**Robert W.D. Lodge** *PhD, PGeo*

Associate Professor, Department of Geology

**Education**

* 2013, PhD in Mineral Deposits/Precambrian Geology, Laurentian University
* 2007, MSc in Geology, University of Western Ontario
* 2005, BSc with Honours in Geology, Acadia University
* 2004, BSc in Environmental Science, Acadia University

**Work Experience**

2020-present – ***Associate Professor, Department of Geology & Environmental Science, University of Wisconsin-Eau Claire***

Tenured position. Duties include teaching physical, economic, structure, and field geology at the undergraduate level. Established internally- and extramurally-funded research program involving undergraduate students. Established department and university service on various committees or initiatives.

2018-present – ***Adjunct Professor, Harquail School of Earth Sciences, Laurentian University***

Appointed adjunct status to contribute expertise and graduate student supervision in projects and courses pertaining to Archean metallogeny and tectonics in the Lake Superior region. Science Lead for Sturgeon transect of the $104 million Metal Earth program.

2015-present – ***Adjunct Professor, Department of Geology, Lakehead University***

Appointed adjunct status to contribute expertise and graduate student supervision in projects and courses pertaining to Archean metallogeny and tectonics in the Lake Superior region. I am currently co-supervising a graduate student project with Dr. Pete Hollings on the petrogenesis and mineral potential of komatiites near Thunder Bay, Ontario.

2014-2020 – ***Assistant Professor, Department of Geology, University of Wisconsin-Eau Claire***

Tenure-track position. Duties include teaching physical, economic, structure, and field geology at the undergraduate level. Established research program involving undergraduate students and obtained funding for field work, geochemical analyses, and student salaries. Served on departmental committees.

2010-2014 – ***Precambrian Geoscientist, Ontario Geological Survey***  
Duties included field mapping and regional geological interpretations, supervision and mentoring of student assistants, management of health and safety issues, and communication of results in reports and presentations. Conducted mapping and research in Archean greenstone belts including ArcGIS compilation of results, geochronological/geochemical analyses, and industry collaboration. Supervised undergraduate thesis project.

2012 – ***Instructor, Department of Earth Science, Mount Royal University***  
As a sessional instructor, duties included teaching a two-week, senior-level field school and marked associated assignments, created and delivered lectures, and safety supervision. When not in the field, course materials were delivered via distance education.

2009-2013 – ***Teaching/Laboratory Assistant, Department of Earth Science, Laurentian University***  
Duties included assisting students, marking assignments, and preparation of course materials. Also assisted in management, sample preparation, and data analysis at LA-ICP-MS laboratory.

2008-2009 – ***Project Geologist, Teck Ltd. – Duck Pond Mine, Newfoundland***  
Duties included core logging, database management, data quality control, training core loggers. Received industrial work place safety training.

2007-2009 – ***Exploration Geologist, Messina Minerals Inc., Millertown, Newfoundland***  
Duties included core logging, drill log and geochemical database compilation and management, drill monitoring and set-up, and surface and section mapping. Also prepared provincial assessment and NI 43-101 reports.

2005-2006 – ***Teaching Assistant, Department of Earth Science, University of Western Ontario***  
Duties included assisting students with geochemical data analysis and petrology, and marking of laboratory assignments.

2003-2005 – ***Research Assistant, Dr. Nancy Van Wagoner, Department of Geology, Acadia University***  
Duties included assistance in background research, data analysis, writing scientific literature, computer-generated imaging, and development of integrated sample database.

2002-2005 – ***Teaching Assistant, Geology & Chemistry Departments, Acadia University***  
Duties included assisting students with laboratory techniques and problems, and marking of laboratory and class assignments.

**Awards**

***Internal Awards***

* University Research and Creative Activity Award (’18, ’21). Program is specifically designed to encourage faculty and academic staff to engage in research, scholarship, and creative activities. Valued at $2500.
* Student-Faculty Collaborative Research Grants (annual). Internal grant awarded from the Office of Research and Sponsored Programs (ORSP), University of Wisconsin-Eau Claire. Awarded to faculty based on project merit and student involvement. Valued at ~$2800 per project
* Summer Student Research Experiences (annual). Internal grant awarded from ORSP, University of Wisconsin-Eau Claire. Awarded to faculty based on project merit and student involvement. Valued at ~$7500 per project.
* International Fellowship Program (‘16, ’19, ’20). Internal grant awarded from Academic Affairs, University of Wisconsin-Eau Claire. Awarded to faculty for international research projects based on project merit and student involvement. Valued at ~$10,000 per project.

