

Nicholas P. McKay

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Education

- 2012 | **Doctor of Philosophy**, University of Arizona
- Major:* Geosciences
Minor: Global Change
Advisor: Dr. Jonathan T. Overpeck
Dissertation: "A multidisciplinary approach to late Quaternary Paleoclimatology with an emphasis on sub-Saharan West Africa and the Last Interglacial period"
- 2007 | **Master of Science**, Northern Arizona University, *with distinction*
- Major:* Geology
Advisor: Dr. Darrell S. Kaufman
Thesis: Late Holocene climate at Hallet and Greyling Lakes, central Chugach Range, south-central Alaska
- 2005 | **Bachelor of Science**, Northern Arizona University, *magna cum laude*
- Major:* Geology
Major: Environmental Science
Minor: Mathematics
Thesis: Characterization of climatic influences on modern sedimentation in an Arctic lake, Svalbard, Norway

Appointments

- Present
- 2012 | **Northern Arizona University**
School of Earth Sciences and Environmental Sustainability
- Assistant Professor* - (2014 to present)
- Assistant Research Professor* - (2013 to 2014)
- Postdoctoral Scholar* - (2012 to 2013)
- 2012-
2007 | **University of Arizona**
Department of Geosciences Environmental Studies Lab
- Graduate Assistant*
- 2007-
2005 | **Northern Arizona University**
Department of Geology
- Graduate Assistant*

Peer-reviewed Publications

- | | |
|--------------|--|
| In Review | 26. PAGES 2k Consortium (2nd Author) (In review), A global multiproxy database for temperature reconstructions of the Common Era, <i>Scientific Data</i> |
| In Press | 25. Abram, N. J., H. V. McGregor, J. E. Tierney, M. N. Evans, McKay, N. P. , D. S. Kaufman, and PAGES 2k Consortium (In press), Early onset of industrial-era warming across the oceans and continents, <i>Nature</i> |
| | 24. Sejrup, H. P., H. Seppä, McKay, N. P. , D. S. Kaufman, A. Geirsdottir, A. de Vernal, H. Renssen, K. Husum, A. Jennings, and J. T. Andrews (In press), North Atlantic-Fennoscandian Holocene climate trends and mechanisms, <i>Quaternary Science Reviews</i> |
| | 23. Briner, J., McKay, N. P. , Y. Axford, O. Bennike, R. S. Bradley, A. de Vernal, D. Fisher, P. Francus, B. Fréchette, K. Gajewski, A. Jennings, D. S. Kaufman, G. H. Miller, C. Rouston, and B. Wagner (In press), Holocene climate change in Arctic Canada and Greenland, <i>Quaternary Science Reviews</i> |
| | 22. Kaufman, D. S., Y. L. Axford, A. C. Henderson, McKay, N. P. , W. W. Oswald, C. Saenger, R. S. Anderson, H. L. Bailey, B. Clegg, K. Gajewski, F. S. Hu, M. C. Jones, C. Massa, C. C. Rouston, A. Werner, M. J. Wooller, and Z. Yu (In press), Holocene climate changes in eastern Beringia (NW North America) — a systematic review of multi-proxy evidence, <i>Quaternary Science Reviews</i> |
| 2016 | 21. McKay, N.P. , and J. Emile-Geay (2016), Technical note: The Linked Paleo Data framework – a common tongue for paleoclimatology, <i>Climate of the Past</i> , 12, 1093–1100 |
| | 20. Rouston, C. C., C. A. Woodhouse, J. T. Overpeck, J. L. Betancourt, and McKay, N. P. (2016), Teleconnected ocean forcing of western North American droughts and pluvials during the last millennium, <i>Quaternary Science Reviews</i> , 146, 238–250 |
| | 19. Shanahan, T. M., K. A. Hughen, J. T. Overpeck, McKay, N.P. , W. Gosling, J. Peck, J. King, C. Scholz, and C. Heil (2016), Abrupt transitions in tropical savanna-woodland boundaries controlled by climate-fire and CO2 interactions, <i>Scientific Reports</i> , 6, doi: 10.1038/srep29587 |
| | 18. Solomina, O., R. S. Bradley, V. Jomelli, A. Geirsdottir, D. S. Kaufman, J. Koch, McKay, N.P. , M. Masiokas, G. Miller, A. Nesje, K. Nicolussi, L. A. Owen, H. Wanner, and G. Wiles (2016), Glacier fluctuations during the past 2000 years, <i>Quaternary Science Reviews</i> , 149, 61–90 |
| 2015 | 17. Bothe, O., M. Evans, L. F. Donado, E. G. Bustamante, J. Gergis, H. G. J. Fidel Gonzalez-Rouco3, G. Hegerl, A. Hind, J. Jungclauss, D. Kaufman, F. Lehner, McKay, N.P. , A. Moberg, C. C. Raible, A. Schurer, F. Shi, J. E. Smerdon, L. von Gunten, S. Wagner, E. Warren, M. Widmann, P. Yiou, and E. Zorita (2015), Continental-scale temperature variability in PMIP3 simulations and PAGES 2k regional temperature reconstructions over the past millennium, <i>Climate of the Past</i> , 11, 1673–1699 |
| | 16. Wang, J., Emile-Geay, D. Guillot, McKay, N.P. , and B. Rajaratnam (2015), Fragility of reconstructed temperature patterns over the common era: Implications for model evaluation., <i>Geophysical Research Letters</i> , 10.1002/2015GL065265 |

