

Andrea R. Brunelle

Professor
Department of Geography
University of Utah
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Academic Employment

- Full Professor, University of Utah, Department of Geography (2014-present)
- Department Chair, University of Utah, Department of Geography (2013-2019)
- Associate Professor, University of Utah, Department of Geography (2009-2014)
- Assistant Professor, University of Utah, Department of Geography (2003-2009)
- Post-Doctoral Research Associate- North and South American Fire History Project, University of Oregon (2002-2003)

Education

- Ph.D. - Physical Geography: Paleoecology, University of Oregon (2002)
- Master of Science - Quaternary Studies: Paleoecology, Northern Arizona University (1997)
- Bachelor of Science - Environmental Science: Geology, Northern Arizona University (1993-cum laude)

Professional Development

- University of Utah Leadership Development Program, Spring 2014.
- American Council on Education Leadership Academy for Department Chairs January 8-10, 2014.
- HERS (Higher Education Resource Service) Leadership Training, July 22- August 5, 2012.
- Science: Becoming the Messenger Communications Workshop, National Science Foundation, August 22-23, 2012 (selected to participate in the 2nd day intensive one-on-one training session).

Research & Professional Experience

- Technical Team Member – Air Quality/Changing Climate Technical Advisory team for the Utah Legislature. Kem C. Gardner Policy Institute. May 2019-January 2020.
- Advisory Council Member- UPEP (University of Utah Prison Education Project) (2018-present)
- Research Affiliate, University of Utah Archaeological Center (2014-present)
- Co-Director of Research, Rio Mesa, University of Utah Field Station (2013-2018)
- Research Curator, Utah Museum of Natural History (2009-present)
- Director, RED Lab (Records of Environment and Disturbance), University of Utah, (2003-present)
- Paleoecological History of Eastern Washington Professional Consultation (2002)
- Research Assistant, University of Oregon (1997-2002)

- GIS Project Designer- The Mammoth Site of Hot Springs, South Dakota (August 1999)
- Researcher- Channel Islands Paleoecology and Fire History Study (1996-1997)
- AMQUA field trip leader (1996)
- Crew Chief, Lake Mead Mammoth Excavation (December, 1992)
- Site Cartographer, The Mammoth Site of Hot Springs, South Dakota (1991- 1996)
- Undergraduate Research Assistant, Northern Arizona University (1990-1993)

Journal Articles- Published

* indicates a student author

Hart, I., Jones, K., Brunelle, A., DeGraffenried, J., Oviatt, C., Nash, B., Duke, D., and Young, D. *In press*. Building a master chronology for the Western Lake Bonneville Basin with stratigraphic and elemental data from multiple sites, USA. *Radiocarbon*.

*Carter, V., **Brunelle, A.**, Power, M., DeRose, R.J., Bekker, M., Hart, I., Brewer, S., Spangler, J., Robinson, E., Abbott, M., Maezumi, S., and Coddling, B. 2021. Legacies of Indigenous land use shaped past wildfire regimes in the Basin-Plateau Region, U.S.A. *Nature Communication Earth & Environment*.

*Hart, I., **Brunelle, A.**, Metcalfe, D., Coats, L. 2021. Evidence for a winter snowpack derived water source for the Fremont maize farmers of Range Creek Canyon, Utah. *The Holocene*.
<https://doi.org/10.1177/0959683620972767>

*Heyer, J., Brewer, S., **Brunelle, A.**, Leys, B., Lundeen, Z., Rittenour, T., Power, M. 2020. Age control for the Lake Bottom oxbow in the lower Dolores River watershed of eastern Utah, USA. <https://doi.org/10.1016/j.quaint.2020.09.013>

*Groves, M., **Brunelle, A.**, Power, M., Petersen, K., Lundeen, Z. 2020. Late Holocene Seasonal Moisture Variability in Range Creek Canyon, UT. *The Holocene*.
<https://doi.org/10.1177/0959683620972769>

Cottrell, S., Mattor, K., *Morris, J., Fettig, C., McGrady, P., Maguire, D., James, P., Clear, J., Wurtzebach, Z., Wei, Y, **Brunelle, A.**, Western, J., Maxwell, R., Rotar, M., Gallagher, L., Robers, R. 2019. Adaptive capacity in social-ecological systems: A framework for addressing bark beetle disturbances in natural resource management. *Sustainability Science*.
<https://doi.org/10.1007/s11625-019-00736-2>

*Watt, J.H., **Brunelle, A.**, Brewer, S. 2020. Methods for detecting past *Dendroctonus ponderosae* outbreaks in Pinus dominated forests, Idaho, USA. *Western North American Naturalist* 80, 105-113.

*Morris, J.L., DeRose, R.J., *Brussel, T., Brewer, S., **Brunelle, A.**, Long, J.N. 2019. Seral or stable? Fire-driven alternative states in aspen forests of western North America. *Biology Letters*.
<http://dx.doi.org/10.1098/rsbl.2019.0011>

Brunelle, A., and Minckley, T. Shinker, J., and *Heyer, J. 2018. Filling a Geographical Gap: New Paleoecological Reconstructions from the Desert Southwest, USA. *Frontiers in Earth Science*. doi: 10.3389/feart.2018.00106.

*Frederick, L., **Brunelle, A.**, *Morrison, M., Crespo, P. Johnson, W. 2018. Holocene Reconstruction of the Paleoclimate of the Ecuadorian Andean Páramo and assessment of the mid-Holocene warm/dry event in Tres Lagunas, Ecuador. *Palaeogeography, Palaeoclimatology, Palaeoecology* 28, 1131–1140.

*Spencer, J., **Brunelle, A.**, and Hepola, T. 2017. Using paleoecology to inform land management as climates change: an example from an oak savanna ecosystem. *Ecological Applications* 60:1090-1100. doi:10.1007/s00267-017-0936-y.

*Carter, V.A., Power, M.J., *Lundeen, S.J., *Morris, J.L., Petersen, K.L., **Brunelle, A.**, Anderson R.S., , Shinker, J.J., Turney, L., Koll, R., and Bartlein, P.J. 2017. A 1,500-year synthesis of wildfire activity stratified by elevation from the U.S. Rocky Mountains, Quaternary International, <http://dx.doi.org/10.1016/j.quaint.2017.06.051>.

