**Nicole K. Davi, Ph.D.**

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**EDUCATION:**

**Ph.D. 2010,** Physical Geography (dendrochronology, paleoclimatology), Department of Geography, Rutgers, The State University of New Jersey, New Brunswick, (Dissertation: Reconstructed Drought Variability Across Mongolia Based on Tree-Ring Records).

Teachers College, Columbia University, New York. Graduate School of Education. One year toward Science Education Ph.D. 2004-2005.

**M.S. 2002,** Physical Geography, Department of Geography, Rutgers, The State University of New Jersey, New Brunswick, (Thesis: Boreal Temperature Variability Inferred from Maximum Latewood Density and Ring-Width Data from the Wrangell Mountain Region, Alaska).

**B.S. 1996**, Environmental Science, Ramapo College of New Jersey.

**PROFESSIONAL EXPERIENCE:**

**Department Chair (July 2020-present),** William Paterson University of New Jersey, Department of Environmental Science. 300 Pompton Road, Wayne, New Jersey. Lead the department in developing and implementing immediate and long-range departmental goals and objectives (with faculty input) to support university initiatives, including; mission, curricula, scheduling, interdisciplinary initiatives, mentoring, advising, budgets, supervising and evaluating 12 staff, and departmental review.

**Full Professor (2019-present), Associate Professor (2017-2019), Assistant Professor (2013-2017),** William Paterson University of New Jersey, Department of Environmental Science. 300 Pompton Road, Wayne, New Jersey.

**Adjunct Senior Research Scientist (2019-present), Adjunct Associate Research Scientist (2013-2019),** Tree-Ring Laboratory, Lamont-Doherty Earth Observatory, Columbia University. Palisades, New York.

**New Jersey Science Advisory Board’s Climate and Atmospheric Sciences Standing Committee,** New Jersey Department of Environmental Protection **(2021-2024).**

**Lecturer (2020-2021),** School of Professional Studies, Sustainability Management, Columbia University. Co-teach: Water Resources and Climate course.

**Fulbright US Scholar 2020.** Fulbright US Scholars Program.Developing long-term climate records from high-altitude forests of the Colombian Central Cordillera (postponed due to pandemic).

**National Science Foundation Postdoctoral Research Fellow (2012-2013),** Division of Atmospheric and Geospace Science. Lamont-Doherty Earth Observatory, Columbia University. Palisades, New York.

**Course Scientist (2011-2013),** American Museum of Natural History, New York, New York. Climate Change.

**Postdoctoral Research Scientist (2010-2012**), Tree-Ring Laboratory, Lamont-Doherty Earth Observatory, Columbia University. Palisades, New York.

**Research Associate (2002-2009),** Tree-Ring Laboratory, Lamont-Doherty Earth Observatory, Columbia University. Palisades, New York.

**Adjunct Professor (2004),** Department of Earth and Environmental Studies, Montclair State University. Montclair, New Jersey. Course: Introduction to Physical Geography

**Research Assistant (1997-2002),** Tree-Ring Laboratory, Lamont-Doherty Earth Observatory, Columbia University. Palisades, New York.

**Instructor (2002),** **Teaching Assistant (2001**), Department of Geography, Rutgers, State University of New Jersey. New Brunswick, New Jersey. Course: Remote Sensing.

**RESEARCH AWARDS AND GRANTS:**

Recipient of the 2021-2022 Faculty Excellence Award in Research/Scholarship/Creative Expression & the 2020-2021 Arnold Speert Students First Award, Student Government Association, William Paterson University.

Undergraduate Research Experiences in Climate Science. Taub Foundation, **Davi N,** Kalejaye R, William Paterson University Foundation & Institutional Advancement, $25,000, 2022-2023, Awarded

Collaborative Research: Socio-economic patterns, public perceptions, and climate vulnerabilities of water resources and quality. NSF Build and Broaden Program, [Award #2127335](https://nsf.gov/awardsearch/showAward?AWD_ID=2127335&HistoricalAwards=false). **Davi N**, Sullivan M, Milanes L, $292,640 to William Paterson University. 2021-2024, Awarded

Collaborative Research: Understanding the Impacts of Extreme Events on the Peoples of the Arctic. NSF Arctic Social Science Program, [Award #2112463](https://nsf.gov/awardsearch/showAward?AWD_ID=2112463&HistoricalAwards=false). **Davi N**, $408,492. 2022-2025, Awarded

Tropical Cyclone Impacts and Climate Resilience of Maritime Forests of New Jersey. NOAA, NJ Sea Grant Program. **Davi N**, Andreu-Hayles L, Haaf L. $139,968. 2022-2024, Awarded

Temporal dynamics of tree-growth and photosynthesis and their environmental drivers in the Lamont Sanctuary Forest Preserve: Lamont-Doherty Earth Observatory Climate Center, Columbia University, $10,000, 4/1/21 to 12/31/22 Rao, M.P., Pacheco-Solana, A., Jensen, J., Oryan, B., Rodríguez-Catón, M., Griffin, K.L., Andreu-Hayles, L., Boelman, N., Commane, R., Gentine, P., & **Davi, N**. Awarded

Tropical cyclone impacts and climate response of the centuries-old maritime forests of NY & NJ: Lamont-Doherty Earth Observatory Climate Center, Columbia University, $10,000, 11/1/20 to 10/31/21. **Davi, N.** & Andreu-Hayles, L. Awarded

Collaborative: A Millennial Northwestern North American Treeline Blue Intensity Network based on Living and Subfossil Wood, NSF Paleo-Perspectives on Climate Change P2C2, Proposal #2202716 (PI: D’Arrigo R, CoPI: Anchukaitis K, Wiles G, Wilson R, **Davi N**, Porter T) $ 532,196, Pending

Developing long-term climate records from high-altitude ecosystems of the Colombian Central Cordillera (PI **N Davi**), Fulbright U. S. Scholars Program, $26,000 Awarded, postponed due to Covid19

Climate Science/Art Collaboration: National Endowment of the Arts. (Evangelista K, **Davi N**, Johnsen E), Nov. 2018, $20,000, Awarded

Geoscience Education: Paterson Great Falls National Historical Park: National Park Service. (PI: Ilyse Goldman, w. **N Davi**, N. Susan Balic, and N. Noris-Bauer). 2018, $38,300 Awarded

Collaborative Research: Calibrating Southeast Asian Proxies: Speleothems and Tree Rings, NSF Paleo-Perspectives on Climate Change P2C2, [Award # 1602947](https://nsf.gov/awardsearch/showAward?AWD_ID=1602947&HistoricalAwards=false), 2016-2019 (PI M Griffiths, Co-PIs B Buckley, K Johnson, **N Davi**), $233,684, Awarded

Infrastructure Support for Undergraduate Research in Dendrochronology, (PI: **Davi N**), College of Science and Health (WPU internal award), March 2015, $19,000 Awarded

Climate, human and ecosystem interactions in the face of a rapidly changing Asian steppe. Arctic Social Science, NSF, [Award # 1737788](https://nsf.gov/awardsearch/showAward?AWD_ID=1737788&HistoricalAwards=false), (PIs **Davi N,** Andreu- Hayles), 2017-2023, $459,475 Awarded

Climate, livestock, and ecosystem interactions in the face of a rapidly changing Asian steppe. NASA Earth and Space Science Fellowship (**Davi N**, PI) Ph.D. Student support award for M. Rao DEES, Columbia University, February 2017, $180,000, Declined

Collaborative Research: Evaluating long-term climate variability and change in Central Asia. Paleoclimate Program, NSF (PI **Davi N**, Co-PI D’Arrigo R, Lyon B), 2016, $400,000 Declined

OPUS: Collaborative Research: The Tree-Ring Record of Severe Climate Conditions linked to Famine and other Socioeconomic Impacts Across Northern Regions. NSF, Division of Environmental Biology (PI R D’Arrigo, Co-Pi **Davi N**), 2016, $195,203 Declined

Using tree rings to develop critical scientific and mathematical thinking skills in undergraduate students, (PIs **Davi N,** Lead, Co-PI Wattenberg F) NSF Division of Undergraduate Education, [Award # 1405664](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1405664&HistoricalAwards=false), 2014-2019, $248,392 Awarded

