

Dr. Nels Anton Iverson*Updated Feb. 2022*

New Mexico Bureau of Geology and Mineral Resources
Materials and Metallurgical Engineering Department
New Mexico Institute of Mining and Technology
801 Leroy Pl.
Socorro, NM 87801
nels.iverson@nmt.edu
(575) 835-5319

Education:University of Hawaii at Hilo

B.S. in geology, 2010

New Mexico Institute of Mining and Technology

M.S. in geology, 2014

Independent Study: Eruptive history and magmatic stability of Erebus volcano, Antarctica:
Insights from englacial tephra

PhD in geochemistry, 2017

Dissertation: Characterization and correlation of englacial tephra from blue ice areas and ice
cores, Antarctica

Honors:

Outstanding Senior in Geology Award (University of Hawaii at Hilo, 2010)

Walther M. Bernard Award (Outstanding Junior in Geology, University of Hawaii at Hilo, 2009)

Rank of Eagle Scout (Boy Scouts of America, 2004)

Professional Memberships:

European Geophysical Union

American Geophysical Union

New Mexico Geological Society

IAVCEI

Employment:

Research Scientist II/Lab Coordinator: January 2019- Present. I am a half-time research scientist at the New Mexico Bureau of Geology and Mineral Resources and half-time Lab Coordinator for the Materials and Metallurgical Engineering Department at New Mexico Institute of Mining and Technology. I am responsible for lab courses and I run the micro-analytical instruments for the department. This includes a Hitachi variable pressure FE-SEM, Hitachi variable pressure SEM and Perkins-Elmer Scanning Auger Microscope.

Post -Doctoral Researcher: July 2017 –January 2019. New Mexico Bureau of Geology and Mineral Resources. Primary research, funded by NSF, focuses on characterizing the tephra record from the South Pole Ice Core (SPICE) and correlation of tephra to source volcanoes and other ice repositories. Part-time responsibilities within the State Geologic Survey; lab technician in the New Mexico Geochronology Research Laboratory and electron microprobe lab. Duties at the NMGRL include; contract work

(preparing samples, analysis and data reduction), lab maintenance and development. Responsibilities in the microprobe lab are; instructor for the Electron Microprobe class (GEOC 575- 2 credits), lab technician (sample preparation, calibration and analysis) and troubleshooting. Collaboration on other current research projects include; tephrochronology and geochronology of Galili, Afar, Ethiopia and geochronology of tephra from the Gona Region, Ethiopia. Geochronology of post-caldera volcanism of the Yellowstone volcano and tephrochronology of post-glacial Yellowstone Lake cores.

Research/Teaching Assistant: Aug. 2010 –2017. New Mexico Institute of Mining and Technology.

Research on volcanism in Antarctica, experience in Electron Microprobe lab, New Mexico Geochronology Research Laboratory and LA-ICP-MS Lab, Aberystwyth University and Oregon State University.

Antarctic Graduate Researcher: 2010/11 and 2011/12. Volcanological field work in McMurdo Sound region, researcher at Mount Erebus Volcano Observatory.

Student Assistant: Spring/Summer 2010. Center for the Study of Active Volcanoes (CSAV). Helped instructors and international students with transportation, logistics, teaching and class work.

Student Assistant: Spring and Fall 2009. University of Hawaii at Hilo Geology Department. The department was being renovated and I was employed to organize, move and store all of the materials in the department. Supervised other students during the move and was an overall “handy-man” for department needs.

Teaching Experience:

Instructor: New Mexico Institute of Mining and Technology. MTL5 202L- Materials Engineering I Lab (2019-present), MTL5 483- Scanning Electron Microscopy (Fall, 2019, Fall 2020), GEOC 575-Theory and Practice of Electron Microprobe Analysis (Spring 2016, Fall 2017, Fall 2018, Spring 2021), EARTH-480-NMT Field Camp (Summer 2016 and 2017), EARTH-456- Volcanology (Guest Lecturer- Fall 2016, Fall 2018), GEOC-589- Practical Aspects of Argon Geochronology (Guest Lecturer- Spring 2018-present), GEOC-517- Advanced Argon Geochronology (Spring 2021).

