

C.V.

Christina M. Neudorf, PhD

Assistant Research Professor
Division of Earth and Ecosystem Sciences
Desert Research Institute
2215 Raggio Parkway
Reno, Nevada 89512-1095
Phone: +1 775-673-7407
E-mail: Christina.Neudorf@dri.edu

EDUCATION

2008-2012 PhD, School of Earth and Environmental Sciences, University of Wollongong, Australia
2005-2008 MSc, Department of Geography, Simon Fraser University, Canada
2000-2005 BSc, High Honours, Department of Geography, University of Saskatchewan, Canada

EMPLOYMENT

07/2020-present Assistant Research Professor, Desert Research Institute, Reno, NV, USA
07/2018 – 06/2020 Research Scientist and Laboratory Manager, Desert Research Institute, Reno, NV, USA
09/2016 – 05/2018 Research Associate, University of the Fraser Valley, Abbotsford, Canada
01-2013 – 04/2018 Sessional Instructor, Department of Geography, Simon Fraser University
09/2012 – 09/2016 Postdoctoral Research Fellow, University of the Fraser Valley, Abbotsford, Canada

SERVICE

06-2017 – present Secretary-Treasurer of the Canadian Geomorphology Research Group (CGRG) of the Canadian Association of Geographers (CAG)

2014 – present Reviewer for the following journals:
Aeolian Research
Radiation Measurements
Quaternary Geochronology
Quaternary Science Reviews
Journal of Human Evolution
Northwest Science
Geomorphology

EXTERNAL FUNDING

Sept. 2019 – “Developing luminescence dating methods to better understand people through time and place in Lincoln County, Nevada” – PI: T. Wriston, Co-PIs: **C. Neudorf (lead author)**, A. Keen-Zebert, M. Collins. Lincoln County Archaeological Initiative Round 12. \$230,598 (Funded).

INTERNAL COMPETITIVE GRANTS

Sept. 2019 – “FY2020 and FY2021 Early Career Capacity Building Fund Request”. PI: **C. Neudorf**. \$14,253 (Funded).

Oct. 2019 – “A Pilot Project to explore the feasibility of dating rock surfaces and carbonate deposits using luminescence dating.” – PI: **C. Neudorf**. Institute Project Assignment, DRI. \$15,323 (Funded).

PUBLICATIONS

Cheng, F., Zuza, A.V., Haproff, P.J., Wu, C., **Neudorf, C.**, Chang, H., Li, Xiangzhong, Li, Bing, Li., (2020). Accommodation of India-Asia convergence via strike-slip faulting and block rotation in the Qilian Shan fold thrust belt, northern margin of the Tibetan Plateau. *Journal of the Geological Society*, doi: <https://doi.org/10.1144/jgs2020-207>.

McIntosh, P., **Neudorf, C.**, Lian, O.B., Slee, A.J., Walker, B., Eberhard, R., Doyle, R., Price, D.M., Dixon, G. (2020). Quaternary and early Holocene aeolian deposits of Tasmania and their climatic implications. *Quaternary Research*, 1–24.

Clarkson, C., Harris, C., Bo, L., **Neudorf, C.M.**, Roberts, R., Lane, C., Norman, K., Pal, J., Jones, S., Shipton, C., Koshy, J., Boivin, N., Petraglia, M. (2020). Human occupation of northern India spans the Toba super-eruption ~74,000 years ago. *Nature Communications* 11 (961), <https://doi.org/10.1038/s41467-020-14668-4>.

Rice, J.M., Martin, R., Paulen, R.C., Kelley, S.E., Briner, J.P., **Neudorf, C.M.**, Lian, O.B. (2019). Refining the ice flow chronology and subglacial dynamics of the migrating Ancestral Labrador Divide, central Quebec with age constraints on deglaciation. *Journal of Quaternary Science* 34, 519–535.

Davis, L.G., Madsen, D.B., Valdivia, L.B., Higham, T., Sisson, D.A., Skinner, S.M., Stueber, D., Nyers, A.J., Keen-Zebert, A., **Neudorf, C.M.**, Cheyney, M., Izuho, M., Iizuka, F., Burns, S.R., Epps, C.W., Willis, S.C., Buvit, I. (2019). Late Upper Paleolithic occupation at Cooper's Ferry, Idaho, USA shows Americas settled before ~16,000 years ago. *Science* 365, 891–897.

Neudorf, C.M., Lian, O.B., McIntosh, P.D., Gingerich, T.B., Augustinus, P.C. (2019). Investigation into the OSL and TT-OSL signal characteristics of ancient (≥ 100 ka) Tasmanian aeolian quartz and its utility as a geochronometer for understanding long-term climate-driven landscape change. *Quaternary Geochronology* 53, 101005.

Smith, N.F., Lepofsky, D., Toniello, G., Holmes, K., Wilson, L., **Neudorf, C.M.**, Roberts, C. (2019). 3500 years of shellfish mariculture on the northwest coast of North America. *PLoS ONE* 14(2), e0211194.

Hagedorn, G.W., Paulen, R.C., Smith, R.I., Ross, M., **Neudorf, C.M.**, Lian, O.B. (2019). Chapter 3: Surficial Geology Constraints on Laurentide Ice Sheet Reconstructions in the Southern Northwest Territories. In: Paulen, R.C., Smith, I.R., Day, S.J.A. (Eds). GEM-2 Southern Mackenzie Surficial activity 2018 report: surficial geology and heavy mineral studies in southern Northwest Territories. Geological Survey of Canada Open File 8477. 73 pp.