Investigating the origin of land cover degradation and dust emission in Central Asia. NASA Earth and Space Science Fellowship (**Davi N**, PI) Ph.D. Student support award for Mukund Rao DEES, Columbia University, 2016, $90,000 Declined

Generating Ultra-Sensitive Millennial-Length Paleoclimatic Records for Central Asia using Novel Blue Light Intensity Techniques, NSF CAREER (**Davi N**, PI**)**, 2015, $573,176 Declined

Sub-Contract to Chuo University Japan: Research on Evaluation of Mean State and Climate Extremes in the long Meteorological Records in Mongolia (PI **Davi N**, Lall U, D’Arrigo R). 2015, $73,252 Awarded

Student-Led Development of Earth Science Interpretive and Curriculum Materials for The Paterson Great Falls National Historic Park (PIs **Davi N**, Griffiths M). Landsberger Foundation: 2013-2014 ($14,000), 2015-2016 ($14,500), 2019 ($19,000), 2021 ($20,000), Awarded

Toward a deeper understanding of climate induced disaster in Mongolia: Identifying mechanisms, change & vulnerability (PI: **Davi**). NSF Atmospheric and Geospace Science, [Award # 1137729](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1137729&HistoricalAwards=false), Postdoctoral Research Fellowship. 2012-2015, $172,000 Awarded

Tree-ring reconstructions of western North Pacific Climate Dynamics (D'arrigo, R, PI; Co-Pis: Anchukaitis, K, **Davi**, N) NSF P2C2, [Award #1159430](https://www.nsf.gov/awardsearch/showAward?AWD_ID=1159430&HistoricalAwards=false), 2012-2015, $685,000 Awarded

Synthesis of three decades of research of tree growth In Northern Forests*,* (D'arrigo, R, PI; Co-PIs: **N Davi**, Jacoby, G) NSF OPUS, [Award # 0948827](https://www.nsf.gov/awardsearch/showAward?AWD_ID=0948827&HistoricalAwards=false), 2010-2014: $133,30 Awarded

The influence of atmospheric and oceanic forcings on the Southwest and Northeast Monsoon over India: (PIs Buckley B, **Davi N**). Lamont Climate Center, 2013 $10,069 Awarded

Elucidating near-term climate change information to guide water resources decisions and foster sustainability,Earth Institute at Columbia University, Cross-Cutting Initiative, (Block P, PI; Co-PIs: **N Davi**, Green A, Marx S) 2010-2011, $34,000 Awarded

SPrEaD FORESTS: Framing Opportunities in Research and Ecosystem Studies for Teachers and their Students (Degnan N Lead PI, CO-PIs **Davi N**, Meagher M, Newton R, Palmer M) National Science Foundation, Innovative Technology Experiences for Students and Teachers (ITEST), Fall 2014, $1,838,371 Declined

Acquisition of Stable Isotope Instrumentation for High Precision Paleoclimatic, Environmental, and Biological Research at William Paterson University (Lead PI Griffiths, CO-PIs **Davi**, Becker, Peek, & Slaymaker) Internal WPU New Equipment Competition. 2015, $300,000 Declined

Collaborative Research: Sub-Annual Reconstruction Of The Southeast Asian Monsoon (WPU PI **Davi N**). NSF EAR: Global Change. 2014, $113,616. Declined

Towards a new understanding of the Dzud and other extreme events in Mongolia: coupling of climatic change and human activities, (**Davi N**, Lead PI, Co-PIs, D'Arrigo R, Anchukaitis K, Cook B, Levy M, Skees, J) NSF-CNH, 2012, $1,496,826 Declined

Lamont-Doherty Geoscience High School Research Program (PIs Alcantara, Lead PI, Co-PIs, **Davi N**, and Newton R). Honda Foundation $60,000. 2013, Declined

SC2OPE-LIT: Studying Climate Change as the Opportunity to Promote Environmental –Literacy (N Degnan, Lead PI, Co-Pis **Davi N** & Newton R). NOAA: Environmental Literacy Grants for Building Capacity of Informal and Formal Educators. 2013, $699,344. Declined

Collaborative Research: Pathways AISL: Expeditions into Tree-ring Research: A Multimodal and Multimedia Public Outreach Campaign (PIs **N Davi**, F. Fiondella, G. Gould, and R Fowler), NSF AISL, 2013, $250,000 Declined

**PEER-REVIEWED PUBLICATIONS:**

In Prep. Mathern C, & **Davi N**. Effective Exhibitions Should Help Us Understand Climate Change Outside of the Classroom. The American Alliance of Museum’s Exhibition magazine.

In Prep. **Davi N**, et al. Tropical Cyclones and Climate Response of a Centuries-Old Maritime Forests, Montauk, NY.

In Prep Nixon T, **Davi N**, Andrue-Hayles, Raphael J, Haaf L Evaluating American Holly (Ilex opaca) climate sensitivity, resilience/vulnerability in Maritime Forests of N.Y. and N.J.

In Prep Yue W, Chen F, **Davi N**, Zhang H, Chen Y, Gao Z, Zhao X. A 600-year warm-season temperature reconstruction documents Little Ice Age and volcanic cooling signals in the Hengduan Mountains, China, *Journal of Climate*, submitted Oct. 2022

2023 Rao MP, **Davi N**, Magney TS, Andreu-Hayles L, Baatarbileg N, Suran BB, Varuolo-Clarke A, Cook B, D’Arrigo R, Pederson N, Odrentsen L, Rodríguez-Catón M, Leland C, & Griffin KL. Approaching a thermal tipping point in the Eurasian boreal forest at its southern margins. *Communications Earth & Environment, in revision.*

2023 Leland C, Andreu-Hayles L, Cook E, Anchukaitis K, Martin-Benito D, Pederson N, Hessl A, **Davi N**, Nachin B, Byambasuren O. Impacts of Climate and Tree Morphology on Tree-ring Stable Isotopes in Central Mongolia. *Tree Physiology*, [*https://doi.org/10.1093/treephys/tpac142*](https://doi.org/10.1093/treephys/tpac142)

2023 Leland C, D’Arrigo D, **Davi N**, Porter T, Nixon T, Oelkers R, Andreu-Hayles L,Wiles G, Wilson R, Anchukaitis K, Rao M, Gaglioti B, Beaulieu, Reed. A Spatiotemporal Assessment of Extreme Cold in Northwestern North America Following the Unidentified 1809 CE Volcanic Eruption. *Paleoceanography and Paleoclimatology* Vol 38 (5). <https://doi.org/10.1029/2022PA004581>

2022 Büntgen et al. Global wood anatomical network reveals climatic triggers of the onset of Late Antique Little Ice Age. *Science Bulletins*, August, 2022

2022 Haraguchi M, Lall U, Wantanabe M, **Davi N**, Rao M, Leland C, Risk analysis of Climate Induced Disaster in Mongolia. *Natural Hazards and Earth System Sciences,* 22, 2751–2770 <https://doi.org/10.5194/nhess-22-2751-2022>

2022 Chen, F., Chen, Y., **Davi, N**., Xu, H., Zhang, H., Summer Temperature Reconstruction for the Source Area of the Northern Asian Great River Basins, Northern Mongolian Plateau Since 1190 CE and its Linkage With Inner Asian Historical Societal Changes, *Frontiers Earth Science*, <https://doi.org/10.3389/feart.2022.904851>

2022 Zhou F, FangK, ChenZ, WangF, **DaviN**, ChenY, WangC, & ChenD, El Niño-Southern Oscillation modulates soil erosion in hilly red soil region of Southeast China: evidence from exposed tree roots. *Frontiers in Earth Science.*

2021 **Davi N**, Pringle P, Fiondella F, Oelkers R, Online labs to introduce undergraduate students to scientific concepts and practices in tree-ring research. *Journal of Geoscience Education,* [*https://doi.org/10.1080/10899995.2021.1927567*](https://doi.org/10.1080/10899995.2021.1927567)

2021 Kecojevic A, Basch C, Sullivan M, Chen T, **Davi N**. COVID-19 vaccination and intention to vaccinate among a sample of college students in New Jersey. *Journal of Community Health, 1-10.* [*https://doi.org/10.1007/s10900-021-00992-3*](https://doi.org/10.1007/s10900-021-00992-3)

