David F. Porinchu September 2021

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EDUCATION

Ph.D. 2002. Geography, with distinction, University of California, Los Angeles.

Dissertation: A Paleolimnological Investigation of Recent and Late Glacial-Early

Holocene Changes in Climate in the Sierra Nevada, California USA.

M.Sc. 1997. Biology, University of New Brunswick, Fredericton, New Brunswick.

Thesis: A Chironomid-Inferred Late-Quaternary Climate Reconstruction of the Lower

Lena River Region, Siberia.

B.Sc. 1995. Geography and Environmental Science (minor: Ecology), Summa Cum Laude,

McMaster University, Hamilton, Ontario. Thesis: *Recycling and Landfill Reclamation*.

APPOINTMENTS

2020 –	Professor, Geography, University of Georgia
2011 - 2020	Associate Professor, Geography, University of Georgia
2010 - 2011	Associate Professor, Geography, The Ohio State University
2004 - 2010	Assistant Professor, Geography, The Ohio State University
2004	Visiting Assistant Professor, Earth Sciences, University of Waterloo
2003 – 2004	Assistant Professor, Geography, California State University, Long Beach
2002 - 2003	Post-Doctoral Appointment, Geography, University of California, Los Angeles

AWARDS AND HONORS

2020	Ellen Mosley Thompson Award - Best publication, Paleoenvironmental Change Specialty Group, American Association of Geographers (paper led by Dr. Jiaying Wu)
2018	Global Collaborative Research Grant, University of Georgia
2018	Core Fulbright U.S. Fulbright-Nehru Fellowship
2014	Provost Summer Research Award, University of Georgia
2013	SEC Visiting Faculty Travel Grant, University of Georgia

RESEARCH GRANTS AND CONTRACTS

RESEARCH GRANTS AND CONTRACTS		
<u>Awarded</u> 2020-2023	National Science Foundation (NSF-2026311): Unraveling long-term and abrupt changes in the Indian Summer Monsoon during the Holocene in the Himalaya of northern India. D.F. Porinchu (PI) with Alex Cherkinsky (Co-PI) and Bahadur Kotlia (Co-I)	
2020-2022	Great Basin Heritage Area Partnership: Climate Variability, Change, Fire, Forests. D.F. Porinchu (co-PI) with S. Reinemann, B. Mark, J. DeGrand (co-PIs)	
2020-2022	Western National Park Association (WPNA): Examining fire regime variability along an elevation gradient in Great Basin National Park during the last two millennia. D.F. Porinchu (co-PI) with S. Reinemann, B. Mark, J. DeGrand (co-PIs)	
2016-2018	National Science Foundation: Doctoral Dissertation Research: Climate and Environmental Change in the Colorado Rocky Mountains During the Late Quaternary: An Analogue for a Warm Future. D.F. Porinchu (PI) with D. Haskett (co-PI)	
2016-2018	Department of the Interior: Benthic Invertebrate Response to Climate and Environmental Change in the Colorado Rocky Mountains during the Recent Past and the Holocene. D.F. Porinchu (PI)	
2016-2017	Western National Park Association (WPNA): Meadow and lake-sediment based reconstructions of Holocene fire histories for sub-alpine and montane ecosystems in Great Basin National Park. D.F. Porinchu (co-PI) with S. Reinemann, B. Mark (co-PIs)	
2012-2013	Department of the Interior: Paleoenvironmental Reconstruction of late Quaternary Conditions at Zeigler Reservoir, Snowmass Village, Colorado. D.F. Porinchu (PI)	
2011-2013	Denver Museum of Nature and Science: Climate change and Pleistocene Megafauna Dynamics: A Case Study - Snowmass, CO. D.F. Porinchu (PI)	
2011-2013	National Science Foundation: Doctoral Dissertation Research: Holocene Climate and Environmental Change in the Great Basin of the Western United States: A Paleolimnological Approach. D.F. Porinchu (PI) with S. Reinemann (co-PI)	
2010-2012	Western National Park Association (WPNA): Recent and Historical Influence of Anthropogenic Activities in Great Basin National Park: Evidence from Lake Sediment and Water Geochemistry. D.F. Porinchu (co-PI) with J. Box and B. Mark (co-PI)	
2009-2011	Climate, Water and Carbon Program, The Ohio State University: Assessing mid-Holocene Aridity in the midwestern United States: A Field-based Approach Incorporating Regional Climate Model Output. D.F. Porinchu (PI)	
2006-2007	Western National Park Association (WPNA): Contemporary Climate History and Climate Change Impacts in Great Basin National Park. D.F. Porinchu (co-PI) with J. Box (co-PI) and B. Mark (co-PI)	
2005-2009	National Science Foundation (NSF 04-587-0455089): A Synthesis of the Last 2000 Years of Climatic Variability from Arctic Lakes. D.F. Porinchu (PI)	

- 2005-2006 American Philosophical Society: Reconstructing Late-glacial Climates in Ohio: Testing Climate Model Output. D.F. Porinchu (PI)
- 2004-2008 National Science Foundation (NSF 02-191-0402664): High-Resolution Quantitative Reconstructions of Holocene Climatic Changes and their Impacts on Environment and People in the Central Canadian Arctic. D.F. Porinchu (PI) with G. MacDonald (co-PI) and K. Moser (co-PI)
- 2004-2008 National Science Foundation (NSF 02-191-0402504): High-Resolution Records of Holocene Climate Change, Drought Variability and Monsoon Behavior from the Uinta Mountains in Utah. D.F. Porinchu (PI)
- 2001-2002 National Science Foundation Doctoral Dissertation Improvement Grant (NSF 0135748): High-resolution Time Series of Eastern Sierra California Over the Late Quaternary. G.M. MacDonald (PI) and D.F. Porinchu (co-PI)
- 2000-2001 Geological Society of America Graduate Student Research Award: High Resolution Time Series of California Climate Over the Last 12,000 years: Testing the Influence of the North Atlantic and North Pacific. D.F. Porinchu (PI)