Wolfe, S.A., Morse, P.D., **Neudorf C.M.**, Kokelj, S.V., Lian, O.B., O'Neill, B.H. (2018). Paleoenvironmental implications of contemporary sand wedge development in seasonally frozen ground, southern Northwest Territories, Canada. *Geomorphology* 308, 215-229.

Eamer, J.B.R., Shugar, D.H., Walker, I.J., **Neudorf, C.M.**, Lian, O.B., Eamer, J.L., Bryce, J., Biln, L. (2018). Late Quaternary landscape evolution in a region of stable post-glacial relative sea-levels, British Columbia central coast. *Boreas* 47, 738-753.

Eamer, J.B.R., Shugar, D.H., Walker, I.J., Lian, O.B., **Neudorf, C.M.**, Telka, A.M. (2017). A unique Late Pleistocene glacial re-advance during retreat of the Cordilleran Ice Sheet. *Quaternary Research* 87, 468–481.

Neudorf, C.M., Smith, N., Lepofsky, D., Toniello, G., Lian O.B. (2017). Between a rock and a soft place: Using optical ages to date ancient clam gardens on the Pacific Northwest. *PLoS ONE* 12, e0171775.

Eamer, J.B.R., Shugar, D.H., Walker, I.J., Lian, O.B., **Neudorf, C.M.** (2017). Distinguishing depositional setting for sandy deposits in coastal landscapes using grain shape. *Journal of Sedimentary Research* 87, 1–11.

Neudorf, C.M., Brennand, T.A., Lian, O.B. (2015). Comparisons between macro- and microfabrics in a pebble-rich, sandy till deposited by the Cordilleran Ice Sheet. *Boreas* 42, 848–875.

Neudorf, C.M., Lian, O. B., Walker, I.J., Shugar, D.H., Eamer, J.E., Griffin, L.C.M. (2015). Toward a luminescence chronology for coastal dune and beach deposits on Calvert Island, British Columbia central coast, Canada. *Quaternary Geochronology* 30, 275–281.

McLaren, D., Fedje, D., Hay, M., Mackie, Q., Walker, I.J., Shugar, D.H., Eamer, J., Lian, O.B., **Neudorf, C.** (2014). A post-glacial Sea Level Hinge on the Central Pacific Coast of Canada. *Quaternary Science Reviews* 97, 148–169.

Shugar, D.H., Walker, I.J., Lian, O.B., Eamer, J.E., **Neudorf, C.M.**, McLaren, D., Fedje, D. (2014). Post-glacial sea level change along the Pacific coast of North America. *Quaternary Science Reviews* 97, 170–192.

Neudorf, C.M., Roberts, R.G., Jacobs, Z. (2014). Assessing the time of final deposition of Youngest Toba Tuff deposits in the Middle Son Valley, India — a luminescence approach using multiple methods. *Palaeogeography, Palaeoclimatology, Palaeoecology* 399, 127–139.

Neudorf, C.M., Roberts, R.G., Jacobs, Z. (2014). Testing the model of alluvial deposition in the Middle Son Valley, India using new field observations and IRSL ages. *Quaternary Science Reviews* 89, 56–69.

Neudorf, C.M., Brennand, T.A., Lian, O.B. (2013). Till forming processes beneath parts of the Cordilleran Ice Sheet, British Columbia, Canada: Macroscale and microscale evidence and a new statistical technique for analyzing microstructure data. *Boreas* 42, 848–875.

Neudorf, C.M., Roberts, R.G., Jacobs, Z. (2012). Sources of overdispersion in a K-rich feldspar sample from north-central India: insights from D_e , K content and IRSL age distributions for individual grains. *Radiation Measurements* 47, 696–702.

Eren, I.M., Durant, A., **Neudorf, C.M.**, Haslam, M., Shipton, C., Bora, J., Korisettar, R., Petraglia, M. (2010). Experimental examination of animal trampling effects on artifact movement in dry and water saturated substrates: a test case from South India. *Journal of Archaeological Science* 37, 3010–3021.

CONFERENCE ORAL PRESENTATIONS (*presenting author)

Stone, M.*, Doran, P., Keen-Zebert, A., **Neudorf, C.**, Goehring, B. (2020). Historic lake level changes in lower Taylor Valley, Antarctica. 2020 McMurdo Dry Valleys LTER Meeting, July 28, 2020.

Neudorf, C.M., Quinn, D., Keen-Zebert, A.* (2019). SPARROW – An open-source laboratory information management system focused on geochronology. 13th New World Luminescence Dating Workshop (NWLDW), Aug. 5-7, Urbana-Champaign, IL, USA.

Lian, O.B.*, Wolfe, S.A., **Neudorf, C.M.**, Hickin, A.S., Gingerich, T.B. (2019). Optical dating of eolian landforms using quartz in British Columbia and western Alberta, Canada – challenges and opportunities. Geological Society of America Meeting, Sept. 22-25, Phoenix, AZ, USA.

Neudorf, C.M.*, Lian, O.B., McIntosh, P.D., Augustinus, P.C., Gingerich, T.B. (2018). OSL and TT-OSL age estimates from ancient (up to ≥ 100 ka) Tasmanian aeolian quartz: a valuable geochronometer for understanding long-term, climate-driven landscape change. CANQUA-AMQUA 2018 Meeting, Aug. 7-11, Ottawa, Canada.

Wolfe, S.A.*, Morse, P.D., **Neudorf, C.M.**, Kokelj, S.V., Lian, O.B., O'Neill, B.H. (2018). Contemporary sand wedge development in eolian settings of seasonally frozen ground. CANQUA-AMQUA 2018 Meeting, Aug. 7-11, Ottawa, Canada.