***Extramural Awards***

* USGS National Geological and Geophysical Data Preservation Program Grant (‘16). External grant awarded in collaboration with the Wisconsin Geologic and Natural History Survey. Awarded to state geologic surveys based on project and investigator merits. Total award valued at ~$24,000 (UWEC portion $9100).
* USGS National Geological and Geophysical Data Preservation Program Grant (‘21). External grant awarded in collaboration with the Wisconsin Geologic and Natural History Survey. Awarded to state geologic surveys based on project and investigator merits. Total award valued at ~$35,000 (UWEC portion $11,000).

***Student Awards***

* Natural Science & Engineering Research Council (NSERC) Postdoctoral Fellowship award. Awarded to promising doctoral researchers based on research potential, academic performance, and communication abilities. Valued at $40,000 / year for 2 years but declined due to tenure-track position.
* Alexander Graham Bell Scholarship (PhD) from the NSERC. Awarded to Canada’s top tier graduate students in terms of research potential, academic performance, and communication abilities. Valued at $35,000 / year for two years.
* Endowment Fund Scholarship (PhD) from the Province of Ontario for recognition as the most promising new graduate student at Laurentian University in terms of research potential. Valued at $1,300.
* Graduate Research Award (PhD) from the Society of Economic Geologists for recognition of a promising research project and proposal in the general field of economic geology. Valued at $3,500 and $4,800.
* Ontario Graduate Scholarship from the Province of Ontario (MSc, PhD) in recognition of excellence in academic, research, and communication abilities. Valued at $15,000 / year but declined due to funding received from NSERC.
* Post-Graduate Scholarship (MSc) from NSERC in recognition of superior research abilities, academic achievements, and communication abilities. Valued at $17,300 / year for two years.
* University Medal for Geology (BSc) from Acadia University for top honours in the graduating undergraduate class.
* Mining Society of Nova Scotia Centennial Medal (BSc) for academic achievements in an undergraduate geology program in Nova Scotia
* NSERC-APICS award (BSc) for best scientific paper presented at the Atlantic Universities Geology Conference.
* Mineralogical Society of America prize for academic excellence in undergraduate petrology courses.
* Mineralogical Association of Canada prize for academic excellence in undergraduate mineralogy courses.

**Recent Academic Research Synopses**

2014-present – Chemostratigraphy and hydrothermal characterization of the VMS deposits in the Paleoproterozoic Penokean Orogen, Wisconsin. Research includes GIS compilation of available data, relogging drill core, and descriptions of variably deformed, hydrothermally altered, and metamorphosed volcanic and intrusive rocks. Collection of whole rock lithogeochemistry via XRF and HR-ICP-MS. Mineral texture and chemistry obtained via SEM-EDS. Objective is to reconstruct the volcanic, tectonic, and metallogenic setting of the accreted arc sequence and within the Penokean Orogeny in northern Wisconsin.

2009-present – Reconstructions of geodynamic settings and metallogeny of Archean greenstone belts. Research includes detailed- and regional-scale mapping of variably deformed and metamorphosed volcanic, sedimentary, and intrusive lithofacies, regional-scale geochemical and isotopic data collection using XRF, ICP-MS, MC-ICP-MS, LA-ICP-MS and SEM-EDS. Objective is to understand tectonic controls influencing metal endowment in Archean greenstone belts and the origin of plate tectonics.

**Publications** (underlinedenotes student co-author)

***Peer-Reviewed Journals***

**Lodge, RWD**, Gélinas, BR, Gibson, HL, (submitted). Lithogeochemistry of Neoarchean Timiskaming-type volcanic rocks and the Tower Mountain Intrusive Complex, Shebandowan greenstone belt, Ontario. Canadian Journal of Earth Science.

Tamosauskas, M, Ma, C, Haugaard, R, **Lodge, RWD**,Sherlock, R, Hamilton, M, Marsh, JH (2024). Formation of a late-orogenic conglomeratic sequence in the Neoarchean western Wabigoon terrane, Superior craton.: Precambrian Research, v. 406: 107394.

