

# MICHAEL CHARLES RYGEL

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## CURRICULUM VITAE

### CONTACT INFORMATION

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### EDUCATION & CREDENTIALS

- **Professional Geologist**  
New York License # 000232-1, awarded August 2017
- **Doctor of Philosophy (Earth Science)**  
Dalhousie University, 2005  
Dissertation: Alluvial sedimentology and basin analysis of Carboniferous strata near Joggins, Nova Scotia, Atlantic Canada
- **Bachelor of Science (Geology and Planetary Science)**  
University of Pittsburgh at Johnstown, 2000

### EXPERTISE

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|---|---|
| • <b>Geoscience education</b>                                     | • <b>Basin analysis</b>                 |
| • <b>Facies analysis of shallow marine and terrestrial strata</b> | • <b>Ichnology</b>                      |
| • <b>Fluvial sedimentology and reservoir architecture</b>         | • <b>Geologic mapping</b>               |
| • <b>Sequence stratigraphy</b>                                    | • <b>Geographic information systems</b> |
|   | • <b>Seismic interpretation</b>         |

### PROFESSIONAL EXPERIENCE

- **Associate Professor**  
State University of New York, College at Potsdam  
Department of Geology, September 1, 2012 – present  
Assistant Professor, September 1, 2006 – August 2012  
Department Chair, July 2014 - present
- **Summer Faculty Member**  
Indiana University  
Indiana University Geologic Field Station, June 2011 – present

- **Consultant**  
Devon Energy  
Geoscience Technology, Strategic Services Division, June 2011 – November 2013
- **Post-Doctoral Research Associate**  
University of Nebraska-Lincoln  
Department of Geosciences, June 2005 – September 2006
- **Geoscience Intern**  
ChevronTexaco  
Energy Technology Company, Subsurface Characterization Team, Summer 2004
- **Instructor**  
Dalhousie University  
Department of Civil Engineering, Summer 2004
- **Adjunct Instructor**  
University of Pittsburgh at Johnstown  
Department of Geology and Planetary Sciences, Spring 2002
- **Graduate Teaching Assistant**  
Dalhousie University  
Department of Earth Sciences, 2000-2004
- **Associate Instructor**  
Indiana University  
Department of Geological Sciences, Summer 2000

## COURSES TAUGHT

- **Physical Geology (GEOL 103)**  
SUNY Potsdam, Fall 2015-present
- **Historical Geology (GEOL 204)**  
SUNY Potsdam, Spring 2007-present
- **Sedimentary Geology (GEOL 301)**  
SUNY Potsdam, Fall 2006 – present
- **Field Geology in the Rocky Mountains (G429)**  
Indiana University, Summer 2000 (Associate Instructor); Summer 2011 – present (Instructor)
- **Geographic Information Systems (GEOL 340)**  
SUNY Potsdam, Spring 2008-present
- **Environmental Geology Problems (GEOL 421)**  
SUNY Potsdam, Fall 2014
- **Geologic Maps and Cross-Sections (GEOL 303)**  
SUNY Potsdam, Fall 2012 – Fall 2015
- **Field Geology (GEOL 300)**  
SUNY Potsdam, Fall 2007 – Fall 2011
- **Geology of Nova Scotia (GEOL 395)**  
SUNY Potsdam, Spring 2009 & 2011
- **Dynamic Earth (GEOL 125)**  
SUNY Potsdam, Fall 2006 – Fall 2010
- **Natural Disasters (GEOL 195)**  
SUNY Potsdam, Spring 2007
- **Introduction to Geology for Engineers (MINE 3500)**  
Dalhousie University, Summer 2004
- **Explorations in Geology (GEOL 0080)**  
University of Pittsburgh at Johnstown, Spring 2002
- **Lab Instruction - Graduate Teaching Assistant**  
Dalhousie University, 2000-2004, Dalhousie Integrated Science Program (DISP: SCIE 1500X/Y.30), Earth Sciences Field School (ERTH 2000.015F), Structural Geology (ERTH 3140), and Sediments and Sedimentary Rocks (ERTH 2203)

**PEER-REVIEWED PUBLICATIONS** - *Undergraduates under my supervision in italics*

- Gibling, M.R., Culshaw, N., Pascucci, V., Waldron, J.F.W., and **Rygel, M.C.**, submitted, The Maritimes Basin of Atlantic Canada: Basin Creation and Destruction in the Collisional Zone of Pangea, in Miall, A. (ed.), *Sedimentary Basins of the United States and Canada*, Amsterdam, Elsevier.
- Davies, N.S., Gibling, M.R., McMahon, W.J., Slater, B.J., Long, D.G.F., Bashforth, A.R., Berry, C.M., Falcon-Lang, H.J., Gupta, S., **Rygel, M.C.**, and Wellman, C.H., 2017, Discussion on 'Tectonic and environmental controls on Palaeozoic fluvial environments: reassessing the impacts of early land plants on sedimentation': *Journal of the Geological Society*, v. 174, <http://geoscienceworld.org/georef/2017-039863>
- Rygel, M.C.**, *Lally, C.*, Gibling, M.R., Ielpi, A., Calder, J.H., and Bashforth, A., 2015, Sedimentology and stratigraphy of the type section of the Pennsylvanian Boss Point Formation, Joggins Fossil Cliffs, Nova Scotia: *Atlantic Geology*, v. 51, p. 1-43.
- Allen, J.P., Fielding, C.R., Gibling, M.R., **Rygel, M.C.**, 2014, Recognizing products of paleoclimate fluctuation in the fluvial stratigraphic record: an example from the Pennsylvanian to lower Permian of Cape Breton Island, Nova Scotia: *Sedimentology*, v. 61, p. 1332-1381.
- Ielpi, A., Gibling, M.R., Bashforth, A., *Lally, C.*, **Rygel, M.C.**, and Al-Silwadi, S., 2014, Early Pennsylvanian braided rivers shaped by woody accumulations: Architecture of the Boss Point Formation, Atlantic Canada: *Sedimentology*, v. 61, p. 1659-1700.
- Gibling, M.R., Davies, N.S., Falcon-Lang, H.J., Bashforth, A.R., DiMichele, W.A., **Rygel, M.C.**, and Ielpi, A., 2014, Palaeozoic co-evolution of rivers and vegetation: a synthesis of current knowledge: *Proceedings of the Geologists Association*, v. 125, no. 5-6, p. 524-533.
- Rygel, M.C.**, *Sheldon, E.P.*, Stimson, M.R., Calder, J.H., *Ashley, K.T.*, and *Salg, J.*, 2014, The Pennsylvanian Springhill Mines Formation: Sedimentological framework of a portion of the Joggins Fossil Cliffs UNESCO World Heritage Site: *Atlantic Geology*, v. 50, p. 249-289.
- Allen, J.P., Fielding, C.R., **Rygel, M.C.**, and Gibling, M.R., 2013, Deconvolving signals of tectonic and climatic controls from continental basins: an example from the late Paleozoic Cumberland Basin, Atlantic Canada: *Journal of Sedimentary Research*, v. 83, p. 847-872.
- Tibert, N.E., **Rygel, M.C.**, Sanders, S.C., Elrick, S.D., Nelson, J., 2013, Temporal and spatial distribution of ostracodes across the Pennsylvanian-Permian boundary interval in eastern North America: *International Journal of Coal Geology*, v. 119, p. 93-105.
- Waldron, J.W.F., **Rygel, M.C.**, Gibling, M.R., and Calder, J.H., 2013, Evaporite tectonics and the late Paleozoic stratigraphic development of the Cumberland basin, Appalachians of Atlantic Canada: *Geological Society of America Bulletin*, v. 125, p. 945-960.
- Allen, J.P., Fielding, C.R., Gibling, M.R. and **Rygel, M.C.**, 2011, Fluvial response to paleo-equatorial climate fluctuations during the Late Paleozoic Ice Age: *Geological Society of America Bulletin*, v. 128, p. 1524-1538.
- Davies, N. S., Gibling, M. R., and **Rygel, M. C.**, 2011, Alluvial facies evolution during the Palaeozoic greening of the continents: case studies, conceptual models and modern analogues: *Sedimentology*, v. 58, no. 1, p. 220-258.
- Davies, N. S., **Rygel, M. C.**, and Gibling, M. R., 2011, Marine influence in the Upper Ordovician Juniata Formation (Potters Mills, Pennsylvania); implications for the history of life on land; reply: *Palaios*, v. 26, no. 10, p. 674-676.
- Fielding, C.R., Allen, J.P., Alexander, J., Gibling, M.R., **Rygel, M.C.**, and Calder, J.H., 2011, Fluvial systems and their deposits in the seasonal tropics and subtropics: modern and ancient examples, in Davidson, S., Leleu, S., and North, C. (eds), *From river to rock record; the preservation of fluvial sediments and their subsequent interpretation*, SEPM Special Publication 97, p. 89-111.