*Carter, V., **Brunelle, A.**, Minckley, T., Shaw, J., DeRose, J., and Brewer, S., (2017). Climate variability and fire effects on quaking aspen in the central Rocky Mountains, USA. *Journal of Biogeography*. doi:10.1111/jbi.12932

*Lundeen, Z., **Brunelle, A.** (2016). A 14,000-year record of fire, climate, and vegetation from the Bear River Range, southeast Idaho, USA. *The Holocene*. doi:10.1177/0959683615622545

*Morris, J.L., DeRose, R.J., and **Brunelle, A.R.** (2015). Long-term landscape changes in a subalpine spruce-fir forest in central Utah, USA. *Forest Ecosystems*. 2:35, 1-12. doi: 10.1186/s40663-015-0057-0

Anderson, L., **Brunelle, A.**, Thompson, R.S. (2015). A multi-proxy record of hydroclimate, vegetation, fire, and post-settlement impacts for a subalpine plateau, Central Rocky Mountains U.S.A. *The Holocene* 25, 932-943. doi: 10.1177/0959683615574583

*Morris, J.L., *Watt, J., Courtney Mustaphi C.J., *Carter, V., Derr, K., Anderson, R.S. and **Brunelle, A.** (2014). Do bark beetle remains in lake sediments correspond to severe outbreaks? A review of published and ongoing work. *Quaternary International* 378: 74–86. doi:10.1016/j.quaint.2014.03.022

Brunelle, A., Minckley, T., Delgadillo, J. and *Blissett, S. (2014). A long-term perspective on woody plant encroachment in the desert southwest, New Mexico, USA. *Journal of Vegetation Science* 25, 829-838.

*Carter, V. **Brunelle, A.**, Minckley, T., Dennison, P. (2013). Regionalization of fire regimes in the Intermountain West, USA. *Quaternary Research* 80:406-416.

*Lundeen, Z., **Brunelle, A.**, Burns, S.J., Asmerom, Y., Polyak, V., (2013). Holocene Paleoclimate from a Northern Wasatch Mountains Speleothem: Season Specific Insight into the Hydroclimatic History of the Great Salt Lake Basin. *Quaternary International* 310:83-95. <http://dx.doi.org/10.1016/j.quaint.2013.03.018>

*Morris, J.L., **Brunelle, A.**, Munson, A.S., Spencer, J., and Power, M.J. (2013). Holocene vegetation and fire reconstructions from the Aquarius Plateau, Utah, USA. *Quaternary International* 310:111-123. <http://dx.doi.org/10.1016/j.quaint.2012.10.055>

*Nishizawa, S. Currey, D.R., **Brunelle, A.** and Sack, D. (2013). Bonneville basin shoreline records of large lake events in Marine Isotope Stages 3 and 2. *Palaeogeography, Palaeoclimatology, Palaeoecology* 386: 374-391. <http://dx.doi.org/10.1016/j.palaeo.2013.05.034>

*Morris J., **Brunelle, A.**, DeRose, R.J., Seppä, H., Power, M.J., *Carter, V., and *Bares, R. (2013). Using quantitative fire regime zones on a high-resolution lake sediment record from southwestern Utah, USA. *Quaternary Research* 79:24-36.

*Morris, J., le Roux, P., *Macharia, A., **Brunelle, A.**, Hebertson, E., and *Lundeen, Z. (2013). Organic, elemental, and geochemical contributions to lake sediment deposits during severe spruce beetle (*Dendroctonus rufipennis*) disturbances. *Forest Ecology and Management* 289:78-89.

*Nishizawa, S., Currey, D., **Brunelle, A.** and Sack, D. (2012). Bonneville basin shoreline records of a large lake during Marine Isotope Stage 16. *Quaternary Science Reviews* 58:1-6.

*Morris, J. and **Brunelle, A.** (2012). Pollen accumulation in lake sediments during historic spruce beetle disturbances in subalpine forests of southern Utah, USA. *The Holocene*, doi: 10.1177/0959683612437870.

Minckley, T., **Brunelle, A.**, and *Blissett, S. (2011) Holocene sedimentary and environmental history of an in-channel wetland along the ecotone of the Sonoran and Chihuahuan Desert grasslands. *Quaternary International*. 235, 40-47.

Dennison, P., **Brunelle, A.**, and *Carter, V. (2010). Assessing canopy mortality during a mountain pine beetle outbreak using GeoEye-1 high spatial resolution satellite data. *Remote Sensing of Environment* 114 (2010) 2431–2435.

*Patrickson, S., Sack, D., **Brunelle, A.** and Moser, K. (2010). Late Pleistocene to Early Holocene Lake Level and Paleoclimate Insights from, Stansbury Island, Bonneville Basin, Utah. *Quaternary Research* 73, 237-246.

*Morris, J., **Brunelle, A.**, Munson, A.S. (2010). Pollen Evidence of Late Holocene Disturbance on the Wasatch Plateau, Utah. *Western North American Naturalist* 70(2):175-188.

Brunelle, A., Minckley, T., *Blissett, S., *Cobabe, S. and *Guzman, B., (2010). An 8000 year fire history of a southwestern U.S. desert wetland. *Journal of Arid Environments* 74: 475-481.

Minckley, T.A., Clementz, M., **Brunelle, A.**, and Minckley, G.A. (2009). Isotopic analysis of wetland development in the American Southwest. *The Holocene* 19: 737-745.

Marlon, J., Bartlein, P., Walsh, M., Harrison, S., Brown, K., Edwards, M., Higuera, P., Power, M., Whitlock, C., Anderson, R. S., Briles, C., **Brunelle, A.**, Carcaillet, C., Daniels, M, Hu, F., Lavoie, M., Long, C., Minckley, T., Richard, P., Shafer, D., Tinner, W., Umbanhower, C. Jr. (2009). Wildfire responses to abrupt climate change in North America. *Proceedings of the National Academy of Science* 106, 2519-2524.

Whitlock, C., Bartlein, P.J., Briles, C., **Brunelle, A.**, Long, C., and Marlon, J. (2008). Long-term relations between fire, fuel, and climate in the northwestern U.S. *International Journal of Wildland Fire* 17, 72-83.

Power, M.J., Ortiz, N., Marlon, J., Bartlein, P.J., Harrison, S.P., Mayle, F., Ballouche, A., Bradshaw, R., Carcaillet, C., Cordova, C., Mooney, S., Moreno, P., Prentice, I.C., Thonicke, K., Tinner, W., Whitlock, C., Zhang, Y., Zhao, Y., Anderson, R.S., Beer, R., Behling, H., Briles, C., Brown, K., **Brunelle A.**, Bush, M., Clark, J., Colombaroli, D., Daniels, M., Dodson, J., Edwards, M.E., Fisinger, W., Gavin, D.G., Gobet, E., Hallett, D.J., Higuera, P., Horn, S., Inoue, J., Kaltenreider, P., Kennedy, L., Kong, Z.C., Long, C., Lynch, J., Lynch, B., McGlone, M., Meeks, S., Meyer, G., Minckley, T., Mohr, J, Noti, R., Pierce, J., Richard, P., Shuman, B.J., Takahara, H., Toney, J., Turney, C., Umbanhower, C., Vandergoes, M., Vanniere, B., Walsh, M., Wang, X., Williams, N., Wilmshurst, J., Zhang , J.H. (2008). Changes in fire activity since the LGM: an assessment based on a global synthesis and analysis of charcoal data. *Climate Dynamics* 30(7-8): 887-907.