- 2015
15. Boldt, R., D. Kaufman, **McKay, N.P.**, and J. Briner (2015), Holocene summer temperature reconstruction from sedimentary chlorophyll content, with treatment of age uncertainties, Kurupa Lake, Arctic Alaska, *The Holocene*, [10.1177/0959683614565929](https://doi.org/10.1177/0959683614565929), 1–10
 14. Shanahan, T., **McKay, N.P.**, K. Hughen, J. Overpeck, B. Otto-Bliesner, C. W. Heil, J. King, C. Scholz, and J. Peck (2015), The time-transgressive termination of the African Humid Period, *Nature Geoscience*, [10.1038/ngeo2329](https://doi.org/10.1038/ngeo2329)
- 2014
13. Kaufman, D.S. (contributing author) (2014), A community-driven framework for climate reconstructions, *Eos, Transactions American Geophysical Union*, *95*(40), 361–362, doi: [10.1002/2014EO400001](https://doi.org/10.1002/2014EO400001)
 12. **McKay, N. P.**, and D. Kaufman (2014), An extended Arctic proxy temperature database for the past 2,000 years, *Scientific Data*, *1*, doi: [10.1038/sdata.2014.26](https://doi.org/10.1038/sdata.2014.26)
 11. Sundqvist, H. S., D. S. Kaufman, **McKay, N. P.**, N. L. Balascio, J. P. Briner, L. C. Cwynar, H. P. Sejrup, H. Seppä, D. A. Subetto, J. T. Andrews, Y. Axford, J. Bakke, H. J. B. Birks, S. J. Brooks, A. de Vernal, A. E. Jennings, F. C. Ljungqvist, K. M. Rühland, C. Saenger, J. P. Smol, and A. E. Viau (2014), Arctic holocene proxy climate database – new approaches to assessing geochronological accuracy and encoding climate variables, *Climate of the Past*, *10*(4), 1605–1631, doi: [10.5194/cp-10-1605-2014](https://doi.org/10.5194/cp-10-1605-2014)
- 2013
10. Otto-Bliesner, B. L., N. Rosenbloom, E. J. Stone, **McKay, N. P.**, D. J. Lunt, E. C. Brady, and J. T. Overpeck (2013), How warm was the Last Interglacial? New model–data comparisons, *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, *371*(2001), doi: [10.1098/rsta.2013.0097](https://doi.org/10.1098/rsta.2013.0097)
 9. PAGES 2k Consortium (member of writing team) (2013), Continental-scale temperature variability during the last two millennia, *Nature Geoscience*, *6*
 8. Shanahan, T. M., **McKay, N.P.**, J. T. Overpeck, J. A. Peck, C. Scholz, C. W. Heil Jr., and J. King (2013a), Spatial and temporal variability in sedimentological and geochemical properties of sediments from an anoxic crater lake in West Africa: Implications for paleoenvironmental reconstructions, *Palaeogeography, Palaeoclimatology, Palaeoecology*, *374*, 96–109, doi: [10.1016/j.palaeo.2013.01.008](https://doi.org/10.1016/j.palaeo.2013.01.008)
 7. **McKay, N.P.**, D. L. Dettman, R. T. Downs, and J. T. Overpeck (2013a), On the potential of Raman-spectroscopy-based carbonate mass spectrometry, *Journal of Raman Spectroscopy*, *44*(3), 469–474, doi: [10.1002/jrs.4218](https://doi.org/10.1002/jrs.4218)
 6. Shanahan, T. M., J. A. Peck, **McKay, N.P.**, C. W. Heil Jr., J. King, S. L. Forman, D. L. Hoffmann, D. A. Richards, J. T. Overpeck, and C. Scholz (2013b), Age models for long lacustrine sediment records using multiple dating approaches - an example from Lake Bosumtwi, Ghana, *Quaternary Geochronology*, *15*, 47–60, doi: [10.1016/j.quageo.2012.12.001](https://doi.org/10.1016/j.quageo.2012.12.001)
- 2012
5. Shanahan, T. M., J. W. Beck, J. T. Overpeck, **McKay, N.P.**, J. S. Pigati, J. A. Peck, C. A. Scholz, C. W. Heil Jr., and J. King (2012), Late Quaternary sedimentological and climate changes at Lake Bosumtwi Ghana: New constraints from laminae analysis and radiocarbon age modeling, *Palaeogeography, Palaeoclimatology, Palaeoecology*, *361–362*, 49–60, doi: [10.1016/j.palaeo.2012.08.001](https://doi.org/10.1016/j.palaeo.2012.08.001)