**Lodge, RWD,** Zens, ZA, Jacobson, RE, Leybourne, M. (2024). Geology and lithogeochemistry of the Paleoproterozoic Flambeau Cu-Zn-Au volcanogenic massive sulfide deposit, Wisconsin, USA. Economic Geology, v. 119: 23-44.

Ma, C, Marsh, JH, **Lodge, RWD,** Tamosauskas, M, Sherlock, R. Lafrance, B, Thurston, P, Ayer, J. (2023) Formation of Archean Greenstone Belts: Insights from an assemblage-scale study in the western Superior craton. Precambrian Research, v. 395: 107150.

Ma, C, Marsh, JH, **Lodge, RWD,** Sherlock, R (2023). Crustal growth/reworking and the stabilization of the Superior craton: Insights from a Neoarchean gneiss complex of the Winnipeg River terrane. Geological Society of America Bulletin, v.135: 643-662.

Mathieu, L, Mole, D, Toth, Z, Rubingh, K, Haugaard, R, White, S, Ma, C, Frieman, B. **Lodge, RWD**, Sherlock, R, Lafrance, B. (2023). The Neoarchean, a turning point for geodynamic and magmatic processes within the Superior craton? In Whitmeyer, SJ, Williams, ML, Kellett, DA, Tikoff, B. (eds). Laurentia, Turning Points in the Evolution of a Continent. Geological Society of America, Memoirs. v. 220: 43-54.

Ma, C, Naghizadeh, M, Adetunji, A, **Lodge, RWD,** Snyder, D, Sherlock, R (2021) Imaging Neoarchean crustal structures: An integrated seismic-magnetotelluric-aeromagnetic-geologic study in the western Wabigoon and Winniped River terranes, Superior Craton. Precambrian Research, 364. Doi: 10.1016/j.precamres.2021.106339

**Lodge, RWD** (2016). Petrogenesis of intermediate volcanic assemblages from the Shebandowan greenstone belt, Superior Province: Evidence for subduction during the Neoarchean. Precambrian Research, 272: 150-167

**Lodge, RWD**, Gibson, HL, Stott, GM, Hudak, GJ, Franklin, JM (2015). Geodynamic setting, crustal architecture, and metallogeny of ca. 2720 Ma greenstone belt assemblages of the northern Wawa subprovince, Superior Province. Canadian Journal of Earth Sciences, 52: 196-214.

**Lodge, RWD**, Gibson, HL, Stott, GM, Hamilton, MA (2014). Geodynamic reconstruction of the Winston Lake greenstone belt and VMS deposits: New trace element geochemistry and U-Pb geochronology. Economic Geology, 109: 1291-1313.

**Lodge, RWD**, Gibson, HL, Stott, GM, Hudak, GJ, Jirsa, MA, Hamilton, MA (2013). New U-Pb geochronology from Timiskaming-type assemblages in the Shebandowan and Vermilion Greenstone Belts, Wawa Subprovince, Superior Craton: Implications for the Neoarchean development of the southwestern Superior Province. Precambrian Research, 235: 264-277.

**Lodge, RWD**, Lescinsky, DT (2009). Anisotropic stress accumulation in cooling lava flows and resulting fracture patterns: Insights from starch-water desiccation experiments, Journal of Volcanology and Geothermal Research, 185: 232-336.

**Lodge, RWD**, Lescinsky, DT (2009). Fracture patterns at lava-ice contacts on Kokostick Butte, OR, and Mazama Ridge, Mount Rainier, WA: Implications for flow emplacement and cooling histories. Journal of Volcanology and Geothermal Research, 185: 298-310.

***Fieldtrip Guidebooks***

**Lodge, RWD,** Hooper, RL (2023). Precambrian geology of the Chippewa River Valley: A transect through the western Marshfield Terrane. *in* **Lodge, RWD** (Ed.), Institute on Lake Superior Geology Proceedings, 69th Annual Meeting, Eau Claire, Wisconsin, Part 2 – Field Trip Guidebooks. v.69, part 2, p.1-26.

**Lodge, RWD**, Weber, EM, Hooper, RL (2023), Precambrian Geology of the Eau Claire River Valley: Re-discovering the Eau Claire Volcanic Complex. *in* **Lodge, RWD** (Ed.), Institute on Lake Superior Geology Proceedings, 69th Annual Meeting, Eau Claire, Wisconsin, Part 2 – Field Trip Guidebooks. v.69, part 2, p.47-70.