Brunelle, A., Rehfeldt, J., Bentz, B., and Munson, S. (2008). Holocene records of Mountain Pine Beetle infestation in the U.S. Northern Rocky Mountains. *Forest Ecology and Management* 255, 836-846.

Brunelle, A. (2007). Evidence of the Younger Dryas chronozone from paleoecological records of the northern Rocky Mountains. *Current Research in the Pleistocene* 24, 1-3.

*Patrickson, S., and **Brunelle, A.** (2007). A Summary of Climate Change in The Great Basin: With Emphasis on The Bonneville Basin (28 Ka - Present). *Nevada Archeologist* 22, 49-56.

Minckley, T.A., and **Brunelle, A.** (2007). Paleohydrology and growth of a desert ciénega. *Journal of Arid Environments* 69, 420-431.

Kim, T., Cova, T., and **Brunelle, A.** (2006). Exploratory Map Animation for Post-Event Analysis of Wildfire Protective Action Recommendations. *Natural Hazards Review* 7, 1-11.

Brunelle, A., Whitlock, C., Bartlein, P.J. , and Kipfmueller, K. (2005). Holocene fire and vegetation along environmental gradients in the Northern Rocky Mountains. *Quaternary Science Reviews* 24, 2281-2300.

Brunelle, A., and Whitlock, C. (2003). Postglacial Fire, Vegetation, and Climate History in the Clearwater Range, Northern Idaho, USA. *Quaternary Research* 60, 307-318.

Brunelle, A., and Anderson, R.S. (2003). Sedimentary charcoal as an indicator of Late-Holocene drought in the Sierra Nevada, California, and its relevance to the future. *The Holocene* **13**, 21-28.

Mock, C.J., and **Brunelle-Daines, A. R.** (1999). A modern analogue of western United States summer palaeoclimate at 6000 years before present. *The Holocene* **9**, 541-545.

Journal Articles- in Review

*Jones, K.B., Drake, L., Hart, I., Nash, B., and **Brunelle, A.** Using x-ray fluorescence to identify Mazama ash in the Lake Bonneville Basin. *Quaternary Research*.

*Watt, J., **Brunelle, A.**, Bentz, B., *Morris, J., DeRose, J., Kipfmueller, K. A Holocene record of *Dendroctonus ponderosae* outbreaks, Montana, USA. *Western North American Naturalist*.

Brunelle, A. 8500 years of fire history and environmental drivers from the southwestern U.S. borderlands. Invited issue in *Frontiers in Ecology and Evolution*, “Fire Regimes in Desert Ecosystems: Drivers, Impacts and Changes.”

Journal Articles – In Revision

*Ward, D., **Brunelle, A.**, and Bowen, B. Holocene chemostratigraphy of spring sediments in Range Creek Canyon, Utah. *The Holocene*.

*Hart, I., **Brunelle, A.**, *Howard, K, *Jones, K., and DeGraffenried, J. 24,000 Years of Climate, Vegetation and Fire at North Redden Springs, Utah. *Quaternary International*.

*Jones, K., Degraffenried, J., Hart, I., and **Brunelle, A.** Linking paleoecological and archaeological histories in the Lake Bonneville basin. *The Holocene*.

*Chavez, V., **Brunelle, A.**, Brewer, S., *Watt, J. Climatic influences on two ciénega complexes from northern Baja California: A ~45,000 year paleoenvironmental record. *Quaternary International*.

Brunelle, A., Eckerle, W., Petersen, K., Power, M., and *Spencer, J. A multi-proxy Holocene paleoenvironmental history of Great Salt Lake. *The Holocene*.

Jones, K. **Brunelle, A.**, Hart, I., DeGraffenried, J. The paleoenvironmental history of Barking Coyote Spring, West Desert, Utah.

Journal Articles- in Preparation

Brunelle, A., Power, M., Eckerle, W. A high-resolution paleoenvironmental record from the Wind River Range: Dead Soda Lake, Wyoming. In preparation for *Quaternary Research*.

Brunelle, A., *Spencer, J., Dennison, P., and Brown, D. A history of Ugandan dambos: linkages to climate and politics. *Annals of Association of American Geographers*. Data analysis near completion, writing manuscript now.

Brunelle, A., Dvoracek, D., *Morris, J., and Lips, E. A calibration of AMS dates on pollen and conifer macrofossils: methods and considerations. *Radiocarbon*. Review research completed, samples for dating at lab.

Peer Reviewed Book Chapters

Whitlock, C., and **Brunelle, A.** (2006). Postglacial pollen records of northwestern North America. *Encyclopedia of Quaternary Science*, Scott Elias (Ed.).

Proceedings Papers

Minckley, T., **Brunelle, A.**, Turner, D. (2013). Paleoenvironmental Framework for Understanding the Development, Stability, and State-Changes of Ciénegas in the American Deserts. *USDA Forest Service Proceedings RMRS-P-67. Peer Reviewed*

Whitlock, C., Bartlein, P.J., Marlon, J., **Brunelle, A.**, and Long, C. (2003). Holocene Fire Reconstructions from the Northwestern U.S.: An Examination at Multiple Time Scales. 5th Symposium on Fire and Forest Meteorology, and 2nd International Wildland Fire Ecology and Fire Management Congress, American Meteorological Society 16-20 November 2003, Orlando Florida.

Agenbroad, L. D., Mead, J. I., and **Brunelle, A. R.** (1994). Paleo-Indian Rock Art on the Colorado Plateau: Plus 11,000 years of Petroglyphs. Invited Paper, 1994 International Rock Art Congress, Flagstaff, 5/27/94-6/4/94.

Other Publications

Brunelle, A. (2004). Book Review of "Fire: a brief history." *The Holocene* 14, 311-318.

Brunelle-Daines, A. (2002). Holocene changes in fire, climate and vegetation in the Northern Rocky Mountains of Idaho and western Montana. Doctoral dissertation, University of Oregon.

Brunelle, A. (1997). A post-glacial record of fire and vegetation from Siesta Lake, Yosemite National Park, California. Masters thesis, Northern Arizona University.

Agenbroad, L.D. and **Brunelle, A.R.** (1992). Analysis of Mammoth Dentition (How To Be A Tooth Fairy)- Teacher and Classroom Kit and Manual.

Agenbroad, L. D., Mead, J. I., and **Brunelle, A. R.** (1992). Dinosaur National Monument. *In* Quaternary Paleoenvironmental Studies of the Colorado Plateau, Year I.