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| 2011 | 4. McKay, N.P. , J. Overpeck, and B. Otto-Bliesner (2011a), The role of ocean thermal expansion in Last Interglacial sea level rise, <i>Geophysical Research Letters</i> , <i>38</i> (14), L14,605, doi: 10.1029/2011GL048280 |
| 2009 | 3. Kaufman, D., D. Schneider, McKay, N.P. , C. Ammann, R. Bradley, K. Briffa, G. Miller, B. Otto-Bliesner, J. Overpeck, B. Vinther, and A. Lakes (2009), Recent warming reverses long-term Arctic cooling, <i>Science</i> , <i>325</i> (5945), 1236, doi: 10.1126/science.1173983 |
| | 2. McKay, N.P. , and D. S. Kaufman (2009), Holocene climate and glacier variability at Hallet and Greyling Lakes, Chugach Mountains, south-central Alaska, <i>Journal of Paleolimnology</i> , <i>41</i> (1), 143–159, doi: 10.1007/s10933-008-9260-0 |
| 2008 | 1. McKay, N.P. , D. S. Kaufman, and N. Michelutti (2008), Biogenic silica concentration as a high-resolution, quantitative temperature proxy at Hallet Lake, south-central Alaska, <i>Geophysical Research Letters</i> , <i>35</i> (5), doi: 10.1029/2007GL032876 |

Other Publications

- | | |
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| 2014 | 4. McKay, N.P. (2014a), A novel multiproxy approach: The PAGES North America 2k working group, <i>PAGES News</i> , <i>22</i> (2), 100 |
| | 3. Anchukaitis, K., and McKay, N. P. (2014), Pages2k: Advances in climate field reconstructions, <i>PAGES News</i> , <i>22</i> (2), 98 |
| 2013 | 2. Kaufman, D., McKay, N.P. , T. Kiefer, and L. von Gunten (2013), A regional view of climate change, <i>Global Change Magazine</i> , <i>81</i> , 18–23 |
| | 1. von Gunten, L., D. Anderson, B. Chase, M. Curran, J. Gergis, E. Gille, W. Gross, S. Hanhijärvi, D. Kaufman, T. Kiefer, McKay, N.P. , I. Mundo, R. Neukom, M. Sano, A. Shah, J. Tyler, A. Viau, S. Wagner, E. Wahl, and D. Willard (2013), The backbone of pages 2k: data management and archiving, <i>PAGES News</i> , <i>21</i> (2), 87 |