**Lodge, RWD**, Smyk, M, Puumula, M (2019) Geology of the past-producing Winston Lake Cu-Zn mine. *In* McTavish A and Hollings, P (eds), Institute of Lake Superior Geology Proceedings, 65th Annual Meeting, Terrace Bay, Ontaroi, Part 2 – Field trip guidebook v. 65, part 2, 113-128

Ma, C, **Lodge, RWD**, Etienne, M (2019). Geologic overview of the lithotectonic assemblages across the Sturgeon Lake greenstone belt along the Sturgeon transect, western Wabigoon, Superior Craton. Metal Earth field trip guidebook. 23pp.

***Reviewed Conference Proceedings***

Glodowski, LN, **Lodge, RWD** (2023). Characterizing volcanic host stratigraphy and syn-volcanic intrusions at the Lynne, Zn-Pb-Cu deposit, Oneida Co., Wisconsin. Institute on Lake Superior Geology Proceedings, 69th Annual Meeting, Eau Claire, Wisconsin, Part 1-Program and Abstracts, p. 34-35.

Johnson, KP, **Lodge, RWD** (2023). Hydrothermal alteration facies of the Eisenbrey Zn-Cu Deposit, Rusk County, Wisconsin. Institute on Lake Superior Geology Proceedings, 69th Annual Meeting, Eau Claire, Wisconsin, Part 1-Program and Abstracts, p. 45-46.

Leahy, MD, **Lodge, RWD** (2023). Petrology and geochemistry of the Paleoproterozoic Eau Claire Volcanic Complex, Eau Claire, WI. Institute on Lake Superior Geology Proceedings, 69th Annual Meeting, Eau Claire, Wisconsin, Part 1-Program and Abstracts, p. 52-53.

**Lodge, RWD** (2023). Re-evaluating the tectonics and metallogeny of terranes in the Paleoproterozoic Penokean Orogen, Wisconsin. Institute on Lake Superior Geology Proceedings, 69th Annual Meeting, Eau Claire, Wisconsin, Part 1-Program and Abstracts, p. 56-57.

Weber, EM, **Lodge, RWD**, Marsh, JH (2023). U/Pb geochronology and zircon petrochronology of Paleoproterozoic magmas from the Marshfield terrane, Penokean Orogen, Wisconsin. Institute on Lake Superior Geology Proceedings, 69th Annual Meeting, Eau Claire, Wisconsin, Part 1-Program and Abstracts, p. 97-98.

Glodowski, LN, **Lodge, RWD** (2022). Defining Volcanic Stratigraphy and Syn-volcanic Intrusions at the Lynne Zn-Pb-Cu Deposit, Wisconsin, USA. Society of Economic Geology, Society of Economic Geologist Annual Meeting Proceedings, Denver, CO, paper P2.09.

**Lodge, RWD**, Lemke, TC, Blotz, KE, (2022). Using Ore Petrography and Geochemical Mass Balance to Constrain the Hydrothermal Environment at the Paleoproterozoic Flambeau Cu-Zn-Au Deposit, Wisconsin, USA. Society of Economic Geology, Society of Economic Geologist Annual Meeting Proceedings, Denver, CO, paper P2.15.

Weber, EM, **Lodge, RWD** (2022). New U/Pb Geochronology from the Proterozoic Penokean Orogen, Wisconsin: Implications for VMS Metallogeny. Society of Economic Geology, Society of Economic Geologist Annual Meeting Proceedings, Denver, CO, paper P5.10.

Lemke, TC, Weber, EM, **Lodge, RWD**, (2021) Characterization of hydrothermal alteration and sulfide ores at the Lynne Zn-Cu-Pb deposit, Oneida Co. WI. 67th Institute on Lake Superior Geology Proceedings v. 67, Part 1-Program and Abstracts, p. 39-40.

Nelson, TJ, Johnson, RM, **Lodge, RWD**, Ma, C, Marsh, JH, (2021) U-Pb geochronology and zircon trace-element geochemistry from granitoid plutons in the Neoarchean Sturgeon Lake greenstone belt, Ontario, Canada. 67th Institute on Lake Superior Geology Proceedings v. 67, Part 1-Program and Abstracts, p. 50-51.

