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2015 – Associate Professor, School of Geography, Development, and Environment
Chair, Graduate Interdisciplinary Program in Global Change
Associate, Center for Climate Adaptation Science and Solutions (CCASS)
Joint Appointment, Laboratory of Tree-Ring Research
Joint Appointment, Department of Geosciences
- LAMONT DOHERTY EARTH OBSERVATORY OF COLUMBIA UNIVERSITY New York, NY
2012 – Adjunct Research Scientist
- WOODS HOLE OCEANOGRAPHIC INSTITUTION Woods Hole, MA
2012 – **2015** Assistant Scientist
- LAMONT DOHERTY EARTH OBSERVATORY OF COLUMBIA UNIVERSITY New York, NY
2010 – **2012** Lamont Assistant Research Professor
2009 – **2010** Doherty Associate Research Scientist
2007 – **2009** Lamont-Doherty Postdoctoral Research Fellow
- EDUCATION UNIVERSITY OF ARIZONA Tucson, AZ
2007 Ph.D., Geosciences
- UNIVERSITY OF TENNESSEE Knoxville, TN
2002 M.S., Geography
- GEORGETOWN UNIVERSITY Washington, DC
1998 B.S., (*cum Laude*) Science, Technology, & International Affairs
School of Foreign Service
Major Field: Environmental Science (with Honors)
Foreign study at University of Costa Rica, Institute for Tropical Studies (Golfito), 1996 – 1997
- PUBLICATIONS *Submitted or in Revision* († = postdoctoral author, ‡ = student author)
- Shishov, V., I. Tychkov, K.J. Anchukaitis, E.A. Vaganov, A continuous model of cambium development: opportunities and prospects, submitted, 2021
- ‡ Zhu, F., J. Emile-Geay, **K.J. Anchukaitis**, G.J. Hakim, A. Wittenberg, M. Morales, J. King, Volcanoes and ENSO: a re-appraisal with the Last Millennium Reanalysis, submitted, 2020
- † Gauthier, N., B.L. Coulthard, **K.J. Anchukaitis**, Pattern-based downscaling of snowpack variability in the western United States, *Climate Dynamics*, submitted, 2020

- Buntgen, U., K. Allen, **K.J. Anchukaitis**, D. Arseneault, E. Boucher, A. Brauning, S. Chatterjee, P. Cherubini, O.V. Churakova, C. Corona, F. Gennaretti, J. Grieginger, S. Guillet, J. Guiot, B. Gunnarson, S. Helama, P. Hochreuther, M.K. Hughes, P. Huybers, A.V. Kirilyanov, P.J. Krusic, J. Ludescher, W. J.-H. Meier, V.S. Myglan, K. Nicolussi, C. Oppenheimer, F. Reinig, M.W. Salzer, K. Seftigen, A.R. Stine, M. Stoffel, S. St. George, E. Tejedor, A. Trevino, V. Trouet, J. Wang, R. Wilson, B. Yang, G. Xu, J. Esper, An ensemble approach to Common Era temperature reconstructions from tree rings, in revision, 2021
- ‡ King, J.M., **K.J. Anchukaitis**, J.E. Tierney, G.J. Hakim, J. Emile-Geay, F. Zhu, R. Wilson, A data assimilation approach to last millennium temperature field reconstruction using a limited high-sensitivity proxy network, *Journal of Climate*, in revision, 2021.
- ‡ Anderson, T.G., D.A. Christie, R.O. Chávez, M. Olea, **K.J. Anchukaitis**, Spatiotemporal peatland productivity and climate relationships across the western South American Altiplano, *Journal of Geophysical Research - Biogeosciences*, in revision, 2021
- ‡ Leland, C. L. Andreu-Hayles, E. R. Cook, **K.J. Anchukaitis**, D. Martin-Benito, N. Pederson, A. Hessler, B. Nachin, O. Byambasuren, Physiological responses of ancient pine trees to partial stem dieback and environmental changes, *Tree Physiology*, in revision, 2020

Peer-Reviewed and Invited Papers († = postdoctoral author, ‡ = student author)