2021 **Davi, N. K.,** Rao, M. P., Wilson, R., Andreu-Hayles, L., Oelkers, R., D'Arrigo, R., et al. (2021). Accelerated recent warming and temperature variability over the past eight centuries in the Central Asian Altai from blue intensity in tree rings. *Geophysical Research Letters*, 48, e2021GL092933. <https://doi.org/10.1029/2021GL092933>

2020 Kecojevic, A, Basch, CH, Sullivan, M, **Davi, NK**, The impact of the COVID-19 epidemic on mental health of undergraduate students in New Jersey, cross-sectional study. *PLOS One- Public Health,* <https://doi.org/10.1371/journal.pone.0239696>

2019 Björklund J, Georg von Arx, Daniel Nievergelt, Loïc Schneider, Patrick Fonti, Anne Verstege, Holger Gärtner, Fritz Schweingruber, Rob Wilson, Björn Gunnarson, Björn Günther, Alexander Kirdyanov, Martin Wilmking, Tobias Scharnweber, Neil Loader, Song Huiming, Andrea Hevia, Ryszard Kaczka, Karolina Janecka, Markus Kochbeck, Claudia Hartl-Maier, Jan Esper, Kurt Nicolussi, Yu Liu, Laia Andreu-Hayles, **Davi N**, Jan van Den Bulcke, De Mil T, Trouet V, Danny McCarroll, Oelkers R, Geary J, Mundo I, Villalba R, Meko M, Timonen M, and Frank D, Scientific merits and analytical challenges of tree-ring densitometry, *Reviews of Geophysics* 57, pp. 1224-1264, [10.1029/2019RG000642](https://doi.org/10.1029/2019RG000642)

2019 Wilson, R., Wood, C., Oelkers, R., Haberbauer, L., Luckman, B., Morimoto, D., Andreu Hayles, L., D’Arrigo, R., **Davi, N**., Cook, E., Krusic, P., Anchukaitis, K., Wiles, G. Improved dendroclimatic calibration using blue intensity in the southern Yukon, *The Holocene:* 1-14: <https://journals.sagepub.com/doi/pdf/10.1177/0959683619862037>

2019 **Davi N**, Lockwood J, Fiondella F, Pringle P, Oelkers R,Tree-Ring Expeditions (TREX): Online labs that guide students to think like scientists. *Journal of Tree-Ring Research* *Vol. 75(2), pp. 160–166 DOI:* [*http://dx.doi.org/10.3959/1536-1098-75.2.160*](http://dx.doi.org/10.3959/1536-1098-75.2.160)

2018 Buentgen U, Wacker L, Galvan D, Arnold S, Arseneault D, Baillie M, Beer J, Bernabei M, Bleicher N, Boswijk G, Bräuning A, Carrer M, Ljungqvist F, Cherubini P, Christl M, Christie D, Clark P, Cook C, D'Arrigo R, **Davi N**, Eggertsson O, Esper J, Fowler A, Gedalof Z, Gennaretti F, Griessinger J, Grissino-Mayer H, Grudd H, Gunnarson B, Hantemirov R, Herzig F, Hessl A, et al. Tree rings reveal globally coherent signature of cosmogenic radiocarbon events in 774 and 993 CE" *Nature Communications 9, 3605.* [*https://doi.org/10.1038/s41467-018-06036-0*](https://doi.org/10.1038/s41467-018-06036-0)

2018 Buckley BM, Hansen K, Griffin K, Schmiege S, Oelkers R, D’ Arrigo, Stahle D, **Davi N**, Nguyen T, Le N, and Wilson R, Blue Intensity (BI) from a tropical conifer’s growth rings and links to climate, *Dendochronologia V50.* [*https://doi.org/10.1016/j.dendro.2018.04.003*](https://doi.org/10.1016/j.dendro.2018.04.003)

2018 Leland, C, Cook E, Andreu-Hayles L, Pederson N, Hessl A, Anchukaitis K, Byambasuren O, Nachin B, **Davi N**, D’Arrigo R, Griffin K. Bishop K, Rao M, Strip-bark Morphology and Radial Growth Trends in Ancient Pinus sibirica Trees from central Mongolia, *Journal of Geophysical Research: Biogeosciences*: <https://doi.org/10.1002/2017JG004196>

2017 Wilson R; D’Arrigo R, Andreu-Hayles L; Oelkers,R; Wiles G, Anchukaitis K, **Davi N**, Experiments based on blue intensity for reconstructing North Pacific temperatures along the Gulf of Alaska. *Clim. Past*, 13, 1007-1022 <https://doi.org/10.5194/cp-13-1007-2017>

2017 Rao MP, Cook BI, Cook ER, D’Arrigo RD, Krusic P, Anchukaitis K, LeGrande A, Buckley BM, **Davi N**, Leland C, Griffin KL, European and Mediterranean hydroclimate response to tropical volcanic forcing over the past millennium. *Geophysical Research Letters,* [*https://doi.org/10.1002/2017GL073057*](https://doi.org/10.1002/2017GL073057)

2017 Anchukaitis, K., Wilson, R., Briffa, K., Büntgen, U., Cook, E., D' Arrigo, R., **Davi, N**., Esper, J., Frank, D.,Gunnarson, B., Hegerl, G., Helama, S., Klesse, S., Krusic, P., Linderholm, H., Myglan, V., Osborn, T., Rydval, M., Schneider, L., Schurer, A., Wiles, G., Zhang, P. and Zorita, E. Last millennium Northern Hemisphere summer temperatures from tree rings: Part II: the spatial context. Quat. Sci, Reviews, 134, 1-18.

2017 Guillet S, Corona C, Stoffel M, Khodri M, Lavigne F, Ortega P, Eckert N, Dkengne Sielenou P, Daux V, Churakova (Sidorova) O, **Davi N**, Edouard J, Zhang Y, Luckman B, Myglan V, Guiot J, Beniston B, Masson-Delmotte V, Oppenheimer C, 2017, How exceptional were the climatic impacts of the largest Common Era volcanic eruption? *Nature Geoscience* 10, 123–128

2016Seim A, Schultz J, Leland C, **Davi N**, Byambasuren O, Liang E, Wang X, Beck C, Linderholm H, Pederson N, Synoptic-scale circulation patterns during summer derived from tree rings in mid-latitude Asia. *Climate Dynamics* *V49, Issue 5–6.*

2016 Chen F, **Davi N**, et al, Irtysh River flow since 1500 as reconstructed by tree rings, reveals changing hydroclimatic signal of central High Asia. *Climatic Change* [*https://doi.org/10.1007/s10584-016-1814-y*](https://doi.org/10.1007/s10584-016-1814-y)

2016 Chen, Z, He X, **Davi N**, Zhang A, and Peng, J., A 258-year reconstruction of precipitation for southern Northeast China and the northern Korean peninsula. *Climate Change* [*https://doi.org/10.1007/s10584-016-1796-9*](https://doi.org/10.1007/s10584-016-1796-9)

2016 Esper J, Krusic P, Ljungqvist F, Luterbacher J, Carrer M, Cook E, **Davi N**, Kirdyanov A, Konter O, Myglan V, Salzer M, Timonen M, Treydte K, Trouet V, Villalba V, Wilson R, Yang B, Büntgen U, Review of tree-ring based temperature reconstructions of the past millennium. *Quaternary Science Reviews 145.*

2016 Wilson, R. J. S., Anchukaitis, K. J., Briffa, K. R., Büntgen, U., Cook, E., D' Arrigo, R. D., **Davi, N. K.**, Esper, J., Frank, D., Gunnarson, B., Hegerl, G., Helama, S., Klesse, S., Krusic, P. J., Linderholm, H. W., Myglan, V., Osborn, Rydval, M., Schneider, L., Schurer, A., Wiles, G., Zhang, P., and Zorita, E., 2016. Last millennium northern hemisphere summer temperatures from tree-rings: Part I: The long term context. Quaternary Science Reviews 134: 1-18.