Short, SR, Glodowski, LN, **Lodge, RWD** (2021) Geochemistry and petrography of volcanic and intrusive rocks hosting the Lynne Cu-Zn-Pb deposit, Oneida County, WI. 67th Institute on Lake Superior Geology Proceedings v. 67, Part 1-Program and Abstracts, p. 63-64.

Tamosauskas, M, Ma, C, Haugaard, R, **Lodge, RWD**, Sherlock, R (2021) Formation of the Ament Bay Metasedimentary Assemblage in the easternmost Western Wabigoon Terrane: Implications for gold exploration in Timiskaming-type basins. Geological Association of Canada Annual Meeting, London, Ontario, Program and Abstracts.

Tamosauskas, M, Haugaard, R, Sherlock, R, Ma, C, **Lodge, RWD** (2021) The provenance, depositional environment and metallogenic implications of the Ament Bay Metasedimentary Assemblage, Sturgeon Lake Greenstone Belt, Northwest Ontario. Prospectors & Developers Association of Canada-Society of Economic Geologists Student Minerals Colloquium.

Chandler, MD, **Lodge, RWD,** Ma, C. (2020) Sedimentology of a potential Timiskaming-type assemblage in the Sturgeon Lake greenstone belt, Northwestern Ontario: Implications for gold exploration. Prospectors & Developers Association of Canada-Society of Economic Geologists Student Minerals Colloquium. Abstract 502.

Kass, SP, **Lodge, RWD**, McFarland, NJ (2020) Petrography and geochemistry of Archean garnetiferous gneisses from the South Boulder River Valley, Tobacco Root Mountains, Montana. Geological Society of America Abstracts with Programs, 52(6), paper 97-8.

Kass, SP, **Lodge, RWD**, McFarland, NJ (2020) Origin of Precambrian Garnetiferous Gneisses from the South Boulder River Valley, Tobacco Root Mountains, Montana. Geological Society of America Abstracts with Programs, 52(5), paper 29-5.

**Lodge, RWD,** Brock, NM, Ma, C, Hudak, GJ (2020) Trace element systematics and chemostratigraphy of mafic-dominated assemblages: Examples from the Archean Superior Province. Geological Society of America Abstracts with Programs, 52(5), paper 2-3.

Ma, C, Naghizadeh, M, Adetunji, A, **Lodge, RWD,** Snyder, D, Sherlock, R (2020) Crustal architecture and processes in the Neoarchean: An integrated geophysical-geologic case study in the western Superior Craton, Canada Geological Society of America Abstracts with Programs, 52(6), paper 48-5.

Nelson, TJ, **Lodge, RWD,** Ma, C. (2020) Geologic overview of Sturgeon Lake greenstone belt granitoid plutons, Western Wabigoon Subprovince. Geological Society of America Abstracts with Programs, 52(6), paper 97-7.

Nelson, TJ, **Lodge, RWD,** Ma, C. (2020) Geology and geochemistry of granitoid plutons in the Sturgeon Lake greenstone belts, Western Wabigoon Subprovince: Implications for base and precious metal metallogeny. Prospectors & Developers Association of Canada-Society of Economic Geologists Student Minerals Colloquium. Abstract 209.

Blotz, KE, **Lodge, RWD**. (2018). Ore Petrography of the Flambeau volcanogenic massive sulfide deposit, northwestern Wisconsin: Implications for hydrothermal fluid composition. 64th Annual Meeting of the Institute on Lake Superior Geology, Iron Mountain, Michigan, p. 11-12.

Blotz, KE, Fredrickson, ET, **Lodge, RWD**. (2018) Characteristics of ore and alteration mineral assemblages at the Flambeau volcanogenic massive sulfide deposit, northwestern Wisconsin. Geological Society of America, Abstracts with Programs, 50(4), paper 38-8.

Fitzpatrick, W, Hooper, R, **Lodge, RWD**, Gélinas, BR (2018). Mineral Chemistries of the Tower Mountain Intrusive Complex Au-Deposit, Ontario. 64th Annual Meeting of the Institute on Lake Superior Geology, Iron Mountain, Michigan, p. 36-37.

Horst, LM, **Lodge, RWD**. (2018) The rediscovery and revival of the Crandon volcanogenic massive sulfide deposit, northeastern Wisconsin. Geological Society of America, Abstracts with Programs, 50(4), paper 38-7.