- [104] Degroot, D., **K.J. Anchukaitis**, M. Bauch, J. Burnham, F. Carnegie, J. Cui, K. de Luna, P. Guzowski, G. Hambrecht, H. Huhtamaa, A. Izdebski, K. Kleemann, E. Moesswilde, T. Newfield, Q. Pei, E. Xoplaki, N. Zappia. Towards a Rigorous Understanding of Societal Responses to Climate Change, *Nature*, in press, 2021
- [103] ‡ Edwards, J., **K.J. Anchukaitis**, B. Zambri, L. Andreu-Hayles, R. Oelkers, R. D'Arrigo, G. von Arx, Intra-annual climate anomalies in northwestern North America following the 1783-1784 CE Laki eruption, *Journal of Geophysical Research*, 126, e2020JD033544, doi:10.1029/2020JD033544, 2020
- [102] Coulthard, B.L., **K.J. Anchukaitis**, G.T. Pederson, E.R. Cook, J. Littell, D. Smith, Snowpack signals in North American tree rings, *Environmental Research Letters*, doi:10.1088/1748-9326/abd5de, 2020
- [101] Williams, A.P., **K.J. Anchukaitis**, C. A. Woodhouse, D. M. Meko, B. I. Cook, K. Bolles, E. R. Cook, Tree rings suggest no stable cycles in Sierra Nevada cool-season precipitation, *Water Resources Research*, doi: 0.1029/2020WR028599, 2020
- [100] ‡ McPartland, M.Y., S. St. George, G.T. Pederson, **K.J. Anchukaitis**, Does signal-free detrending increase chronology coherence in large tree-ring networks? *Dendrochronologia*, 63, 125755, doi:10.1016/j.dendro.2020.125755, 2020
- [99] ‡ Murphy, P.C., J.F. Knowles, D.J.P. Moore, **K.J. Anchukaitis**, D.L. Potts, G.A. Barron-Gafford, Topography influences species-specific patterns of seasonal primary productivity in a semiarid montane forest, *Tree Physiology*, 40(10),1343–1354, doi:10.1093/treephys/tpaa083, 2020
- [98] Cook, B.I., J. S. Mankin, K. Marvel, A. P. Williams, J. E. Smerdon, **K.J. Anchukaitis**, Twenty-first Century Drought Projections in the CMIP6 Forcing Scenarios, *Earth's Future*, 8, 6, doi:10.1029/2019EF001461, 2020
- [97] Andreu-Hayles, L., B.V. Gaglioti, L.T. Berner, M. Levesque, **K.J. Anchukaitis**, S. Goetz, R. D'Arrigo, A narrow window of summer temperatures is associated with shrub growth in Arctic Alaska, *Environmental Research Letters*, 15, 10, 105012, doi:10.1088/1748-9326/ab897f, 2020
- [96] † Martin, J.T., G.T. Pederson, C.A. Woodhouse, E.R. Cook, G.J. McCabe, **K.J. Anchukaitis**, E.K. Wise, P.J. Erger, L.S. Dolan, M. McGuire, S. Gangopadhyay, K.J. Chase, J.S. Littell, S.T. Gray, S. St. George, J.M. Friedman, D.J. Sauchyn, J. St. Jacques, and J.C. King, Increased drought severity tracks warming in the United States' largest river basin, *Proceedings of the National Academy of Sciences*, 117 (21) 11328–11336, doi: 10.1073/pnas.1916208117, 2020.

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- [94] Pederson, N., C. Leland, D.A. Bishop, J.K. Pearl, **K.J. Anchukaitis**, T. Mandra, M. Hopton-Ahmed, D. Martin-Benito, A framework for determining population-level vulnerability to climate: evidence for growth hysteresis in *Chamaecyparis thyoides* along its contiguous latitudinal distribution, *Frontiers in Forests and Global Change*, 3, 39, doi:10.3389/ffgc.2020.00039, 2020.
- [93] **Anchukaitis, K.J.**, M.N. Evans, M. K. Hughes, and E. Vaganov, An interpreted language implementation of the Vaganov-Shashkin tree-ring proxy system model, *Dendrochronologia*, 60, 125677, doi:10.1016/j.dendro.2020.125677, 2020
- [92] ‡ Pearl, J.K., **K.J. Anchukaitis**, N. Pederson, J. Donnelly, Multivariate climate field reconstructions using tree rings for the northeastern United States, *Journal of Geophysical Research*, 125, 1, e2019JD031619, doi:10.1029/2019JD031619, 2020.
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arXiv Preprints

- Karnauskas, K.B., J.P. Donnelly, **K.J. Anchukaitis**, An intercomparison of monthly surface air temperature on islands and proximate moorings across the tropical Indo-Pacific, arXiv:1707.04603, 2017.

Conference Proceedings and Reports

- Hessl, A.E., N. Pederson, O. Byambasuran, **K.J. Anchukaitis**, and C. Leland, How Unusual Was the 21st Century Drought in Mongolia? Placing Recent Extremes in a 2000-Year Context, *Proceedings of the Trans-disciplinary Research Conference: Building Resilience of Mongolian Rangelands*, Ulaanbaatar, Mongolia, doi:10.25675/10217/181727, 80–86, 2015.
- Cook, E.R., R.D. D’Arrigo, and **K.J. Anchukaitis**, ENSO Reconstructions from Long Tree-Ring Chronologies: Unifying the Differences? in *Workshop on ENSO reconstructions for the past 500 years*, edited by H. F. Diaz, MEDIAS-FRANCE/METEO-FRANCE/NOAA, Moorea, French Polynesia, 2008.