Presentations Given

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| 2016 | 30. McKay, N.P. (2016a), A global multiproxy database for temperature reconstructions of the common era, <i>American Quaternary Association, 24th Biennial Meeting, Santa Fe, NM</i> , [Invited Talk] |
| | 29. McKay, N.P. (2016b), The structure of linked paleo data, <i>PaleoData Standards Workshop, Boulder, CO</i> , [Invited Talk] |
| 2015 | 28. McKay, N.P. , J. Emile-Geay, and the PAGES2k Consortium (2015a), A global multiproxy database for temperature reconstructions of the Common Era, <i>AGU Fall Meeting 2015, San Francisco, California</i> , [Invited Talk] |

- 2015
27. **McKay, N.P.**, D. S. Kaufman, P. D. Zander, and C. C. Routson (2015b), The timing and amplitude of Holocene Neoglaciation in the Arctic, *AGU Fall Meeting 2015, San Francisco, California*, [Talk]
 26. **McKay, N.P.** (2015a), Collaborative database building and lessons learned from the pages 2k projects, *Open kickoff meeting of the PAGES working group Global Soil and Sediment Transfers in the Anthropocene, Hamburg, Germany*, [Invited talk]
 25. **McKay, N.P.** (2015b), The state (and future) of age modelling, *Proxy System Modeling Workshop, Catalina Island, CA*, [Invited Talk]
 24. **McKay, N.P.** (2015c), Geochronr and chronrater, *Cyber for Paleo Webinar Series*, [Invited Talk]
- 2014
23. **McKay, N.P.** (2014b), Development of the global PAGES 2k temperature database, *PAGES2k AGU 2014 Satellite Meeting*, [Invited Talk]
 22. **McKay, N.P.** (2014c), PAGES-Powell North America 2k database, *AGU Fall Meeting 2014, San Francisco, California*, [Poster]
 21. **McKay, N.P.**, and D. Kaufman (2014), The spatial and temporal structure of the onset of Neoglaciation in the Arctic, *PAGES Holocene Workshop, Mt. Hood, OR*, [Invited Talk]
 20. **McKay, N.P.** (2014d), The more daunting aspects of the (paleo)data, *SAMSI paleoclimate seminar series*, [Invited Talk]
 19. **McKay, N.P.** (2014e), Advances in climate field reconstructions and North America 2k, *LOTRED-SA 3rd International Symposium, Medellin, Columbia*, [Invited Talk]
 18. **McKay, N.P.**, D. Kaufman, H. S. S. Sundqvist, and N. L. Balascio (2014), The Arctic Holocene Transitions database and ChronRater: a simple approach to assessing the accuracy of age models from Holocene sediment cores, *Age Models, Chronologies and Databases workshop, Belfast, UK*, [talk]
- 2013
17. **McKay, N.P.**, and D. Kaufman (2013), North-south contrast in climate change across north-western North America during the mid-Holocen transition and the possible relation to western Arctic Ocean sea ice., *AGU Fall Meeting 2013, San Francisco, CA*, [Poster]
 16. **McKay, N.P.** (2013), Site-level analyses in PAGES2k, *PAgeS2k-PMIP3 Workshop, Madrid, Spain*, [Invited Talk]
 15. **McKay, N.P.**, H. S. Sundqvist, D. S. Kaufman, and N. L. Balascio (2013b), On the power of a well-formed database: A proxy climate database for the mid-Holocene transition in the Arctic, *3rd International Climate Informatics Workshop, Boulder, Colorado*, [Spotlight talk and poster]
 14. **McKay, N.P.**, J. T. Overpeck, T. M. Shanahan, E. Brown, J. A. Peck, C. W. Heil, J. W. King, and C. A. Scholz (2013c), A high-resolution record of West African Monsoon variability for the past 530,000 years from Lake Bosumtwi, southern Ghana, *4th PAGES Open Science Meeting, Goa, India*, [talk]
 13. **McKay, N.P.**, J. T. Overpeck, T. M. Shanahan, J. A. Peck, C. W. Heil, J. W. King, and C. A. Scholz (2013d), A 12,000-Year-Long, Annually-Resolved Varve Record Spanning the Last Interglacial from Lake Bosumtwi, Southern Ghana, *2nd PAGES Young Scientist's Meeting, Goa, India*, [Poster]