Jacobson, RE, **Lodge, RWD**. (2018). Reconstructing Paleoproterozoic volcanism in northwestern Wisconsin: Geochemistry of the Flambeau Cu-Zn-Au Mine. 64th Annual Meeting of the Institute on Lake Superior Geology, Iron Mountain, Michigan, p. 55-56.

Jacobson, RE, **Lodge, RWD**, Zens, ZA (2018). Petrogenesis of Volcanic Assemblages Hosting the Flambeau Cu-Zn Massive Sulfide Deposit, Northwestern Wisconsin, USA. Society of Economic Geologist Annual Meeting Proceedings, Keystone, CO, p.027.

**Lodge, RWD**,Fitzpatrick, W**,** Hooper, R,Gélinas, BR(2018). Two-Phase Magmatic Hydrothermal Alteration at the Monzonite-Diorite Tower Mountain Intrusive Complex Au Deposit, Ontario, Canada. Society of Economic Geologist Annual Meeting Proceedings, Keystone, CO, p.187.

**Lodge, RWD**, Zens, ZA, Jacobson, RE. (2018) Lithogeochemical characteristics of the volcanic system hosting the Flambeau Cu-Zn-Au deposit, northwestern Wisconsin. Geological Society of America, Abstracts with Programs, 50(4), paper 5-1.

Olson, MJ, **Lodge, RWD**. (2018). Komatiite-hosted nickel-copper mineralization potential in the eastern Shebandowan Greenstone Belt, Ontario, Canada. 64th Annual Meeting of the Institute on Lake Superior Geology, Iron Mountain, Michigan, p. 79-80.

Olson, MJ, **Lodge, RWD**. (2018). Textural and geochemical evidence for assimilation of S-bearing sedimentary assemblages by komatiites in the Shebandowan greenstone belt, ON, Canada. Society of Economic Geologist Annual Meeting Proceedings, Keystone, CO, p. 049.

Merss, BHM, **Lodge RWD**. (2017) Ore petrography and trace elements of the Paleoproterozoic Eisenbrey VMS Deposit in Midwestern USA: Implications for hydrothermal fluid compositions. X Simposio Sul-Brasilereiro de Geologia, 10.

**Lodge, RWD**, Pignotta, GS, Gélinas, BR, Schwierske, K, Hudak, GJ (2016). Volcanological, geochemical, and geochronological comparisons of the Gafvert Lake Sequence in Minnesota and Shebandowan Assemblage in Ontario. 62st Annual Meeting of the Institute on Lake Superior Geology, Duluth, Minnesota. p. 89-90.

Helmuth, SL, **Lodge, RWD** (2016). A new Rusk County: Producing a new Precambrian geological map from new field observations and compilations of historic geological/geophysical datasets. 62st Annual Meeting of the Institute on Lake Superior Geology, Duluth, Minnesota. p. 62-63.

Jackson, NR, Merss, BHM, **Lodge, RWD** (2016). Lithostratigraphy and ore petrology of the Eisenbrey Zn-Cu-Pb deposit, Rusk County, Wisconsin. 62st Annual Meeting of the Institute on Lake Superior Geology, Duluth, Minnesota. p. 70-71.

Olson, MJ, **Lodge, RWD** (2016). Ore petrography and precious metals of the primary Flambeau massive sulfide ore. 62st Annual Meeting of the Institute on Lake Superior Geology, Duluth, Minnesota. p. 113-114.

Stanley, V., Schoephoester, P., **Lodge, RWD** (2016). Challenges for rescuing drill core from the volcanogenic massive sulfide deposits in northern Wisconsin. American Geophysical Union, Fall Meeting, Abstract #U52A-04.

Zens, ZA, **Lodge RWD** (2016). Geochemistry and petrography of the volcanic strata hosting the Flambeau Cu-Zn-Au deposit in Rusk County, WI: A re-examination of Wisconsin’s only past-producing volcanogenic massive sulfide mine. 62st Annual Meeting of the Institute on Lake Superior Geology, Duluth, Minnesota. p. 157-158.

Essig, E, Hudak, GJ, Pignotta, GS, **Lodge, RWD** (2015). Petrographic analysis of felsic tuffs within the Neoarchean Soudan Member of the Ely Greenstone Formation, NE Minnesota. 61st Annual Meeting of the Institute on Lake Superior Geology, Dryden, Ontario. p. 29-30.

**Lodge, RWD** (2015). The importance of andesites for interpreting tectonic processes during the Archean. Geological Society of America, Abstracts with Programs, 47(5).