Funded Proposals- PI

- University of Utah Faculty Small Grant "Re-examining Pollen Aggregates as Cultural Indicators." \$6000. Awarded January 2022 with Lisbeth Louderback.
- University of Utah Group Teaching Grant "Enhancing the Student Experience in an Interdisciplinary Teaching Lab." \$7000. Awarded May 2018 with *Jenn Watt, Jenn Shah and Lisbeth Louderback.

- University of Utah Funding Incentive Seed Grant. "Understanding the role of wildfire in perpetuating Utah's ancient aspen." \$17,235. Awarded May 2017. 1 year.
- Department of Defense-Dugway Proving Grounds Paleoenvironmental Research. \$782,209. 2015-2021.
- Department of Defense "Callao and Redden Springs Paleoenvironmental Reconstruction." Awarded April 2014, 18 months, \$78,192.
- Environmental Protection Agency: Southwest Center for Environmental Research and Policy: "Sierra de Juarez Coring Project." Awarded 2012, 9 months, \$42,405.
- U.S. Forest Service Cooperative Agreement "Long-term Disturbance Patterns in Interior West Forests." Awarded 2011, two years, \$61,113.
- U.S. Fish and Wildlife Service Cooperative Agreement "Sherburne Paleoenvironmental History." Awarded 2010, one year, \$40,903.
- Environmental Protection Agency: Southwest Center for Environmental Research and Policy: "A paleoenvironmental reconstruction of ciénega form and function: Baja California, MX." Awarded 2009, eighteen months, \$74,340.
- Environmental Protection Agency: Southwest Center for Environmental Research and Policy: "Hydrologic variability and disturbance in borderland ciénegas: a regional examination." Awarded 2008, eighteen months, \$67,500.
- Proposal Initiative Grant, Submitted March 2008, \$4000 (one month summer 2008 salary).
- University of Utah Technology Assisted Curriculum Center (TACC) Course Development Grant- 2008, \$5000
- University of Utah Seed Grant: "Using cave and lake sediments records to resolve the climate history of the Bear Lake Region, Idaho and Utah." 2007, One year \$27,000.
- National Science Foundation, Geography and Regional Science: "Assessing the use of paleorecords to understand beetle outbreaks in subalpine forests." Awarded 2007, 2 years, \$123,408.
- Forest Service Summer Field Research: Using Cave and Lake Sediment Records to Resolve the Climate History of the Bear Lake Region, Idaho and Utah, Awarded 2007. \$9000.
- Stephen W. Carruthers and Associates (SWCA): Entrega Pipeline Paleoenvironmental Research Project. Awarded 2006, one year \$56,866.
- Joint Fire Sciences Program: "Holocene records of fire in the subalpine forests of Utah: Linkages to climate change, forest composition and beetle infestations." Awarded 2006, 3 years, \$149,797.
- Proposal Initiative Grant, Awarded 2005, \$4000 (one month summer 2005 salary).
- University of Utah Seed Grant: "Long-term records of spruce bark beetles in Utah: climate controls and relationship to fires." Awarded 2005, one year \$28,000.
- Environmental Protection Agency: Southwest Center for Environmental Research and Policy: "Response of fire and vegetation patterns to large-scale changes in climate on the ecotone of the Sonoran and Chihuahuan deserts in the American Southwest." Awarded 2005, eighteen months, \$69,670.
- University of Utah Instrumentation Grant: Multidepartmental Cold Storage Facility. Awarded 2004, \$20,545.
- Proposal Initiative Grant, Awarded 2004, \$4000 (one month summer 2004 salary).

- Environmental Protection Agency: Southwest Center for Environmental Research and Policy: “Long-term records of fire, vegetation, and climate from cienegas in the region of the San Bernardino National Wildlife Refuge, Arizona and Mexico.” Awarded 2004, eighteen months \$74,445.
- USDA Forest Service Joint Cooperative Agreement: Mimbres Lake Project. Agreement for pack support made November 2003 for May 2004 field work
- Environmental Protection Agency: Southwest Center for Environmental Research and Policy: “Paleoenvironmental history of Mimbres Lake, New Mexico.” Awarded 2003, 12 months, \$10,665.

Funded Proposals-Co-PI

- Collaborative Research: A Continuous 60,000 Year Sediment Record Documenting Abrupt to Precession-Scale Climate Change and Ecosystem Response at Fish Lake UT, Upper CO River Basin. National Science Foundation, Paleo-Perspectives on Climate Change. 7/1/21-6/30/24, \$300,372 (Utah portion).
- With *Jenn Watt and Brett Clark, Center for Latin American Studies: "Sierra de San Pedro Collaborative Research Project." 2018, 1 year, \$4500.
- With *Jenn Watt and Brett Clark, GCSC seed funding: "Sierra de San Pedro Collaborative Research Project." 2018, 1 year, \$10,000.
- With Bradley Parker (History), NEH Grant: " Ground-Truthing Network Empire: A Comprehensive Approach to Inca and Wari Imperialism in the Nazca Headwaters, Ayacucho, Peru." 2017, 3 years, \$200,000.
- With Jenn Watt (Environmental and Sustainability Program), SWC Seed Grant: "Historic Climate Induced Bark Beetle Epidemics and Management Responses in the Sierra Nevada." 2017, One Year, \$11,000.
- With Richard Paine (University of Utah Anthropology), University of Utah Seed Grant: " Population and Ecology at the Pre-Classic Maya Center of El Mirador, Guatemala (2350 BP - 1850 BP)." 2016, One Year, \$34,650.
- National Science Foundation: “Doctoral Dissertation Research: Calibration and application of sedimentary proxies in evaluating spruce beetle outbreaks from the high plateaus of Utah” with *Jesse Morris. Awarded 2010, two years, \$11,375.
- National Science Foundation: “Doctoral Dissertation Research: A Long-Term Paleoclimate Perspective on the Changing Hydroclimatology of the Bear River Basin and Likely Impacts” with *Zachary Lundeen. Awarded 2009, two years, \$8875.
- With Phil Dennison (University of Utah), University of Utah Seed Grant: "Remote sensing of a mountain pine beetle outbreak as a modern baseline for prehistoric outbreaks" 2007, One year \$34,768.

Proposals in Review

- **Brunelle = PI** NSF NRT: Convergent Human and Environmental Dynamics Research (CHEDR). 5 years. 2,868,945.
- **Brunelle = PI** Department of Defense-Dugway Proving Grounds Paleoenvironmental Research II. Department of Defense, Dugway Proving Ground. 4 years. \$537,060.
- **Brunelle = PI.** NSF, DISES: Long Term Trajectories of an Anthropogenic Landscape: Examining Intersections of Prehispanic Maya Land Use, Climate, and Environmental

Change in Bajo La Jarilla, El Mirador, Peten. 5 years. \$1,599,420. With Rick Paine and David Wahl.