- 2012
12. **McKay, N.P.**, J. T. Overpeck, T. M. Shanahan, J. A. Peck, C. W. Heil, J. W. King, and C. A. Scholz (2011b), A 12,000-Year-Long, Annually-Resolved Varve Record Spanning the Last Interglacial from Lake Bosumtwi, Southern Ghana, *AGU Fall Meeting 2012, San Francisco, California*, [talk]
 11. **McKay, N.P.**, and D. S. Kaufman (2012), Data-model comparison of the Mid-Holocene Transition in the Arctic, *2012 PAGES SynTraCE-21 Workshop, Providence, Rhode Island*, [talk]
 10. **McKay, N.P.** (2012), Pleistocene climate variability in tropical West Africa on interannual to orbital timescales, inferred from the Lake Bosumtwi sediment record, *School of Earth Sciences and Environmental Sustainability Seminar Series, Fall 2012, Northern Arizona University, Flagstaff, Arizona*, [talk]
 9. **McKay, N.P.**, T. R. Ault, and S. St. George (2012a), Improving access to the global paleoclimate dataset through the development of a virtual paleoclimate laboratory in R (vplR), *2nd International Climate Informatics Workshop, Boulder, Colorado*, [Spotlight talk and poster]
 8. **McKay, N.P.**, J. T. Overpeck, T. M. Shanahan, E. T. Brown, J. A. Peck, J. W. King, C. Scholz, and C. W. Heil (2012b), Paleohydrologic changes in tropical West Africa on interannual to orbital timescales over the past 500,000 years, *Colloquium of the French Academy of Science on the African Tropical Forest, Paris, France*, [Invited Talk]
- 2011
7. **McKay, N.P.**, J. T. Overpeck, T. M. Shanahan, J. A. Peck, J. W. King, C. A. Scholz, and C. W. Heil (2011c), Interannual- to multicentennial-scale variability in the West African Monsoon during the Eemian, *AGU Fall Meeting 2011, San Francisco, California*, [Poster]
 6. **McKay, N.P.**, J. T. Overpeck, and B. Otto-Bliesner (2011d), The role of ocean thermal expansion in Last Interglacial sea level rise, *Geodaze 2011, Tucson, Arizona*, [talk]
 5. **McKay, N.P.**, J. T. Overpeck, T. M. Shanahan, J. A. Peck, J. W. King, C. A. Scholz, and C. W. Heil (2011e), An initial comparison of Eemian and Holocene varve structure and variability in the Lake Bosumtwi drill core record, *2nd Workshop of PAGES Varves Working Group, Corpus Christi, Texas*, [talk]
- 2010
4. **McKay, N.P.**, J. T. Overpeck, E. T. Brown, T. M. Shanahan, J. A. Peck, J. W. King, Scholz, C. A., and C. W. Heil (2010), A scanning-XRF record of Lake Bosumtwi sediments: Implications for West African Monsoon variability over the past 500 kyr, *Geodaze 2010, Tucson, Arizona*, [talk]
- 2009
3. **McKay, N.P.**, J. T. Overpeck, E. T. Brown, T. M. Shanahan, J. A. Peck, J. W. King, Scholz, C. A., and C. W. Heil (2009), A scanning-XRF record of Lake Bosumtwi sediments: Implications for West African Monsoon variability over the past 500 kyr, *AGU Fall Meeting 2009, San Francisco, California*, [talk]
- 2007
2. **McKay, N.P.**, and D. S. Kaufman (2007), A biogenic-silica-inferred temperature reconstruction for the past 2 kyr, and Holocene climate fluctuations from Hallet and Greyling Lakes, Chugach Range, south-central Alaska, *International Arctic Workshop, Skaftafell, Iceland*, [talk]