2015 Rao PM\*, **Davi N**, Wang S, D’Arrigo R, Skees J, Lyon B, Leland, C. Climate, Dzuds, droughts, and livestock mortality in Mongolia. *Env. Res. Letters—\*PhD student*

2015 **Davi N**, D’Arrigo R, Jacoby G, Nachin B. et al. A Central Asian Millennial Temperature Record based on Tree Rings from Mongolia. *Quaternary Science Reviews 121, 89-97*

2015 Chen Z, Zhang X, He X, **Davi N**, Bai X, Li L, Response of radial growth to warming and CO2 enrichment in southern Northeast China: a case of *Pinus tabulaeformis. Climatic Change 130, 559-571.*

2015 Fang K, Chen D, D'Arrigo R, **Davi N,** Influence of non-climatic factors on the relationships between tree growth and climate over the Chinese Loess Plateau. *Global and Planetary Change*

2014 Fang K, Seppa H, He M, **Davi N**, Hydroclimate Variations in Central and Monsoonal Asia over the Past 700 Years. *PLOS ONE*

2014 D’Arrigo, R., R. Wilson, G. Wiles, K. Anchukaitis, O. Solomina, **N. Davi**, C. Deser, V Matskovsky, E Dolgova, Tree ring reconstructed temperature index for coastal northern Japan: Implications for western North Pacific variability. *International Journal of Climatology,* DOI: 10.1002/joc.4230

2014 Fang K, Wilmking M, **Davi N,** Zhou F, Liu C, An ensemble weighting approach for dendroclimatology: drought reconstructions for the northeastern Tibetan Plateau. PLOS ONE https://doi.org/10.1371/journal.pone.0086689

2014 D’Arrigo R, **Davi N**, Jacoby G, Wilson R, Wiles G. Synthesis of Three Decades of Research on Tree Growth in Northern Forests in relation to Global Climatic Change. AGU/Wiley Monograph ISBN-13: 978-1118848722

2013 Fang K, **Davi N**, D’Arrigo R, A reconstruction of the Asia-Pacific Oscillation Index for the past 1500 years and its association with the Asian summer monsoon. *International Journal of Climatology* 34 (7).

2013 Leland C, Pederson N, Hessl A, **Davi N**, Nachin B.A Hydroclimatic Regionalization of North-central Mongolia as Inferred from Tree Rings. *Dendrochronologia*.

2013 **Davi N**, Pederson N, Leland C, Suran B, Nachin B, Jacoby G. Four centuries of hydroclimatic context for the recent drying in east central Mongolia. *Water Resources Research 118, 1–8,* [*https://doi.org/10.1029/2012WR011834*](https://doi.org/10.1029/2012WR011834)

2012 Poulter, B., N. Pederson, H. Liu, Z. Zhu, R. D'Arrigo, P. Ciais, **N. Davi,** D. Frank, C. Leland, R. Myneni, S. Piao, and T Wang. Recent trends in Inner Asian forest dynamics to temperature and precipitation indicate high sensitivity to climate change. Invited paper for the special issue "Drought threatened Inner Asian Ecosystems" in *Agricultural and Forest Meteorology,* [*https://doi.org/10.1016/j.agrformet.2012.12.006*](https://doi.org/10.1016/j.agrformet.2012.12.006)

2012 Cui M, He X, **Davi N**, Chen Z, Zhang X, Peng J, Chen W, Ding W. Evidence of century environmental changes: trace element in tree-ring of Fuling Mausoleum Shenyang. *Dendrochronologia* [*http://dx.doi.org/10.1016/j.dendro.2011.09.003*](http://dx.doi.org/10.1016/j.dendro.2011.09.003)

2012 FangK, ChenF, GouX, **DaviN**, LiuC, Spatiotemporal drought variability for central and eastern Asia over the past seven centuries derived from tree-ring based reconstructions. *Quaternary International.* [*http://dx.doi.org/10.1016/j.quaint.2012.03.038*](http://dx.doi.org/10.1016/j.quaint.2012.03.038)

2012 Chen Z, Li J, Fang K, **Davi** **N**, He X, Cui M, Zhang X, Peng J. Seasonal dynamics of vegetation over the past 100 years inferred from tree rings and climate in Hulunbei’er steppe, northern China. *Journal of Arid Environments* <http://dx.doi.org/10.1016/j.jaridenv.2012.03.013>

2012Peng J, Sun Y, Chen M, He X, **Davi NK**, Zhang X, Li T, Zhu C, Cai C, Chen Z. Tree-ring based precipitation variability since AD 1828 in northwestern Liaoning, China. *Quaternary International* <http://dx.doi.org/10.1016/j.quaint.2012.07.007>

2012 Pederson N, LelandC, NachinB, Hessl A, SaladygaT, SuranB, BrownP M and **DaviN**. Four-hundred Years of Drought History in Mongolia’s Breadbasket. *Agricultural and Forest Meteorology*, Special Issue: Drought threatened ecosystems in semi-arid Inner Asia. <http://dx.doi.org/10.1016/j.agrformet.2012.07.003>

2012 Chen, Z, Zhang X, Hea, X, **Davi,** N, Cuic, M and Penga, J Extension of summer (June-August) temperature records for northern Inner Mongolia (1715-2008), China using tree rings. *Quaternary International* [*http://dx.doi.org/10.1016/j.quaint.2012.07.005*](http://dx.doi.org/10.1016/j.quaint.2012.07.005)

2011 Zhang X, He X, Li J, **Davi N**, Chen Z, Cui M, Chen W, Li N. Temperature reconstruction (1750–2008) from Dahurian larch tree-rings in an area subject to permafrost in Inner Mongolia, Northeast China *Climate Research 47: 151–159.*

2011 Fang K, Gou X, Chen F, Liu C, Zhao Z, **Davi N**, Li Y. Tree-ring based reconstruction of drought variability (1615–2009) in the Kongtong Mountain area, northern China. *Global and Planetary Change.* *Volume 80, p. 190-197.*

2010 Chen Z, He X, Cui M, **Davi, N**, Zhang X, Chen W, Sun Y, The effect of anthropogenic activities on the reduction of urban tree sensitivity to climatic change: dendrochronological evidence from Chinese pine in Shenyang city. *Trees –Structure and Function.* [*https://doi.org/10.1007/s00468-010-0514-x*](https://doi.org/10.1007/s00468-010-0514-x)

2010 **Davi N**, Jacoby G, Fang K, Li J, D'Arrigo R, Baatarbileg N. Robinson. Reconstructed drought across Mongolia based on a large-scale tree-ring network: 1520-1993. *Journal of Geophysical Research 15,* [*https://doi.org/10.1029/2010JD013907*](https://doi.org/10.1029/2010JD013907)

2010 Fang K, Gou X, Chen F, Li J, D’Arrigo R, Cook E, Yang T, **Davi N**. Reconstructed droughts for the southeastern Tibetan Plateau over the past 568 years and its linkages to the Paciﬁc and Atlantic Ocean climate variability. *Climate Dynamics*: DOI 10.1007/s00382-009-0636-2.

2010 **Davi N**, Reconstructed Drought variability across Mongolia based on tree-rings. Dissertation. Rutgers University. 174 pages.

2009 Li J, Cook E, Chen F, **Davi N**, D’Arrigo R, Gou X, Wright W, Fang K, Jin L, Shi J, Yang T. Summer Monsoon Moisture Variability over China and Mongolia during the Past Four Centuries. *Geophysical Research Letters* 36: DOI 10.1029/2009GL041162

2009 Fang, K., **Davi, N**., Gou, X., Chen, F., Cook, E., Li, J., D’Arrigo, R. Spatial drought reconstruction for central high Asia based on tree rings. *Climate Dynamics*: DOI 10.1007/s00382-009-0739-9

2009 **Davi N**, Jacoby G, D’Arrigo R, Baatarbileg N, Li J, Curtis A. A Tree-Ring Based Drought Index Reconstruction for Far Western Mongolia: 1565-2004. *Int. J. of Climatology* 29 (3), 1508-1514.

2008 Nachin, B., Park, W., Jacoby, G.C., **Davi, N.K**. History of Mandal Monastery in Mongolia Based on Tree-Ring Dating. *Dendrochronologia* 26 (2).

2006 **Davi, N.K**., Jacoby, G.C., Curtis, A.E., Nachin, B. Extension of Drought Records for Central Asia using Tree Rings: West Central Mongolia, *Journal of Climate* 19: 288-299.

2005 Solomina, O., **Davi, N**., D’Arrigo, R. and Jacoby, G. Reconstructed Drought Variability on the Crimean Peninsula Over the Past Four Centuries. *Geophy. Res. Let.* 32 19704.