PEER-REVIEWED PUBLICATIONS (* denotes student co-author, ^ denotes post-doctoral co-author)

Niederman, E., **Porinchu, D.F.**, and Kotlia, B.S. Hydroclimate change in the Garhwal Himalaya, India at 4200 yr BP coincident with the contraction of the Indus civilization. *Scientific Reports* DOI: 10.1038/s41598-021-02496-5

Campbell, L., Lorimer, J., Mansfield, B., Osborne, T., **Porinchu, D.F**. Wright, S. Editorial: Introducing Progress in Environmental Geography. *Progress in Environmental Geography*, 1(1), pp.1-7. (**Note: Editorial**).

- Kotlia, B.S., **Porinchu, D.F.**, Singh, A.K. Last 5 ka in South Asia: Climate and Civilization. *Quaternary International.* (**Note: Editorial for Special Issue**).
- Cooper, S., **Porinchu, D.F.**, *Reinemann, S., Degrand, J., Mark, B.Cooper, A lake sediment based paleoecological reconstruction of late Holocene fire history and vegetation change from Great Basin National Park, Nevada, USA. *Quaternary Research* 1–15. https://doi.org/10.1017/qua.2021.17.
- *Wu, J. and **Porinchu, D.F.**, 2020. A high-resolution sedimentary charcoal-and geochemistry based reconstruction of late Holocene fire regimes in the páramo of Chirripó National Park, Costa Rica. *Quaternary Research*, 93(1), pp.314-329.
 - Kaufman, D., McKay, N., Routson, C., Erb, M., Davis, B., Heiri, O., Jaccard, S., Tierney, J. Dätwyler, C., Axford, Y. and Brussel, T., + 82 authors including **Porinchu, D.F.** 2020. A global database of Holocene paleotemperature records. *Scientific Data*, 7(1), pp.1-34.

Sambuco, E., Mark, B.G., Patrick, N., DeGrand, J.Q., **Porinchu, D.F.**, Reinemann, S.A., Baker, G. and Box, J.E., 2020. Mountain temperature changes from embedded sensors spanning 2000m in Great Basin National Park, 2006-2018. *Frontiers in Earth Science*, 8, p.292.

- 2019 Engels, S. Medeiros, A.S., Axford, Y., Brooks, S.J., Heiri, O., Nazarova, L., Luoto, T.P., Porinchu, D.F., Quinlan, R., Self, A.E. Climate change as a driver of biodiversity: subfossil chironomids as an indicator of long-term trends in insect diversity. *Global Change Biology*. DOI: 10.1111/gcb.14862
 - **Porinchu, D.F.**, MacDonald, G.M., ^Rolland, N., Kremenetski, K., Moser, K.A., Seppä, H., Rühland, K. Evidence of abrupt climate change at 9.3 ka and 8.2 ka in the central Canadian Arctic: Connection to the North Atlantic and Atlantic Meridional Circulation. *Quaternary Science Reviews* 219: 204-217.
 - *Wu, J., **Porinchu, D.F.**, Horn, S.P. Late Holocene hydroclimate variability in Costa Rica: Signature of the Terminal Classic Drought and the Medieval Climate Anomaly in the northern tropical Americas. *Quaternary Science Reviews* 215: 144-159.
 - *Wu, J., **Porinchu, D.F.**, *Campbell, N.L., *Mordecai, T.M. and *Alden, E.C., 2019. Holocene hydroclimate and environmental change inferred from a high-resolution multi-proxy record from Lago Ditkebi, Chirripó National Park, Costa Rica. *Palaeogeography, Palaeoclimatology, Palaeoecology* 518: 172-186.
- 2017 **Porinchu, D.F.**, *Haskett, D., *Reinemann, S. Biostratigraphic Evidence of Human Modification of High Elevation Aquatic Ecosystems in the Intermountain West of the United States. *Anthropocene* 20: 37-47.
 - *Wu, J., **Porinchu, D.F.**, Horn, S.P. A chironomid-based reconstruction of late Holocene climate and environmental change for southern Pacific Costa Rica. *The Holocene* 27: 73-84.
 - **Porinchu, D.F.** "Global Climate Change". In, *The International Encyclopedia of Geography: People, the Earth, Environment, and Technology*. Ed. D. Richardson. Wiley-Blackwell. NY. (**Note: Encyclopedia Entry**).
- 2016 MacDonald, G.M., Bloom, A.M., Potito, A.P., **Porinchu, D.F.**, Moser, K.A., Holmquist, J., Hughes, J., Kremenetski, K. Persistent relationship between climate warming, Pacific sea surface temperatures, and California aridity over the Holocene. *Nature Scientific Reports* 6: 1-8.
- Fortin, M-C., Medeiros, A., Gajewski, K., Barley, E., Larocque-Tobler, I., **Porinchu, D.F.**, Wilson, S. Chironomid-environment relations in northern North America: a larger modern analogue for quantitative temperature reconstructions. *Journal of Paleolimnology* 54: 223-237.
 - Medeiros, A., Gajewski, K., **Porinchu, D.F.**, Vermaire, J., Wolfe, B.B. The influence of secondary environmental gradients on chironomid-inferred paleotemperature reconstructions in northern North America. *Quaternary Science Reviews* 124: 265-274.
 - *Wu, J., **Porinchu, D.F.**, Horn, S.P., Hayberan, K. A. The modern distribution of chironomid sub-fossils (Insecta: Diptera) in Costa Rica and their potential as a paleotemperature proxy *Hydrobiologia* 742: 107-127.
- Miller, I.M., Pigati, J.S., Anderson, R.S., Johnson, K.R., Ager, T.A., Baker, R.G., Blaauw, M., Bright, J., Brown, P.M., Bryant, B., Calamari, Z.T., Carrara, P.E., Cherney, M.D.8, Davis, E.B., Demboski, J.R., Elias, S.A., Fisher, D.C., Graham, R.W., Gray, H.J., *Haskett, D.R., Honke, J.S., Jackson, S.T., Jiménez-Moreno, G., Kline, D., Leonard, E.M., Lifton, N.A., Lucking, C., Mahan, S.A., McDonald, H.G., McHorse, B.K., Miller, D.M., Muhs, D.R., Nash, S.E., Newton, C.,