- Laia Andreu-Hayles, **2009–2012**, Postdoctoral Fellow and Marie Curie Postdoctoral Fellow, Lamont Doherty Earth Observatory (co-mentor with Rosanne D'Arrigo). Currently Lamont Associate Research Professor, Lamont-Doherty Earth Observatory of Columbia University.
- Dario Martin-Benito, **2012–2013**, Postdoctoral Scientist, Lamont Doherty Earth Observatory. Currently Ramón y Cajal Research Scientist at the Forest Research Center, Instituto Nacional de Investigación, Madrid, Spain
- Daniel Griffin, **2013–2014**, WHOI Postdoctoral Scholar and NOAA/UCAR Climate and Global Change Postdoctoral Fellowship, Woods Hole Oceanographic Institution. Currently Assistant Professor, University of Minnesota.
- Bethany Coulthard, **2016–2018**, Postdoctoral Research Scientist, Laboratory of Tree-Ring Research and School of Geography and Development, University of Arizona. Currently Assistant Professor, University of Nevada Las Vegas.
- Nicolas Gauthier, **2019–**, Postdoctoral Research Scientist, Laboratory of Tree-Ring Research and School of Geography and Development, University of Arizona.

Graduate Students

- Gloria Jimenez, **Ph.D. 2018**, Geosciences, University of Arizona (co-advisor with Julie Cole, 2017–2018)
- Jessie Pearl, **Ph.D. 2019**, Geosciences, University of Arizona (2014–2018)
- Talia Anderson, **M.A. 2020**; Ph.D., University of Arizona, School of Geography and Development (2017–)
- Julie Edwards, **M.A. 2020**; Ph.D., University of Arizona, School of Geography and Development (2018–)
- Jonathan King, Ph.D., Geosciences, University of Arizona (2018–)
- Kira Haris, M.A., University of Arizona, School of Geography and Development (2020–)

Dissertation, Thesis Committee, or External Reviewer

- Petra Breitenmoser, **2013**, external referee, Ph.D., University of Bern, Switzerland
- Kristina Seftigen, **2014**, *fakultetsopponent*, Ph.D., Gothenburg University, Sweden
- Brewster Malevich, **2017**, committee member, Ph.D., Geosciences, University of Arizona
- Diego Pons, **2017**, external committee member, Ph.D., University of Denver
- Patrick Murphy, **2018** committee member, M.S., Geography, University of Arizona
- Sarah Frederick, **2018** committee member, M.S., Geography, University of Arizona
- Grace Windler, **2018** committee member, M.S., Geosciences, University of Arizona
- Chris Zemp, **2018**, committee member, M.S., Geography, University of Arizona
- Gloria Jimenez, **2018**, co-advisor and committee member, Ph.D., Geosciences, University of Arizona
- Anne Billingsley, **2019**, committee member, Ph.D., Geosciences, University of Arizona
- Matthew Meko, committee member, Ph.D., Geosciences, University of Arizona
- Manuel Hernandez, external committee member, Ph.D., Geography, University of North Carolina
- William Tintor, committee member, Ph.D., Geography, University of Arizona
- Grace Windler, committee member, Ph.D., Geosciences, University of Arizona
- Dervla Meegan Kumar, committee member, Ph.D., Geosciences, University of Arizona
- Emma Reed, committee member, Ph.D., Geosciences, University of Arizona
- Brandon Strange, committee member, Ph.D., School of Natural Resources and the Environment, University of Arizona
- Zack Grzywacz, external committee member, M.S., Geography, West Virginia University

Andrew Zimmer, committee member, Ph.D., Geography, University of Arizona
Aria Blumm, committee member, M.S., Geosciences, University of Arizona

Undergraduates and Interns

Kristin Campbell, **2010**, Climate and Society Intern, Columbia University (co-mentor with Ben Cook)
Hannah Aizenman, **2011**, Google Summer of Code, City University of New York and Columbia University (co-mentor with Julien Emile-Geay and Jason Smerdon).
Diego Pons, **2011**, US State Department and LASPAU Global Change Professional Fellow (mentor and host).
Liora Hostyk, **2012**, Lamont-Doherty Earth Observatory Summer Internship (NSF REU), Barnard College and Columbia University (co-mentor with Ben Cook and Richard Seager).
Manuel Hernandez, **2013, 2014**, WHOI Summer Student Fellow and UCAR/NCAR SOARS protégé, Texas A&M University (co-mentor with Caroline Ummenhofer).
Mariel Herzog, **2013**, Lamont-Doherty Earth Observatory Summer Internship (NSF REU), University of Colorado (co-mentor with Allegra LeGrande).
Laura Fleming, **2013, 2014–2015**, Northeastern University Co-op Semester, Visiting Student at Woods Hole Oceanographic Institution.
Melissa Schwan, **2016**, University of Arizona, Department of Geosciences, Senior Honors Thesis.
Andrea Lara-Garcia, **2020–**, University of Arizona, School of Geography and Development, Senior Honors Thesis