Gingerich, T.B.*, Lian, O.B., **Neudorf, C.M.**, Biln, L.C.M., Bryce, J.K. (2018). Optical dating of the postglacial marine regression and onset of aeolian deposition, Savary Island, British Columbia. CANQUA-AMQUA 2018 Meeting, Aug. 7-11, Ottawa, Canada.

Neudorf, C.M.*, Lian, O.B., Biln, L.C.M., Bryce, J.K., Eamer, J.B.R., Smith, N., Shugar, D.H., Walker, I.J., Clague, J.J. (2017). Optical dating sediments from coastal British Columbia: successes, challenges, and plans for the future. Geological Society of America Abstracts with Programs, vol 9, no. 6.

Smith, N.*, Augustine, S., Holmes, K., Lepofsky, D., **Neudorf, C.**, Puckett, M., Roberts, C., Rowell, K., Salomon, A., Toniello, G., Wilson, L. (2017). Ancient Mariculture in British Columbia: Documenting the Past for the Future, Part 2. The 40th Annual Conference of the Society of Ethnobiology, May 10-13, Montreal, QC, Canada.

Smith, N.*, Augustine, S., Lepofsky, D., **Neudorf, C.**, Holmes, K. (2017). Clam Gardens: Ancient and Living Landscapes in the Salish Sea. Society for American Archaeology 82nd Annual Meeting, Mar. 29-Apr. 2, Vancouver, BC, Canada.

Wolfe, S.A.*, Morse, P.D., Kokelj, S.V., **Neudorf, C.M.**, Lian, O.B. (2015). Contrasting environments of sand wedge formation in discontinuous permafrost, Great Slave High Boreal Plains, Northwest Territories, Canada. XI. International Conference on Permafrost 2015, Jun. 20-24, Potsdam, Germany.

Neudorf, C.M.*, Smith, N., Lepofsky, D., Toniello, G., Lian, O.B. (2015). Toward a chronology for clam garden construction on Quadra Island, BC. Hakai 2015 Research Exchange, Oct. 15th, Nanaimo, BC, Canada.

Bryce, J., **Neudorf, C.M.***, Griffin, L., Lian O.B., Walker, I.J., Shugar, D., Eamer, J. (2015). The origin of mysterious organic mats in the beaches of Calvert Island, BC central coast. Hakai 2015 Research Exchange, Oct. 15th, Nanaimo, BC, Canada.

Eamer, J.B.R.* , Shugar, D.H., Walker, I.J., Lian, O.B., **Neudorf, C.M.** (2015). 15,000 years of landscape change on northwest Calvert Island. Hakai 2015 Research Exchange, Oct. 15th, Nanaimo, BC, Canada.

Neudorf, C.M.*, Smith, N., Lepofsky, D., Toniello, G., Lian, O.B. (2015). Toward a chronology for clam garden construction on Quadra Island, BC. CANQUA CGRG 2015 Biennial Meeting, Aug. 16-19, St. John's, NL, Canada.

Neudorf, C.M.*, Lian, O.B., Lepofsky, D., Smith, N. (2014). Toward a chronology for clam garden construction on Quadra Island, BC. Hakai 2014 Research Exchange, Oct. 24th, Sidney, BC, Canada.

Shugar, D.*, Walker, I.J., Lian, O.B., Eamer, J.B.R., **Neudorf, C.**, McLaren, D., Fedje, D. (2014). The past 18,000 years of sea level change in Pacific North America. GSA Annual Meeting 2014, Oct. 19-22, Vancouver, BC, Canada.

Eamer, J.* , Shugar, D., Walker, I. J., Lian, O. B., **Neudorf, C. M.**, Telka, A. M. (2014). A late Pleistocene glacial re-advance during retreat of the Cordilleran Ice Sheet on the central coast of British Columbia. GSA Annual Meeting 2014, Oct. 19-22, Vancouver, BC, Canada.

Neudorf, C.M.*, Lian, O.B., Mackovick, B., Griffin, L., Bryce, J., Walker, I.J., Shugar, D.H., Eamer, J. (2014). Optical ages and luminescence characteristics of quartz and feldspar from Calvert Island, British Columbia central coast, Canada. Western Division of the Canadian Association of Geographers 2014 Conference, Mar. 7-8, Victoria, BC, Canada.

Griffin, L.* , **Neudorf, C.M.**, Lian, O.B., Walker, I.J., Shugar, D.H., Eamer, J. (2014). Illustrating the importance of using multiple dating methods on Calvert Island, British Columbia. Western Division of the Canadian Association of Geographers 2014 Conference, Mar. 7-8, Victoria, BC, Canada.

Shugar, D.H.* , Walker, I.J., Lian, O.B., Eamer, J., **Neudorf, C.M.**, McLaren, D., Fedje, D. (2014). 20,000 years of

sea level fluctuations in Pacific North America. Western Division of the Canadian Association of Geographers 2014 Conference, Mar. 7-8, Victoria, BC, Canada.

Eamer, J.*, Walker, I.J., Lian, O.B., Shugar, D.H., **Neudorf, C.M.** (2014). Toward a late Pleistocene and Holocene geomorphic history of Calvert Island. Western Division of the Canadian Association of Geographers 2014 Conference, Mar. 7-8, Victoria, BC, Canada.

Neudorf, C.M.*, Lian, O.B., Walker, I.J., Shugar, D. H., Eamer, J. (2013). Optical ages for stabilized coastal dune and beach deposits, northern Calvert Island, British Columbia central coast, Canada. Hakai 2013 Research Exchange, Dec. 9th, Vancouver, BC, Canada.