- Birgenheier, L.P., Frank, T.D., Fielding, C.R., and **Rygel, M.C.**, 2010, Coupled carbon isotopic and sedimentological records from the Permian system of eastern Australia reveal the response of atmospheric carbon dioxide to glacial growth and decay during the late Palaeozoic Ice Age: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 286, p. 178-193.
- Davies, N.S., **Rygel, M.C.**, and Gibling, M.R., 2010, Marine influence in the Upper Ordovician Juniata Formation (Potters Mills, Pennsylvania): Implications for the history of life on land: *Palaaios*, v. 25, p. 527-539.
- Birgenheier, L.P., Fielding, C.R., **Rygel, M.C.**, Frank, T.D., and Roberts, J., 2009, Evidence for dynamic climate change on sub-10<sup>6</sup>-year scales from the Late Paleozoic glacial record, Tamworth Belt, New South Wales, Australia: *Journal of Sedimentary Research*, v. 79, p. 56-82.
- Gibling, M.R., and **Rygel, M.C.**, 2008, Late Paleozoic cyclic strata of Euramerica: Gondwanan glacial signatures enhanced during slow-subsidence periods: in Fielding, C.R., Frank, T.D., and Isbell, J., *Resolving the Late Paleozoic Ice Age in Time and Space*, Geological Society of America Special Publication 441, p. 219-233.
- Waldron, J.W.F. and **Rygel, M.C.**, 2008, Extension, shortening, and salt tectonics at a Paleozoic transcurrent plate boundary: Cumberland Basin, Nova Scotia: v. 27, no. 1, p. 2757-2761.
- Gibling, M.R., Culshaw, N., **Rygel, M.C.**, and Pascucci, V., 2008, The Maritimes Basin of Atlantic Canada: basin creation and destruction in the collisional zone of Pangea, in Miall, A. (ed), *Sedimentary Basins of the United States and Canada*, Amsterdam, Elsevier, pp. 211-244.
- Fielding, C.R., Frank, T.D., Birgenheier, L.P., **Rygel, M.C.**, Jones, A.T., and Roberts, J., 2008, Stratigraphic imprint of the Late Palaeozoic Ice Age in eastern Australia: a record of alternating glacial and non-glacial climate regime, *Journal of the Geological Society of London*, v. 165, p. 129-140.
- Fielding, C.R., Frank, T.D., Birgenheier, L.P., **Rygel, M.C.**, Jones, A.T., and Roberts, J., 2008, Stratigraphic record and facies associations of the Late Paleozoic Ice Age in eastern Australia (New South Wales and Queensland), in Fielding, C.R., Frank, T.D., and Isbell, J.L., eds., *Resolving the Late Paleozoic Ice Age in Time and Space: Geological Society of America, Special Paper 441*, p. 41-57.
- Frank, T.D., Birgenheier, L.P., Montañez, I.P., Fielding, C.R., and **Rygel, M.C.**, 2008, Late Paleozoic climate dynamics revealed by comparison of ice-proximal stratigraphic and ice-distal isotopic records, in Fielding, C.R., Frank, T.D., and Isbell, J.L., eds., *Resolving the Late Paleozoic Ice Age in Time and Space: Geological Society of America, Special Paper 441*, p. 331-342.
- Rygel, M.C.**, Fielding, C.R., Bann, K.L., Frank, T.D., Birgenheier, L.P., and Tye, S., 2008, The Lower Permian Wasp Head Formation, Sydney Basin: high-latitude shallow marine sedimentation following the late Asselian-early Sakmarian glacial event in eastern Australia: *Sedimentology*, v. 55, p. 1517-1540.
- Rygel, M.C.**, Fielding, Frank, T.D., and Birgenheier, L.P., 2008, The magnitude of Late Paleozoic glacioeustatic fluctuations: A synthesis: *Journal of Sedimentary Research*, v. 78, p. 500-511.
- Montañez, I.P., Tabor, N.J., Niemeier, D., DiMichele, W.A., Frank, T.D., Fielding, C.R., Isbell, J.L., Birgenheier, L.P., and **Rygel, M.C.**, 2007, CO<sub>2</sub>-forced climate instability and linkages to tropical vegetation during Late Paleozoic deglaciation: *Science*, v. 315, p. 87-91.
- Rygel, M.C.**, and Gibling, M.R., 2006, Natural geomorphic variability recorded in a high-accommodation setting: fluvial architecture of the Pennsylvanian Joggins Formation of Atlantic Canada: *Journal of Sedimentary Research*, v. 76, p. 1230-1251.
- Rygel, M.C.**, Calder, J.H., Gibling, M.R., Gingras, M.K., and Melrose, C.S.A., 2006, Tournaisian forested wetlands in the Horton Group of Atlantic Canada: in Greb, S.F., and DiMichele, W.A., eds., *Wetlands Through Time: Geological Society of America, Special Publication 399*, p. 103-126.
- Rygel, M.C.**, and Shipley, B.H., 2005, "Such a section as never was put together before": Logan, Dawson, Lyell, and mid-nineteenth-century measurements of the Joggins section: *Atlantic Geology*, v. 41, p. 87-102.
- Waldron, J.W.F. and **Rygel, M.C.**, 2005, Role of evaporite withdrawal in the preservation of a unique coal-age succession: Joggins section, Nova Scotia: *Geology*, v. 33, no. 5, p. 337-340.