2004 Kaufman, R., D’Arrigo, R., Laskowski, C., Myneni, R., Zhou, L., **Davi, N**. The Effect of Growing Season and Summer Greeness on Northern Forests. *Geophysical Research Letters*, Vol. 31 No. 9, Pp.4.

2004 D’Arrigo, R., Kaufman, R., **Davi, N**., Jacoby, G., Myneni, R., and Laskowski, C. Thresholds for Warming-Induced Growth Decline at Elevational Treeline in Yukon Territory, Canada. *Global Biogeochemical Cycles* 18, GB3021, doi:10.1029/2004GB002249.

2003 **Davi, N,** Jacoby, G., and Wiles, G. Boreal Temperature Variability Inferred from Maximum Latewood Density and Tree-Ring Width Data, Wrangell Mountain Region, Alaska. *Quaternary Research* 60, 252-262.

2002 Wiles, G., McAllister, R., **Davi, N**., Jacoby, G. Eolian response to little ice age climate change, Tana Dune, Chugach Mountains, Alaska. *Arctic, Antarctic & Alpine Res*: 35 (1), 67-73.

2002 **Davi, N.,** D’Arrigo, R., Jacoby, G., Buckley, B., Kobayashi, O. Warm-Season Annual to Decadal Temperature Variability for Hokkaido, Japan Inferred from Maximum Latewood Density (AD 1557-1990) and Ring Width Data (AD 1532-1990). *Climatic Change* 52, 201-217

2002 Wiles, G., Jacoby, G., **Davi, N**., McAllister, R. Late Holocene Glacial Fluctuation in the Wrangell Mountains, Alaska. *Bulletin of Geological Society of America* 114, 896-908.

**BOOKS, EDUCATIONAL PRODUCTS, AND OTHER PUBLICATIONS:**

2023 Davi, N, Tree Clocks and Climate Change, in *The Language of Trees* by Katie Holten, Tin House Publisher. ISBN: 9781953534682

2022 M. Kudish, S. Parisio, J. Franklin, J. Maloof, N. Pederson, and **N. Davi**, A Guide to Catskill Old Growth Forest Field Trip. CERM 2022.

2022 **Davi N**, edited by Cari Herndon. [Back to the Future: Climate Edition, What Can We Learn from a Tree?](https://ncse.ngo/past-vs-present-climate-change) National Center for Science Education, lesson set.

2018 **Davi N**, Pringle P, Fiondella F, Lockwood J, Wattenburg F, Greidanus I, Fox S. Tree-Ring Expeditions (TREX), online labs for undergraduates: <https://serc.carleton.edu/trex/index.html>

2017 **Davi, N**, Plake T, Sinton C, Turner R, [Water Agriculture and Sustainability](https://serc.carleton.edu/integrate/teaching_materials/water_sustainability/index.html): Curriculum for the InTeGrate, SERC—Science Education Resource Center, Carleton College.

2016 *About Trees* an artist book by Katie Holten. Chapter contributor “Tree Clocks and Climate Change”. Broken Dimanche Press ISBN: 978-3-943196-30-6

2015 **Davi N**, Pederson N, D’Arrigo R, Buckley B, Cook E, Wiles G, Peteet D, Farewell to a Tattooed, Bourbon Drinking, Grudge Holding, Tree-coring, Brilliant Buddhist Badass of a Scientist, Invited Memorial, *Journal of Tree Ring Research*.

2015 **Davi N**, Pederson N, D’Arrigo R, Buckley B, Cook E, Wiles G, Peteet D, Farewell to a Tattooed, Bourbon Drinking, Tree-coring Scientist. Memorial, *Dendrochronolgia.*

2014 D’Arrigo R, **Davi N**, Jacoby G, Wilson R, Wiles G. Synthesis of Three Decades of Research on Tree Growth in Northern Forests in relation to Global Climatic Change. AGU/Wiley Monograph ISBN-13: 978-1118848722

**ABSTRACTS/TALKS:**

Sullivan, M, **Davi, N.** Milanes, L. Environmental justice considerations in lead service line replacement in New Jersey. American Public Health Association 2023 Annual Meeting and Expo.

**Davi, N. Tree-Ring Expeditions (TREX) in the classroom.** National Center for Science Education. Online talk for teachers, Nov. 2022. Invited speaker.

**Davi N**. Tropical Cyclones and Sea Level Rise Impacts of Old-Growth Maritime Forests in New York & New Jersey. NJ Shade Tree Association Annual Meeting. Trenton, NJ, Oct. 2022. Invited Speaker.

**Davi N**, D’Andrea W, Sullivan M, Pederson N, Milanes L, Leland C, Tree-ring reconstructions, climate vulnerabilities of water resources, and connections to people in the Catskills watershed region. Catskill Environmental Research & Monitoring Conference, October 2022. Invited Speaker.

D’Andrea B, **Davi N**, Sullivan M, Milanes M. Reconstructing long-term climate changes in the Catskills Mountain lake Sediments from Andes, NY. Catskill Environmental Research & Monitoring Conference, October 2022. Invited Speaker.

Whipp M, Kehrely E, Obando F, Dykstra A, Chavez H, Gilfillan H, DaSilva M, **Davi N**. A Study of Microplastics and Water Quality in the Passaic River System, New Jersey. New Jersey Water Environment Association, student poster competition. 107th Annual Conference at Harrah’s in Atlantic City, New Jersey, May 9-13, 2022. 2nd place poster competition winners.

Leland C, D’Arrigo R, **Davi N**, Porter T, Nuttall M, Oelkers R, Andreu-Hayles L, Wiles G, Wilson R, Anchukaitis K, Gaglioti B, Nixon T. The “Unknown” 1809 Volcanic Event: Evidence from Tree Rings and Historical Data. PAGES (Past Global Changes), VICS (Volcanic Impacts on Climate and Society). May 2022.

Nixon T, **Davi N**, Andreu-Hayles L, Haaf L, Forrester J, RaphaelJ, DaSilva M.Assessing Vulnerability of American Holly *(Ilex opaca)* Trees in Coastal Maritime Forests of N.Y. and N.J. Ameridendro Conference, Montreal, Canada, June 2022.

**Davi N**, Andreu-Hayles L, Rao M, Cook E , Haaf L, Nixon T, Raphael J. Evaluating Tropical Cyclone Impacts and Climate Response of a Maritime Forest (1737-2018), Montauk, N.Y.Ameridendro 2022, Montreal Canada June 2022.

Leland C, D’Arrigo R, **Davi N**, Porter T, Piper L, Andreu-Hayles L, Nixon T. Volcanic Cooling Events: Impacts on Climate and Indigenous Peoples in Northwestern North America. Ameridendro Conference, Montreal, Canada, June 2022.

Rao MP, Magney TS, **Davi NK**, Andreu-Hayles L, Baatarbileg N, Suran BB, Odrentsen L, D’Arrigo R, Leland C, Rodríguez-Catón M, & Griffin KL. High photosynthetic performance but low thermal tolerance in Siberian Larch (Larix sibirica) in the Mongolian boreal forest. International Conference of Young Scientists on Climate Change and Environment in Central and Northeast Asia, Nov. 20th, 2021.

Haraguchi M, **Davi N**, Rao M, Leland C, Lall U, Watanabe M, Compound socio-climate events: A case study of winter disasters and livestock mortality in Mongolia. AGU 2020.

L Andreu-Hayles, R D'Arrigo, R Oelkers, K 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 Conference Abstracts, 21137, 2020.

Rao M. P., Griffin K. G., **Davi N. K.,** Hayles L. A., Nachin B., Suran B., D’Arrigo R. D., Leland C., Gardner W., & Honeychurch W., Photosynthetic heat tolerance, light response, and respiration rates across gradients in the northwestern Mongolian boreal-steppe. AGU 2019.