- Paces, J.B., Petrie, L., Plummer, M.A., **Porinchu, D.F.**, Rountrey, A.N., Scott, E., Sertich, J.W., Sharpe, S.E., Skipp, G.L., Strickland, L.E., Stucky, R.K., Thompson, R.S., Wilson, J. A high-elevation, multi-proxy biotic and environmental record of MIS 6-4 from the southern Rocky Mountains, Colorado, USA. *Quaternary Research* 82: 618-634.
- *Reinemann, S., **Porinchu, D.F.**, Gustin, M.S., Mark, B.G. Historical trends of mercury and spheroidal carbonaceous particle deposition in sub-alpine lakes in the Great Basin, United States. *Journal of Paleolimnology* 52: 405-418.
- Anderson, R.S., Jiménez-Moreno, G., Ager, T., **Porinchu, D.F**. High-elevation paleoenvironmental change during MIS 6 4 in the central Rockies of Colorado as determined from pollen analysis. *Quaternary Research*: 82: 542-552.
- *Haskett, D., **Porinchu, D.F**. A quantitative midge-based reconstruction of thermal conditions in central Colorado during Marine Isotope Stage 5. *Quaternary Research* 82: 580-591.
- *Reinemann, S., **Porinchu, D.F.**, MacDonald, G.M., Mark, B.G., DeGrand, J. A 2000 year reconstruction of air temperature in the Great Basin of the United States with specific reference to the Medieval Climatic Anomaly. *Quaternary Research*: 82: 309-317.
- *Reinemann, S., **Porinchu, D.F.**, Mark, B.G. Regional climate change evidenced by recent shifts in chironomid community composition in sub-alpine and alpine lakes in the Great Basin of the United States. *Arctic, Antarctic and Alpine Research* 46: 600-615.
- 2011 Self, A.E., Brooks, S.J., Birks, H.J.B., Nazarova, L., **Porinchu, D.F.**, Odland, A., Yang, H., Jones, V.J. The distribution of chironomids in high-latitude Eurasian lakes with respect to temperature and continentality: development and application of new chironomid-based climate-inference models in northern Russia. *Quaternary Science Reviews* 30: 1122-1141.
 - *Reinemann, S.R., Patrick, N., Baker, G., **Porinchu, D.F.**, Mark, B.G., Box, J.E. Climate change in Great Basin National Park: Lake sediment and sensor-based studies. *Park Science*: 28: 78-82.
- 2010 **Porinchu, D.F.**, *Reinemann, S.R., Mark, B., Box, J. and ^Rolland, N. Application of a midge-based inference model for air temperature reveals evidence of late-20th century warming in subalpine lakes in the central Great Basin, United States. *Quaternary International* 215: 15-26.
- *Reinemann, S.R., **Porinchu, D.F.**, Bloom, A.M, Box, J.B., Mark, B.G. A multi-proxy paleoclimate reconstruction of Holocene thermal conditions in the Great Basin, United States. *Quaternary Research* 72: 347-358.
 - **Porinchu D.F.**, ^Rolland N. and MacDonald G.M. A 2000 year midge-based paleotemperature reconstruction from the Canadian Arctic Archipelago. *Journal of Paleolimnology* 41: 177-188.
 - **Porinchu, D. F.**, ^Rolland, N. and Moser, K. A. Development of a chironomid-based air temperature inference model for the Central Canadian Arctic. *Journal of Paleolimnology* 41: 349-368.
 - ^Rolland, N., **Porinchu, D.F.**, and Larocque, I. The use of high-resolution gridded climate data in the development of chironomid-based inference models from remote areas. *Journal of Paleolimnology* 41:343-348.

- Kaufman, D.S., Schneider, D.P., McKay, N.P., Ammann, C.M., Bradley, R.S., Briffa K.R., Miller, G.H., Otto-Bliesner, B.L., Overpeck, J.T., Vinther, B.M., Arctic Lakes 2k Project Members (Abbott, M., Axford, Y., Bird, B., Birks, H.J.B., Bjune, A.E., Briner, J., Cook, T., Chipman, M., Francus, P., Gajewski, K., Geirsdóttir, Á., Hu, F.S., Kutchko, B., Lamoureux, S., Loso, M., MacDonald, G., Peros, M., Porinchu, D., Schiff, C., Seppä, H., Thomas, E. Recent warming reverses long-term Arctic cooling. *Science* 325: 1236-1239.