- Calder, J.H., **Rygel, M.C.**, Gibling, M.R., Ryan, R.J., Falcon-Lang, H.J., and Hebert, B., 2005, Stratigraphy and sedimentology of Pennsylvanian red beds near Joggins, Nova Scotia: The proposed Little River Formation with redefinition of the Joggins Formation: *Atlantic Geology*, v. 41, p. 143-167
- Davies, S.J., Gibling, M.R., **Rygel, M.C.**, and Calder, J.H., 2005, The Pennsylvanian Joggins Formation of Nova Scotia: sedimentological log and stratigraphic framework of the historic fossil cliffs: *Atlantic Geology*, v. 41, 115-142.
- Falcon-Lang, H.J., **Rygel, M.C.**, Calder, J.H., and Gibling, M.R., 2004, An early Pennsylvanian "waterhole" deposit and its fossil biota in a dryland alluvial plain setting, Joggins, Nova Scotia: *Journal of the Geological Society of London*, v. 161, p. 209-222.
- Falcon-Lang, H.J., Gibling, M.R., **Rygel, M.C.**, Calder, J.H., and Davies, S.J., 2004, A dance to the music of time: *Geoscientist*, v. 14, p. 4-9.
- Rygel, M.C.**, Gibling, M.R., and Calder, J.H., 2004, Vegetation-induced sedimentary structures from fossil forests in the Pennsylvanian Joggins Formation, Nova Scotia: *Sedimentology*, v. 51, p. 531-552.
- Rygel, M.C.**, and Beuthin, J.D., 2002, Paleopedology of a residual clay associated with the Mississippian-Pennsylvanian (mid-Carboniferous) unconformity, southwestern Pennsylvania: *Southeastern Geology*, v. 41, p.129-143.

## REPORTS

- Rygel, M.C.**, 2011, Devon Energy Confidential Report DCR 11-07G, 65 p.

## FIELDGUIDES

- Rygel, M.C.**, and Beuthin, J.D., 2016, Paleosol development along the Mississippian Pennsylvanian unconformity near Johnstown, Pennsylvania: Field Guide for the 81<sup>st</sup> Annual Field Conference of Pennsylvania Geologists, p. 161-173.
- Calder, J.H., Gibling, M.R., Grey, M., Mukhopadhyay, P.K., **Rygel, M.C.**, Stimson, M.R., 2011, Coals and Organic Deposits of the Joggins Fossil Cliffs World Heritage Site - Field Trip of the Annual Meeting of the Society for Organic Petrology: Nova Scotia Department of Natural Resources, Outside Publication Outside Publication ME 2011-001, 18 p.
- Calder, J.H., Gibling, M.R., and **Rygel, M.C.**, 2005, Field Trip B2 - The Joggins Section, Nova Scotia: "Charles Lyell's Galapagos": Atlantic Geoscience Society, Special Publication 28, 43 p.
- Calder, J.H., **Rygel, M.C.**, Falcon-Lang, H.J., Gibling, M.R., Scott, A.C., 2005, The Joggins cliffs of Nova Scotia: a window into the Carboniferous: North American Paleontological Convention Guidebook, 49 p.

## CONFERENCE ABSTRACTS - *Students that I am supervising or co-supervising are in italics*

- Keough, B.M., King, O.A., Stimson, M.R., Quinton, P.C., and **Rygel, M.C.***, 2018, Sequence stratigraphy of the Late Carboniferous Clifton Formation, New Brunswick: Geological Society of America Abstracts with Programs. v. 50, no. 2.
- Levesque, E. R., **Rygel, M.C.**, and Quinton, P.C.*, 2018, Carbon isotopes and sea level history of the Madison Group carbonates from Milligan Canyon, Montana: Geological Society of America Abstracts with Programs. v. 50, no. 2.
- Peters, L., and **Rygel, M.C.***, 2018, The origin and significance of a possible "fireclay" in the Cretaceous Kootenai Formation, SW Montana: Geological Society of America Abstracts with Programs. v. 50, no. 2.