**Davi, N,** Tree-Ring Expeditions (TREX): Online labs to improve student understanding of climate change and the nature-of-science. Technology Across the Curriculum. EXPLORATIONS: Research, Scholarship and Creative Expression WPU Conference, April 2019

NK Davi, R Oelkers, R D'Arrigo, MP Rao, L Andreu-Hayles, ER Cook, et al, Improved Central Asian Temperature from Blue Intensity Reflectance of Tree Rings. AGU Meeting Abstracts 2019, PP43D-1651

**Davi N,** Climate Change Through the Lens of Tree Rings: To the Core of Me. Collaborative Eco-Theatre Workshop. Pratt University, March 2019

Knyfd\* K, Nixon T, Degan A, Harris J, **Davi N**, Griffiths M, Raphael J, Forrester JTracing Storms and Climate Change Through Tree-Ring Growth Patterns on Coastal Maritime Forests in NY and NJ, GSA, March. 2019 Portland ME. \*Student led

Oelkers R, Andeu-Hayles L, D’Arrigo R, Wiles G, **Davi N**, Anchukaitis K, A Blue Intensity Temperature Record from a Drought-Sensitive White Spuce Site in Central Alaska, AGU 2018

**Davi N**, Oelkers R, Fiondella F, Pringle P, Tree-Ring Expeditions (TREX) for Undergrads: Online labs that guide students to think like scientists, AGU 2018, Wash. DC.

Andeu-Hayles L, D’Arrigo R, Oelkers R, Anchukaitis K, Gaglioti B, Wilson R, Wiles G, Frank D, **Davi N**, Temperature Variabilty from Blue Intensity (BI) and Maximum Latewood Density (MXD) Tree-Ring Chronologies from the Nother American Boreal Forests, AGU 2018.

Knyfd\* K, Nixon T, Degan A, Harris J, **Davi N**, Griffiths M, Raphael J, Forrester JTracing Storms and Climate Change Through Tree-Ring Growth Patterns on Coastal Maritime Forests in NY and NJ, Rutgers Climate Symposium, Nov. 2018. \*Student led

**Davi N**. Tree-Ring Expeditions: A pedagogical workshop on creative and engaging assignments for the Center for Teaching Excellence. Oct. 2018

Wilson, R., Andreu Hayles, L., Cook, E., D’Arrigo, R., **Davi, N**., Haberbauer, L., Krusic, P., Luckman, B., Morimoto, D., Oelkers, R., Wood, C. Exorcising “divergence” using Blue Intensity in the southern Yukon. World Dendro Bhutan, June 2018

Gaglioti BV, Rao MP, Wiles GC, Oelkers R, N Wiesenberg, D’Arrigo RD, Wilson R, Andreu-Hayles L, **Davi N,** Cook, ER, Assessing the expression of volcanic cooling on North Pacific climate over the last millennium: The Seasonal Record from Coastal Alaskan Trees. Frontiers in Earth Science, Columbia University. June 2018.

**Davi N**, Pringle P, Lockwood J, Fiondella F, Wattenburg F, Greidanus I, TREX (Tree-Ring Expeditions): curriculum modules that use tree-ring research techniques and data to develop critical scientific thinking skills in undergraduate students. National Association of Geoscience Teachers, Washington, June 2018

**Davi N**, Demystifying Service Learning and Building Campus and Community Partnerships, Panelist. Institute for Teaching Excellence, NJ Institute of Technology. May 16th, 2018.

Leland C, Cook E, Andreu-Hayles L, Pederson N, Hessl A, Anchukaitis K, Byambasuren O, Nachin B, **Davi N**, D’Arrigo R, Griffin K, Bishop D, Rao M, Strip-bark morphology and radial growth trends of ancient *Pinus sibirica* trees in Mongolia: Considerations for dendroclimatic reconstructions. World Dendro Bhutan, 2018.

Eric Howard\*, Richard Plattel, Elizabeth Judge, Nazila Yekanifard, Omar Mahmoud, Mike Dasilva, **Nicole Davi,** Martin A. Becker. 2018, A Preliminary Study of Microplastics and Microfibers at The Molly Ann Brook, NJ, GSA, Burlington VT. March 2018. \*Student led

**Davi N**, Ilyse Goldman, Hazel England, and Bruce Balistrieri, Improving Geoscience Literacy Through Connections to the National Park Service and Community Partners, National Center for Science and Civic Engagement, Science, Washington DC, March 2018.

Leland C, Cook E, Andreu-Hayles L, Pederson N, Hessl A, Anchukaitis K, Byambasuren O, Nachin B, **Davi N**, D’Arrigo R, Griffin K, Bishop D, Palat Rao M, A comparison of radial growth trends from strip-bark and whole-bark Siberian Pine trees and implications for climate reconstruction AGU 2017, New Orleans.

Wiles G, Charlton J, Wilson R, D’Arrigo R, Gaglioti B, Wiesenberg N, Oelkers R, Hayles L, **Davi N**. Progress and promise in reconstructing north pacific climate from ring-width and blue intensity tree ring chronologies. GSA Washington, Nov. 2017.

**Davi N,** Tree-rings, Mongolian Paleo-Climate and Undergraduate Research, Silver Tip Ranch, Montana, July 2017.

**Davi N** , D’Arrigo R1, Oelker R1&2, Geary J2, Reyes CM2, Leland C1&3, and Rao MP, Developing improved climate reconstructions for Central Asia, Annual Meeting of the American Association of Geographers, Boston April 2017

Geary J\*, Oelkers R, Reyes C, **Davi N**, Generating new ultra-sensitive temperature reconstructions in Mongolia using blue intensity reflectance. Annual Meeting of the American Association of Geographers, Boston April 2017. \*Student led

Wilson R, D’Arrigo R, Andreu-Hayles L, Oelkers R, Wiles G, Anchukaitis K, **Davi N**, Blue Intensity based experiments for reconstructing North Pacific temperatures along the Gulf of Alaska, EGU 2017

Leland C, Cook E, Pederson, HesslA, Andreu-HaylesA, AnchukaitisA, NachinB, ByambasurenO, **Davi N**, D’ArrigoR, Palat RaoM, Strip bark morphology and radial growth trends of Ancient Pinus sibirica trees in Mongolia: Considerations for dendroclimatic reconstructions. PAGES Young Scientists Meeting, Spain, Spring 2017.

**Davi N**, Fattal L, Rosenthal J, Tree-ring research through current technologies informs, makes accessible and nurtures scientific inquiry and an aesthetic sensibility to understand climate change, NJ Edge Conference Nov. 2016.

**Davi N**, Wattenburg F, Pringle P, Caulkins J, Griedanus I, Fiondella F, Oelkers R, Using Tree-Ring data to Develop Critical Scientific and Mathematical Thinking Skills in Undergraduate Students, Envisioning the Future of Undergraduate STEM Education: research and Practice Symposium, Washing DC April 27-29th, 2016 Sponsored by AAAS and NSF.

**Davi N**, Positioning Research for Competitive Federally Funded Grants. Invited Speaker, Advancing Research, Scholarship and Creative Expression at WPU, 2016.

Hansen\* K, Wiles G, Oelkers R, D’Arrigo R, Andreu-Hayles L, **Davi N,** Strengthening the climate signal in tree-ring records using blue intensity methods: Gulf of Alaska. William Paterson University Research & Scholarship Day April 2016, \*student led

Geary J\*, Oelkers R, **Davi N**, Björklund J, An International Comparison of Tree-Ring Density. William Paterson U Research & Scholarship Day April 2016, \*Student led

C Sinton, **N Davi,** R Turner, T Plake, Teaching About Sustainability of Water Resources and Agriculture,. Association of Environmental Studies and Science, April 2016 Washington DC.

MP Rao, BI Cook, R D’Arrigo, AN LeGrande, C Leland, ER Cook, BM Buckley, **NK Davi**, K Anchukaitis, KL Griffin, European hydroclimate response to tropical volcanic forcing over the past millennium, LDEO Volcanic Impacts workshop, 2016.

**Davi N**, Invited speaker, Testing Blue Light technology on Temperature Sensitive Cores from Mongolia, Ameri-Dendro Conference, March 2016, Mendoza, Argentina.

Björklund J, Wood Densitometry Consortium (includes **N Davi**). Towards an International Benchmarking of Wood Density and Blue Intensity Measurements for Dendroclimatological Research. Ameri-Dendro Conference, March 2016, Mendoza, Argentina.

Wiles, G.; Happ, M.; Oelkers, R.; Wilson, R. ; D’Arrigo, R.; Solomina, O. **Davi, ; N**.; Andreu-Hayles, L.; Anchukaitis, K., Development of Blue Intensity (BI) Chronologies along the North Pacific Rim. Ameri-Dendro Conference, March 2016, Mendoza, Argentina.