Teaching Assistant: New Mexico Institute of Mining and Technology. Preparing, teaching and grading work for Oceanography lab (Spring, 2012), Igneous and metamorphic petrology lab (Spring, 2015) and NMT Field camp (Summer, 2015).

Teaching Assistant: University of Hawaii at Hilo Geology Department. Preparing, teaching and grading work for- Introductory Geology Course (Fall, 2009, 2010), Historical Geology (Spring, 2010), Igneous and Metamorphic Petrology (Spring, 2010) and Sediments and Stratigraphy (Spring, 2010).

Invited Seminars:

New Mexico Tech, Materials and Metallurgical Engineering Department, Socorro, NM (April, 2021)

University of Hawai'i at Hilo, Hilo, Hawai'i (October, 2020)

Northern Arizona University, Flagstaff, Arizona (September, 2020)

Korean Polar Research Institute (KOPRI), Songdo, South Korea (April, 2019)

Earth Observatory of Singapore, Singapore (April, 2019)

New Mexico State University, Department of Geological Sciences, Las Cruces, NM (September, 2018)

Colorado Springs Mini Maker Faire, Colorado College, Colorado Springs, CO (October, 2016)

List of Publications

Publications in Refereed Journals (by year)

Dunbar, N.W., Iverson, N.A., Smellie, J.L., McIntosh, W.C., Zimmerer, M.J. 2021. Active volcanoes of Marie Byrd Land in: *Volcanism in Antarctica: 200 Million Years of Subduction, Rifting and Continental Break-Up*. Geological Society, London, Memoirs, Chapter 7.4 , 55, 759-783, 12 April 2021, <https://doi.org/10.1144/M55-2019-29>

Schiller, C., Whitlock, C., Elder, K., Iverson, N., & Abbott, M. (2021). Erroneously old radiocarbon ages from terrestrial pollen concentrates in Yellowstone Lake, Wyoming, USA: Radiocarbon. *Radiocarbon*, 63(1), 321-342. doi:10.1017/RDC.2020.118

Hartman L., Kurbatov, A.V., Davies, S.M., Dunbar, N.W., Fudge, T.J., Iverson, N.A., Winski, D.A., Fegyveresi, J., and Yates, M.G. 2019. SPICE Ice Core Cryptotephra Geochemistry Study of 1450's Kuwae Interval. *Scientific Reports*, 9, 14437 <https://doi.org/10.1038/s41598-019-50939-x>

Lee, M. J., Kyle, P. R., Iverson, N. A., Lee, J. I., & Han, Y. 2019. Rittmann volcano, Antarctica as the source of a widespread 1252±2 CE tephra layer in Antarctica ice. *Earth and Planetary Science Letters*, 521, 169-176.

Oppenheimer, C., Khalidi, L., Gratuze, B., Iverson, N., Lane, C., Vidal, C., Sahle, Y., Blegen, N., Yohannes, E., Donovan, A. and Goitom, B., 2019. Risk and reward: explosive eruptions and obsidian lithic resource at Nabro volcano (Eritrea). *Quaternary Science Reviews*, 226, p.105995.

Schiller, M., Dickinson, W.W., Iverson, N.A. and Baker, J. A. 2019. A re-evaluation of the Hart Ash, an important stratigraphic marker: Wright Valley, Antarctica. *Antarctic Science*, 31(3),139-149 doi:10.1017/S0954102019000129

Sigl, M.; Buizert, C.; Fudge, T.J.; Winstrup, M.; Cole-Dai, J.; McConnell, J. R.; Ferris, D. G.; Rhodes, R.H.; Taylor, K. C.; Welten, K. C.; Woodruff, T. E.; Adolphi, F.; Baggenstos, D. Brook, E. J.; Caffee, M. W.; Clow, G. D.; Cheng, H.; Cuffey, K. M.; Dunbar, N. W.; Edwards, R.L.; Edwards, L.; Geng, L.; Iverson, N.; Koffman, B. G.; Layman, L.; Markle, B. R.; Maselli, O. J.; McGwire, K. C.; Muscheler, R.; Nishiizumi, K.; Pasteris, D. R.; Severinghaus, J. P.; Sowers, T. A.; Steig, E. J. 2019: WAIS Divide Deep ice core 0-68 ka WD2014 chronology. *PANGAEA*, <https://doi.org/10.1594/PANGAEA.902577>.