- Trop, J.M., Broussard, D., **Rygel, M.C.**, and Daeschler, T., 2016, Paleoenvironmental analysis of Late Devonian tetrapod and fish assemblages from Catskill Formation site in north-central Pennsylvania: Geological Society of America Abstracts with Programs. v. 48, no. 7.
- Rygel, M.C.**, 2016, Licensure of professional geologists in New York State – challenges and opportunities for academic geoscience departments: Geological Society of America Abstracts with Programs. v. 48, no. 2.
- Grisi, K.C., and **Rygel, M.C.**, 2015, Carbon and sulfur geochemistry of possible marine zones within the Pennsylvanian Joggins Formation, Nova Scotia, Canada: Geological Society of America Abstracts with Programs. v. 47, no. 7, p. 537.
- Gibling, M.R., Davies, N.S., Ielpi, A., Simon, S., Bashforth, A., and **Rygel, M.C.**, 2013, Fluvial style and vegetation abundance as a paleoclimate proxy in the Pennsylvanian and early Permian: an evaluation of preservational issues: Geological Society of America, Abstracts with Programs. v. 45, no. 7, p. 301.
- Ielpi, A., Gibling, M.R., Bashforth, A.R., Lally, C., **Rygel, M.C.**, Al-Siwaldi, S., 2013. Architecture of Pennsylvanian vegetation-influenced braided rivers - the Boss Point Formation of Atlantic Canada: 10th International Conference on Fluvial Sedimentology, Leeds, U.K., Abstracts Volume.
- Lally, C., Brewer, A., and **Rygel, M.C.**, 2013, Sedimentology of the Boss Point Formation (Pennsylvanian), Cumberland Basin, Nova Scotia: Geological Society of America, Abstracts with Programs, v. 145, p. 141. – poster also presented at SUNY Potsdam Learning and Research Fair.
- Rygel, M.C.**, 2013, Share and share alike: using Wikimedia Commons to disseminate geophotography: Geological Society of America, Abstracts with Programs, v. 45, no. 7, p. 381.
- Wagner, E. E., **Rygel, M.C.**, Hebert, B.L., and O'Brien, N. R., 2013, Pyritization of a Stigmaria from the Boss Point Formation (Pennsylvanian), Nova Scotia: Geological Society of America, Abstracts with Programs, v. 45, no. 7, p. 589.
- Badger, R.L., Amati, L., Greene, R. A., Kelson, C.R., **Rygel, M.C.**, and Revetta, F., 2011, Outreach programs as a means of long-range recruiting: Geological Society of America, Abstracts with Programs, v. 43, p. 145.
- Brewer, A. and **Rygel, M.C.**, 2011, Sandstone petrography of the Pennsylvanian Cumberland Group, Cumberland Basin, Nova Scotia: Geological Society of America, Abstracts with Programs. – poster also presented at SUNY Potsdam Learning and Research Fair.
- Rygel, M.C.**, 2011, Wikimedia Commons: a global repository for geologic images: Geological Society of America, Abstracts with Programs, v. 43, p. 55.
- Sweeney, S., Armitage, J., **Rygel, M.C.**, and Badger, R.L., 2011, New cores and outcrops prove that there is not any Potsdam Sandstone beneath the village of Potsdam, SUNY Potsdam Learning and Research Fair, p. 31.
- Brewer, A., Brink, R.A., Sheldon, E.P., Stephan, E.L., and **Rygel, M.C.**, 2010, Petrography of the Mabou and Cumberland Groups (Carboniferous), Cumberland Basin, Nova Scotia, SUNY Potsdam Learning and Research Fair, p. 35.
- Brink, R.A., Sheldon, E.P., Stephan, E.L., Morris, E., and **Rygel, M.C.**, 2010, Pennsylvanian terrestrial ecosystems: A field guide to the Springhill Mines and Ragged Reef Formations, Cumberland Basin, Nova Scotia: Geological Society of America, Abstracts with Programs, v. 42, p. 72.
- Davies, N.S., **Rygel, M.C.**, and Gibling, M.R., 2010, Not the oldest evidence for complex life on land: the Juniata Formation (Upper Ordovician, Pennsylvania): Atlantic Geology, v. 46, p. 47.
- Richard, C.L., Pykles, B.C., **Rygel, M.C.**, and McBride, J.H., 2010, Applicability of Ground Penetrating Radar (GPR) and Geographic Information Systems (GIS) for Documenting and Visualizing Historic Mormon Nauvoo, Illinois: Society for Historical Archaeology Meeting: Amelia Island, Florida.
- Rockefeller, D., **Rygel, M.C.**, and Brown, W., 2010, Human impact in the area surrounding the Hadley Mountain Firetower, SUNY Potsdam Learning and Research Fair, p. 35-36.
- Rygel, M.C.**, 2010, The geology of Nova Scotia: one of the premier field trips in eastern North America: Geological Society of America, Abstracts with Programs, v. 42, p. 389.
- Sheldon, E.P., Stephan, E.L., Brink, R.A., Brewer, A., and **Rygel, M.C.**, 2010, Fluvial Sedimentology of the Pennsylvanian Joggins, Springhill Mines, and Ragged Reef Formations: Exploring the relationship between

- paleogeomorphology, Walther's Law, tectonism, and climate change: Geological Society of America, Abstracts with Programs, v. 42, p. 72.
- Sheldon, E.P., Brink, R.A., Stephan, E.L., Brewer, A., and **Rygel, M.C.**, 2010, Fluvial sedimentology of the Pennsylvanian Joggins, Springhill Mines, and Ragged Reef Formations: SUNY Potsdam Learning and Research Fair, p. 36.
- Slane, D.C., 2010, Marginal Marine Facies of the Catskill Formation (Upper Devonian), Tioga County, PA: Collegiate Science and Technology Entry Program, 18th Annual Statewide Student Conference, Bolton Landing, NY, p. 50.
- Slane, D.C., and **Rygel, M.C.**, 2010, Marginal-marine facies of the Catskill Formation (Upper Devonian), Tioga County, PA, SUNY Potsdam Learning and Research Fair, p. 36-37.
- Stephan, E.L., 2010, Sedimentology of the Pennsylvanian Ragged Reef Formation, Cumberland Basin, Nova Scotia, Collegiate Science and Technology Entry Program, 18th Annual Statewide Student Conference, Bolton Landing, NY, p. 50.
- Werlau, A., and **Rygel, M.C.**, 2010, A digital bedrock geology map of New York State, SUNY Potsdam Learning and Research Fair, p. 37.
- Ashley, K.T., Stephan, E.L., Salg, J., and **Rygel, M.C.**, 2009, Depositional Environments and alluvial architecture of the Springhill Mines Formation (Pennsylvanian), Cumberland Basin, Nova Scotia: Geological Society of America - Abstracts with Programs, v. 41, no. 3, p. 27.  
– poster also presented at SUNY Potsdam Learning and Research Fair.
- Brink, R.A., and **Rygel, M.C.**, 2009, Basin-margin facies of the Pennsylvanian Ragged Reef Formation, Cumberland Basin, Nova Scotia: Geological Society of America, Abstracts with Programs, v. 41, p. 145.
- Sheldon, E.P., and **Rygel, M.C.**, 2009, The Pennsylvanian Springhill Mines Formation: meandering fluvial systems in a cyclic, coal-bearing succession: Geological Society of America, Abstracts with Programs, v. 41, p. 145.
- Sheldon, E., Ashley, K.T., and **Rygel, M.C.**, 2009, The Springhill Mines Formation, Cumberland Basin, Nova Scotia: evolution of channel body architecture within a Pennsylvanian fluvial system: Geological Society of America - Abstracts with Programs, v. 41, no. 3, p. 27.  
– poster also presented at SUNY Potsdam Learning and Research Fair.
- Slane, D.C., and **Rygel, M.C.**, 2009, Marginal-marine facies of the Catskill Formation (Upper Devonian), Tioga County, Pennsylvania: Geological Society of America, Abstracts with Programs, v. 41, p. 145.
- Stephan, E.L., and **Rygel, M.C.**, 2009, Coarse-grained meandering fluvial systems of the Pennsylvanian Ragged Reef Formation, Cumberland Basin, Nova Scotia: Geological Society of America, Abstracts with Programs, v. 41, p. 145.
- Stephan, E.L., Ashley, K.T., and **Rygel, M.C.**, 2009, Sedimentology of the Pennsylvanian Ragged Reef Formation, Cumberland Basin, Nova Scotia: Geological Society of America, Abstracts with Programs, v. 41, no. 3, p. 27.  
– poster also presented at SUNY Potsdam Learning and Research Fair.
- Rygel, M.C.**, and Ashley, K.T., 2008, Sedimentary Rocks in Thin Section, SUNY Potsdam Learning and Research Fair.
- Allen, J., Fielding, C.R., **Rygel, M.C.**, and Gibling, M.R., 2008, Fluvial instability in the paleoequatorial realm of Atlantic Canada during the Late Carboniferous to Early Permian. A record of global climate variation?, Geological Society of America Abstracts with Programs, p. 535.
- Blumberg, E., Chiarenzelli, J., Husinec, A., and **Rygel, M.C.**, 2008, Insight from cores in the Potsdam Group, northern New York: Geological Society of America Abstracts with Programs, v. 40, p. 82.
- Remington, K., Daeschler, E.B., and **Rygel, M.C.**, 2008, Sedimentology of an *Archanodon*-bearing channel body in the Catskill Formation (Upper Devonian) near Steam Valley, PA: Geological Society of America Abstracts with Programs, v. 40, p. 82.