Andreu-Hayles, L.; D’arrigo, R.; Oelkers, R.; Anchukaitis, K.J.; Wiles, G., Wilson, R.; Frank, D.; **Davi, N**., Blue Intensity (BI) and Maximum Latewood Density (MXD) tree-ring chronologies from Alaska and Yukon Territory, Canada, Ameri-Dendro Conference, March 2016, Mendoza, Argentina.

Oelkers\*, R.C.; Darrigo, R.;Andreu-Hayles, L.Wiles, G., Wilson. R.; **Davi, N.K**.; Buckley, B., The temperature signal of Blue Light Intensity (BI) tree-ring data sets from trees growing under distinct environmental conditions, Ameri-Dendro, 2016, Mendoza, Argentina. \*Student led

Oelkers R\*, **Davi N**, D’Arrigo R., A long-term context for rapid warming in Mongolia and introduction to a new climat proxy. Rutgers Regional Climate Symposium, 2015, \*Student led

**Davi N**, R D’ Arrigo, Cook ER, Anchukaitis K, Nachin B, Rao M, Leland C, Oelkers R, A Long-Term Context (931-2005 C.E.) for Rapid Warming Over Central Asia. American Geophysical Union Fall 2015 Conference, San Francisco.

**Davi N,** F Wattenberg, P Pringle, F Fiondella, I Greidanus, and Rose Oelkers,Using Tree-Ring data to Develop Critical Scientific and Mathematical Thinking Skills in Undergraduate Students. American Geophysical Union Fall 2015 Conference, San Francisco.

Fiondella F, R Fowler**, N Davi**, Picture This: The Art of Using Museum and Science Collaborations to Teach about Climate Change. AGU Fall 2015.

Sanders**\*** R, **N Davi,** I Goldman, M Griffiths, B Balistriri, B Golden and A Aryasz\* 2015. Connecting Grade 3-12 Students to Natural Geoscience Processes in Their Local Urban National Park, Geological Society of America, Baltimore, Maryland, Nov. 2015 \*Student led

R Sanders**\***, **N Davi,** I Goldman, M Griffiths, B Balistriri, B Golden and A Aryasz\* 2015. Connecting Grade 3-12 Students to Natural Geoscience Processes in Their Local Urban National Park, Re: NJ Science Convention, Princeton NJ Oct. 2015 \*Student led

**Davi N,** Climate Change and the Impact on People Historically, Department of Elementary and Early Childhood Education, WPU, 7th AnnualDiversity Conference. June 2015

**Davi N,** Dzuds, droughts, and livestock mortality during unprecedented warming (931-2005 C.E.) in Mongolia, WPU Research & Scholarship Day April 2015

E Gerry\*, **N Davi**, A Dendro-Archaeological Study of Historic Structures from Rockland County, New York, William Paterson University Research & Scholarship Day April 2015 \*Student led

R Sanders**\***, **N Davi,** I Goldman, M Griffiths, B Balistriri, B Golden and A Aryasz\* 2015. Connecting Grade 3-12 Students to Natural Geoscience Processes in Their Local Urban National Park, WPU Research & Scholarship Day, 2015 \*Student led

R Wilson, K Anchukaitis, K Briffa, U Büntgen, E Cook, R D' Arrigo, **N Davi**, Jan Esper, Dave Frank, Björn Gunnarson, Gabi Hegerl, S Klesse, P Krusic, Hans Linderholm, Z Peng, M Rydval, l schneider, S Tett, G Wiles and E Zorita, Are tree-ring based estimates for Northern Hemisphere medieval temperatures fit for purpose? EGU 2015, Vienna, Austria.

Frederick S, Solomina O, D'arrigo R, Anchukaitis K, Dolgova E, Matskovsky V, Maratovna T, Grabenko E, **Davi N**, Wiles G, Tree-Ring Reconstruction of the Paleoclimatic History for the Russian Far East. GSA Annual Meeting in Vancouver, British Columbia (19–22 October 2014)

Leland C, Pederson N, Seim A, **Davi N**, Hessl A, Nachin B, Climatic Convergence? Recent Synchronicity Among Tree-ring Records Across Mongolia. Tree-Rings in Archaeology, Climatology and Ecology. Aviemore, May 2014

Oelkers R\*, Crapella J\*, **Davi N**, & D'Arrigo R, Expeditions into Tree-ring Research: Developing a Photo Archive for Public Outreach and Education. William Paterson University Research & Scholarship Day (April 2014)  \*Student led

Thompson C**\***, Gerry E**\***, Nichols D**\***, Heye M**\***, Scimeca R**\***, **Davi N**, Griffiths M, Goldman I, Student-Led Development of Earth Science Curriculum for Paterson Schools Grades 4, 7, and 8: WPU & Scholarship Day (2014 & the 8th Annual Undergraduate Research Symposium in the Biological Sciences at WPU (April 12th, 2014). \*Student led

**Davi N,** Climate reconstruction and livestock mortality in Mongolia. Invited speaker. Center for Arctic Studies, Smithsonian Institution. May 2013

**Davi N,** Lyon B, D’Arrigo R, Pederson N, Leland C, Curtis A, Climate-Induced Disasters in the Livestock Sector in Mongolia: Reconstructions and Dynamical Insights. AGU Fall 2012.

**Davi N**, Wattenberg F, Pringle P, Tanenbaum J, O’Brien A, Greidanus I, Perry M. Using tree-ring data, research, and expeditions as an accessible, hands-on “bridge” into climate studies for diverse audiences. AGU Fall 2012.

**Davi N**, Lyon B, D’Arrigo R, Pederson N, Leland C, Seim A. Recurrent and Anomalous Circulation Patterns Associated with Mongolian Summertime Rainfall Variability and “Dzud” Events. NOAA's 37th Climate Diagnostics and Prediction Workshop. Oct 2012

Leland C, Pederson N, Nachin B, Hessl A, **Davi N**, Bell A, Martin-Benito D, Saladyga T, Brown P, Suran B. Hydroclimatic variability across Mongolia’s breadbasket and implications for water resource management. AGU 2012

**Davi N**, Pederson N, Leland C, Suran B, Nachin B, Jacoby G. Four centuries of hydroclimatic context for the recent drying in east central Mongolia. The 2nd International Asian Dendrochronological Association Conference. China, August 2011.

Leland C, Pederson N, **Davi N**, Hessl A, Assessment of Hydroclimatic Regions across North-central Mongolia as Inferred from Tree-rings. The 2nd International Asian Dendrochronological Association Conference. China, August 2011.

**Davi, N.** Droughts, Dzud and Archaeology in Mongolia: A Tree Ring Perspective**.** School of Marine and Atmospheric Sciences, Stony Brook University. October, 2011.

**Davi N.** Biology and Paleo-Environment Seminar. Drought Reconstruction Across Mongolia. LDEO, Palisades, NY, Jan. 2010

Anchukaitis, K.J., B.M. Buckley, E.R. Cook, R.D. D’Arrigo, G.C Jacoby, W.E. Wright, **N. Davi**, J. Li, 2009. A thousand years of human history and the Asian monsoon from tropical tree rings, Georgetown University, Washington DC, October 2009.

Anchukaitis, K., E. Cook, C. Ammann, B. Buckley, R. D'Arrigo, G. Jacoby, W. Wright, **N. Davi**, and J. Li. Objective spatiotemporal Asian monsoon climate proxy-model comparisons for the last millennium. Conference on Climate Variability in the Greater Mekong River Basin: Paleo proxies, instrumental data and model projections. Vietnam, February 16-18, 2009

**Davi, N**., Jacoby,G. Moisture Variability Across Mongolia. National Science Foundation Project Workshop: Tree-Ring Reconstructions of Asian Monsoon Climate Dynamics. Lamont-Doherty Earth Observatory, Palisades, NY, Sept. 2008.

Anchukaitis, K.J., E.R. Cook, C.M. Ammann, B.M. Buckley, R.D. D’Arrigo, G. Jacoby,W.E. Wright, **N. Davi**, J. Li, Objective spatiotemporal proxy-model comparisons of the Asian monsoon for the last millennium. Eos Trans. AGU, PP21A-1403, 2008.

**Davi, N**, Jacoby C. Extension of Drought Records for Central Asia Using Tree-Rings. 7th International Conference on Dendrochronology, Beijing, China, June 2006.