 MacDonald G.M., Porinchu D.F., ^Rolland N., Kremenetsky K.V. and Kaufman D.S. Paleolimnological evidence of the response of the central Canadian treeline zone to radiative forcing and hemispheric patterns of temperature change over the past 2000 years. *Journal of Paleolimnology* 41:129-141.
- Westover, K.S., Moser, K.A., **Porinchu, D.F.** and MacDonald, G.M. Physical and chemical limnology of a 61-lake transect across mainland Nunavut and southeastern Victoria Island, Central Canadian Arctic. *Fundamental and Applied Limnology* 175/2: 93-112.
- Macdonald, G.M., Moser, K.A., Bloom, A.M., **Porinchu, D. F.**, ^Potito. A.P., Wolfe, B., Edwards T.W.D. Evidence for temperature depression and hydrological variations during the Younger Dryas chronozone in the Sierra Nevada, California. *Quaternary Research* 70: 131-140.
- 2007 **Porinchu, D.F.,** Moser, K.A. and Munroe, J. Development of a midge-based summer surface water temperature inference model for the Great Basin of the western United States. *Arctic, Antarctic and Alpine Research* 39: 566-577.
 - **Porinchu, D.F.,** ^Potito, A., MacDonald, G.M., Bloom, A.M. Subfossil chironomids as indicators of recent climate change in Sierra Nevada, California, lakes. *Arctic, Antarctic and Alpine Research* 39: 286-296.
- ^Potito, A., **Porinchu, D.F.**, MacDonald, G.M., Moser, K.A. A late Quaternary chironomid inferred temperature record from the Sierra Nevada, California: connections to northeast Pacific sea surface temperatures. *Quaternary Research* 66: 356-363.
- Kaufman, D., Ager, T.A., Anderson, N.J., Anderson, P.M., Andrews, J.T., Bartlein, P.J,
 Brubaker, L.B., Coats, L.L., Cwynar, L.C., Duvall, M.L., Dyke, A.S., Edwards, M.E., Gajewski,
 K., Geirsdóttir, A., Hu, F.S., Jennings, A.E., Kaplan, M.R., Kerwin, M.W., Lozhkin, A.V.,
 MacDonald, G.M., Miller, G.H., Mock, C.J., Oswald, W.W., Otto-Bliesner, B.L., Porinchu,
 D.F., Rűhland, K., Smol, J.P., Steig, E.J. and Wolfe, B.B. Holocene thermal maximum in the
 western Arctic (O-180°W). Quaternary Science Reviews, 23: 529-560.
- 2003 **Porinchu, D.F.,** MacDonald, G.M., Bloom, A.M. and Moser, K.A. Chironomid community development in the eastern Sierra Nevada, California, U.S.A., during the late glacial-early Holocene transition: paleoclimatic implications. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 198: 403-422.
 - **Porinchu, D.F.** and MacDonald, G.M. The use and application of freshwater midges in geographical research. *Progress in Physical Geography*, 27: 409-453.
 - Bloom, A.M., Moser, K.A., **Porinchu, D.F.** and MacDonald G.M. Diatom-inference models for surface-water temperature and salinity developed from a 57-lake calibration set from the Sierra Nevada, California, USA. *Journal of Paleolimnology* 29: 235-255.

- 2002 Porinchu, D.F., MacDonald, G.M., Bloom, A.M. and Moser, K.A. The modern distribution of chironomids (Insecta: Diptera) in the Sierra Nevada, California: potential for paleoclimatic reconstructions. *Journal of Paleolimnology* 28: 355-375.
 - **Porinchu, D.F.** and Cwynar, L.C. Late-Quaternary history of midge communities and climate from a tundra site near the lower Lena River, northeast Siberia. *Journal of Paleolimnology* 27: 59-69.
- 2000 **Porinchu, D.F.** and Cwynar, L.C. The distribution of freshwater chironomidae (Insecta: Diptera) across treeline near the lower Lena River, northeast Siberia. *Arctic, Antarctic and Alpine Research* 32: 429-427.

Peer Reviewed Book Chapters

2004 MacDonald, G.M., Edwards, T., Gervais, B., Laing, T., Pisaric, M., Porinchu, D.F., Synder, J., Solovieva, N., Tarasov, P., and Wolfe, B. Recent Paleolimnological Research from Northern Russian Eurasia. In: *Long -Term environmental change in Arctic and Antarctic lakes*. Editors: Pienitz, R., Douglas, M.S.V., and Smol, J.P. Kluwer Academic Publishers, Dordrecht, The Netherlands, pp. 349-380.