- Salg, J., and Rygel, M.C., 2008, Sedimentology of the lower Springhill Mines Formation, Cumberland Basin, Nova Scotia: Geological Society of America Abstracts with Programs, v. 40, p. 82.*  
– poster also presented at SUNY Potsdam Learning and Research Fair.
- Rygel, M.C.,** Fielding, C.R., Frank, T.D., and Birgenheier, L.P., 2007, New insight into the timing, dynamics, and consequences of Late Paleozoic glaciation: Geological Society of America Abstracts with Programs, v. 39, No. 6, p. 354. - invited keynote speech.
- Rygel, M.C.,** Fielding, C.R., Frank, T.D., and Birgenheier, L.P., 2007, Late Paleozoic sea-level fluctuations: a closer look at glacioeustasy in an icehouse world: Geological Society of America Abstracts with Programs, v. 39, No. 6, p. 86.
- Rygel, M.C.,** Gibling, M.R., and Calder, J.H., 2007, Vegetation-induced sedimentary structures (VISS): The influence of in-situ plants on sedimentary systems: International Geological Correlation Programme, Meeting for Project 469 – Late Variscan terrestrial biotas and palaeoenvironments, Abstract Volume.
- Rygel, M.C.,** and Waldron, J.W.F., 2007, Tectonostratigraphic history of the Cumberland Basin, Nova Scotia: extension, shortening, and salt tectonics in a "strike-slip" basin: Geological Society of America Abstracts with Programs, v. 39, p. 77-78.
- Allen, J., Fielding, C.R., **Rygel, M.C.,** and Gibling, M.R., 2007, Comparison of fluvial styles within the late Carboniferous succession of the Maritimes Basin, Atlantic Canada: Towards a refined understanding of palaeoclimate: American Association of Petroleum Geologists Annual Convention and Exhibition, April 1-4, Long Beach, CA.
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- Rygel, M.C.,** and Gibling, M.R., 2006, Channel bodies of the Pennsylvanian Joggins Formation: A unique opportunity to compare internal architecture and external form: American Association of Petroleum Geologists Annual Meeting, April 9-12.
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- Birgenheier, L.P., Fielding, C.R., Frank, T.D., **Rygel, M.C.,** and Roberts, J., 2006, Lithologic consequences of glacially influenced deposition: A case study from the Late Paleozoic of New South Wales, Australia: American Association of Petroleum Geologists Annual Meeting, April 9-12, p. 10.
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- Frank, T.D., Birgenheier, L.P., Fielding, C.R., and **Rygel, M.C.**, 2006, Near-field stratigraphic record of the Late Paleozoic Gondwanan Ice Age from eastern Australia provides a framework for examining far-field stable isotope records: Geological Society of America Abstracts with Programs, v. 38, p. 317.
- Waldron, J.W.F., **Rygel, M.C.**, and Roselli, C., 2006, Strike-slip faults and salt tectonics in the evolution of the late Paleozoic Maritimes Basin, Northern Appalachians of Atlantic Canada: Geological Society of America Northeastern Section Meeting, Camp Hill, PA, March 20-22.
- Rygel, M.C.**, Gibling, M.R., Davies, S.J., Falcon-Lang, H.J., Calder, J.H., and Waldron, J.W.F., 2005, The Pennsylvanian Joggins Formation of Nova Scotia: nature and origin of cyclic sedimentation in a rapidly subsiding depocenter: Geological Society of America Abstracts with Programs, v. 37, no. 7, p. 255.
- Rygel, M.C.**, Gibling, M.R., and Calder, J.H., 2005, The fossil record of plant-sediment interaction: vegetation-induced sedimentary structures from the Pennsylvanian Joggins Formation, Nova Scotia: North American Paleontological Conference Programme and Abstracts, Paleobios, v. 25, Supplement to No. 2, p. 100.
- Rygel, M.C.**, and Shipley, B.H., 2005, "The detail will surprise you" – A closer look at Logan, Dawson, and Lyell's measurements of the Joggins section: GAC-MAC-CSPG-CSSS Joint Meeting, Halifax, Nova Scotia, May 16-18, Abstracts, v. 30, p. 169.
- Fielding, C.R., Frank, T.D., Birgenheier, L., Thomas, S., **Rygel, M.C.**, and Jones, A. 2005, Revised Permian glacial record of eastern Australia: Geological Society of America Abstracts with Programs, v. 37, no. 7, p. 256.
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- Waldron, J.W.F., and **Rygel, M.C.**, 2005, Structure of the western Cumberland Basin: implications for coalbed-methane exploration: Mining Matters 2005, Nova Scotia Department of Natural Resources, Report ME 2005-2, p. 24.
- Waldron, J.W.F., and **Rygel, M.C.**, 2005, Development and deformation of the Late Paleozoic Cumberland Basin, Nova Scotia, Canada: AAPG Annual Meeting, Calgary, Alberta, June 19-22.
- Waldron, J.W.F., and **Rygel, M.C.**, 2005, Role of evaporite withdrawal in the preservation of a unique coal-bearing succession: Pennsylvanian Joggins Formation, Nova Scotia: GAC-MAC-CSPG-CSSS Joint Meeting, Halifax, Nova Scotia, May 16-18, Abstracts, v. 30, p. 203.
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- Rygel, M.C.**, Leiggi, P.A., and Bassant, P., 2004, Stratigraphic modeling with DIONISOS: Mesozoic strata of the Peschanomys Uplift, Middle Caspian Basin, Kazakhstan: ChevronTexaco Subsurface Characterization Forum, The Woodlands, Texas, October 24-29.