Winski, D. A., Fudge, T. J., Ferris, D. G., Osterberg, E. C., Fegyveresi, J. M., Cole-Dai, J., Thundercloud, Z., Cox, T. S., Kreutz, K. J., Ortman, N., Buizert, C., Epifanio, J., Brook, E. J., Beaudette, R., Severinghaus, J., Sowers, T., Steig, E. J., Kahle, E. C., Jones, T. R., Morris, V., Aydin, M., Nicewonger, M. R., Casey, K. A., Alley, R. B., Waddington, E. D., Iverson, N. A., Dunbar, N. W., Bay, R. C., Souney, J. M., Sigl, M., and McConnell, J. R. 2019. The SP19 chronology for the South Pole Ice Core – Part 1: volcanic matching and annual layer counting, *Climate of the Past*, 15, 1793–1808, <https://doi.org/10.5194/cp-15-1793-2019>, 2019.

- Dunbar, N.W., Iverson, N.A., Van Eaton, E., Sigl, M., McConnell, J., Alloway, B., Wilson, C. 2017. New Zealand super-eruption provides time marker for Last Glacial Maximum in Antarctica. *Scientific Reports*, 7, 12238. doi: 10.1038/s41598-017-11758-0
- Iverson, N.A., Lieb-Lappen, R., Dunbar, N.W., Obbard, R., Kim, E., & Golden, E. 2017. The first physical evidence of subglacial volcanism under the West Antarctic Ice Sheet. *Scientific Reports*, 7, 11457. doi.org/10.1038/s41598-017-11515-3
- J.R. McConnell, A. Burke, N.W. Dunbar, P. Köhler, J.L. Thomas, M. Arienzo, N.J. Chellman, O.J. Maselli, M. Sigl, J.J.F. Adkins, D. Baggenstos, J.F. Burkhart, E.J. Brook, C. Buizert, J. Cole-Dai, T.J. Fudge, G. Knorr, H.-F. Graf, M. Grieman, N. Iverson, S.A. Marcott, K. McGwire, R. Mulvaney, G. Paris, R. Rhodes, E.S. Saltzman, J.P. Severinghaus, J.P. Steffensen, K.C. Taylor, G. Winckler, X. Yu. 2017 Synchronous volcanic eruptions and abrupt climate change ~17.7k years ago plausibly linked by stratospheric ozone depletion. *PNAS*. 114 (38) 10035-10040; doi:10.1073/pnas.1705595114
- Iverson, N.A., Kalteyer, D., Dunbar, N.W., Kurbatov, A. and Yates, M., 2017a. Advancements and best practices for analysis and correlation of tephra and cryptotephra in ice. *Quaternary Geochronology*, 40: 45-55.
- Sigl, M., Fudge, T. J., Winstrup, M., Cole-Dai, J., Ferris, D., McConnell, J. R., Taylor, K., Welten, K., Woodruff, T. E., Adolphi, F., Bisiasx, M., Brook, E., Buizert, C., Caffee, M. W., Dunbar, N.W., Edwards, R., Geng, L., Iverson, N.A., Koffman, B.G., Layman, L., Maselli, O., McGwire, K., Muscheler, R., Nishiizumi, K., Pasteris, D., Rhodes, R. H., and Sowers, T., 2015, The WAIS Divide deep ice core WD2014 *chronology – Part 2: Annual-layer counting (0-31 ka BP) Climate of the Past*, v.11, p.3425-3474. doi: 10.5194/cpd-11-3425-2015
- Buizert, C., Adrian, B., Ahn, J., Albert, M., Alley, R. B., Baggenstos, D., Bauska, T. K., Bay, R. C., Bencivengo, B. B., Bentley, C. R., Brook, E. J., Chellman, N. J., Clow, G. D., Cole-Dai, J., Conway, H., Cravens, E., Cuffey, K. M., Dunbar, N. W., Edwards, J. S., Fegyveresi, J. M., Ferris, D. G., Fitzpatrick, J. J., Fudge, T. J., Gibson, C. J., Gkinis, V., Goetz, J. J., Gregory, S., Hargreaves, G. M., Iverson, N., Johnson, J. A., Jones, T. R., Kalk, M. L., Kippenhan, M. J., Koffman, B. G., Kreutz, K., Kuhl, T. W., Lebar, D. A., Lee, J. E., Marcott, S. A., Markle, B. R., Maselli, O. J., McConnell, J. R., McGwire, K. C., Mitchell, L. E., Mortensen, N. B., Neff, P. D., Nishiizumi, K., Nunn, R. M., Orsi, A. J., Pasteris, D. R., Pedro, J. B., Pettit, E. C., Price, P. B., Priscu, J. C., Rhodes, R. H., Rosen, J. L., Schauer, A. J., Schoenemann, S. W., Sendelbach, P. J., Severinghaus, J. P., Shturmakov, A. J., Sigl, M., Slawny, K. R., Souney, J. M., Sowers, T. A., Spencer, M. K., Steig, E. J., Taylor, K. C., Twickler, M. S., Vaughn, B. H., Voigt, D. E., Waddington, E. D., Welten, K. C., Wendricks, A. W., White, J. W. C., Winstrup, M., Wong, G. J., Woodruff, T. E., and Members, W. D. P., 2015, Precise inter-polar phasing of abrupt climate change during the last ice age: *Nature*, v. 520, no. 7549, p. 661-U169. doi: 10.1038/nature14401.