- NSF GCR: Developing a Convergent Model for Conflict Resolution on Sagebrush Rangelands, 5 years, 3,600,000. Co-PI.

Presentations and Abstracts (Presenter)

Brunelle, A., Jones, K., Hart, I., DeGraffenried, J., Quist, R. (2019). Five years and 17 cores later, some neat paleo-lessons from Utah's West Desert. **Invited Talk**, Montana State University, Bozeman, MT.

Brunelle, A., Jones, K., Hart, I., DeGraffenried, J., Quist, R. (2019). A synthesis of fire history across the West Desert, Utah for the last ~20,000 years. Pacific Climate Workshop. Asilomar, CA.

Brunelle, A., Jones, K., Hart, I., DeGraffenried, J., Quist, R. (2018). A synthesis of fire history across the West Desert, Utah for the last ~20,000 years. **Plenary Talk** Great Basin Archaeological Conference. Salt Lake City, UT.

Brunelle, A., Minckley, T. (2018). Long-term climate controls on wetland ecosystems in the desert southwest. Rocky Mountain Division, Geological Society of America. Flagstaff, AZ.

Brunelle, A., Minckley, T. (2017). Long-term environmental variability in wetland ecosystems of the desert southwest. Biennial Conference on Science and Management. Flagstaff, AZ.

Brunelle, A., Shinker, J.J. (2017). Sedimentary data contributing to understanding hydroclimatic variability. AAG, Boston, MA.

Brunelle, A., Minckley. (2016). 200 years of change: wetland ecosystems in the desert southwest. AMQUA. Santa Fe, New Mexico.

Brunelle, A. (2016). Getting creative with pollen data. AAG, San Francisco, California.

Brunelle, A., Power, M., Eckerle, W. (2015). A Holocene Record of Vegetation, Fire and the Seasonality of Precipitation for the Bonneville Basin, USA. PACLIM, Asilomar, California.

Brunelle, A., Eckerle, W., Power, M., Petersen, K., Spencer, J. (2014). A Holocene Record of Vegetation, Fire and the Seasonality of Precipitation for the Bonneville Basin, USA. **Invited Talk**, Great Basin Anthropological Conference, Boise, Idaho.

Brunelle, A. (2014). Using paleoecology to better understand archaeological records: past environmental history at Red Fish Bog and Redden Springs, Utah. **Invited Talk**, Government-to-Government Consultation Meeting with American Indian Tribes, Wendover, Nevada.

Brunelle, A. (2014). Climate driven dynamics in southwestern US desert ecosystems. **Invited Talk**, Nakama Research Talk, University of Utah Vice President for Research, Salt Lake City, Utah.

Brunelle, A. (2014). Fires and Floods in the American Southwest: Climate Controls on Desert Ecology. **Invited Talk**, Utah State University, Logan, Utah.

Brunelle, A. (2014). Using sediments to evaluate woody plant encroachment in the desert southwest, USA. Association of American Geographers Annual Meeting, Tampa, FL.

Brunelle, A. (2014). Bark Beetles in the West: Using Paleoecology to Understand Modern Outbreak Dynamics. **Invited Plenary Talk**, Hot Springs Mammoth Site Annual Meeting, Hot Springs, South Dakota.

Brunelle, A. (2013). Climate driven dynamics in southwestern US desert ecosystems. **Invited Talk**, Global Change and Sustainability Center Seminar Series, University of Utah.

Brunelle, A. (2013). Using Paleocological Records to Understand Past Climate. **Invited Talk**, Atmospheric Sciences Seminar Series, University of Utah.

Brunelle, A., Minckley, T. and Delgadillo, J. (2013). A long-term perspective on woody plant encroachment in desert grasslands, New Mexico. *Abstract and Oral Presentation*, PACLIM, Pacific Grove, CA.

Brunelle, A., Minckley, T. and Delgadillo, J. (2013). A long-term perspective on woody plant encroachment in desert grasslands, New Mexico. *Abstract and Oral Presentation*, SCERP Technical Conference, Tempe, AZ.

Brunelle, A. (2012). Using Sediment Records to Understand Past Environments. **Invited Talk**, Universidad Autonoma de Baja California, Ensenada. *In Spanish*.

Brunelle, A. (2012). **Invited Panelist**, Teaching Climate Change. Great Plains- Rocky Mountain Regional AAG.

Brunelle, A. (2012). Desert Wetlands in the Southwestern U.S.: Holocene Climate Controls on Form and Function. *Abstract and Oral Presentation*, AAG Annual Meeting, February, New York City, NY.

Brunelle, A. (2011). Fire in the Desert: Using Wetland Sediments to Tell the Story. **Invited Talk** to University of Texas-El Paso Geological Sciences and Environmental Science Seminar Series.

Brunelle, A., Morris, J., and Munson, S. (2011). Using paleoecology to understand spruce bark beetle outbreaks in high-elevation Utah forests. **Invited Talk** to the Natural Resources Law Forum, SJ Quinney Law School, University of Utah.

Brunelle, A. (2011). What the Past Can Tell Managers About the Future: Using Paleoecological Data to Inform Ecosystem Restoration and Management. **Invited Talk**, Policy at the Podium, Institute of Public and International Affairs, University of Utah.

Brunelle, A., and Minckley, T.A. (2010). " Holocene records of the significance of ENSO on vegetation and fire regimes in deserts and semi-arid grasslands of the United States and Mexico." Geological Society of America, Denver, Colorado.

Brunelle, A. (2010). Holocene records of the significance of ENSO on vegetation and fire regimes in deserts and semi-arid grasslands of the United States and Mexico . **Invited Plenary Speaker**, International Association of Vegetation Science, Ensenada, Mexico.

Brunelle, A. (2009). A Holocene record of fire from a subalpine Utah forest: linkages to climate change, forest composition and beetle infestations. *Abstract and oral presentation*, Association of Fire Ecology, Savannah, GA.

Brunelle, A. (2009). An introduction to paleoecological data and their utility in ecosystem restoration. **Invited Talk**, Restoring the West, Logan, UT.

Brunelle, A. (2009). Using paleoecology to understand disturbance in western forests. **Invited Talk**. Brigham Young University, Provo, UT.

Brunelle, A., Minckley, T., Blissett, S., Guzman, B., and Starratt, S. (2009). The Dynamic Nature of Desert Wetlands- Holocene Changes in Sedimentation and Fire Regime on the Arizona/Mexico Border. **Invited Talk**, PACLIM, Pacific Grove, CA.

Brunelle, A., Minckley, T., Blissett, S., Guzman, B. (2009). An 8000 Year Fire History of a Southwestern U.S.Desert Wetland. *Abstract and oral presentation* , AAG Annual Meeting, Las Vegas, NV.