- Rygel, M.C.**, Davies, S.J., Gibling, M.R., and Calder, J.H., 2004, The Joggins Formation: sedimentological log and stratigraphic framework of the historic fossil cliffs: Abstracts, 30th Annual Atlantic Geoscience Society Meeting, Atlantic Geology, v. 40, p. 155.
- Calder, J.H., **Rygel, M.C.**, Gibling, M.R., and Hebert, B.L., 2004, Sedimentology and stratigraphy of Pennsylvanian red beds near Joggins, Nova Scotia: The proposed Lower Cove Formation with redefinition of the Joggins Formation: Abstracts, 30th Annual Atlantic Geoscience Society Meeting, Atlantic Geology, v. 40, p. 136.
- Waldron, J.W.F, and **Rygel, M.C.**, 2004, Evolution of the Cumberland Basin, Nova Scotia: New insights on deposition and salt tectonics from seismic reflection profiles: Abstracts, 30<sup>th</sup> Annual Atlantic Geoscience Society Meeting, Atlantic Geology, v. 40, p. 160.
- Waldron, J.W.F, and **Rygel, M.C.**, 2004, Evolution of the Cumberland Basin, Nova Scotia: New insights on deposition and salt tectonics from seismic reflection profiles: presentation to the Geological Survey of Canada's Logan Club, Ottawa, Ontario, February 3.
- Waldron, J.W.F, **Rygel, M.C.**, and Chesterman, J.P., 2004, Salt tectonism and sedimentation patterns in the Cumberland Basin, Nova Scotia: new insights from Devon Canada's seismic reflection profiles: Canadian Society of Petroleum Geologists Conference Abstracts Volume.
- Rygel, M.C.**, and Gibling, M.R., 2003, Centrocinal cross strata - origin, morphology, and implications for understanding ancient terrestrial ecosystems: Geological Society of America Abstracts with Programs, v.35, p. 25.
- Calder, J. H., Davies, S. J., Falcon-Lang, H. J., Gibling, M. R., Hebert, B. L., **Rygel, M. C.**, and Scott, A. C., 2003, Current Research at Joggins: Testimony to a Prospective World Heritage Site: *in* MacDonald, D.R. (ed.), Mining Matters for Nova Scotia 2003 – Opportunities for Economic Development, Nova Scotia Department of Natural Resources Report ME 2003-2, p. 2.
- Gibling, M.R., **Rygel, M.C.**, Falcon-Lang, H.J., and Calder, J.H., 2003, Dryland vegetation in the Paleozoic: the Pennsylvanian Record from Joggins, Nova Scotia: Geological Society of America Abstracts with Programs, v. 35, p. 25.
- Rygel, M.C.**, Falcon-Lang, H.J., Calder, J.H., and Gibling, M.R., 2002, Sedimentology and fossil biota of a Pennsylvanian "waterhole" deposit in a dryland alluvial plain setting, Joggins, Nova Scotia: Geological Society of America Abstracts with Programs, v. 34, no. 6, p. 18.
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- Rygel, M.C.**, and Gibling, M.R., 2001, The interaction of sediment and vegetation – some examples from the Carboniferous of Nova Scotia: Geological Society of America Abstracts with Programs, v. 33, no. 6, p. A-220.
- Rygel, M.C.**, 2001, Fluvial sedimentology of the Joggins Formation (Pennsylvanian), Cumberland Basin, Nova Scotia: American Association of Petroleum Geologists Bulletin, v. 85, no. 11, p. 2058.
- Rygel, M.C.**, Gibling, M.R., and Davies, S.D., 2001, Alluvial architecture of the Joggins Formation, Atlantic Canada – the evolution of fluvial style in a rapidly subsiding Carboniferous floodplain: *in* Mason, J.A., Diffendal, R.F., and Joeckel, R.M. (eds.), Program with Abstracts, 7<sup>th</sup> International Conference on Fluvial Sedimentology, Open-File Report 60, Conservation and Survey Division, University of Nebraska-Lincoln, p. 238.

**Rygel, M.C.**, and Beuthin, J.D., 2000, Paleoweathering evidence for the Mississippian-Pennsylvanian unconformity near Johnstown, Cambria County, PA: Geological Society of America Abstracts with Programs, v. 32, no. 1, p. A-71.

## INVITED PRESENTATIONS

- **University of North Carolina - Wilmington**  
September 15<sup>th</sup>, 2017: Sticks and Stones – How the Evolution of Land Plants Changed Clastic Depositional Systems
- **Pennsylvania Council of Professional Geologists Annual Meeting**  
March 7, 2017: Licensure of Professional Geologists in NYS: An overview  
Sticks and Stones: How the Evolution of Land Plants Changed Clastic Depositional Systems
- **New York State DEC**  
January 10, 2017: Presentation about the licensure of geologists in NYS.
- **Buffalo Association of Professional Geologists Monthly Meeting**  
September 21, 2016: “New York State Professional Geologist Licensure Update”
- **Central New York Association of Professional Geologists Monthly Meeting**  
May 19<sup>th</sup>, 2016: Sticks and Stones – How the Evolution of Land Plants Changed Clastic Depositional Systems
- **SUNY Oneonta, Department of Earth and Environmental Sciences**  
April 12, 2016: Licensure of professional geologists in New York State: challenges and opportunities for academic geoscience departments
- **New York State Geological Association Annual Meeting**  
Plattsburgh, NY on Sept. 12-13’ 2015: Licensure of professional geologists in New York State: challenges and opportunities for academic geoscience departments
- **Hudson-Mohawk Professional Geologists Association Monthly Meeting**  
Nov. 18<sup>th</sup>, 2015: Sticks and Stones – How the Evolution of Land Plants Changed Clastic Depositional Systems
- **New York State Council of Professional Geologists Annual Meeting**  
Albany, NY on Nov. 18<sup>th</sup>, 2015: Licensure of professional geologists in New York State: challenges and opportunities for academic geoscience departments
- **SUNY Plattsburgh**  
May 4<sup>th</sup>, 2015: Licensure of professional geologists in New York State: challenges and opportunities for academic geoscience departments
- **University of Pennsylvania**  
February 21, 2014: Sticks and Stones – How the Evolution of Land Plants Changed Clastic Depositional Systems
- **Syracuse University**  
November 17, 2011: Sticks and Stones – How the Evolution of Land Plants Changed Clastic Depositional Systems
- **Canadian Society of Petroleum Geologists University Outreach Tour**  
January 2009: The Magnitude of Late Paleozoic Glacioeustatic Fluctuations: A Synthesis
  - January 12<sup>th</sup>, 2009: University of Windsor, Windsor, Ontario
  - January 13<sup>th</sup>, 2009: University of Western Ontario, London, Ontario
  - January 15<sup>th</sup>, 2009: Laurentian University, Sudbury, Ontario
  - January 16<sup>th</sup>, 2009: University of Ottawa, Ottawa, Ontario

- January 16<sup>th</sup>, 2009: Carleton University, Ottawa, Ontario
- **St. Lawrence University**  
March 14, 2008: The Late Paleozoic Ice Age: Dynamic Glaciation in an Icehouse World
- **Canadian Society of Petroleum Geologists University Outreach Tour**  
February 2008: The Late Paleozoic Ice Age: Dynamic Glaciation in an Icehouse World
  - February 13<sup>th</sup>, 2008: Acadia University, Wolfville, Nova Scotia
  - February 14<sup>th</sup>, 2008: St. Francis Xavier University, Antigonish, Nova Scotia
  - February 18<sup>th</sup>, 2008: University of New Brunswick, Fredericton, New Brunswick
  - February 19<sup>th</sup>, 2008: Dalhousie University, Halifax, Nova Scotia
- **Canadian Society of Petroleum Geologists Technical Luncheon Series**  
October 9, 2007: Late Paleozoic Sea-level Fluctuations: A Critical Look at Glacioeustasy in an Icehouse World
- **University of Iowa**  
April 7, 2006: Changing views of the Late Paleozoic ice age: An eastern Australian perspective
- **University of Nebraska-Lincoln, Stout Lecture Series**  
November 11, 2005: The Fossil Record of Plant-Sediment Interaction: Vegetation-Induced Sedimentary Structures from the Pennsylvanian Joggins Formation, Nova Scotia