- 2005
1. **McKay, N.P.**, D. S. Kaufman, and D. E. Anderson (2005), Characterization of climatic influences on modern sedimentation in an arctic lake, Svalbard, Norway, *Northeast regional Geological Society of America Conference, Saratoga Springs, New York*, [talk]

Research Grants

- 2016
- MRI: Acquisition of A Mini Carbon Dating System for Understanding Arctic Carbon and Climate (ACCLIMATE) – **[Co-investigator]** – *Declined*
- *NSF: Major Research Instrumentation*
 - Requested funds (local): \$1,971,874
- Synthesis of Holocene Proxy Climate Records from Western North America – **[Co-investigator]** – *Funded*
- *NSF: Paleo-perspectives on climate change*
 - Local funds: \$481,822
- Collaborative Research: Evolution of terrestrial climate and vegetation through the mid-Pleistocene climate transition: A 1.2 Ma record from Stoneman Lake, Arizona – **[Co-investigator]** – *Declined*
- *NSF: Paleo-perspectives on climate change*
 - Requested funds (local): \$320,589
- Holocene Dustiness in the San Juan Mountains, Colorado – **[Co-investigator]** – *Declined*
- *NSF: Paleo-perspectives on climate change*
 - Requested funds (local): \$203,595
- The Drought-Dust Nexus in the Four-Corners Region and Impacts on Society – **[Lead Investigator]** – *Funded*
- *Bob and Judi Braudy Foundation*
 - Local funds: \$139,308
- 2015
- EarthCube IA: Collaborative Proposal: LinkedEarth: Crowdsourcing Data Curation & Standards Development in Paleoclimatology **[Co-investigator]** – *Funded*
- *NSF: Earthcube: Integrated Activities*
 - Local funds: \$113,015
- EarthCube IA: Collaborative Proposal: Chains of Provenance: Linking geoscientific archives, repositories, and analysis **[Co-investigator]** – *Declined*
- *NSF: Earthcube: Integrated Activities*
 - Requested funds (local): \$132,515
- 2014
- Collaborative research: Developing a system model of Arctic glacial-lacustrine sedimentation for investigating past and future climate change **[Lead Investigator]** – *Funded*
- *NSF: Arctic System Science*
 - Local Funds: \$753,203 plus \$300,000 logistical support

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| | Collaborative Research: GeoChronR – Open-source Tools for the Analysis, Visualization and Integration of Time-Uncertain Geoscientific Data [Lead Investigator] – <i>Funded</i> |
| | – <i>NSF: Geoinformatics</i> |
| | – Local funds: \$369,346 |
| 2013 | EarthCube Building Blocks: Crowdsourcing Geoscientific Data Curation [Co-investigator] – <i>Declined</i> |
| | – <i>NSF: Earthcube Building Blocks</i> |
| | – Requested funds (local): \$66,179 |
| | A broader view of North American climate over the past two millennia: Synthesizing paleoclimate records from diverse archives [Lead Investigator] – <i>Funded</i> |
| | – <i>USGS: Powell Center</i> |
| | – Local funds: \$129,737 |
| 2012 | Collaborative Research: A virtual paleoclimate laboratory to quantify climate reconstruction uncertainty – [Lead Investigator] – <i>Declined</i> |
| | – <i>NSF: Paleo-perspectives on climate change</i> |
| | – Requested funds (local): \$473,326 |
| | Collaborative Research (RUI): Alaskan and Peruvian Contributions to a Synthesis of Holocene Proxy Climate Records from the Arctic and Eastern Pacific Rim [Co-investigator] – <i>Declined</i> |
| | – <i>NSF: Paleo-perspectives on climate change</i> |
| | – Requested funds (local): \$687,900 |