Iverson, N.A., Kyle, P.R., Dunbar, N.W., McIntosh, W.C., Pearce, N.J.G., 2014. Eruptive history and magmatic stability of Erebus volcano, Antarctica: Insights from englacial tephra. *Geochemistry Geophysics Geosystems*, 15, 4180-4202.

Talks or Posters presented at Professional Meetings or Invited Talks

Buizert, C., Sowers, T., Brook, E., Severinghaus, J., Fudge, T.J., Ferris, D., Osterberg, E., Winski, D., Fegyveresi, J., Kurbatov, A. Iverson, N., Dunbar, N., Cole-dai, J., Bay, R. 2017. SPICEcore Timescale: Delta-age and the gas age scale. South Pole Ice Core Science Meeting, Sept. 19-20, 2017, Seattle, WA pg. 6.

Dunbar, N., Iverson, N., Kurbatov, A. McIntosh, W., Hartman, L., Wheatley, S., Yates, M. 2018. Geochemical measurements and correlations of Antarctic and tropical tephra in the SPICEcore. South Pole Ice Core Science Meeting, Sept. 19-20, 2017, Seattle, WA pg. 6.

Dunbar, N.W., Iverson, N.A., Kurbatov, A. McIntosh, W.C., Hartman, L., Wheatley, S., Yates, M., Bay, R., Fudge, T.J., Fegyveresi, J., Ferris, D., Osterberg, E. Winski, D. 2017. Geochemical measurements and correlations of Antarctic and tropical tephra in the SPICE core. South Pole Ice Core Science Meeting, Sept. 19-20, 2017, Seattle, WA pg. 6-7.

Dunbar, N., Iverson, N. A., Kurbatov, A., McIntosh, W., Kalteyer, D., Koffman, B. G., and Yates, M., 2015, Antarctic tephra research: source volcanoes, blue ice sites, and ice cores, SCAR Kickstart meeting for working group on Antarctic Volcanism: Catania, Italy.

Dunbar, N., Iverson, N., Kurbatov, A., Kalteyer, D. McConnell, J., Sigl, M., 2015. Volcanic ash from the Oruanui 25.4 ka eruption in Antarctic ice: Implications for mechanism of distal ash transport. 2015 WAIS Divide ice core/SPICE core science meeting, Sept. 22-23, 2015, La Jolla, CA, p. 22.

Dunbar, N.W., Iverson, N.A., Kurbatov, A., McIntosh, W.C., 2014. Antarctic tephrochronology: A maturing tephra record from ice cores, blue ice sites and local volcanism, Tephra 2014- Maximizing the potential of tephra for multidisciplinary studies, Portland, Oregon.