**Lodge, RWD**, Gibson, HL, Stott, GM (2015). Geodynamic settings of Archean greenstone belts and their influence on synvolcanic metallogeny: Examples from the Superior Province. Geological Society of America, Abstracts with Programs, 47(5).

Zens, ZA, Helmuth, SL, **Lodge, RWD** (2015). Geochemistry and petrography of the strata hosting the Flambeau Cu-Zn-Au Deposit: Revisiting Wisconsin’s only past-producing volcanogenic massive sulfide mine. Geological Society of America, Abstracts with Programs, 47(5).

**Lodge, RWD**, Gibson, HL, Stott, GM, Hudak, GJ, Jirsa, MA (2013). Geochronology and geochemistry of Neoarchean Timiskaming-type assemblages in the Shebandowan and Vermilion greenstone belts, Wawa subprovince, Superior Craton. Geological Association of Canada - Mineralogical Association of Canada, Abstracts & Program, 36: 132.

**Lodge, RWD**, Gibson, HL, Stott, GM, Franklin, JM (2013). Rapid development and subsidence of a Neoarchean volcanic arc hosting the Winston Lake VMS ore bodies, Wawa subprovince, Superior Craton. Geological Association of Canada - Mineralogical Association of Canada, Abstracts & Program, 36: 131-132.

**Lodge, RWD**, Gibson, HL, Stott, GM (2012). Trace element geochemistry of VMS-deprived and VMS-endowed 2720 Ma greenstone belts in the Wawa Subprovince, Superior Craton. 22nd V.M. Goldschmidt Conference, Montreal. Mineralogical Magazine, 76: 2030.

**Lodge, RWD**, Gibson, HL, Stott, GM (2012). Trace element geochemistry and physical volcanology of the Shebandowan Greenstone Belt, Superior Craton, Canada; Implications for VMS mineralization and tectonic processes in the Neoarchean. Geological Association of Canada - Mineralogical Association of Canada, Abstracts & Program, 35: 80.

Hudak, GJ, Heine, J, **Lodge, RWD**, Jansen, A. (2012). Recent developments understanding the volcanic, magmatic, tectonic, and metallogenic evolution of the Ely Greenstone Formation, Vermilion District, NE Minnesota. Geological Association of Canada - Mineralogical Association of Canada, Abstracts & Program, 35: 59.

**Lodge, RWD**, Gibson, HL, Stott, GM (2011). Comparing the volcanology and geochemistry of the Neoarchean VMS-endowed and VMS-deprived greenstone belts in the Wawa Subprovince of the Superior Craton. Geological Society of America, Abstracts with Programs, 43(5): 489.

**Lodge, RWD**,Lescinsky, DT (2006). Characterization of sheet fracture patterns in polygonal-jointed lavas at Kokostick Butte, OR, and Mazama Ridge, WA: investigation and interpretation of their formation and significance. EOS Transaction, American Geophysical Union, 87(52), Fall Meeting Program, Abstract # V53C-1763.

Van Wagoner, NA, **Lodge, RWD**, Dadd, KA (2005). Comparative volcanology of the Silurian Passamaquoddy Bay subbelt, Maine and New Brunswick: Implications for correlation and volcanic setting. Geological Association of Canada – Mineralogical Association of Canada, Abstracts & Program, 30: 199-200.

**Lodge, RWD**, Van Wagoner, NA, Dadd, KA (2005). Phreatomagmatism of the Silurian Passamaquoddy Bay subbelt, Maine and New Brunswick. Atlantic Geology, 41: 70.

**Lodge, RWD** (2004). Volcanism of the Silurian Eastport Formation, Maine, U.S.A. Atlantic Geology, 40: 259-260.

Van Wagoner, NA, **Lodge, RWD**, Dadd, KA (2004). Controls on maar volcanism: Evidence from sills and dykes of the Silurian Eastport Formation. Occasional Papers of the Geological Institute of Hungary. 203: 99.

***Government Publications***

Etienne, M, Ma, C, and **Lodge, RWD** (2019) Preliminary results of metallogenic investigation of felsic-dominated supracrustal assemblages in the Sturgeon Lake Greenstone Belt, Western Wabigoon Subprovince. Summary of Field Work and Other Activities, Ontario Geological Survey Open File Report 6260.