Teaching

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| 2016 | Instructor | Earth and Environmental Data Analysis (EES 599), Climate Dynamics (EES 599), Northern Arizona University |
| 2015 | Instructor | Climate Change (ENV 115), Climate Dynamics (EES 599), Northern Arizona University |
| 2014 | Instructor Instructor | Climate Change (ENV 115), Northern Arizona University Paleolakes seminar (EES 698), Northern Arizona University |
| 2013 | Instructor | Modes of Climate Variability (EES 698), Northern Arizona University |
| 2011 | Teaching Assistant | Global Change (GEOS 478/578), University of Arizona |
| 2010 | Teaching Assistant | Physical Geology (GEOS 251), University of Arizona |
| 2007 | Teaching Assistant | Environmental Geology (GLG 360), Northern Arizona University |
| 2007-2005 | Teaching Assistant | Curriculum development and implementation: Tablet computers in the geosciences, Northern Arizona University |

Awards

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| 2016 | Northern Arizona University Research and Creativity Award: “Most Promising New Scholar” |
| 2012 | William G. McGinnies Award for Arid Lands Research |
| 2011 | Best presentation, Geodaze 2011: “Paleoclimate: Oceans, Caves and Modelling” session |
| 2010 | Galileo Circle Scholar |
| 2007 | Northern Arizona University: Geology Department Academic Excellence Award |
| 2005 | Outstanding Senior, Department of Geology, Northern Arizona University |
| 2004 | Accepted to Research Experience for Undergraduates program for summer fieldwork in Svalbard |

Personal Grants and Fellowships

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| 2011 | Graduate and Professional Student Council Travel Grant |
| | Institute of the Environment Student Travel Grant |
| | Wilson R. Thompson Summer Research Grant |
| 2010 | Graduate and Professional Student Council Travel Grant |
| | ChevronTexaco Summer Research Grant |
| | Institute of the Environment Dissertation Improvement Grant |
| 2009 | Graduate and Professional Student Council Travel Grant |
| 2007 | University of Arizona Institute for the Study of Planet Earth Fellowship |
| | University of Arizona Graduate College Fellowship |
| | Northern Arizona University: Geology Department Academic Excellence Fellowship |
| 2006 | Geological Society of America Graduate Research Grant |
| | Friday Lunch Clubbe Research Grant |
| 2005 | Flagstaff Gem and Mineral Society Scholarship |

Professional Service and Outreach

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| 2016 | Leader: PAGES North America 2k working group |
| | Data coordinator: Global PAGES 2k Network |
| 2015 | Leader: PAGES North America 2k working group |
| | Data coordinator: Global PAGES 2k Network |
| | Organizer : PAGES/USGS Powell Center “North America 2k working group meeting”, 12-15 October Fort Collins, CO |
| 2014 | Leader: PAGES North America 2k working group |
| | Data coordinator: Global PAGES 2k Network |
| | Organizer : PAGES/USGS Powell Center “North America 2k working group meeting”, 23-26 June Fort Collins, CO |
| | Organizer : PAGES “North America 2k AGU Breakout meeting”, 17 December, San Francisco, CA |
| | Co-organizer: ”PAGES 2k - Advances in Climate Field Reconstruction Workshop”, 15-16 April, Woods Hole, MA |
| | Invited panelist for NOAA Paleoclimate ad-hoc review panel |

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| 2013 | Climate science Q&A accompanying <i>Chasing Ice</i> |
| 2012 | Geology display at Knoles Elementary School STEM Night Public Lecture – Stories in the mud: What lakes have taught me about past climates. Inaugural McGinnies Lecture, University of Arizona. |
| 2011 | Invited Judge for the University of Arizona Graduate and Professional Student Council Travel Grants |
| 2010 | Introduction to Paleoclimatology. Osher Lifelong Learning Institute, Green Valley, AZ |

Reviewer (Journals)

Science, Geophysical Research Letters, Journal of Geophysical Research: Oceans, Climates of the Past and Geochemical Transactions

Media Coverage

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| Print | Arizona Republic, Arizona Daily Star, BBC News, Green Valley News and Sun, NAU Lumberjack, NAU News, NBC News, and Science Daily |
| Radio | BBC |
| Television | Arizona Public Media |
| New Media | Nature Publishing Group Journal Club, PAGES 2k Google Hangout |