Dunbar, N. W., Iverson, N. A., Kurbatov, A., and McIntosh, W. C., 2013, Continued Investigation and Correlations of Tephra in the WAIS Divide WDC06A Ice Core: WAIS Divide Science Meeting, Sept. 24-25, 2013, La Jolla, CA, p. 37.

Fudge, T.J., Lilien, D., Conway, H., Waddington E., Koutnik M., Stevens M., Buizert, C., Brook E., Severinghaus, J., Epifanio, J., Beaudette R., Winski, D., Osterberg, E., Ferris, D., Cole-Dai, J., Kreutz, K., Kurbatov, A., Hartman, L., Iverson, N., Dunbar, N., Bay, R., Steig, E., Kahle, E., Schauer, A., Jones, T., Vaughn B., White, J. 2018. SPICEcore Timescale, Accumulation, and advection impacts on climate records. South Pole Ice Core Science Meeting, Sept. 11-12, 2018, Seattle, WA pg. 3

Fudge, T.J., Ferris, D. Osterberg, E., Winski, D., Fegyveresi, J. Kurbatov, A. Iverson, N., Dunbar, N., Cole-dai, J., Buizert, C., Bay, R., Brook, E., Severinghaus, J., Sowers, T. 2017. SPICEcore Timescale: Stratigraphic matching. South Pole Ice Core Science Meeting, Sept. 19-20, 2017, Seattle, WA pg. 4-5.

Iverson N., Siddoway C., Zimmerer M., Smellie J., IODP Expedition 379 Scientists. 2020. Geochemical characterization and geochronology of distinctive rhyolite tephra and other sparse volcanogenic material in IODP379 deep-sea cores, Resolution Drift, northern Amundsen Sea. SCAR SCAR Open Science Conference 2020, Session 15. Abstract 1270. Online, August 5, 2020

Iverson, N. , Siddoway, CS , Zimmerer, M. , Smellie, J. , Dunbar, N. and Gohl, K. , IODP Expedition 379 Scientists (2021): Rhyolite volcanism in the Marie Byrd Land volcanic province, Antarctica: New evidence for pyroclastic eruptions during latest Pliocene icesheet expansion , EGU General Assembly vEGU21, online, 19 April 2021 - 30 April 2021.

Iverson, N.A., Dunbar, N.W., Kurbatov, A., 2019. SPICEcore: the missing link between ice core tephra records. South Pole Ice Core Science Meeting. Sept. 17-18, 2019, Seattle WA pg. 21.

Iverson, N.A., Dunbar, N.W., Kurbatov, A., 2018. Transcontinental Tephra: Linking the East and West Antarctica volcanic record through SPICEcore. AGU Fall Meeting 2018. December 10-14. Washington D.C. V23M-0222.

Iverson, N., Dunbar, N., Kurbatov, A., Hartman, L., Yates, M. 2018. How the volcanic record in SPICEcore fits into the Antarctic tephra framework. South Pole Ice Core Science Meeting, Sept. 11-12, 2018, Seattle, WA pg. 8

Iverson, N.A, Dunbar, N.W, Kurbatov, A, McIntosh, W.C. 2017. Antarctica's englacial tephra record: linking source volcanoes, ice cores and blue ice areas. IAVCEI 2017. Aug- 14-19, 2017, Portland, OR. VH13A-185

Iverson, N. A., Dunbar, N. W., McIntosh, W.C. and Kurbatov, A., 2016. The tephrostratigraphy of Mt. Berlin volcano, Antarctica: Integrating blue ice tephra and ice core tephra records.AGU Fall Meeting 2016.

Iverson, N. A., Dunbar, N. W., Kurbatov, A., Kalteyer, D., Yates, M., and McIntosh, W. C., Sigl, M., McConnell, J. and Pearce, N.J.P., 2015. Linking the Antarctic tephra record across the continent and beyond. AGU Fall Meeting 2015.