Eamer, J.*, Walker, I.J., Shugar, D.H., Lian, O.B., **Neudorf, C.M.** (2013). Late Pleistocene and Holocene geomorphic history of Calvert Island – Project Update. Hakai 2013 Research Exchange, Dec. 9th, Vancouver, BC, Canada.

Neudorf, C.M.*, Lian, O.B., Walker, I.J., Shugar, D. H., Eamer, J. (2013). Optical ages for stabilized coastal dune and beach deposits, northern Calvert Island, British Columbia central coast, Canada. CANQUA CGRG 2013 Biennial Meeting, Aug. 18-22, Edmonton, AB, Canada.

Shugar, D.,* Walker, I.J., Lian, O. B., Eamer, J., **Neudorf, C. M.** (2013). Post-glacial relative sea-levels in Western North America. CANQUA CGRG 2013 Biennial Meeting, Aug. 18-22, Edmonton, AB, Canada.

Eamer, J.*, Walker, I.J., Shugar, D.H., Lian, O.B., **Neudorf, C.M.** (2013). Initial exploration of the late Quaternary evolution of Calvert Island, central coast, British Columbia. CANQUA CGRG 2013 Biennial Meeting, Aug. 18-22, Edmonton, AB, Canada.

Neudorf, C.M.*, Lian, O.B. (2012). Towards a chronology for Holocene relative sea level change on Calvert Island using luminescence dating. An Update: Community Engaged Research Science in a Social Context, Hakai Network for Coastal People Ecosystems and Management, Dec. 4th, Burnaby, BC, Canada.

Neudorf, C.M.*, Roberts, R.G., Jacobs, Z., Petraglia, M.D., Pal, J.N. (2011). Assessing the time of final deposition of a Youngest Toba Tuff deposit in the Middle Son Valley, India – a luminescence approach using multiple methods. XVIII INQUA-Congress 2011, July 21-27, Bern, Switzerland. *Quaternary International* 279-280, 349–350.

Neudorf, C.M.*, Roberts, R.G., Jacobs, Z. (2011). Investigating the potential for luminescence dating of individual K-rich feldspar grains using an IR (830 nm) laser. 13th International Conference on Luminescence and Electron Spin Resonance Dating 2011, July 10-14, Toruń, Poland.

Neudorf, C.M.*, Brennand, T.A., Lian, O.B. (2007). Depositional environments of the last Cordilleran Ice Sheet, British Columbia: Investigating the link between macro- and micro- scales of observation. CANQUA 2007, June 4-8, Ottawa, ON, Canada.

Neudorf, C.M.*, Brennand, T.A., Lian, O.B. (2007). Subglacial processes inferred from basal tills and the relationship between macro- and micro- scales of observation. *Abstracts with Programs – Geological Society of America* 39(4), 64 pp.

Brennand, T.A.*, Lesemann, J.-E., Sjogren, D.B., **Neudorf, C.M.** (2007). Testing hypotheses of drumlin genesis against observations from a drumlin swarm on the Thompson Plateau, British Columbia, Canada. EGU 2007, Apr. 15-20, Vienna, Austria.

Fortier, G.F.*, Smith, R.C., Sjogren, D.B., **Neudorf, C.M.** (2004). Interpretation of glaciotectonized sediment at Travers Reservoir, southern Alberta, Canada: an integrated geophysical and geomorphological approach. *Abstracts with Programs – Geological Society of America* 36(5), 172 pp.

CONFERENCE POSTER PRESENTATIONS (*presenting author)

Hagedorn, G.W.*, Ross, M., Paulen, R.C., Smith, I.R., **Neudorf, C.M.**, Gingerich, T., Lian, O.B. (2019). Towards a new glacial geology framework supporting geoscience applications in the Southwestern Great Slave Lake area. 47th Annual Yellowknife Geoscience Forum, November 19-21, Yellowknife, NT, Canada.

Hagedorn, G.W.*, Ross, M., Paulen, R.C., Smith, I.R., **Neudorf, C.M.**, Gingerich, T., Lian, O.B. (2019). Ice-flow and deglacial history of the Laurentide Ice Sheet in the Southwestern Great Slave Lake Area. GAC-MAC-IAH/CNC 2019, May 12-15, Quebec City, QC, Canada.

Gingerich, T.*, Lian, O.B., Biln, L., **Neudorf, C.M.**, Bryce, J. (2019). Postglacial landscape adjustment driven by relative sea level changes and climatic variation, Savary Island, British Columbia. INQUA Congress 2019, July 25-31, 2019, Dublin, Ireland.

Gingerich, T.*, Lian, O.B., **Neudorf, C.M.**, Biln, L., Bryce, J. (2018). Sandy beaches and shifting seas: Postglacial sea level change on Savary Island, B.C. University of the Fraser Valley Student Research Day, Apr. 5, 2018.

Rice, J.M.*, Ross, M.A., Paulen, R.C., McClenaghan, M.B., **Neudorf C.M.**, Lian, O.B. (2017). Glacial dynamics of the Quebec-Laborador sector of the Laurentide Ice Sheet in northcentral Quebec/Laborador. QS1. Processes and Deposits: Advances and Applications, 2017 Annual Meeting of the GAC/MAC, May 14-18, Kingston, ON, Canada.

Neudorf, C.M.*, Smith, N., Lepofsky, D., Toniello, G., Lian, O.B. (2017). Between a Rock and a Soft Place: Using Optical Ages to Date Ancient Clam Gardens on the Pacific Northwest. Society for American Archaeology 82nd Annual Meeting, Mar. 29-Apr. 2, Vancouver, BC, Canada.

