWS:

- Most of my doctoral students (Laflamme, MacNaughton, Sherman, and Turner) and several master's students (Clapham, Bamforth, Mason) held NSERC Post-graduate Scholarships.
- Turner received the 1999 "Best Ph.D. Thesis Award" from the Canadian Society of Petroleum Geologists (awarded in 2000) and a paper based on this thesis received "Honourable Mention" for the "Best Paper Award" in *Palaios* in 2001.
- My students received the "Thomas E. Bolton Award" for the best student paper at the Canadian Paleontological Conference twice (Clapham in 2001; Bamforth in 2007) and were runners up for this award two times (Laflamme in 2002; Bamforth in 2006). In addition, Laflamme (AESERC, 2005 and Atlantic Geoscience Conference, 2007) and Bamforth (AESERC, 2007) also won "Best Student Presentation" awards in regional geological conferences.
- Four of my former graduate students and post-doctoral fellows are currently teaching in tenured university positions (Turner at Laurentian University; Wickham-Peters at Rennes University; Clapham at University of California, Santa Cruz; Marc Laflamme at University of Toronto, Mississauga)
- All of my honours students either attained employment in their field or went on to graduate school in geology/paleontology. Five of my honours students (Dewing, Eyvindson, Russel, Dececchi, Bingham) and two of my summer field assistants (Daley, Martindale) subsequently went into doctoral programs in paleontology.

PUBLIC EDUCATION AND IMPACT (LOCAL):

On a local scale, my students and I endeavor to provide information to the local residents most likely to be impacted by our scientific research. In northern Canada, I have given several interviews to CBC North, in which I describe the scientific projects we are carrying out and discuss the importance of the north to scientific research in general and to the origin of animals in specific and gave a public lecture in Norman Wells.

In Newfoundland, I have given radio interviews on CBC and public talks in St. John's, Corner Brook, and Portugal Cove South. My students and I produced large posters describing the fossils in the area of the three regions in Newfoundland where I work (Mistaken Point, Ferryland, and Spaniard's Bay) and distributed these to the schools, town councils, museums, and visitor's centers in the area. I worked successfully with the local community at Portugal Cove South/Trepassey and with Newfoundland Parks and Natural Areas to secure an extension to the Mistaken Point Ecological Reserve to protect our new fossil discoveries in 2003, and later on a proposal that resulted in Mistaken Point being added to the Tentative List for status as a UNESCO World Heritage Site in 2005. Final decision regarding World Heritage status will not be made until 2012, but the resultant ecotourism has already resulted in literally thousands of visitors every summer and in two permanent and 10-12 seasonal jobs in park interpretation for the local community. I designed all of the paleontological displays for the new, million-dollar interpretation centre at the gateway to Mistaken Point and gratefully accepted the town's invitation to present the keynote address to celebrate its grand opening in 2007.

An indication of the impact of this work on the economy of the local community can be found in the October 4, 2011 NPR broadcast "Fossils Help Revive Hard-Hit Newfoundland Fishing Area" <<http://www.npr.org/2011/10/04/141044355/fossils-help-rev-hard-hit-newfoundland-fishing-area>>.

PUBLIC EDUCATION AND IMPACT (GLOBAL):

On a global scale, public interest in the origin of animals is strong, and discussions of my research and my views on the early evolution of animals have appeared in most newspapers and science websites worldwide, and in other popular media as follows:

Magazines

- *TIME MAGAZINE* (December 4, 1995, cover story)
- *National Geographic* (April, 1998)
- *La Recherche* (March, 2003)
- *Natural History* (July-August, 2003)
- *Science et Vie* (September 2003)
- *Canadian Geographic* (January-February, 2004)
- *L'Actualité* (October 1, 2004)
- *Reader's Digest*, Canadian Edition (November, 2006)

Radio

- CBC science show "*Quirks and Quarks*" (December 1990, October 1994, December 2003, March 2007)
- CBC radio news "*The World at Six*" (December 1990, December 2003)
- "Advances in Canadian and Australian Science". Jointly produced and aired by CBC-Radio "*Quirks and Quarks*" and ABC-Radio "*The Science Show*" (March-April 2007)
- CBC-Radio documentary "In praise of ice" on "*Ideas*" (December 1, 2008).
- National Public Radio (NPR) "Fossils Help Revive Hard-Hit Newfoundland Fishing Area" in the NPR series "*For What It's Worth*" (October 4, 2011). Also released as a podcast in the Encyclopedia of Life Series "*One Species at a Time*" (October 19, 2011).

Television

- CBC-TV national news (July 1987, December 2002, August 2004)
- BBC documentary "Snowball Earth" (2001)
- CBC-TV documentary science show "*The Nature of Things*" narrated by David Suzuki (October 2007)
- History Channel (USA) documentary series "*Evolve*" (August 2008)
- Discovery Channel-TV (Canada) science news (March 30, 2008)
- CBC-TV documentary on Mistaken Point in "Land and Sea" (November, 2010)
- Atlantic/BBC/ABC/Discovery documentary "First Life with David Attenborough" (filmed in September 2009 and released October 2010 - February 2011 worldwide).
Winner of three Emmy Awards including "Best Nature Programming"