TEACHING

UNIVERSITY OF ARIZONA

Tucson, AZ

School of Geography, Development, and Environment

GEOG 170A1 *Introduction to Physical Geography* (Spring 2016, 2017, 2018, 2019, 2020, 2021)
GEOG 230 *Our Changing Climate* (Autumn 2015, 2016, 2020)
GEOG 430/530 *The Climate System* (Spring 2016, 2017, 2018, 2019, 2021)
GEOS 599-010 *Models of the North Atlantic jet (Independent Study)* (Spring 2018)
GEOG 696C *Spatiotemporal Data Analysis* (Autumn 2016, 2019)
GEOG 696C *State-of-the-Art Climate Science* (Autumn 2020)
GEOG 696M *Hydroclimate: Past, Present, and Future* (Autumn 2017)
GEOG 699-013 *Topics in Paleobiogeography (Independent Study)* (Spring 2016)
GEOG 699-013 *Statistics for Biogeography (Independent Study)* (Spring 2017)

MIT-WHOI JOINT PROGRAM IN OCEANOGRAPHY

Cambridge and Woods Hole, MA

Marine Geology and Geophysics

12.708 *Topics in Paleoceanography* (Autumn 2013)

COLUMBIA UNIVERSITY

New York, NY

Masters in Sustainability Management Program

SUMA K4230 *The Earth's Climate System* (Spring 2011, Spring 2012)

Department of Earth and Environmental Science

EESC V2011 *Earth's Environmental Systems: The Climate System* (Spring 2012)

HONORS, AWARDS, AND FELLOWSHIPS

Udall Center for Studies in Public Policy Fellowship, University of Arizona, Autumn 2018
George H. Davis Travel Fellowship, Office of Research, Discovery & Innovation, University of Arizona, Spring 2018
Research Professorship, College of Social and Behavioral Sciences, University of Arizona, Autumn 2017

Henry Cowles Award for Excellence in Publication, Biogeography Specialty Group, Association of American Geographers, 2015

Stephen S. Visher Lecturer in Climatology, Indiana University, February 2015

Marsico Visiting Scholar, University of Denver, Autumn 2011

Newton International Postdoctoral Fellowship at Oxford University, The Royal Society (United Kingdom), 2009-2011 (*declined*)

Andrew Ellicott Douglass Memorial Scholarship, The University of Arizona, 2007

US Department of Energy (DOE) Global Change Education Program, Graduate Research and Education Fellowship (GCEP-GREF), 2004 – 2006; *declined* in 2007.

NSF Integrative Graduate Education Research and Training Fellowship (IGERT), The University of Arizona, 2003 – 2004, 2007.

Galileo Circle Scholar, The University of Arizona College of Science, 2004

Robert G. Long Outstanding Graduate Student Award, The University of Tennessee, 2002

U.S. Environmental Protection Agency (EPA) STAR Fellowship, 1999 – 2001.

Departmental Honors; First & Second Honors (Dean’s List) Georgetown University, 1998

GRANTS

Current and Recent

- “A stable isotope dendroclimatology approach toward reconstructing paleoclimate dynamics in Central America”, PIs: Laia Andreu-Hayles and **K.J. Anchukaitis**, Columbia University Climate Center, 12/2020, \$8,360.
- “PaleoCAMP (Paleoclimate training in Climate Archives, Models, and Proxies): A multidisciplinary summer school for graduate students in paleoclimatology”, PI: Jessica Tierney, co-PIs: **K.J. Anchukaitis**, Tripti Bhattacharya, Daniel Ibarra, Kathleen Johnson, Heising-Simons Foundation, 01/2021 – 12/2024, \$425,166
- “2000 Years of Variability in the Southern Annular Mode (SAM) from Tree Rings and Ice”, PI: Amy Hessel, co-PIs: **K.J. Anchukaitis**, NSF Paleoclimate Perspectives on Climate Change (P2C2), AGS-1803946, 02/01/2019 – 01/31/2022, \$369,192 (UA Scope: \$149,929)
- “Spatiotemporal Variability in Western United States Snowpack During the Common Era”, PI: **K.J. Anchukaitis**, co-PI: Bethany Coulthard, NSF Paleoclimate Perspectives on Climate Change (P2C2), AGS-1803995, 09/01/2018 – 08/31/2021, \$397,055
- “Developing Tree-Ring Based Streamflow Reconstructions for Large and Complex River Basins”, PI: **K.J. Anchukaitis**, co-PI: Bethany Coulthard, NSF Geography and Spatial Sciences, BCS-1759629, 09/01/2018 – 02/28/2022, \$279,672

Completed

- “The global climate response to volcanic eruptions in the Last Millennium Reanalysis”, PI: J. Emile-Geay, co-PIs: **K.J. Anchukaitis** and G. Hakim. NOAA Climate Program Office, Climate Monitoring Program and Climate Variability and Predictability Program, 09/01/2018 – 08/31/2020, \$299,973 (UA Scope: \$64,004)
- “Stable and Radiogenic Isotope Approach to Paleoclimate Dynamics in Central America” PI: **K.J. Anchukaitis**, University of Arizona, Research, Discovery & Innovation (RDI) International Research and Program Development Grant, 07/01/2018-06/30/2019, \$26,510
- “Recent Northeastern United States Temperature Records in the Context of the Late Holocene” PIs: **K.J. Anchukaitis**, Jeff Donnelly, and Neil Pederson, NSF Paleoclimate Perspectives on Climate Change (P2C2), AGS-1304262, 08/2013 – 07/2016 (No Cost Extensions to 07/2019), \$447,183