Griffin, L.C.M.*, Lian, O.B., Ward, B.C., Clague, J.J., **Neudorf, C.M.**, Bryce, J.K. (2016). Postglacial landscape evolution of aeolian landforms, Savary Island, British Columbia. Hakai 2016 Research Exchange, Nov. 29, Nanaimo, BC, Canada.

Smith, N.F.*, Lepofsky, D., **Neudorf, C.M.**, Toniello, G., Wilson, L., Roberts, C. (2016). Quadra Island Clam Gardens: Archaeological Results from 2016. Hakai 2016 Research Exchange, Nov. 29, Nanaimo, BC, Canada.

Jorge, M.*, Brennand, T.A., Perkins, A.J., **Neudorf, C.**, Hillier, J.K., Cripps, J.E., Spagnolo, M., Dinney, M., Storrar, R.D. (2016). Reliability of drumlin morphometric data based on manual mapping – assessment of inter-mapper differences using a morphometrically diverse sample of relict drumlins. *Geophysical Research Abstracts* 18, 2016 EGU General Assembly, Apr. 17-22, Vienna, Austria.

Lian, O.B.*, **Neudorf, C.M.*** (2016). Optical dating. #BCTechSummit 2016, Jan. 18-19, Vancouver, BC, Canada.

Griffin, L.C.M.*, Lian, O.B., Clague, J.J., Ward, B.C., **Neudorf, C.M.**, Bryce, J.K. (2015). Postglacial landscape evolution of aeolian landforms, Savary Island, British Columbia. Hakai 2015 Research Exchange, Oct. 15th, Nanaimo, BC, Canada.

Neudorf, C.M.*, Brennand, T.A., Lian, O.B. (2015). Comparisons between macro- and microfabrics in a pebble-rich, sandy till deposited by the Cordilleran Ice Sheet. CANQUA CGRG 2015 Biennial Meeting, Aug. 16-19, St. John's, NL, Canada.

Griffin, L.*, Lian, O.B., Clague, J.J., Ward, B.C., **Neudorf, C.M.**, Bryce, J.K. (2015). Postglacial landscape evolution of aeolian landforms, Savary Island, British Columbia. CANQUA CGRG 2015 Biennial Meeting, Aug. 16-19, St. John's, NL, Canada.

Bryce, J.K.*, Griffin, L.C.M., **Neudorf, C.M.**, Lian, O.B., Walker, I.J., Eamer, J.B.R., Shugar, D.H. (2015). Radiocarbon and optical ages of organic deposits buried in beaches of Calvert Island, central coast British Columbia, and their implication for the genesis of the deposits. CANQUA CGRG 2015 Biennial Meeting, Aug. 16-19, St. John's, NL, Canada.

Bryce, J.K. *, **Neudorf, C.M.**, Griffin, L., Lian, O.B., Walker, I.J., Shugar, D.H., Eamer, J. (2015). The origin of mysterious organic mats in the beaches of Calvert Island, BC central coast. University of the Fraser Valley Student Research Day, Apr. 8th, Abbotsford, BC, Canada.

Griffin, L.*, **Neudorf, C.M.**, Lian, O.B., Walker, I.J., Shugar, D.H., Eamer, J. (2015). Illustrating the importance of using multiple dating proxies on Calvert Island, British Columbia. Western Division of the Canadian Association of Geographers (WDCAG) 2015 Conference, Mar. 13-14, Prince George, BC, Canada.

Shugar, D.H.*, McLaren, D., Walker, I.J., Lian, O.B., Eamer, J., **Neudorf, C.M.**, Fedje, D. (2014). Post-glacial sea levels in Pacific North America — Hinge zones and human occupation. American Quaternary Association's 23rd Biannual Meeting, August 7-10, Seattle, WA, USA.

Neudorf, C.M.*, O.B. Lian, Walker, I.J., Shugar, D.H., Eamer, J. (2014). Optical age information for coastal deposits on Calvert Island, British Columbia central coast, Canada. 14th International Conference on Luminescence and Electron Spin Resonance Dating, July 7-11, Montreal, QC, Canada. Book of Abstracts, p. 148.

Shugar, D.H.*, Walker, I.J., Lian, O.B., Eamer, J., **Neudorf, C.M.** (2013). Relative sea-level fluctuations since deglaciation in western North America. American Geophysical Union Fall 2013 Meeting, Dec. 9-13, San Francisco, CA, USA.

Neudorf, C.M.*, Brennand, T.A., Lian, O.B. (2013). Till-forming processes beneath parts of the Cordilleran Ice Sheet, British Columbia, Canada: Macroscale and microscale evidence and a new statistical technique for analyzing microstructure data. CANQUA CGRG 2013 Biennial Meeting, Aug. 18-22, Edmonton, AB, Canada.

Eren, I.M.*, Durant, A., **Neudorf, C.M.**, Haslam, M., Shipton, C., Bora, J., Korisettar, R., Petraglia, M. (2010). An experimental examination of animal trampling in dry and saturated substrates, Kurnool District, Andhra Pradesh, South India. Society for American Archaeology 2010 Meeting, Apr. 14-18, St Louis, MO, USA. **(Collaborative research during PhD program and winner of the SAA Student Poster Award)**

Neudorf, C.M.*, Fenwick, J., Roberts, R.G., Jacobs, Z., Petraglia, M., Pal, J.N. (2009). Prehistory in Ash and Alluvium: archaeology, geomorphology, and geochronology of the Middle Son Valley, India. 2nd Asia-Pacific Conference on Luminescence and Electron Spin Resonance Dating, Nov. 12-15, Ahmedabad, India.