INVITED RESEARCH PRESENTATIONS (^,* denotes (former) post-doc, student co-author)

- 2018 **Porinchu, D.F.** Holocene climate change in Arctic Canada and Eurasia. Department of Geology, Kumaun University, Nainital, India. (02/12/18)
 - **Porinchu, D.F.** Evidence of abrupt climate change at 9.3 and 8.2 ka in the central Canadian Arctic: linkages with the North Atlantic. Wadia Institute of Himalayan Geology, Dehradun, India. (05/15/18)
 - **Porinchu, D.F.** Response of sub-alpine and alpine lakes in the western United States to recent climate and environmental change. International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal (05/25/18)
 - **Porinchu, D.F.** Evidence of abrupt climate change at 9.3 and 8.2 ka in the central Canadian Arctic: linkages with the North Atlantic. University of Kentucky, Department of Earth and Environmental Sciences. (11/15/18)
- 2017 **Porinchu, D.F**. Evidence of abrupt climate change at 9.3 ka and 8.2 ka in the central Canadian Arctic: An analogue for the future? Indiana State University, Department of Earth and Environmental Systems (04/21/2017)
- 2016 Reinemann, S.A., **Porinchu, D.F.** and Mark, B.G. Long term perspective on environmental change in Great Basin National Park. Great Basin National Park, Baker, NV. (07/12/2016)
- 2014 **Porinchu, D.F.** Abrupt Climate Change during the Late Quaternary: Evidence from Arctic and Alpine Environments. Georgia State University, Department of Geosciences (10/16/2014)
- 2013 **Porinchu, D.F**. A Paleolimnological Perspective on Late Quaternary Climate Change in the Intermountain West of the United States. University of Tennessee, Department of Geography (07/08/13)

- **Porinchu, D.F.** Workshop on Chironomids in Paleoclimate Research. University of Tennessee, Department of Geography (07/09/13)
- 2012 Porinchu, D.F., Haskett, D. Late Quaternary climate change at the Snowmastodon Site, Snowmass Village, CO: Preliminary results from sub-fossil midge analysis. Denver Museum of Nature and Science (06/25/12)
 - **Porinchu, D.F.**, Reinemann, S. and Haskett, D. Holocene climate variability in the Intermountain West: Evidence from lake sediment. MNTCLIM; Consortium for Integrated Climate Research in Western Mountains (CIRMOUNT), Estes Park, CO (10/02/12)
 - **Porinchu, D.F.** Late Quaternary climate change in the Intermountain West: Evidence from lake Sediment. University of Georgia, Department of Geology (11/30/12)
- 2011 **Porinchu, D.F.** Paleolimnology Field Methods and Theory: Case Studies from the Central Canadian Arctic. University of Indiana, Geological Sciences (10/17/11)
 - **Porinchu, D.F.** Impacts of Global Change on Freshwater Ecosystems: The View from the Intermountain West of the United States. University of Indiana, Geological Sciences (10/17/11)
 - **Porinchu, D.F.** Chironomid Paleoclimatology: The View from the Great Basin. Pacific Climate Workshop (PACLIM), Pacific Grove, CA. (03/08/11)
 - **Porinchu, D.F.** Global Climate and Environmental Change: Case Studies from the Canadian Arctic and the western United States. University of Georgia, Geography (03/24/11)
 - **Porinchu, D.F.** Chironomid Paleoclimatology: The View from the Intermountain West of the United States. The Ohio State University, EEOB (04/21/11)
- 2010 **Porinchu, D.F.**, ^Potito, A.P., *Soltesz, P., DeGrand, J., Reinemann, S.R. Assessing Mid-Holocene Aridity in the Midwestern United States. Ohio Geological Survey Quaternary Studies Workshop, Delaware, OH. (10/15/10)
- 2009 **Porinchu, D.F.**, Mark, B.G. and *Reinemann, S.R. Climate change and Great Basin National Park: Insights from The Ohio State University research and education program. Great Basin National Park, Baker, NV (08/10/09)
 - **Porinchu, D.F.** Paleolimnological and paleoecological studies from northern Eurasia: evidence of abrupt and long-term climate change during the late Quaternary. 3rd LIMPACS (IGBP, PAGES) Conference, Chandigarh, India (03/06/09)
 - **Porinchu, D.F.** Insects and paleoclimate: paleolimnological evidence of climate variability in the Great Basin, USA during the late Quaternary. Department of Geology, Middlebury College, Middlebury, VT (01/20/09)
 - **Porinchu, D.F.** Paleoecology and paleolimnology: what lake sediment can reveal about past environments. Department of Geology, Middlebury College, Middlebury, VT (01/21/09)
- 2008 **Porinchu, D.F**. Insects and Paleo-Eskimos: paleolimnological evidence of climate variability in the central Canadian Arctic during the Holocene. Department of Geography and Regional Sciences, University of Arizona, Tucson, AZ (10/30/08)