- “Past Ocean-Atmosphere Variability from Spatiotemporal Patterns of North Atlantic Climate During the Common Era” (with Lamont-Doherty Earth Observatory, PI: Ed Cook), coPIs: **K.J. Anchukaitis**, Rosanne D’Arrigo. NSF Paleoclimate Perspectives on Climate Change (P2C2), AGS-1501856, 05/2015 – 04/2018 (No Cost Extensions to 04/2019), (UA scope: \$93,491)
- “Spatiotemporal Variability of Northwestern North American Temperatures in Response to Climatic Forcing” (with Lamont-Doherty Earth Observatory, PI: Rosanne D’Arrigo), coPIs: **K.J. Anchukaitis**, Laia Andreu-Hayles, Greg Wiles, Rob Wilson, NSF Paleoclimate Perspectives on Climate Change (P2C2), AGS-1501834, 05/2015 – 04/2018 (No Cost Extensions to 04/2019), (UA scope: \$105,155)
- “Water Resource Relevant Hydroclimatic Reconstructions for Western North America” PI: **K.J. Anchukaitis**, Postdoctoral Researcher: Bethany Coulthard. U.S. Geological Survey (G16AC00266), 09/02/2016 – 9/01/2018, \$118,886
- “Reconstructing Changes in Asian Monsoon Circulation during the Last Millennium from Stable Isotopes in Tropical Tree Rings” PIs: **K.J. Anchukaitis**, B.M. Buckley, C. Ummenhofer, NSF Paleoclimate Perspectives on Climate Change (P2C2), AGS-1203818, 8/15/2012 – 8/14/2015 (No Cost Extension to 08/2017), \$688,279
- “Reconstructing Droughts in the Tropical Americas Using Tree-Ring Analysis” PIs: **K.J. Anchukaitis** and Matthew Taylor, NSF Geography and Spatial Sciences, BCS-1263609, 07/2013–12/2016, \$278,599
- “CNH: Pluvials, Droughts, Energetics, and the Mongol Empire” (with West Virginia University, PI: Amy Hessl), coPIs: Neil Pederson and **K.J. Anchukaitis**, Coupled Natural-Human Systems (CNH), BCS-1210360, 05/2012 – 04/2016 (No Cost Extension to 05/2017) , \$1,394,398; (Pederson & Anchukaitis scope: \$317,576)
- “Tree-Ring Reconstructions of Western North Pacific Climate Dynamics”, PIs: R.D. D’Arrigo, **K.J. Anchukaitis**, N. Davi. NSF Paleoclimate Perspectives on Climate Change (P2C2) AGS-1159430, 06/2012 – 05/2015 (No Cost Extension to 05/2016), \$686,982
- “Past and Future Drought Variability in the Mediterranean Basin” PI: Ramzi Touchan, coPIs: **K.J. Anchukaitis**, David Meko, and B.I. Cook, NSF Paleoclimate Perspectives on Climate Change (P2C2) AGS-1103450, 06/2011 – 05/2014, No-cost extension to 5/2015, (Anchukaitis and Cook scope: \$70,388).
- “Paleoclimate shocks: environmental variability, human vulnerability, and societal adaptation during the last millennium in the Greater Mekong Basin”, PIs: B.M. Buckley, T. Heikkila, **K.J. Anchukaitis**, and 7 others, Coupled Natural-Human Systems (CNH), ATM-0908971, 10/2009 – 9/2013 (No Cost Extension to 09/2014), \$1,401,351
- “Shifting Seasonality of Northern Forest Response to Arctic Environmental Change ”, PIs: R.D. D’Arrigo, **K.J. Anchukaitis**, NSF ARC-0902051, 4/2009 – 3/2012, \$381,154
- “Developing multicentury drought reconstructions from Guatemala and the context for past and future hydroclimatic change”, PIs: **K.J. Anchukaitis**, M. Taylor, and E. Castellanos, Geography and Spatial Sciences, NSF BCS-0852652, 04/2009 - 03/2012 (No Cost Extension to 03/2013), \$203,351
- “Annual climate during the rise and fall of the Great Mongol Empire: Rapid collection of an ancient and endangered paleoclimate resource”, PIs: N. Pederson and **K.J. Anchukaitis**, Columbia University Climate Center, 11/2011, \$7,850.
- “Building capacity for managing climate risk from drought in Guatemala”, PI: **K.J. Anchukaitis**, Columbia University Earth Institute Cross-Cutting Initiative, 11/2010, \$24,000
- “Construction of a device for rapid cellulose extraction from wood for applications in isotope dendrochronology and organic biogeochemistry”, PI: **K.J. Anchukaitis**, Columbia University Climate Center, 05/2011, \$8,000