## AWARDS AND HONORS

- **President's Award for Teaching Excellence**  
SUNY Potsdam, Spring 2014
- **Greek Advisor of the Year**  
SUNY Potsdam, Spring 2012
- **Member, Omicron Delta Kappa – National Leadership Honor Society**  
April 30, 2011
- **Student's Choice Award**  
Student Support Services, SUNY Potsdam, Spring 2011
- **The Donald L. and Carolyn N. Biggs Earth Science Teaching Award**  
Geological Society of America, Geoscience Education Division, Fall 2010
- **Elected Member, Sigma Xi Scientific Research Society**  
Fall, 2009
- **Who's Who In Research**  
SUNY Potsdam Research & Sponsored Programs Newsletter, Spring 2009
- **Grant Writing Initiative Award**  
SUNY Potsdam Research & Sponsored Programs, 2006 & 2008
- **Best Ph.D. Award**  
Canadian Society of Petroleum Geologists, 2007
- **Best Paper Award**  
Coal Geology Division, Geological Society of America, for the following presentation at the 2006 annual meeting:  
Birgenheier, L.P., Frank, T.D., Fielding, C.R., and Rygel, M.C., 2006, The Permian stable isotope record from ice-proximal localities in eastern Australia: a proxy for Late Paleozoic climate change: Geological Society of America Abstracts with Programs, v. 38, p. 317.
- **Doctoral Thesis Award - Sciences and Engineering**  
Dalhousie University, 2006
- **Killam Pre-Doctoral Scholar**  
Dalhousie University; 2003-2005
- **History of Geology Division Student Award**  
Geological Society of America, 2004
- **President's Graduate Teaching Assistant Award**  
Dalhousie University, 2002-2003
- **A.L. Medlin Award**  
Coal Geology Division of the Geological Society of America, 2001

- **Teaching Assistant of the Year**  
Dalhousie University Geology Department, 2000-2001
- **Cameron Award**  
Canadian Society of Coal Science and Organic Petrology, 2001
- **College Scholar (Geology Department)**  
University of Pittsburgh at Johnstown, Geology Department, 2000
- **Jonathan Graft Memorial Scholarship**  
UPJ Geology Department, 1999
- **Summer Field Course Scholarship**  
National Association of Geoscience Teachers, 1999
- **Indiana University Summer Scholarship**  
Indiana University, 1999

## GRANTS

- **SGA Capital Projects Grant**  
SUNY Potsdam Student Government Association, Fall 2017, \$17,563  
*Geology Department Proposal for 12 Petrographic Microscopes*
- **Professional Development Grants**  
NY United University Professors
  - 2016, *Travel to the 81st Annual Field Conference of Pennsylvania Geologists in Johnstown, PA* \$354
  - 2015, *Travel to 2015 GSA meeting in Baltimore, MD*, \$1,000
  - 2014, *Sedimentary Geochemistry of the Cumberland Basin, Nova Scotia*, \$986
  - 2010, *Travel to 2010 GSA meeting in Denver, CO*, \$892
  - 2009, *Travel to 2009 GSA meeting in Portland, OR*, \$875
  - 2008, *Early Paleozoic fluvial systems in the Appalachian Basin*, \$975
  - 2007, *Travel to 2007 GSA meeting in Denver, CO*, \$825
  - 2006, *Travel to 2006 GSA meeting in Philadelphia, PA*, \$850
- **Faculty Curriculum Development Grant**  
Part of the SUNY Potsdam Title III Strengthening Institutions Grant, Spring 2011, \$3,000  
*Grant to transform my "Geology of Nova Scotia" field trip into a research-intensive course.*
- **Faculty-Undergraduate Summer Research Grant**  
SUNY Potsdam RSPO Office, Summer 2009, \$4,200 stipend for undergraduate Daniel Slane to work on the project: *Sedimentology of the Devonian Catskill Formation: Were the Earliest Terrestrial Ecosystems Terrestrial or Tidal?*
- **Faculty/Student Conference Travel Application (for undergraduate Dan Slane)**  
Funds from Title III Strengthening Institutions Grant at SUNY Potsdam, October 2009, \$1,000  
*Travel to 2009 Geological Society of America Annual Meeting in Portland, Oregon*
- **Petroleum Research Foundation Grant #47967-GB8**  
American Chemical Society, 2008 through 2011, \$50,000  
*Alluvial Architecture of the Springhill Mines and Ragged Reef Formations: Fluvial Reservoir Characteristics Linked to Paleogeomorphology*
- **Research and Creative Endeavors Grant**  
SUNY Potsdam RSPO Office, 2007, \$725  
*Understanding Early Terrestrial Ecosystems: The Upper Devonian Catskill Formation of Northcentral Pennsylvania*

- **Pennsylvania Department of Conservation and Natural Resources Grant**  
2007; \$1,219  
*Understanding Early Terrestrial Ecosystems: The Upper Devonian Catskill Formation of Northcentral Pennsylvania*
- **Curriculum Development Grant**  
SUNY Potsdam RSPO Office, 2006; **\$1,000**  
*Sedimentary Geology: A hands-on approach to understanding Earth surface processes and materials*
- **Conference Travel Grant**  
SUNY Potsdam RSPO, 2006, \$200
- **Nova Scotia Museum Grant**  
2003, \$3,200  
*Vegetation-induced sedimentary structures from the fossil forests of Nova Scotia: insight into the dynamics of early terrestrial ecosystems*
- **Graduate Research Grant**  
Geological Society of America, 2001, \$2,600  
*Fluvial sedimentology of the Joggins Formation, Cumberland County, Nova Scotia*
- **Graduate Research Grant**  
American Association of Petroleum Geologists, 2001, \$1,911  
*Fluvial sedimentology of the Joggins Formation, Cumberland County, Nova Scotia*
- **Medlin Award**  
Coal Geology Division of the Geological Society of America, 2001, \$1,500  
*Channels and Coal – floodplain dynamics of the Pennsylvanian Joggins Formation*
- **Undergraduate Research Grant**  
Northeastern Section of the Geological Society of America, 1999, \$600  
*Paleopedogenic analysis of a possible silica-cemented paleosol (ganister) at the Mississippian-Pennsylvanian unconformity near Johnstown, PA*

## TEACHING DEVELOPMENT & CONTINUING EDUCATION

- **Geophotography Course**  
On the Cutting Edge Workshop Series; February-March 2013
- **Ground Based Lidar Methods and Applications**  
Geological Society of America Annual Meeting, 29 October, 2010
- **Research Proposal Workshop**  
The Grantsmanship Center, Sept. 17<sup>th</sup>-19<sup>th</sup>, 2009
- **Earth Science Literacy Initiative**  
Online Workshop, May 12<sup>th</sup>-23<sup>rd</sup>, 2008
- **Designing Effective and Innovative Courses in the Geosciences**  
On the Cutting Edge Workshop Series, Clinton, NY, July 8<sup>th</sup>-12<sup>th</sup>, 2007
- **Invited Panelist, Perspectives on Education**  
February 2004, Dalhousie University, Center for Learning & Teaching