- **Porinchu, D.F.** Chironomids as indicators of recent and long-term climate change in the western United States. Department of Geological Sciences, University of Arizona, Tucson, AZ (10/31/08)
- **Porinchu, D.F.** From insects to climate: paleolimnological evidence of climate variability in the central Canadian Arctic during the Holocene. Global and Environmental Change Seminar, School of Earth Sciences, The Ohio State University, Columbus, OH (11/07/08)
- 2007 **Porinchu, D.F.** and Rolland, N. High resolution records of climate variability available from the central Canadian Arctic. Summary workshop: synthesis of the last 2000 years of climate variability from Arctic lakes. San Francisco, CA (12/13/2007)
 - **Porinchu, D.F.** Abrupt climate change: evidence of differential response of lakes in the Sierra Nevada to Younger Dryas forcing. Pacific Climate Workshop (PACLIM), Pacific Grove, CA. (05/15/2007)
 - **Porinchu, D.F.** Climate variability in the central Canadian Arctic: the last 2000 years. Workshop: synthesis of the last 2000 years of climate variability from Arctic lakes. Skaftafell, Iceland (05/01/2007)
 - **Porinchu, D. F.** Climate change: The view from arctic and alpine environments. Department of Geography, Miami University, Oxford OH (04/15/2007)
- 2006 **Porinchu, D.F.**, Moser, K.A., MacDonald, G.M, and Munroe, J.S. Chironomids as proxy indicators of recent climate change in the Uinta Mountains, UT. UINTAS 2006. Snowbird, UT. (05/19/2006)
 - **Porinchu, D.F.** Publications: Journals, editorial boards and the peer review process. Graduate Student Symposium. Department of Geography, UCLA. (05/10/2006)
 - **Porinchu, D. F.** Chironomids as proxy indicators of past climate conditions: evidence from high altitude and high latitude. Department of Entomology, The Ohio State University, Columbus, OH (02/17/2006)
- 2004 **Porinchu, D.F.** The use of midge flies in paleoclimatic research: case studies from the Sierra Nevada, California. Byrd Polar Research Center, The Ohio State University, Columbus, OH (02/12/04)
 - **Porinchu, D.F.** The use of midge flies in paleolimnological research: recent advances. Department of Biology, York University, Toronto, Canada. (11/29/04)
 - **Porinchu, D.F.** California climate during the last glacial-interglacial transition: The Younger Dryas and a North Atlantic linkage. Department of Geography, The Ohio State University, Columbus, OH. (02/17/04)
- 2003 **Porinchu, D.F.** Lord of the *PAD*-rings: Tree-rings and climate in the Peace-Athabasca Delta. Department of Earth Sciences, University of Waterloo, Waterloo, Canada. (10/30/03)
 - **Porinchu, D.F.** Evidence of the Younger Dryas in Sierra Nevada, California lakes: paleoclimatic implications. DISCCRS: **Dis**sertations Initiative for the Advancement of Climate Change Research Symposium, Copamarina, Puerto Rico. (03/15/03)

Porinchu, D.F. Tracking Climate Variability Using Natural Archives. Department of Geography, California State University, Long Beach, Long Beach, CA. (02/15/03)

RESEARCH PAPERS AND POSTERS# PRESENTED AT PROFESSIONAL MEETINGS

- (^, * denotes (former) post-doctoral, student co-author, respectively, # denotes psoter) (<u>54 additional papers and/or posters presented between 1997 and 2011</u>)
- 2020 Response of Vegetation to Hydroclimate Variability and Wildfire during the late Holocene in the Mountains of the central Great Basin, Nevada, USA. **Porinchu, D.F.,** *Cooper, S., *Reinemann, S., Mark, B., DeGrand, J. American Geophysical Union, San Francisco, CA (virtual attendance).
- #Mark, B. Sambuco, E., Patrick, N., DeGrand, J., Porinchu, D.F., Reinemann, S., Box, J. Hourly to Decadal Patterns of Mountain Temperature Variability from Embedded Sensors Spanning 2000m in Great Basin National Park, 2006-2018. American Geophysical Union, San Francisco, CA.
 - Soni, N., Mark, B. Schoessow, F., Reinemann, S., DeGrand, J., **Porinchu, D.**, Vega, E., Manos, J-M. Interannual Rock Glacier Surface Elevation Changes using UAS in Great Basin National Park, Nevada. American Geophysical Union, San Francisco, CA.
 - **#Porinchu, D.F.,** *Cooper, S., *Reinemann, S., Degrand, J., Mark, B. Evidence for a severe fire event in Great Basin National Park, NV during the late 15th century. Pacific Climate Workshop (PACLIM), Asilomar, CA.
 - *Wu, J., **Porinchu, D.F.**, Horn, S. Late Holocene hydroclimate variability in Costa Rica: Signature of the Terminal Classic Drought and the Medieval Climate Anomaly in the northern tropical Americas. American Association of Geographers Annual Meeting, Washington D.C.
 - *Niederman, E., **Porinchu, D.F.**, Speakman, R., Kotlia, B. Tracing Indian Summer Monsoon (ISM) variability from the Mid-Holocene to the present in Uttarakhand, India using X-ray fluorescence (XRF). American Association of Geographers Annual Meeting, Washington D.C.
 - *Cooper, S., **Porinchu, D.F**., *Reinemann, S., Degrand, J., Mark, B. A lake sediment-based reconstruction of fire history spanning the last two millennia from Great Basin National Park, NV. American Association of Geographers Annual Meeting, Washington D.C.
 - *Niederman, E., **Porinchu, D.F.**, Speakman, R., Kotlia, B. Changes in Harappa civilization corresponds to an abrupt climate change event at 4.2 ka in northern India. Ninth International Symposium on Radiocarbon and Archaeology, Athens, GA.
 - *Cooper, S., **Porinchu, D.F.**, *Reinemann, S., Degrand, J., Mark, B. Evidence for an infrequent and severe fire event in Great Basin National Park, NV during the late 15th century. Ninth International Symposium on Radiocarbon and Archaeology, Athens, GA.
 - **Porinchu, D.F.**, *Wu, J. Holocene hydroclimate variability and environmental change in the glacial highlands of Costa Rica: Evidence for abrupt climate change at 5.2 ka BP. International Union for Quaternary Research (INQUA), Dublin, Ireland.
 - Engels, S. Medeiros, A.S., Axford, Y., Brooks, S.J., Heiri, O., Nazarova, L., Luoto, T.P., **Porinchu, D.F.**, Quinlan, R., Self, A.E. Spatiotemporal trends in subfossil chironomid diversity: potential and problems. International Union for Quaternary Research (INQUA), Dublin, Ireland.