- “MRI-R2: Acquisition of Stable Isotope Instrumentation for High Precision Paleoclimatic and Environmental Research at the Lamont Doherty Earth Observatory”, PIs: B. Linsley, B. Yan, **K.J. Anchukaitis**, P. deMenocal, P. Schlosser, NSF AGS-0959148, 5/2010 – 4/2012, \$811,868
- “Dating the World Trade Center Ship”, PIs: B.M. Buckley, **K.J. Anchukaitis**, N. Pederson, E.R. Cook, R.D. D’Arrigo. AKRF, Inc., The Lower Manhattan Development Corporation, and The Port Authority of NY & NJ, 8/2010 – 7/2011, \$12,306
- “Establishing the stable oxygen isotope signature of precipitation in the Central Highlands of Vietnam for application to dendroclimatology”, PI: **K.J. Anchukaitis** and B.M. Buckley, Columbia University Climate Center, 11/2008, \$8,000
- “Assessing the dendrochronological potential of tree species in highland Guatemala”, PI: **K.J. Anchukaitis**, Columbia University Climate Center, 12/2007, \$5,000

PRESENTATIONS Recent (2019 to present) † = postdoctoral author, ‡ = student author

- ‡ Dye, L. B. Coulthard, J.S. Littell, **K.J. Anchukaitis**, Tree Rings Reveal Multi-century Snowpack Dynamics of the Cascade Range, USA, AGU Fall Meeting, PP030-0014 (Online), December 2020
- Emile-Geay, J., F. Zhu, G.J. Hakim, **K.J. Anchukaitis**, A.T. Wittenberg, M. Morales, J. King, Volcano-induced ENSO occurrences: an integrated assessment using targeted paleoclimate data assimilation experiments, AGU Fall Meeting, OS015-0014 (Online), December 2020
- English, N.B. A. Adriaanse-Tucker, H. Barton, P.J. Baker, **K.J. Anchukaitis** J. King, A.E. Hessel, K.J. Allen, Frequency-Dependent Covariance of Warm- and Cool-Season Temperature Reconstructions for Southern Australia over the Last Five Centuries, AGU Fall Meeting, PP030-0006 (Online), December 2020
- Xu, G. C.H. Guiterman, T. Swetnam, V. Trouet, **K.J. Anchukaitis**, C.H. Baisan, Fire and climate in eastern Siberia over the past 500 years (1500-2010 CE), AGU Fall Meeting, PP047-0008, (Online), December 2020
- Emile-Geay, J. F. Zhu, G.J. Hakim, **K.J. Anchukaitis**, J. King, Resolving the differences in the simulated and reconstructed temperature response to volcanism over the Last Millennium Reanalysis, Workshop on the Impacts of Large Volcanic Eruptions on Climate and Societies: Proxies, models and solutions for the future, Saas-Fee, Switzerland (Online), August 11-15, 2020
- Anchukaitis, K.J.**, J. King, R. Wilson, and the NTREND Consortium, Northern Hemisphere temperature reconstructions and the climate response to volcanic eruptions, Workshop on the Impacts of Large Volcanic Eruptions on Climate and Societies: Proxies, models and solutions for the future, Saas-Fee, Switzerland (Online), August 11-15, 2020
- ‡ Zhu, F., J. Emile-Geay, G.J. Hakim, **K.J. Anchukaitis**, J. King, Resolving the differences in the simulated and reconstructed temperature response to volcanism over the Last Millennium Reanalysis, EGU General Assembly (Online), May 4D8, EGU2020-2477, 2020
- Andreu-Hayles, L., R. D’Arrigo, R. Oelkers, **K.J. Anchukaitis**, G. Wiles, R. Wilson, D. Frank, N. Davi, Comparison between Blue Intensity (BI) and Maximum Latewood Density (MXD) tree-ring chronologies from the North American Boreal forests, EGU General Assembly (Online), May 4D8, EGU2020-21137, 2020
- Anchukaitis, K.J.** and J. King, Inference from the periphery: large-scale climate variability and Nile riverflow during the Common Era, International Conference on Climate Change in the Breadbasket of the Roman Empire: Reconstructing Nile Floods for the Roman Period, Swiss Institute in Rome, January 23–24, 2020 (**Invited**)
- Anchukaitis, K.J.**, T. Anderson, K. Morino, D. Pons, D. Griffin, C. Leland, E. Castellanos, M.J. Taylor, Progress in Central American dendrochronology, Paper presented at the 36th Conference of Latin American Geographers, Antigua Guatemala, January 2-4, 2020