**Davi, N**., and Jacoby, G., Mongolian Dendroclimatology. Archaeology and Environmental History of Mongolia Workshop, University Honors College, University of Pittsburgh. Feb. 2005.

Solomina, O., **Davi, N**., D’Arrigo, R., and Jacoby, G., Summer precipitation reconstructed by pine ring-width chronologies and the Saki lake sediments in Crimea, Ukraine. International Conference on Tree Rings and Climate: Sharpening the Focus. Laboratory for tree ring research, University of Arizona, Tucson. April 5-9, 2004.

D’Arrigo R, **Davi N**, Jacoby G and Wiles G, A Tree-Ring Temperature Reconstruction from the Wrangell Mountains, Alaska (1593-1992): Evidence for Pronounced Regional Cooling During the Maunder Minimum 2002 AGU.

**Davi, N**., Jacoby, G., Wiles, G., Boreal Temperature Variability Inferred from Maximum Latewood Density and Ring Width Data from the Wrangell Mountain Region Alaska, 6th International Conference on Dendrochronolgy, Quebec, August 2002.

**Davi, N**., Jacoby, G., Wiles, G., McAllister, R., Skelly, S. 2000: Dendroclimatic Evidence for Environmental Change from the Wrangell Mountains of Alaska. International Conference on Dendrochronology, 2-7 April 2000, Mendoza, Argentina.

Wiles, G., McAllister, R., Skelly, S., Jacoby, G., **Davi, N**. 2000: Tree-Ring Dated Little Ice Age Glacier Histories and Regional Comparisons, Wrangell Mountains, Alaska USA. International Conference on Dendrochronology, 2-7 April 2000, Mendoza, Argentina.

Frank, D., Jacoby, G., Shumilov, O., Lovelius, N., Pederson, N., **Davi, N**., Karbainov, J., Kirtsidely, I., Raspopov, O. 2000: Temperature Reconstruction From the Taymir Peninsula, Northern Siberia. Intl. Conference on Dendrochronology, 2-7 April 2000, Mendoza, Argentina.

McAllister, R., Wiles, G., **Davi, N**., Jacoby, G., 2000: Dendogeomorphology of the Tana Dunes, Alaska: GSA, Northcentral Meeting, Indianapolis, IN.

**ART/SCIENCE COLLABORATIONS:**

2022 Collaborating scientist, [Climate in Therapy](https://www.imdb.com/title/tt18163368/), Documentary Film. Director: Nathan Grossman, Producer: Cecilia Nessen

2021 Collaborating scientist, Forest Story, Documentary Film. Director: Irene Taylor Brodsky

2021 Consulting scientist, [Sierra of Creation](https://www.wpunj.edu/coac/gallery/Exhibitions/exhibition-detail.html?id=265a94c5-9200-4143-a751-369e12688277), US State Department (STRAX Program) & Art Space 976, WPU Ben Shahn Gallery, September 1 - December 3, with artists: Tuguldur Yondonjamts, Munkhbolor Ganbold and Bat-Erdene Batchuluun.

2020 Collaborating scientist, Marion Wilson, [The Landscape Is Sanctuary to Our Fears](https://www.wpunj.edu/coac/gallery/images/spring-2020/MarionWilsonCatalogue_web.pdf)

2019 Collaborating scientist, Jussara Lee, Designer: [Science dress](https://news.climate.columbia.edu/2020/01/10/climate-scientist-awards-fashion/)

2019 Collaborating scientist, Supehero’s Clubhouse: [Eco-Performance Lab](http://www.christopherxjjensen.com/2019/03/17/eco-performance-lab-during-pratts-2019-green-week-the-first-step-of-to-the-core-of-me/)

2019 Consulting scientist, [Lightfield Arts: Ecology, history and Landscape of the Hudson River Valley](https://www.lightfield.vu/2019-artists).

2018 Collaborating scientist, Johanna Goodman: [Imaginary Beings: Nature 14](http://johannagoodman.com/#/portfolio/work/-nature-imaginary-beings/14)

2016 Collaborating scientist, Tattfoo Tan: WPU Ben Shahn Gallery [Living Together: Nurturing Nature in the Built Environment](https://www.wpunj.edu/news/wpmagazine/spring2016/parting-shot.html)

2016 [About Trees](https://www.katieholten.com/books#/abouttrees/) an artist book by Katie Holten. Chapter contributor “Tree Clocks and Climate Change”. Broken Dimanche Press ISBN: 978-3-943196-30-6

2014 Consulting scientist, The Civilians, [The Great Immensity](https://thecivilians.org/productions/the-great-immensity/)

2012 Collaborating scientist, Superhero’s Clubhouse: Field Trip: [A Climate Cabaret](https://news.climate.columbia.edu/2012/09/27/positivefeedback-presents-field-trip-a-climate-cabaret/)

**RECENT NEWS:**

[What tropical trees can teach us about the environment.](https://news.climate.columbia.edu/2022/10/25/what-tropical-trees-can-teach-us-about-the-environment/) State of the Planet, Oct. 2022

[How to time your leaf peeping trip this fall.](https://www.nytimes.com/2022/10/04/travel/fall-foliage-united-states-timing.html) NY Times, October 2022

[Honored for Excellence During Undergraduate Commencement Ceremony.](https://www.wpunj.edu/articles/news/2022-05-20/miryam-wahrman-nicole-davi-and-richard-kearney-honored-for-excellence-during-undergraduate-commencement-ceremony/) WP News, May 2022

[Will the plastic bag ban in N.J. help the environment? Here’s what experts say.](https://www.nj.com/news/2022/04/will-the-plastic-bag-ban-in-nj-help-the-environment-heres-what-experts-say.html) NJ.com, Apr., 2022

[Learning From Tree Rings: An interview with Nicole Davi](https://news.climate.columbia.edu/2022/03/08/learning-from-tree-rings-an-interview-with-nicole-davi/), State of the Planet, Mar., 2022

[New Way of Analyzing Tree Rings Confirms Unprecedented Central Asia Warming](https://news.climate.columbia.edu/2021/08/17/new-way-of-analyzing-tree-rings-confirms-unprecedented-central-asia-warming/), State of the Planet, Aug. 2021

[Artists and Scientists from Mongolia Attempt to Communicate What Others Have Not](https://www.newjerseystage.com/articles/2021/11/19/climate-artists-and-scientists-from-mongolia-attempt-to-communicate-what-others-have-not/), NJ Stage, Nov., 2021

[We didn’t track hurricanes hundreds of years ago—but trees did](https://www.popsci.com/story/environment/hurricane-record-tree-rings/) Popsci, Oct., 2020

[What’s a Climate Scientist to Wear During Awards Season?](https://news.climate.columbia.edu/2020/01/10/climate-scientist-awards-fashion/) State of the Planet, Jan., 2020

**SERVICE:**

William Paterson University:

* Lead faculty member to update and re-design Sustainability, Environmental Science and Earth Science majors (2020-2021)
* Lead faculty member to develop a new minor in Sustainability and Climate (2021)
* Search Committee Chair for Associate Dean, College of Science and Health (Fall 2021)
* Co-developed environmental science dual enrollment course in geology (Spring 2021) and sustainability (Fall 2022).
* Lead faculty member for department review (2020)
* Co-developed Sustainable Chemistry Certificate Program (2020-2021)
* Mentor to the Green League student club (2018-present)
* Student Government, Students First Award (as Green League Advisor) 2021.
* Center for Research committee member (2018-2020)
* Paterson Metropolitan Region Research Center Advisory Committee (2015-2020)

Discipline:

* Associate Editor: Dendrochronologia (2021-Present)
* Reviewer: Dendrochronologia, Journal of Climate, International Journal of Climatology. Quaternary Research, Quaternary Science Reviews, etc.
* Proposal/Panel reviewer for NSF (AGS, CNH, DUE, SBE).
* Led the development of [Tree-Ring Expeditions (TREX),](https://serc.carleton.edu/trex/students/index.html) public online labs to introduce undergraduate students to foundational tree-ring research. To date, more than 150 faculty from across the country have registered to use the labs.
* Committed to working with media and artists for outreach and education.

**PROFESSIONAL AFFILIATIONS:** American Geophysical Union, Tree-Ring Society, National Association of Geoscience Teachers, Appalachian Mountain Club (Youth Opportunities Program, Outdoor Leader: hiking, camping, backpacking), American Chestnut Foundation.