- Mark, B.G., Sambuco, E., Patrick, N., DeGrand, J., **Porinchu, D.F.**, Reinemann, S., Box, J. Hourly to decadal patterns of mountain temperature variability from embedded sensors spanning 2000 m in Great Basin N.P., 2006-2018. American Geophysical Union, San Francisco, CA.
- Soni, N., Mark, B.G., Schoessow, F., Reinemann, S.A., DeGrand, J., Porinchu, D.F., Vega, E., Manos, J.M. Interannual Rock Glacier Surface Elevation Changes using UAS in Great Basin, Nevada. American Geophysical Union, San Francisco, CA.
- Sambuco, E., Patrick, N., Mark, B., DeGrand, J., *Reinemann, S., **Porinchu, D.F.** A decade observing vertical temperature in Great Basin National Park using an embedded sensor network. The Geological Society of America (GSA) 2018 Annual Meeting, Indianapolis, IN.
 - Schoessow, F., Manos, J-M, Mark, B., DeGrand, J., Soni, N., *Reinemann, S., **Porinchu, D.F.** Mapping rock glacier surface elevation changes in Great Basin National Park, Nevada. The Geological Society of America (GSA) 2018 Annual Meeting, Indianapolis, IN.
 - *Haskett, D., **Porinchu, D.F**. Chironomid community response to recent climate and environmental change in Rocky Mountain National Park, Colorado. American Association of Geographers Annual Meeting, New Orleans, LA.
 - *Cooper, S., **Porinchu, D.F**. A lake sediment-based reconstruction of late Holocene fire history from Great Basin National Park. American Association of Geographers Annual Meeting, New Orleans, LA.
- 2017 **Porinchu, D.F.**, MacDonald, G.M., Rolland, N., Kremenetski, K., Moser, K.A., Seppä, H., Rühland, K. Evidence of abrupt climate change at 9.3 ka and 8.2 ka in the central Canadian Arctic: Connection to the North Atlantic and Atlantic Meridional Circulation. The Geological Society of America (GSA) 2017 Annual Meeting, Seattle, WA.
 - **Porinchu, D.F.**, *Haskett, D. and *Reinemann, S., *Sachdeva, U. Documenting the Response of High Elevation Aquatic Ecosystems in the Intermountain West of the United States to Regional Climate Change. Pacific Climate Workshop (PACLIM), Asilomar, CA.
 - **Porinchu, D.F.**, *Haskett, D., *Reinemann, S. Biostratigraphic Evidence of Human Modification of High Elevation Aquatic Ecosystems in the Intermountain West of the United States. American Association of Geographers 113th Annual Meeting, Boston, MA.
 - Reinemann, S., **Porinchu, D.F.**, Mark, B. and Munroe, J. A regional synthesis of climate change during the Holocene from the central Great Basin. Pacific Climate Workshop (PACLIM), Asilomar, CA.
 - *Haskett, D., **Porinchu, D.F**. Climate and Environmental Change in the Colorado Rocky Mountains during the Late Quaternary: An Analogue for a Warm Future. American Association of Geographers 113th Annual Meeting, Boston, MA.
 - *Wu, J., **Porinchu, D.F.** Reconstruction of Hydroclimate and Environmental Change for the Last Two Millennia in Southern Central America. The Geological Society of Americ (GSA) 2018 Annual Meeting, Seattle, WA.

- 2016 **Porinchu, D.F.** *Haskett, D. *Sachdeva, U., Reinemann, S. Evidence of the "Anthropocene" and a Golden Spike: The View from Alpine Ecosystems in the Intermountain West of United States. American Association of Geographers 112th Annual Meeting, San Francisco, CA.
 - *Wu, J. and **Porinchu, D.F**. Evidence for Hydroclimate Variability during the Medieval Climate Anomaly in the Highlands of Central Costa Rica. American Association of Geographers 112th Annual Meeting, San Francisco, CA.
- 2015 Porinchu, D.F., Campbell, A., Stansell, N., Mark, B., Yu, Z., Booth, R., Klein, E., *Reinemann, S. A quantitative reconstruction of late Holocene climate and environmental change in south-central Alaska: evidence from lake sediment. American Association of Geographers 111th Annual Meeting, Chicago, IL.
 - *Wu, J., **Porinchu, D.F**. A paleolimnological study of Holocene climate and environmental change in Chirripó National Park, Costa Rica. American Association of Geographers 111th Annual Meeting, Chicago, IL.
 - Jiménez-Moreno, G. Anderson, R.S. Ager, T., **Porinchu, D.F**. High-elevation paleoenvironmental change during MIS 6–4 in the central Rockies of Colorado. Perth International Mountain Conference, Perth, Scotland.
- 2014 Porinchu, D.F., *Reinemann, S., *Haskett, D. A Paleolimnological Perspective on Recent Climate Change in the Intermountain West of the United States. American Association of Geographers 110th Annual Meeting, Tampa Bay, FL.
 - *Haskett, D., **Porinchu, D.F.** A Midge-based Reconstruction of Thermal Conditions in the Central Colorado Rockies during Marine Isotope Stage 5. American Association of Geographers 110th Annual Meeting, Tampa Bay, FL.
 - **#Porinchu, D.F.**, *Haskett, D., *Reinemann, S. Response of high elevation lakes in the Intermountain West of the United States to Recent Climate Change. Mountain Climate Research Conference (MTNCLIM), Midway, UT.
 - *Haskett, D., **Porinchu, D.F.** A Quantitative Midge-based Reconstruction of Mean July Air Temperature from a High Elevation Site in Central Colorado for MIS 6 and MIS 5. Southeast Division of the American Association of Geographers Annual Meeting, Athens, GA.
 - **Porinchu, D.F.** Paleoenvironmental Change During the Younger Dryas Chronozone: Evidence from Western Beringia. Southeast Division of the American Association of Geographers Annual Meeting, Athens, GA.
- 2013 Porinchu, D.F. Evidence of abrupt climate change in the central Canadian Arctic during the early Holocene: linkages to the North Atlantic. Southeast Division of the American Association of Geographers Annual Meeting, Roanoke, VA.
 - *Wu, J., **Porinchu, D.F.**, Horn, S.P., Hayberan, K.A. A chironomid-based reconstruction of late Holocene environmental change in southern Costa Rica. Southeast Division of the American Association of Geographers Annual Meeting, Roanoke, VA.