- ‡ Anderson, T., **K.J. Anchukaitis**, D. Pons, M.J. Taylor, Multiscale Trends in the Central American Midsummer Drought and Regional Precipitation Extremes, Paper presented at the 36th Conference of Latin American Geographers, Antigua Guatemala, January 2-4, 2020
- Anchukaitis, K.J.**, K. Cobb, E.R. Cook, J. Emile-Geay, J.E. Smerdon, A retrospective on 10 years of the Climate of the Common Era Session at AGU, Abstract presented at 2019 Fall Meeting, AGU, Washington, DC, 9-13 December, 2019
- Anchukaitis, K.J.**, A. LeGrande, F. Ludlow, M. Toohey, M. Sigl, C.M. Vidal, Volcanic impacts on climate and society during the Common Era, Abstract PP43D-1633 presented at 2019 Fall Meeting, AGU, Washington, DC, 9-13 December, 2019
- ‡ Zhu, F., J. Emile-Geay, G.J. Hakim, **K.J. Anchukaitis**, J. King, The climate response to Common Era volcanism: insights from the Last Millennium Reanalysis, Abstract PP41A-05 presented at 2019 Fall Meeting, AGU, Washington, DC, 9-13 December, 2019
- ‡ Edwards, J.A., **K.J. Anchukaitis**, L. Andreu-Hayles, R. Oelkers, R. D'Arrigo, G. von Arx, B. Zambri, The impact of the 1783 Laki eruption on North American climate using quantitative wood anatomy of Alaskan white spruce, Abstract PP43D-1632 presented at 2019 Fall Meeting, AGU, Washington, DC, 9-13 December, 2019
- Andreu-Hayles, L., B. Gaglioti, L.T. Berner, **K.J. Anchukaitis**, M. Levesque, S.J. Goetz, R. D'Arrigo, A narrow window of summer temperatures is associated with shrub growth in Arctic Alaska, Abstract B11D-01 presented at 2019 Fall Meeting, AGU, Washington, DC, 9-13 December, 2019
- ‡ King, J., **K.J. Anchukaitis**, J.E Tierney, F. Zhu, J. Emile-Geay, G.J. Hakim, R. Wilson, Reconstructing Common Era temperatures by data assimilation of a limited expert-validated proxy network, Abstract PP43D-1635 presented at 2019 Fall Meeting, AGU, Washington, DC, 9-13 December, 2019
- Anchukaitis, K.J.**, Volcanic impacts on the Climate of the Common Era, University of Washington, Quaternary Research Center 50th Anniversary Speaker Series, Seattle, WA, 30 October, 2019 (**Invited**)
- Anchukaitis, K.J.**, Fimbulwinter, Yaxche, and Armageddon: Volcanic impacts on climate and society, Georgetown University, Department of History and Georgetown Environment Initiative, Washington, DC, 17 September, 2019 (**Invited**)
- Anchukaitis, K.J.**, M.N. Evans, A.N. LeGrande, Indo-Pacific Influences on Tree-Ring Stable Isotopes in Vietnam, Goldschmidt Abstracts, European Association of Geochemistry, Barcelona, Spain, 18–23 August, 2019
- Dull, R.A., J.R. Southon, S. Kutterolf, **K.J. Anchukaitis**, A. Freundt, D.B. Wahl, P. Sheets, P. Amaroli, W. Hernandez, M.C. Wiemann, C. Oppenheimer, Sixth century volcanism and the Tierra Blanca Joven eruption of Ilopango volcano, 4th Volcanic Influence on Climate and Society (VICS) workshop, Cambridge, UK, 13–16 April, 2019
- Anchukaitis, K.J.**, R. Wilson, S. Guillet, M. Stoffel, J. Esper, C. Corona, L. Schneider, D. Frank, and the NTREND Consortium, The volcanic eruption signal in an ensemble reconstruction of Northern Hemisphere temperatures, 4th Volcanic Influence on Climate and Society (VICS) workshop, Cambridge, UK, 13–16 April, 2019
- ‡ Pons, D. A.G. Muñoz, **K.J. Anchukaitis**, M.J. Taylor, M. Melendez, F. Pappa, R. Gomez, Climate Services for Coffee Farmers in Southern Guatemala, Paper presented at the American Association of Geographers Annual Meeting, Washington, DC, 3–7 April, 2019
- Coulthard, B., **K.J. Anchukaitis**, G.T. Pederson, J. Alder, S. Hostetler, S. Gray, Western United States Snow Droughts during the Common Era, Paper presented at the American Association of Geographers Annual Meeting, Washington, DC, 3–7 April, 2019
- ‡ Leland, C. E.R. Cook, L. Andreu-Hayles, A. Hessel, N. Pederson, **K.J. Anchukaitis**, B. Nachin, O. Byambasuren, The Adaptive Morphology of Ancient Siberian Pine and Impacts on Tree-ring Proxies, Paper presented at the American Association of Geographers Annual Meeting, Washington, DC, 3–7 April, 2019

Anchukaitis, K.J. and D. Griffin, Drought, whiplash, and variability in tree-ring reconstructions from western North America, 29th Pacific Climate Workshop (Extreme Events), Pacific Grove, California, 17-20 February, 2019 (**Invited**)