- **Teaching Methods, How to Speak, Managing Conflict, and Student Assessment Methods Workshops**  
Dalhousie University, Office of Instructional Development and Technology (OIDT), March 2003
- **Surviving Academia**  
Geological Society of America Annual Meeting, October 2001

## SERVICE

- **Associate Editor, Canadian Journal of Earth Sciences**
  - September 2012 to present
- **Associate Editor, Journal of Sedimentary Research**
  - May 2009 to present
- **New York State Council of Professional Geologists**
  - Director: February 2010 to present
  - Vice President: 2014
  - President: 2015-2017
- **External Reviewer**
  - American Chemical Society, Petroleum Research Fund
  - Atlantic Geology
  - Basin Research
  - Canadian Journal of Earth Sciences
  - Geological Society of America Bulletin
  - Geology
  - Gondwanan Geology
  - Journal of the Geological Society, London
  - Journal of Sedimentary Research
  - Norton Publishing (several book chapters and online products)
  - Sedimentary Geology
  - National Science Foundation
  - Natural Sciences and Engineering Research Council of Canada
- **Campus-Level Service**
  - SUNY Potsdam Environmental Studies Department, Advisor, Fall 2017-present
  - General Education Task Force, SUNY Potsdam, Spring 2016-Present. Member of the Thinking Scientifically and Freshman Seminar Working Groups.
  - SUNY Potsdam Faculty Senate, Member-at-Large, 2008-2010  
Department Representative, Fall 2011 and Fall 2016-present
  - Honors Council, SUNY Potsdam, Spring 2014-present
  - Arts and Sciences Curriculum Committee, SUNY Potsdam, Spring 2011-Spring 2016
  - Hill Endowment Administrative Committee, SUNY Potsdam, Member, Fall 2006-2012
  - Teaching and Learning Technology Roundtable, SUNY Potsdam, Member, Fall 2007-Spring 2014  
Communication Subcommittee Chair, 2008-2010
  - SUNY Potsdam Collegiate Science and Technology Entry Program, Advisory Board, SUNY Potsdam, Spring 2009-2012
  - Mt. Emmons Scholarship Selection Committee, SUNY Potsdam, Spring 2012 and Spring 2014
  - User Services Librarian Search Committee, SUNY Potsdam, Spring 2009
  - Research and Creative Endeavors Committee, SUNY Potsdam, Member, Fall 2007-Spring 2010

- Geology Department Review Report, SUNY Potsdam, Editor, Fall 2007
- **College-Related Public Service**
  - SOAR Program, SUNY Potsdam
    - Spring 2011 – Life through Time
    - Fall 2012 – Earth’s Climate History
  - Sigma Gamma Epsilon (student Honor Society), Advisor, Fall 2007-present
  - Advisor, Zeta Gamma Sigma Sorority, 2008-present
  - Participant, SUNY Potsdam Open House Programs, 2006-present
  - Participant, Geology Department Open House, 2006-present
  - Panelist, Bregman Book Discussion Series, A Passion for Mars, March 2<sup>nd</sup>, 2010
  - Speaker, President’s Emeriti Breakfast, SUNY Potsdam, Feb. 12<sup>th</sup>, 2009
  - Panelist, Bregman Book Discussion Series, Children of the Sun by Alfred Crosby, January 20<sup>th</sup>, 2007
- **Community Service**
  - Geology hike for Potsdam High School, June 3<sup>rd</sup>, 2010
  - Participant, High School Science Lab Day, 2007-2015
  - Participant, Middle School Science Olympiad, 2007-present
  - Participant, Geology Department Rock and Fossil Show, 2007 and 2008
  - Co-Organizer, Geology Workshop for Norwood-Norfolk Middle School, March 23<sup>rd</sup>, 2007
  - Co-Organizer, Geology Workshop for St. Lawrence Middle School, March 29<sup>th</sup>, 2007

## MEDIA COVERAGE

- **Watertown Times, October 18, 2017, SUNY**  
Potsdam introduces new major in geographic information science
- **SUNY Potsdam YouTube Video, March 12, 2012**  
Geology Professor – Dr. Mike Rygel, available at <http://youtu.be/eXHL9GFXBNU>
- **Watertown Times, August 24, 2011**  
Virginia earthquake felt in the North Country
- **Advance News, December 26, 2010, p. 7A**  
SUNY Potsdam’s Michael Rygel honored for teaching
- **Daily Courier Observer, December 18, 2010, p. 9**  
Geology professor Rygel receives Biggs Award
- **Watertown Times, June 23, 2010**  
Canadian quake shakes buildings, people throughout North Country
- **North Country Public Radio, June 23, 2010**  
Interview about Canadian earthquake - <http://www.northcountrypublicradio.org/news/story/15861/breaking-earthquake-shakes-northern-new-york-ontario-and-quebec>
- **Potsdam People, Spring 2009, p. 3**  
CBC Documents Research by Potsdam Prof. and Students
- **Land and Sea (CBC Television Series), October 26, 2008**  
Joggins, webcast available at: <http://www.cbc.ca/landandsea/2009/05/joggins.html>
- **Daily Courier & Observer, October 24, 2008, p. 7**  
CBC Series Features SUNY Potsdam Crew
- **Halifax Chronicle Herald, July 3, 2008, p. B4**  
New York Science, N.S. Rocks



- **Daily Courier-Observer, April 26, 2008, p. 10**  
Dr. Rygel Awarded \$50,000 for Geology field work
- **Daily Courier-Observer, September 26, 2007**  
Dr. Rygel to Present Work at Geological Society Meet
- **Daily Courier & Observer, May 18, 2007, p. 14**  
Rygel Dissertation Lauded
- **North Country This Week, May 16-18, 2007, p. 5**  
Rygel's Best Dissertation
- **Ogdensburg Advance News, March 18, 2007**  
SUNY Potsdam Presenting Research
- **Houston Chronicle, January 9, 2007, p. 2**  
Climate changes of past yielding clues to present / Research team suggests global warming, cooling have run in cycles
- **Los Angeles Times, January 5, 2007, p. A8**  
Ancient global warming was jarring, not subtle, study finds
- **San Francisco Chronicle, January 5, 2007, p. B1**  
Scientists research stretches of global warming, cooling/Fossil studies helped determine sea levels at various times
- **Potsdam Daily Courier-Observer, September 30, 2006**  
Geology Faculty Present Research at Meeting.
- **Fielding, C.R., Frank, T.D., and Isbell, J. (2006), Eos Transactions, v. 87 (21), p. 87, 91**  
The Late Paleozoic ice age revisited
- **Geotimes, July 2005, Sedimentology News Notes, p. 10-11**  
Fossil forests sunk by salt