Iverson, N. A., Dunbar, N. W., Kurbatov, A., Kalteyer, D., Yates, M., and McIntosh, W. C., 2015. Linking East and West Antarctica: How SPICECORE will contribute to the existing Antarctic tephra

- framework. 2015 WAIS Divide ice core/SPICE core science meeting, Sept. 22-22, 2015, La Jolla, CA, p. 25.
- Iverson, N.A., Dunbar, N.W., Lieb-Lappen, R., Kim, E., Golden, E., Obbard, R., 2014. Phreatomagmatic eruptions under the West Antarctic Ice Sheet: potential hazard for ice sheet stability AGU Fall Meeting 2014.
- Iverson, N.A., Dunbar, N.W., Kurbatov, A., Kalteyer, D., McIntosh, W.C., Sigl, M., McConnell, J.R., 2014. Integration of the WAIS Divide tephra record into the maturing Antarctic tephra record. West Antarctic Ice Sheet Research Meeting, September 20-22, La Jolla, CA.
- Iverson, N.A., Dunbar, N.W., McIntosh, W.C., 2014. How advancements in analytical techniques are improving our understanding of the englacial tephra record in Antarctica, Tephra 2014- Maximizing the potential of tephra for multidisciplinary studies, Portland, OR.
- Iverson, N. A., Dunbar, N. W., McIntosh, W., Pearce, N. J. G., and Kyle, P., 2013, Improvements in the chronology, geochemistry and correlation techniques of tephra in Antarctic ice Abstract V13D-2642 Presented at the 2013 Fall AGU meeting, San Francisco, CA, Dec. 9-12.
- Iverson, N. A., and Dunbar, N. W., 2013, Preparation Techniques for Microanalysis of Fine-Grain Tephra that Incorporates Imaging Tephra Particles Prior to Quantitative Analysis: Examples from WDC06A Core: WAIS Divide Science Meeting, Sept. 24-25, 2013, La Jolla, CA, p. 54.
- Iverson, N. A., Kyle, P. R., Dunbar, N. W., and Pearce, N., 2012, Eruptive history and magmatic stability of Erebus volcano, Antarctica: Insights from englacial tephra Abstract V43B-2841 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.
- Iverson, N.A. and Kyle, P.R. 2012. Glass Composition and Morphology of Englacial Tephra on the Flanks of Erebus volcano, Antarctica: Le Studium Conference on Erebus volcano: An Exceptional Laboratory, 15-16 March, Orleans, France.
- Kim, E., Lieb-Lappen, R., Golden, E., Obbard, R., Iverson, N.A., Dunbar, N.W., 2014. What can the distribution of tephra in ash layers in the West Antarctic Ice Sheet tell us? West Antarctic Ice Sheet Research Meeting, September 20-22, La Jolla, CA.
- Kurbatov, A, Davies, S.M. Dunbar, N.W., Hartman, L., Iverson, N.A., Yates, M.G. 2018. New developments in evaluation of record of global volcanism from polar ice cores. AGU Fall Meeting 2018. December 10-14. Washington D.C. C41-1757.
- Kurbatov, A., Dunbar, N.W., Iverson, N. A., Gerbi, C.C., D., Yates, M., Kalteyer, D., and McIntosh, W. C., 2015. Antarctic Tephra Database (AntT). 2015 WAIS Divide ice core/SPICE core science meeting, Sept. 22-23, 2015, La Jolla, CA, p. 26.

Kurbatov, A., Brook, E., Campbell, S., Conway, H., Dunbar, N.W., Higgins, J.A., Iverson, N.A., Kehrl, L.M., McIntosh, W.C., Spaulding, N.E., Yan, Y., Mayewski, P.A. 2016. Allan Hills Pleistocene Ice Project (PIP). AGU Fall Meeting 2016.

Kurbatov, A.V., Dunbar, N.W., Iverson, N.A., Gerbi, C., Yates, M., Kalteyer, D., McIntosh, W.C., 2014. Antarctic Tephra Database (AntT). AGU Fall Meeting 2014.

McIntosh, W.C., Dunbar, N.W., Iverson, N.A., 2014. New generation mass-spectrometers offer improved $^{40}\text{Ar}/^{39}\text{Ar}$ dating of tephra, Tephra 2014- Maximizing the potential of tephra for multidisciplinary studies, Portland, OR.