SERVICE & SYNERGISTIC ACTIVITIES

- University of Arizona, 2015–*: School of Geography and Development Colloquium Committee (2017–2018; 2019–present); Chair, Global Change Graduate Interdisciplinary Program (2017–present); School of Geography and Development Annual Performance Review Committee (2018–present, Chair in 2020–2021); School of Geography Committee for Diversity, Equity, and Inclusion (2019–2020); Graduate Admissions Committee, School of Geography and Development (2015 to 2018); Earth System Genomics faculty search committee (2016); Integrated Land Use Science/Human-Environment Systems faculty search committee (2016–2017); Forests, Carbon & Climate faculty search committee (2017); Paleoclimatology Faculty Search committee (2017–2018); Data Science and Spatial Analysis Faculty Search committee (2019–2020)
- Contributing Author*, Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6), 2019–present
- Guest editor, special issue on ‘Interdisciplinary studies of volcanic impacts on climate and society’ for *Climate of the Past*, 2020–2021
- Editorial Advisory Board, *Studies in Premodern History and Environment*, Oxford University Press, 2019–
- U.S. National Committee (USNC) for the International Union for Quaternary Research, 2018–
- Editorial Advisory Board*, *Quaternary Science Reviews*, 2008–present.
- Steering Group*, PAGES Working Group on Volcanic Impacts on Climate and Society 2015–present.
- Member*, PAGES Asia2k (2011–2014), Ocean2k (2011–2015), North America 2k (2015–present) Working Groups.
- Organizer and co-chair*, ‘Climate of the Common Era’ for the American Geophysical Union Annual Meeting (AGU), 2010–2019; ‘Monsoon Effects on Past Civilizations’, 2012.
- US Secretariat and Scientific Committee*, 10th International Conference on Dendrochronology, Thimphu, Bhutan (2018)
- University of Arizona Museum of Art panelist, ‘Fires of Change’ exhibit (2016).
- Coordinator*, PAGES2k Transregional Reconstruction Methods Development, 2014–2016.
- Scientific Committee, 3rd American Dendrochronology Conference, Mendoza, Argentina, March 2016
- Guest editor, *PAGES Magazine*, 2015.
- Founder, organizer, and lead instructor*, Central American Dendroecological Fieldweek, Chancol, Cuchumatanes, Guatemala, March 2015.
- Fellow, Expert Witness Training Academy, NSF Paleoclimate Program and William Mitchell College of Law, St. Paul, Minnesota, August 2015.
- Chair and co-organizer*, PAGES Advances in Climate Field Reconstructions, April 15–16, 2014, Woods Hole, Massachusetts.
- Scientific Advisory Committee*, 9th International Conference on Dendrochronology, Melbourne, Australia, January 2014.
- Contributing Author*, Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5; 2013)
- Instructor*, North American Dendroecological Fieldweek, Black Rock Forest, New York, June–July 2013.
- CLIVAR-PAGES Panel (starting in 2012)
- Arctic Research Consortium of the U.S. (ARCUS) PolarTREC Selection Committee, 2012–2013

International Workshop on Climate Informatics, Program Committee and Breakout Group Leader, 2012

Lamont-Doherty Earth Observatory, 2007–2012: Columbia Climate Center, 2011 - 2012; Promotion and Careers Committee, 2009 - 2012; Campus Life Committee, 2008 - 2010; Volunteer and Speaker, Annual Open House, 2007, 2008, Panelist on Climate Extremes, 2011.

Organizer and co-chair, ‘Advances in Paleoclimatology’ for the Annual Meetings of the Association of American Geographers, 2004 – 2009; ‘Challenges in Dendrochronology’, 2012.

Mentor, ‘Google Summer of Code’, Climate Code Foundation, Summer 2011.

Guest editor, Dendrochronologia, 2003 – 2004.

Professional reviewer of journal manuscripts for *Science, Nature, Nature Geoscience, Nature Climate Change, Science Advances, Proceedings of the US National Academy of Sciences, Journal of Climate, Geology, Journal of Geophysical Research, Geophysical Research Letters, Climate Dynamics, Physical Geography, Geochimica et Cosmochimica Acta, Ecology, Earth and Planetary Science Letters, Global Change Biology, Climate of the Past, Quaternary Research, Climatic Change, The Holocene, Paleoceanography, Geochemistry, Geophysics, Geosystems, Tellus B, Chemical Geology, Canadian Journal of Forest Research, Forest Ecology and Management, International Journal of Biometeorology, Canadian Water Resources Journal, Journal of Volcanology, Earth Interactions, Historical Geography, Current Anthropology, Tree-Ring Research, Dendrochronologia,* and others.

Proposal reviewer for the National Science Foundation (NSF, USA), National Aeronautics and Space Administration (NASA, USA), Natural Environment Research Council (NERC, UK), Deutsche Forschungsgemeinschaft (the German Research Foundation, DFG), the Swiss National Science Foundation, Fonds de Recherche du Québec, and the National Geographic Society.