**Lodge, RWD**, Ma, C, Etienne, M, Nelson, TJ, Chandler, MD, Brock, NM (2019) Geologic Overview and petrogenetic history of the Sturgeon Lake Transect, Western Wabigoon. Summary of Field Work and Other Activities, Ontario Geological Survey Open File Report 6260.

Ma, C, **Lodge, RWD**, and Etienne, M (2019) Variation of structures along the Metal Earth Sturgeon transect in the Winnipeg River terrane and the western Wabigoon subprovince, Superior craton. Summary of Field Work and Other Activities, Ontario Geological Survey Open File Report 6260.

Hinz, SLK, Hollings, P, **Lodge, RWD** (2019) Geochemical data for ultramafic metavolcanics rocks in the eastern portion of the Shebandowan greenstone belt, northwestern Ontario. Ontario Geological Survey, Miscellaneous Release-Data 374.

Hinz, SLK, Hollings, P, **Lodge, RWD**, Olson, MJ, Helmuth, SL (2016). Preliminary geology of the Bateman trenches area and macroscopic textures of the ultramafic rocks in the eastern Part of the Shebandowan greenstone belt, northwestern Ontario. Ontario Geologic Survey, Summary of Field work and Other Activities, Open File Report 6323, pp. 13-1 to 13.9.

Gélinas, BR**, Lodge, RWD,** Gibson, HL (2016). Characterization of the Mineralization and Alteration at Tower Mountain, Conmee Township, Shebandowan Greenstone Belt, Ontario Ontario Geological Survey, Miscellaneous Release - Data 330

**Lodge, RWD** (2015). Geochemistry of Neoarchean volcanic and intrusive rocks in Aldina Township, northwestern Ontario. Ontario Geological Survey, Miscellaneous Release – Data 315.

**Lodge, RWD** (2014). Precambrian geology of Aldina Township. Ontario Geological Survey, Preliminary Map 3776, scale 1:20,000.

**Lodge, RWD**, Ratcliffe, LM, Walker, JA (2014). Geology and Mineral Potential of Sackville and Conmee Townships, Wawa Subprovince. Ontario Geological Survey, Summary of Field Work and Other Activities, Open File Report 6300, pp. 9-1 to 9-17.

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**UW-Eau Claire Service**

* University Senate (2022-present)
* Environmental Education Advisory Committee (2022-present)
* DPC Chair, Department of Geology & Environmental Science (2022-present)
* IAS Search Chair, Department of Geology & Environmental Science (2021-2022)
* Field Camp Coordinator, Department of Geology and Environmental Science (2020-present)
* Faculty Advisor, University of Wisconsin-Eau Claire Geology Club (2016-present)

**Professional Service**

* Conference Organizer, 2023 Institute of Lake Superior Geology, Eau Clare, WI
* Session Chair, 2023 National Council for Undergraduate Research, Eau Claire, WI
* Session Chair, 2020 Northcentral Geological Society of America Meeting, Duluth, MN
* Invited Fieldtrip Leader, “Geology of Winston Lake VMS Mine”, Institute of Lake Superior Geology, Terrace Bay, Ontario, Canada
* Invited Seminar Speaker
* “Ask A Scientist” Public Lecture Series, Eau Claire, WI
* UW-Eau Claire Faculty Forum Series
* UW-Eau Claire Geology Seminar Series
* WPR
* “Mining 101” Public Symposium for Wisconsin Counties Association
* University of Minnesota-Duluth
* Colorado School of Mines
* Memorial University of Newfoundland
* Minnesota Geological Survey
* Mesabi Range Geological Society
* Session Chair, 2016 Institute of Lake Superior Geology Annual Meeting, Duluth, MN
* Student Poster Judge, 2015 Northcentral Geological Society of America Meeting, Madison, WI
* Committee Member, Cyclical Review of Earth Science Graduate Program at Laurentian University
* Reviewer
* Journal of Volcanology and Geothermal Research
* Geochimica et Cosmochimica Acta
* Minerals
* Precambrian Research
* International Journal of Earth Science
* Mapping Leader, Student-Industry Mineral Exploration Workshop, PDAC, Sudbury

**Active Professional Affiliations**

* Society of Economic Geologists
* Institute of Lake Superior Geology
* Prospectors & Developers Association of Canada
* Geological Society of America
* Mesabi Range Geological Society
* Association of Professional Geoscientists of Ontario