REPORTS

Neudorf, C., Keen-Zebert, A. (2021). Luminescence dating of sediment from Christmas Hills, Tasmania, Australia. 21 pp.

Neudorf, C., Keen-Zebert, A. (2020). Luminescence dating of sediment from New Jersey Pine Barrens Dunes. 20 pp.

Neudorf, C., Keen-Zebert, A., (2020). Luminescence dating of sediment for the Grass Valley Paleo Project (sample Iny-49-2-2). 14 pp.

Neudorf, C., Keen-Zebert, A., (2020). Luminescence dating of sediment from North Tibet. DRI Project Report

(samples RF001 and RF002). 14 pp.

Neudorf, C., (2020). A pilot project to explore the feasibility of dating rock surfaces and carbonate deposits using luminescence dating. Institute Project Assignment Report, Desert Research Institute, 66 pp.

Neudorf, C., Keen-Zebert, A. (2020). Luminescence dating of sediment from Hawksy Walksy. DRI Project Report (samples HWV003-006). 16 pp.

Neudorf, C., Keen-Zebert, A. (2020). Luminescence dating of sediment from Greers Ferry Lake. DRI Project Report (samples GFL001-008). 20 pp.

Neudorf, C., Keen-Zebert, A. (2020). Luminescence dating of sediment from Pee Dee Quarry. DRI Project Report (samples PDQ001-004). 16 pp.

Neudorf, C., Keen-Zebert, A. (2020). Luminescence dating of sediment from Rub Al Khali. DRI Project Report (samples RAK008, RAK014-016). 16 pp.

Neudorf, C., Keen-Zebert, A. (2020). Luminescence dating of sediment from Snake River (Idaho Power Project). DRI Project Report (samples IDP005-010). 18 pp.

Neudorf, C., Keen-Zebert, A. (2020). Luminescence dating of sediment from China Lake. DRI Project Report (samples NAWSCL-N & S). 14 pp.

Neudorf, C., Keen-Zebert, A. (2019). Luminescence dating of sediment from Rub Al Khali. DRI Project Report (samples RAK001, -003, -005, -007). 16 pp.

Neudorf, C., Keen-Zebert, A. (2019). Luminescence dating of sediment for the LCAI Desert Dust Projects. DRI Project Report. 21 pp.

Neudorf, C., Keen-Zebert, A. (2019). Luminescence dating of sediment for the Distal ORB Project. DRI Project Report. 14 pp.

Neudorf, C., Keen-Zebert, A. (2019). Luminescence dating of sediment from the Snake River Valley, ID. DRI Project Report. 17 pp.

Neudorf, C., Keen-Zebert, A. (2019). Luminescence dating of sediment from Hawksy Walksy Valley, OR (samples HWV001-002). DRI Project Report. 15 pp.

Neudorf, C., Keen-Zebert, A. (2019). Luminescence dating of sediment for the Grass Valley Paleo Project. DRI Project Report. 16 pp.

Neudorf, C., Keen-Zebert, A. (2019). Luminescence dating of sediment for the Grass Valley Archaeological Project. DRI Project Report. 14 pp.

Neudorf, C.M., Lian, O.B. (2018). Optical ages, sample preparation and measurement procedures for 17-SUV samples. To Roger C. Paulen, Natural Resources Canada, Ottawa, Canada.

Neudorf, C.M., Lian, O.B. (2017). Optical ages, sample preparation and measurement procedures for WSSK samples, collected from 106N 90E. To Prof. Alec Aitken and Aurora Bowers, Department of Geography, University of Saskatchewan, 10 pp.

Neudorf, C.M., Lian, O.B. (2017). Optical ages, sample preparation and measurement procedures for PTA(R) samples. To Roger C. Paulen, Natural Resources Canada, Ottawa, Canada, 7 pp.

Neudorf, C.M., Lian, O.B. (2017). Report on optical dating of samples TRRP-1S and TRRP-1N. To Dr. Thomas Raab, Brandenburg University of Technology, Cottbus–Senftenberg, Germany, 7 pp.

Neudorf, C.M., Lian, O.B. (2017). Luminescence measurements of samples from Point Rosee, NL (collected Aug. 2016). To Drs Gregory Mumford and Sarah Parcak, University of Alabama at Birmingham, USA, 11 pp.

Neudorf, C.M. (2016). Optical dating sample preparation and measurement procedures for 15PTA samples. To Roger C. Paulen, Natural Resources Canada, Ottawa, Canada, 6 pp.

Neudorf, C.M. (2016). Point Rosee, NL field observations, August 2016. To Drs Gregory Mumford and Sarah Parcak, University of Alabama at Birmingham, USA, 12 pp.

Neudorf, C.M. (2016). Hakai Research Report for 2015. To Dr. Dana Lepofsky, Department of Archaeology, Simon Fraser University, Canada, 10 pp.

Neudorf, C.M. (2015). Optical dating and sample preparation and measurement of SAW12 samples. To Dr. Stephen A. Wolfe, Geological Survey of Canada, Canada, 12 pp.

Neudorf, C.M. (2014). Status report on optical dating of samples from NW Calvert Island, June 13th, 2014. To the Hakai Beach Institute, Canada, 40 pp.

Neudorf, C.M. (2013). Status report on optical dating of samples from NW Calvert Island, Dec. 2nd, 2013. To Profs Olav Lian, Luminescence Dating Lab, University of the Fraser Valley and Ian Walker, Coastal Erosion & Dune Dynamics Lab, University of Victoria, Canada, 25 pp.