Morgan, L. A., Shanks III, W. C., Iverson, N. A., Schiller, C., Brown, S., Whitlock, C.L., Fritz, S.C., Cartier, R., Zahajská, P., 2019. The Dynamic Floor of Yellowstone Lake: A Geologic Record over the Past 14 ka of Hydrothermal Explosions, Doming, and Faulting. *AGUFM, 2019*, V24B-07.

Sigl M., McConnell, J.R., Winstrup, M., Fudge, T.J., Cole-Dai, J., Ferris, D., Taylor, K., Buizert, C., Rhodes, R., McGwire., Welten, K.C., Woodruff, T.E., Dunbar, N.W., Iverson N.A., Maselli, O.J., Pasteris, D.R. and Muscheler, R., 2015. WD2014: A new reference chronology for ice cores from Antarctica? EGU 2015

Sigl, M., Cole-Dai, J., Ferris, D., Fudge, T.J., McConnell, J.R., Welten, K., Winstrup, M., Woodruff, T.E., Brook, E., Buizert, C., Dunbar, N., Iverson, N.A., Koffman, B.G., Maselli, O., McGuire, K., Muscheler, R., Pasteris, D., Sowers, T., Taylor, K., 2014. The WAIS-Divide deep ice core WD2014 chronology: 1. Annual layer counting (0-31 ka BP). West Antarctic Ice Sheet Research Meeting, September 20-22, La Jolla, CA.

Stinchcomb, Gary E., Quade, Jay, Levin, Naomi E., Iverson, Nels, Dunbar, Nelia, McIntosh, William, Arnold, Lee J., Duval, Mathieu, Grun, Rainer, Takashita-Bynum, Kevin K., White, Marie N., Gilbert, Henry, Rodgers, Michael J. and Semaw, Sileshi. 2020. Fluvial response and its implications for human-environment interactions during the Middle to Late Pleistocene and African humid period in Ethiopia. Geological Society of America *Abstracts with Programs*. Vol 52, No. 6 doi: 10.1130/abs/2020AM-357299.

Takashita-Bynum, Kevin; Stinchcomb, Gary; White, Marie N.; Driese, Steven G.; Dworkin, Steve; Levin, Naomi E.; Quade, Jay; Iverson, Nels; McIntosh, William C.; Dunbar, Nelia; Arnold, Lee; Duval, Mathieu; Peck, Margaret E.; Rogers, Michael; and Semaw, Sileshi, "Physical and chemical analysis of paleosols before, during and after periods of Anatomically Modern Human migration at Gona, Ethiopia" (2019). *ORCA Travel & Research Grants*. 51.

<https://digitalcommons.murraystate.edu/orcagrants/5>

Takashita-Bynum, Kevin; Stinchcomb, Gary; Levin, Naomi E.; Quade, Jay; Iverson, Nels; McIntosh, William C.; Dunbar, Nelia; Arnold, Lee; Duval, Mathieu; Rogers, Michael; and Semaw, Sileshi, The persistence of salt-affected paleosols at Gona, Ethiopia: a sedimentary archive o Middle to Late Pleistocene soil salinity within a corridor of early human migration. (2018). Geological Society of America *Abstracts with Programs*. Vol. 50, No. 6 doi: 10.1130/abs/2018AM-319253

Wheatley, S., Kurbatov, A., Dunbar, N.W., Yates, M., Iverson, N.A., Griessbach, S., Self, S., 2016. Pushing the limits of geochemical tephra analysis from ice core samples. AGU Fall Meeting 2016.

White, Marie; Takashita-Bynum, Kevin K.; Stinchcomb, Gary E.; Quade, Jay; Levin, Naomi; Iverson, Nels; Dunbar, Nelia; McIntosh, William; Arnold, Lee; Duval, Mathieu; Rogers, Mike; and Semaw, Sileshi, "Evidence of Late Pleistocene and Holocene paleo-Critical Zones at Gona, Ethiopia" (2019). *ORCA Travel & Research Grants*. 52.
<https://digitalcommons.murraystate.edu/orcagrants/52>

Woodard, M. and Iverson, N.A., 2022. Re-evaluating the emplacement history of the Cournudas Mountains. GSA 2022 Cordilleran/Rocky Mountain Joint Section Meeting. March 15-17. Las Vegas, NV. T3-11