- **Porinchu, D.F.**, *Haskett, D. A quantitative midge-based reconstruction of thermal conditions in central Colorado during Marine Isotope Stage 5. Geological Society of America 125th Annual Meeting, Denver, CO.
- **Porinchu, D.F.**, Self, A. A Chironomid-based Quantitative Reconstruction of Late Pleistocene and Holocene Thermal Conditions in Northeast Siberia. American Association of Geographers 109^h Annual Meeting, Los Angeles, CA.
- *Wu, J., **Porinchu, D.F.**, Horn, S.P., Hayberan, K.A. A chironomid-based reconstruction of late Holocene environmental change in southern Costa Rica. American Association of Geographers 109^h Annual Meeting, Los Angeles, CA.
- *Reinemann, S.A., **Porinchu, D.F**. Munroe, J., Mark, B.G. Sub-fossil Midge Analysis Provides Evidence of Elevated Temperatures during the mid-Holocene in the central Great Basin, NV. American Association of Geographers 109^h Annual Meeting, Los Angeles, CA.
- *Haskett, D., **Porinchu, D.F**. A Chironomid-based Reconstruction of Late Quaternary Thermal Conditions at the Snowmastodon Site, Snowmass Village, Colorado. American Association of Geographers 109^h Annual Meeting, Los Angeles, CA.
- 2012 **Porinchu, D.F.**, ^Potito, A., *Soltesz, P., Beilman, D., *Reinemann, S., DeGrand, J., Brady, V. A multi-proxy paleolimnological assessment of mid-Holocene aridity in the Midwestern United States American Association of Geographers 108^h Annual Meeting, NY, NY.
 - *Soltesz, P., **Porinchu, D.F.,** ^Potito, A. Beilman, D., DeGrand, J., *Reinemann, S. Mid-Holocene Aridity in Central Ohio. American Association of Geographers 108^h Annual Meeting, NY.
 - *Reinemann, S., **Porinchu, D.F.**, Mark, B.G., Gustin, M. A. Multi-Proxy Paleolimnology Investigation of Anthropogenic Influence and Ecological Response in Sub-Alpine and Alpine Ecosystems in the Great Basin, United States. American Association of Geographers 108^h Annual Meeting, NY, NY.
 - *Wu, J., **Porinchu, D.F.**, Horn, S., Haberyan, K. Development of a Midge-Based Inference Model to Assess late Holocene Climate Change in Costa Rica. American Association of Geographers 108^h Annual Meeting, NY, NY.
 - **#Porinchu**, D.F., ^Potito, A., *Soltesz, P., Beilman, D., Brady, V. Multi-proxy paleolimnological analyses provides evidence of early to mid-Holocene aridity in the Midwestern United States. 12th International Paleolimnology Symposium, Glasgow, Scotland.

GRADUATE STUDENT SUPERVISION

University of Georgia

Master's thesis - Chair

Victor Arraes (Geography, in progress)

Emily Niederman (Geography, 2021)

Cooper, Stephen (Geography, 2019)

Haskett, Danielle (Geography, 2013)

Wu, Jiaying (Geography, 2012)

Doctoral dissertation - Chair

Wu, Jiaying (Geography, 2018)

Haskett, Danielle (ABD, Geography, 2013-2018)

Thesis and Dissertation Committee Member

Anik Regan (Geology, 2021)

Laura Dupont (Geology, 2020)

Ny riavo Gilbertinie Voarintsoa (Geology, 2017)

Rivera, Maria (Geography, 2017)

Pete Akers (Geography, 2016)

Genevieve Holdridge (Geography, 2016)

Lixin Wang (Geography, 2016)

Jake MacDonald (Geography, 2016)

Cameron, Sean (Geography, 2015)

The Ohio State University

Post-doctoral Supervisor

Rolland, Nicolas (Geography, 2007-08)

Potito, Aaron (Geography, 2005-06)

Master's thesis - Chair

Wu, Jiaying (Atmospheric Sciences, transferred to UGA in 2011)

Reinemann, Scott (Atmospheric Sciences, 2008)

Doctoral dissertation - Chair

Reinemann, Scott (Atmospheric Sciences, 2013)

Thesis and Dissertation Committee Member

Alecia Campbell (Geography, 2013)

Grey Evanson (Geography, 2009)

Dudley Bonsal (Geography, 2007)

Brianna Vogt (Geography, 2006)

Scott Stuckman (Environmental Sciences; 2009-2011)

Becki Witherow (Earth Sciences, 2009)

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