Neudorf, C.M. (2009). Kurnool Field Report, Jan.-Feb. 2009 Field Season. Submitted to Dr. Michael Haslam, Project Coordinator, Cambridge University, England, 51 pp.

TEACHING AND MENTORSHIP

01/2019-present – Providing training in luminescence dating for:

- Michael Stone (current PhD student, Louisiana State University)
- Conni De Masi Castillo (current PhD student, University Nevada, Reno)
- Abbey Marcott (current MSc student, Kansas State University)
- Abigail Langston (visiting scholar to DRI, Assistant Professor, Kansas State University)
- Nina Ataee (former MSc student, Kansas State University)
- Colin Chupick (former MSc student, University of Nevada, Reno)

2015-present – Served as a reference for undergraduate students and early career scientists applying for positions/programs locally and overseas (e.g., Simon Fraser University, University College of London, Stony Brook University, SUNY Oneonta).

01/2018-04/2018 – Geog. 213, Geomorphology. Simon Fraser University

01/2017-04/2017 – Geog. 213, Geomorphology. Simon Fraser University

09/2016-12/2016 – Geog. 412W, Glacial Processes and Environments. Simon Fraser University

01/2016-04/2016 – Geog. 213, Geomorphology. Simon Fraser University

01/2015-04/2015 – Geog. 213, Geomorphology. Simon Fraser University

09/2013-12/2013 – Geog. 412/612W, Glacial Processes and Environments. Simon Fraser University

09/2013-05/2018 – Mentored and trained honours student, Travis Gingerich (UFV, completed) and Masters students, Libby Griffin (SFU, completed) and Jordan Bryce (SFU).

INVITED LECTURES

Neudorf, C.M. (2017). The use of fluvial sequences to reconstruct past environments: A case study from north India. Geography 302 – Fluvial Geomorphology, University of the Fraser Valley, Abbotsford, BC, Canada, Nov. 22st.

Neudorf, C.M. (2016). The micromorphology of tills. Geography 402 – Quaternary Geology and Geomorphology, University of the Fraser Valley, Abbotsford, BC, Canada, Nov. 18th.

Neudorf, C.M. (2016). Prehistory in ash and alluvium: Luminescence investigations into the time of final deposition of Toba volcanic ash and artefact-bearing alluvial sediments in the Middle Son Valley, Madhya Pradesh, India. Geography 402 – Quaternary Geology and Geomorphology, University of the Fraser Valley, Abbotsford, BC, Canada, Sept. 23rd.

Neudorf, C.M. (2015). The use of fluvial sequences to reconstruct past environments: A case study from north India. Geography 302 – Fluvial Geomorphology, University of the Fraser Valley, Abbotsford, BC, Canada, Nov. 22nd.

Neudorf, C.M. (2015). Optically stimulated luminescence (OSL) dating. Geography 402 – Quaternary Geology and Geomorphology, University of the Fraser Valley, and Geography 424 – Field Studies in Coastal Geomorphology, University of Victoria, BC, Canada, Feb. 10th.

Neudorf, C.M. (2014). The use of fluvial sequences to reconstruct past environments: A case study from north India. Geography 302 – Fluvial Geomorphology, University of the Fraser Valley, Abbotsford, BC, Canada, March 26th.

Neudorf, C.M. (2007). The micromorphology of tills. Geography 420 – Quaternary Geology and Geomorphology, University of the Fraser Valley, Abbotsford, BC, Canada, Feb. 3rd.

INVITED TALKS

Neudorf, C.M. (2020). SPARROW – an open-source laboratory information management system focused on luminescence dating. EarthCube Workshop: Geochronology Frontier at the Laboratory-Cyberinformatics Interface. Oct. 21-23, 2020 (virtual meeting).

Neudorf, C.M. (2019). Illuminating the Quaternary with Luminescence Dating: Techniques and Application in the Geological and Archaeological Sciences. China University of Geosciences (Beijing), Beijing, China, Aug. 5, 2019.

Neudorf, C.M. (2013). Towards a chronology for Holocene relative sea level change on Calvert Island using luminescence dating. UFV 1st Annual Science Research Open House, University of the Fraser Valley, Abbotsford, BC, Canada, Jan. 31st.

Neudorf, C.M. (2013). A chronology for artefact-bearing alluvial sediments in the Middle Son Valley, India. Geography Discovery Speaker Series, Department of Geography, University of the Fraser Valley, Abbotsford, BC, Canada, Jan. 17th.

Neudorf, C.M. (2012). Prehistory in ash and alluvium: Luminescence investigations into the time of final deposition of Toba volcanic ash and artefact-bearing alluvial sediments in the Middle Son Valley, Madhya Pradesh, India. Shaping the Earth's Surface Series, School of Earth and Environmental Sciences, University of Wollongong, Wollongong, Australia, June 22nd.

OTHER ACTIVITIES

- Writer of luminescence dating blog at <https://theglowcurve.org/blog>.
- Coordinator of the [New World Luminescence Dating Portable Gamma Spectrometer Calibration Initiative](#) held in Grand Junction, Colorado, Oct. 19-20th, 2019.
- Participated as a mentor in “Girl’s Day of STEM” at the Desert Research Institute, Jan. 26, 2019.
- Assisted as a mentor and teacher in “Be a Geographer Day”, University of the Fraser Valley, Nov. 14, 2017.
- Co-Convener of the session: “T197. No Dates: No Rates--Utilizing Geochronometers to Quantify Rates of Geomorphic Processes or Archaeological Development over a Wide Range of Temporal and Spatial Scales”, GSA Annual Meeting, Oct. 22-25, 2017, Seattle, WA, USA.
- Assisting in managing Luminescence Dating Laboratory at UFV, 2012-present.
- Chaired the session: “Dating the Quaternary”, CANQUA CGRG Biennial Meeting, Aug. 16-19, 2015, St. John’s, NL, Canada.
- Chaired the session: “Dating the Quaternary”, CANQUA CGRG Biennial Meeting, Aug. 18-22, 2013, Edmonton, AB, Canada.