Brunelle, A. (2009). The Dynamic Nature Of Desert Wetlands- Holocene Changes in Sedimentation and Fire Regime On The Arizona-Mexico Border. **Invited Talk**, Quaternary Program, University of Minnesota, Minneapolis, St. Paul.

Brunelle, A. (2009). Using Paleoecology to Understand Disturbance Ecology in Western Forests. **Invited Talk**, Geography Department, University of Minnesota, Minneapolis, St. Paul.

Brunelle, A., Morris, J. and Munson, S. (2008). Beetles, Fire, and Humans- Evidence of Forest Disturbance on the High Plateaus of Utah. **Invited Talk**, Utah Museum of Natural History Brown Bag Lecture Series.

Brunelle, A., Minckley, T., Blissett, S., Guzman, B., Cobabe, S., and Staratt, S. (2008). An 8000 year fire history of a southwestern U.S. desert wetland. *Abstract and oral presentation*, Association for Fire Ecology Regional Conference: Fire in the Southwest: Integrating Fire into Management of Changing Ecosystems.

Brunelle, A., Morris, J., Munson, S. (2007). Long-term records of spruce beetles and fire from Utah. **Invited talk**, Western Forest Insect Work Conference, Boise, Idaho.

Brunelle, A., Rehfeldt, J., Bentz, B., and Munson, S. (2007). Lake Sediment Records of Mountain Pine Beetle Infestations. **Invited talk**, Western Forest Insect Work Conference, Boise, Idaho.

Brunelle, A., Minckley, T., Cobabe, S. Blissett, S., Guzman, B. (2006). Response of Fire and Vegetation Patterns to Large-Scale Changes in Climate on the Ecotone of the Sonoran and Chihuahuan Deserts in the American Southwest. *Abstract and oral presentation*, EPA SCERP Technical Conference, Tucson, Arizona.

Brunelle, A., Minckley, T.A., Blissett, S., Cobabe, S., Guzman, B., Spencer, J. (2006). Holocene growth and development of a southwestern ciénega. *Abstract and Poster*, AMQUA, Bozeman, MT.

Brunelle, A., Blissett, S., Watt, J., Minckley, T., Morris, J., Morris, S., Spruance, C. (2006). Sedimentary charcoal as a proxy for past drought: exploration of new data from the southwestern United States. *Abstract and Poster*, PACLIM.

Brunelle, A. (2006). Long-term records of fire, vegetation and climate from cienegas in the region of the San Bernardino National Wildlife Refuge, Arizona and Mexico. *Abstract and oral presentation*, SCERP's Annual Technical Conference: Application of Science to Avoid Environmental Hazards: Research and Policy Across Borders. San Diego, California.

Brunelle, A. (2004). Reconstructing long-term records of vegetation, disturbance, and climate using paleoecological proxy data. **Invited Talk**, Department of Geography, Texas A & M, College Station.

Brunelle, A. (2004). Mountain Pine Beetle Infestations in the Northern Rocky Mountains: A Comparison of Modern and Long-term Controls. *Abstract and oral presentation*, American Association of Geographers.

Brunelle, A., and Whitlock, C. (2003) Holocene Fire, Climate, and Vegetation in the Northern Rockies. *Abstract and oral presentation*, XVI International Quaternary Association Congress.

Brunelle, A, and Kipfmueller, K. (2002) An interproxy comparison of fire history in the Bitterroot Region of the Northern Rocky Mountains. *Abstract and oral presentation*, Fire and Climate History in Western North and South America Workshop.

Brunelle, A. and Whitlock, C. (2002) Regional-to-local scale responses to variations in climate in the Northern Rocky Mountains. *Abstract and oral presentation*, American Association of Geographers.

Brunelle-Daines, A. and Whitlock, C. (2001) Differing effects of Holocene insolation change across a climatic boundary in the Northern Rocky Mountains. *Abstract and poster presentation*, American Geophysical Union, Pacific Climate Workshop.

Brunelle-Daines, A. and Whitlock, C. (2001) Holocene relationships between fire, climate, and vegetation as recorded from four Northern Rocky Mountain sites. *Abstract and oral presentation*, American Association of Geographers.

Brunelle-Daines, A. and Whitlock, C. (2000) The Effects of Insolation on Vegetation and Fire History in the Northern Rocky Mountains, USA. *Abstract and oral presentation*, Geological Society of America.

Brunelle-Daines, A., and Whitlock, C. (2000) Spatial Variations In Holocene Climate In The Selway-Bitterroot Wilderness Area, ID & MT, USA. *Abstract and poster presentation*, Society for Conservation Biology.

Brunelle-Daines, A., and Whitlock, C. (2000) Spatial Variations In Holocene Climate in the Northern Rocky Mountains, USA. *Abstract and poster presentation*, American Quaternary Association.

Brunelle-Daines, A. and Whitlock, C. (2000). Holocene Fire, Vegetation, and Climatic Variations in Northern Idaho. *Abstract and oral presentation*, American Association of Geographers.

Brunelle-Daines, A., and Whitlock, C. (1999). A High-Resolution Record of Fire, Vegetation and Climate from Burnt Knob Lake, Selway Bitterroot Wilderness Area, Idaho. *Abstract & poster presentation*, Science in Wilderness Conference.

Brunelle-Daines, A. (1998). A post-glacial record of fire and vegetation from Siesta Lake, Yosemite National Park, California. *Abstract & oral presentation*, Association of Pacific Coast Geographers.

Brunelle-Daines, A., and Whitlock, C. (1998). A High Resolution Record of Fire, Vegetation and Climate from the Selway-Bitterroot Wilderness Area, Idaho and Montana, USA. *Abstract & poster presentation*, American Quaternary Association.

Grants and Fellowships

- Department of Geography AAG Travel Grant- University of Oregon (March 2002)
- University of Oregon Doctoral Research Fellowship: One full year of tuition and funding to complete dissertation (2001-2002)
- Department of Geography AAG Travel Grant- University of Oregon (March 2001)
- Society of Conservation Biology Travel Grant (June 2000)
- American Quaternary Association Travel Grant (April 2000)
- Graduate Student Research Award- Graduate School- University of Oregon (April 2000)
- Department of Geography AAG Travel Grant- University of Oregon (March 2000)
- Department of Geography Research Grant - University of Oregon (June 1999)

- Association of Pacific Coast Geographers Travel Grant (October 1998)
- American Quaternary Association Travel Grant (September 1998)

Awards

- Outstanding Mentor/Advisor, Department of Geography, University of Utah, 2007, 2009, 2013
- Finalist, College of Social and Behavioral Science Superior Teaching Award, 2007, 2013
- Honorable Mention, AAG Biogeography Specialty Group Student Paper Competition (2001)
- Outstanding Graduate Teaching Assistant Award (1996)