OTHER TRAINING

2020-2021	Training in Gamma Spectroscopy Measurement and Applications (5 courses), Mirion Tech, Oakland, TN, USA.
2018 & 2019 21/10/2017	Laboratory Safety and Managing Hazardous Waste Training, Desert Research Institute Course 513 -High Resolution Topography and 3D Imaging II: Introduction to Structure from Motion (SfM) Photogrammetry, Geological Society of America Meeting, Seattle, Washington
2012 & 2016 16/09/2013	Radiation Safety Training Certificate, Radiation Safety Office, Simon Fraser University, Canada Laboratory Safety Training, Occupational Health and Safety Office, Simon Fraser University, Canada
11/05/2012	WHMIS Training Certificate, University of the Fraser Valley, Canada
04/06/2006	6 th International Workshop on the Micromorphology of Glacial Deposits, Department of Earth Sciences, Brock University, Canada

RESEARCH ASSISTANTSHIPS

05/2012-07/2012	Research Assistant, funded by Australian Research Council (ARC) Supervisors: Prof. Colin Murray-Wallace and Amy Blakemore, University of Wollongong <ul style="list-style-type: none">○ Derived luminescence ages from quartz in samples collected from Woakwine Range barrier sediments, South Australia.
05/2012	Research Assistant, funded by ARC Supervisor: Dr. Amy Dougherty, University of Wollongong <ul style="list-style-type: none">○ Sampled a barrier dune complex in southeast Australia (Moruya, NSW) for luminescence dating and collected gamma spectrometry measurements. Assisted in ground penetrating radar (GPR) surveys of beaches.
05/2005-08/2005	Research Assistant, funded by a Natural Sciences and Engineering Council of Canada Undergraduate Student Research Award (NSERC USRA). Supervisor: Dr. Tracy Brennand, Simon Fraser University <ul style="list-style-type: none">○ Participated in research on glacial diamicton genesis in the Rocky Mountain Trench and in the Lake Ontario region. Duties included plotting stereograms and rose diagrams, designing informative graphics for presentations, and creating maps using geological (field) data and Digital Elevation Models (DEMs) using geographic information systems (GIS).

- 05/2004-08/2004 Research Assistant (NSERC USRA)
Supervisor: Dr. Darren Sjogren, University of Calgary
- Participated in research on glaciotectonism in southeastern Alberta, the origin of hummocky terrain near McGregor Lake, Alberta, and drumlin formation in the Rocky Mountain Trench, British Columbia. Duties included reconnaissance, collecting and processing till clast fabric data, conducting topographic surveys using differential global position systems (DGPS), and conducting electrical resistivity surveys.
- 05/2003-08/2003 Research Assistant (NSERC USRA)
Supervisor: Dr. Alec Aitken, University of Saskatchewan
- Participated in research on the glacial history of Axel Heiberg Island, Nunavut, and the geoarchaeology of the Douglas Point Sand Hills, south-central Saskatchewan. Duties included conducting topographic surveys, cleaning, describing and logging sections in the field, and conducting particle size analysis and loss-on-ignition of collected samples in the laboratory.

TEACHING ASSISTANTSHIPS

- 01/2008-05/2008 Teaching Assistant (part time)
Teaching Lab Sessions, Geography 213 – Geomorphology I
Simon Fraser University
- 09/2007-12/2007 Teaching Assistant (part time)
Teaching Lab Sessions, Geography 412 – Glacial Geomorphology
Simon Fraser University
- 01/2006-05/2006 Teaching Assistant (part time)
Teaching Lab Sessions, Geography 213 – Geomorphology I
Simon Fraser University
- 09/2005-12/2005 Teaching Assistant (part time)
Teaching Lab Sessions, Geography 111 – Introduction to Physical Geography
Simon Fraser University
- 01/2005-05/2005 Teaching Assistant (part time)
Teaching Lab Sessions, Geography 120 – Introduction to Physical Geography
University of Saskatchewan

SCHOLARSHIPS AND AWARDS

- University of Wollongong International Postgraduate Tuition Award (\$20,000 per annum) 2008-2012
- University of Wollongong University Postgraduate Award (\$20,000 per annum) 2008-2012
- University of Wollongong Conference Travel Grant (\$3000)
- Pacific Century Graduate Scholarship, Province of British Columbia (\$10,000) 2008-declined
- Bert Henry Memorial Scholarship, Simon Fraser University (\$18,000) 2008-declined
- Graduate Fellowship, Simon Fraser University (\$1000) 2006
- Canada Graduate Scholarship, NSERC (\$17,500 per annum) 2006-2008
- Graduate Student Research Grant, Geological Society of America (\$3000) 2006
- Undergraduate Student Research Award (x 3 @ \$5,625 each), NSERC 2003, 2004, 2005
- Dr. A. K. Chakravarti Scholarship, University of Saskatchewan (\$800) 2004-2005
- Honours Scholarship, University of Saskatchewan (\$1000) 2002-2003
- Chancellor's Scholarship, University of Saskatchewan (\$4000 per annum) 2000-2004