Service

Department

- Department Chair, Geography Department, University of Utah (2013-2019)
- Director of Undergraduate Studies, Geography Department, University of Utah (2009-2014)
- GTU faculty sponsor (2005-2007; 2013-present)
- Member- Geography RPT Committee (2005- 2013)
- TA Course Coordinator- Physical Geography (2005- Present)
- Member, Geography Undergraduate Committee (2005- Present)
- Physical Geography Focus Area Chair (2005- Present)
- Chair- Physical Geography Search Committee (2005-2006)

College/University

- Chair, Society, Water and Climate Cluster (2014-present)
- Member, Utah Symposium on Science and Literature, 2017
- Co-chair, University Sustainability Action Plan Research Working Group (2016-present)
- Co-chair, Society, Water, and Climate Transformative Excellence Program Cluster Hire (2014-2017)
- Member, University Task Force on Retention and Recruitment (2014-present)
- Geography Representative, CSBS Curriculum Committee (2005- 2012; 2013-2014)
- College Representative, University Sustainability Certificate Advisory Committee (2013-present)
- Member, Office of Undergraduate Studies Panel on General Education and Learning Outcomes (2012-present)
- College Representative, Rio Mesa University of Utah Research Station Executive Committee (2011-present)
- College Representative- University of Utah Physical, Life and Applied Science Area General Education Committee (2008-Present)
- College Representative, Global Change and Ecosystem Center (2011-2013)
- Chair, University of Utah Environmental Studies Program Steering Committee (2011-2012)

- Member, University of Utah Environmental Studies Program Curriculum Committee (2011- present)
- University of Utah Technical Representative: Interagency Great Basin Cooperative Ecosystem Studies Unit (2009- 2013)
- Participant- LEAP Essential Learning Outcomes Pilot Project, University of Utah Undergraduate Education (2008- 2010)
- College Representative- University of Utah Physical, Life and Applied Science Area General Education Committee (2008-Present)
- Member, University of Utah Environmental Studies Program Steering Committee (2009-2011)
- Geography Representative, CSBS Superior Research Committee (2007)
- Member- Utah Museum of Natural History Herbarium Curator/Geography Search committee (2006-2007, 2007-2008)
- Geography Representative, Superior Teaching Award Committee (Spring, 2005)
- Geography Representative, Superior Teaching Award Committee (Spring, 2005)

Discipline

- Highlighted Scholar, KUED Documentary, "Troubled Edens." Aired 3/29/17
- NSF Panelist (2016, 2017)
- Member- Scientific Advisory Committee, The Mammoth Site of Hot Springs, South Dakota (2008- Present)
- Co-chair, NOAA/NCDC International Multiproxy Paleofire Database (2002-2009)
- Interviews with the Utah Daily Chronicle, Ogden Examiner, and KCPW regarding 2007 NSF funded research on mountain pine beetles and fire
- Reviewer for Geological Society of America Press, fall 2006
 - "Paleoenvironments of Bear Lake, Utah-Idaho"
- Reviewer for University of Utah Press, summer 2006
 - "Climate Warming in Western North America"
- Exhibit Design Advisor, Utah Museum of Natural History (2006-present)
- Reviewer for: National Science Foundation, Quaternary Science Reviews, Journal of Quaternary Science, Geology, Journal of Paleolimnology, Forest Ecology and Management, Quaternary Research, The Holocene, The Annals of the Association of American Geographers, Professional Geographer, Quaternary International, Arctic, Antarctic and Alpine Research, Annals of Forest Science, Current Research in Pleistocene, International Journal of Wildland Fire, Madroño, Review of Paleobotany and Palynology, Frontiers in Paleoecology
- Participant, Minority Graduate Education Mentoring Workshop (October, 2003)
- Mentor, Cybersisters middle-school girls science mentoring program (1999-2000)

Professional Affiliations

- American Association of Geographers (AAG)
- American Quaternary Association (AMQUA)
- Ecological Society of America (ESA)
- Geological Society of America (GSA)
- Society for American Archaeology (SAA)

Teaching Experience

- University of Utah, Department of Geography, created “Climate Change” undergraduate certificate, approved May 2013
- University of Utah Courses:
 - Global Climate Change Online (GEOG/ENVST 3210, GEOG 5210) (Fall 2021-present)
 - Climate Change and Lost Cities (GEOG/ANTH 2400) (Fall 2020, 2021, ongoing?)
 - Climate Change, Business School (BUS 3840), (Spring 2014, Fall 2015, Spring 2017)
 - Paleoecology of Costa Rica: Climate, Plants and Fire (Geog 5963), (Summer 2011, 2013)
 - Introduction to Environmental Science and Sustainability (ENVST 2050), (Fall 2012)
 - Popular Literature on Global Change: A Geographic Perspective (Geog 6960), (Spring 2009, 2014)
 - Introduction to Geographic Data (Geog 1010), (Fall 2008-2010)
 - Advanced Pollen Analysis Seminar (Geog 6960), (Fall 2007)
 - Recent Research in Global Change (Geog 6960), (Fall 2006)
 - Seminar on Western Climates (Geog 6960), (Fall 2005)
 - Global Climate Change (Geog 3210/5210), (2005-present)
 - Pyrogeography: Fire, Humans, and the Environment (Geog 3230/5230), (2005-present)
 - Pollen Analysis (Geog 5420/6420), (Fall 2004-present)
 - Geovisualization (Geog 3963/5963), (Spring, 2004)
 - Principles of Cartography (Geog 3040), (2003-2007)
- University of Oregon Courses:
 - Global Environmental Change (Geog 143), (Summer, 2001)
 - Long-Term Environmental Change (Geog 430/530), (Fall, 2000)
 - Global Environmental Change (Geog 102), (Summer, 2000)
 - Teaching Assistant- Biogeography, (Spring 1999)
- Northern Arizona University:
 - Author/Editor- 3-course series of lab manuals for Environmental Science, Center for Environmental Science and Education, Northern Arizona University (1997)
 - Lab Instructor, Ecology & Introductory Environmental Science, Center for Environmental Science and Education, Northern Arizona University (1991-1997)
 - Community College Teaching Certification (1996)
 - Member, environmental science curriculum design committee, Center for Environmental Science and Education, Northern Arizona University (May, 1995)

Graduate Students-Chair

- Kaylee Barket, **Ph.D.**, Geography, University of Utah, 2020
 - Paleoecological reconstructions of the Bonneville Basin
- Victoria Simmons, MS, Geography, University of Utah, 2020
 - Analysis of the old river bed delta and lake Bonneville during the late Pleistocene

- Josh Heyer, **Ph.D.**, Geography, University of Utah, 2020
 - Past, modern, and future environmental change for the Dolores river watershed in eastern Utah and southwestern Colorado
- Marianne Newell, MS, Geography, University of Utah, 2020
 - A late Holocene climatic, archeologic and ecologic study for five sites in the Bonneville basin, Utah, USA
- Maria Groves, **Ph.D.**, Geography, University of Utah, 2019
 - Moisture and fire variability in the northern section of the Colorado Plateau
- Vachel Carter, **Ph.D.**, Geography, University of Utah, 2016
 - The role of climate variability and disturbances on forest ecology in the intermountain west
- Danielle Ward, MS, Geography, University of Utah, 2016
 - Holocene chemostratigraphy of spring sediments in Range Creek Canyon, Utah
- Vanessa Chavez, MS, Geography, University of Utah, 2015
 - Climatic influences on two ciénega complexes from northern Baja California: A ~45,000 year palaeoenvironmental record
- Kelsey Howard, MS, Geography, University of Utah, 2015
 - A Late Pleistocene To Early Holocene Climate, Vegetation and Fire History Record for The Bonneville Basin, Utah, USA
- Laurie Macmillan, Professional Master of Science and Technology, University of Utah, 2014
 - Greenpop, Africa - contributions in light of changing climate
- Alyssa Trujillo, Professional Master of Science and Technology, University of Utah, 2014
 - “Field Research Safety Guide: Filling a gap in the University of Utah’s Comprehensive Safety Program”
- Jennifer Watt, **Ph.D.**, Geography, University of Utah, 2013
 - “Using Sedimentary Evidence to Understand Past Outbreaks of *Dendroctonus ponderosae* in the Northern Rocky Mountains, USA.”
- Neil Opperman, Professional Master of Science and Technology, University of Utah, 2013
 - “A Web-Based Approach to Science Communication: The development of a public outreach tool for the Salt Lake City School District to publish sustainability data and educational information.”
- Zachary Lundeen, **Ph.D.**, Geography, University of Utah, 2012
 - “Western Hydroclimatology and the Need for Long-Term Data: The Basis for Paleoenvironmental Investigations in the Bear River Range.”
- Jim Davis, **Ph.D.**, Geography, University of Utah, 2012
 - “Biological and Chemical Characteristics of Giant Sandstone Weathering Pits, Moab, Utah.”
- Jessica Spencer, MS, Geography, University of Utah, 2012
 - “An 8,000 year fire and vegetation history of an oak savanna in east central Minnesota.”
- Jesse Morris, **Ph.D.**, Geography, University of Utah 2011
 - “Historic And Holocene Forest Disturbance in South-Central Utah.”
- Shizuo Nishizawa, **Ph.D.**, Geography, University of Utah, 2010

- “Bonneville lake basin shoreline records of large lake and abrupt climate change events.”
- Shawn Blissett, MS, Geography, University of Utah, 2010
 - “A Late Holocene History of Vegetation, Fire, and Climate from a Desert Wetland in Southwest North America.”
- Stacy Randolph, MS, Geography, University of Utah, 2010
 - “After the Fremont: Fire and Vegetation History of Prehistoric Abandonment and Historic Occupation of Range Creek Canyon, Utah.”
- Vachel Carter, MS, Geography, University of Utah, 2010
 - “A Paleocological Fire and Vegetation history in southeastern Wyoming”
- Jesse Morris, MS, Geography, University of Utah, 2007
 - “Sedimentological Evidence of Late Holocene Disturbance on the Wasatch Plateau, Utah, USA”
- Shela Patrickson, MS, Geography, University of Utah, 2006
 - “Paleoenvironmental Reconstruction Using Multiple Proxies from the Stansbury Gulch, Bonneville, Basin, USA”
- Molly Hanson, MS, Geography, University of Utah, 2005
 - “Pleistocene-Holocene Transition in the Greater Owens River System and Other Basins within the Great Basin, USA: Paleohydrologic Patterns”
- Alyssa Hynes, MS, Geography, University of Utah, in progress
- Ben Marconi, **Ph.D.**, Geography, University of Utah, ABD 2020
- Savannah Bommarito, **Ph.D.** Geography, University of Utah, ABD

Graduate Students- Committee Member

- Andrew Kennedy, MS, Geography, University of Utah, 2020
- Katie Mohlenhoff, Ph.D., Anthropology, University of Utah, 2019
- Kate Magargal, Ph.D., Anthropology, University of Utah, 2018
- Logan Frederick, Ph.D., Geology and Geophysics, University of Utah, 2018
- Ashley Parker, Ph.D., Anthropology, University of Utah, 2018
- Josh Mueller, Ph.D., Geography, University of Utah, 2018
- Katie Potter, MS, Professional Master of Science and Technology, University of Utah, 2017
- Isaac Hart, Ph.D., Anthropology, University of Utah, 2017
- Erika Wenrich, MS, Geography, University of Utah, 2016
- Blake Wellard, MS, Geography, University of Utah, 2016
- Shira (Yoshi) Tracy, Ph.D., Geography, University of Utah, 2015
- Ashley Grimes, MS, Anthropology, University of Utah, 2015
- Josh Heyer, MS, Geography, University of Utah, 2015
- Ran Meng, Ph.D., Geography, University of Utah, 2014
- Rob Baskin, Ph.D., Geography, University of Utah, 2014
- Chris Parker, Ph.D., Anthropology, University of Utah, 2014
- Ryan Bares, MS, Geography, University of Utah, 2014
- Lovina Turney, MS, Geography, University of Utah, 2014
- Gillian Edwards, MS, Anthropology, University of Utah, 2013

- Anthony Macharia, Ph.D. Geography, University of Utah, 2012
- Ashley Powell, MS, Geography, University of Utah, 2012
- Rebecca Koll, MS, Geography, University of Utah, 2011
- J Robert Benton, Professional Master of Science and Technology, University of Utah, 2010
- Dale Earl, MS, Anthropology, University of Utah, 2010
- Deanna Halseth, MS, Geography, University of Utah, 2010
- Jeff VanLooy, Ph.D, Geography, University of Utah, 2007
- Tim Edgar, MS, Geography, University of Utah, 2007
- Amy Bloom, Ph.D, Geography, University of Utah, 2006
- Brenda Guzman, Universidad Autonoma de Baja California, in progress
- Melanie Cooke, MS, Geography, University of Utah, in progress
- Tom Flannigan, Ph.D., Anthropology, University of Utah, in progress
- Jordin Hartley, MS, Geography, University of Utah, in progress
- Brendan Ermish, MS, Anthropology, University of Utah, in progress
- Stefania Wilks, Ph.D., Anthropology, University of Utah, in progress
- Stella Mosher, MS, Geography, University of Utah, in progress
- Taylor Townsend, MS, Anthropology, University of Utah, in progress
- Josh Krahulec, MS, Geography, University of Utah, in progress
- Sierra Krippner, PMST, University of Utah, in progress
- Linda Gottschalk, PMST, University of Utah, in progress