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EDUCATION

1996 -1998 Senior Postdoctoral Research Associate, Univ. of Massachusetts, Amherst
1995 Ph.D. Physical Geography, Univ. of Bern, Switzerland
1991 M.S. Physical Geography, Univ. of Bern, Switzerland

EMPLOYMENT HISTORY

2025 - present Distinguished Professor, Dept. Atmos. Environ. Sciences, Univ. at Albany.
2017 - 2025 Full Professor, Dept. Atmos. Environ. Sciences, Univ. at Albany.
2012 - 2016 Associate Professor, Dept. Atmos. Environ. Sciences, Univ. at Albany.
2008 - 2012 Assistant Professor, Dept. Atmos. Environ. Sciences, Univ. at Albany.
2004 - 2008 Research Associate Professor, Dept. Geosci., Univ. of Massachusetts, Amherst.
2000 - 2004 Research Assistant Professor, Dept. Geosci., Univ. of Massachusetts, Amherst.
1998 - 2000 Adjunct Assistant Professor, Dept. Geosci., Univ. of Massachusetts, Amherst.
1996 Research Associate, Swiss Academy of Sciences - ProClim, Bern.

ACADEMIC APPOINTMENTS

2022 Visiting Scientist, Oeschger Centre for Climate Change Research (OCCR),
University of Bern, Switzerland
2016 - 2019 Science Leadership Council, Mountain Research Initiative (MRI)
2016 - 2018 Associate Editor, *Geophysical Research Letters*
2012 - 2018 U.S. National Committee (USNC), International Union for Quaternary Research
(INQUA)
2005 NCCR Visiting Scientist, University of Bern, Switzerland

FELLOWSHIPS, HONORS & AWARDS

2025 Elected Member of the Distinguished Academy of the State University of New
York (SUNY)
2023 SUNY Chancellor's Award for Excellence in Scholarship and Creative Activities

2022	University at Albany President's Award for Excellence in Research and Creative Activities
2018	University at Albany recognition for 'outstanding scholarly achievement'
2017	Université Joseph Fourier Visiting Professor Fellowship, Grenoble, France
2015	University at Albany Terra Award, for 'making a significant impact in furthering sustainability initiatives in research and sharing sustainability information with students in creative ways'
2014	FAPESP Visiting Professor Fellowship, University of Sao Paulo, Brazil
2011	Senior Fellow, Energy and Climate Partnership of the Americas (ECPA), Bureau of Western Hemisphere Affairs (WHA) and Science and Technology Adviser's Office (STAS), U.S. Department of State
2010	American Geophysical Union Editor's Citation for Excellence in Refereeing for <i>Geophysical Research Letters</i>
2006	American Geophysical Union Editor's Citation for Excellence in Refereeing for <i>Journal of Geophysical Research - Atmospheres</i>
1997	Swiss National Science Foundation Advanced Researcher Fellowship
1996	Swiss National Science Foundation Postdoctoral Fellowship

FUNDED RESEARCH

Career total: \$12.9M (\$10.9M as PI)

2024-2029	Role: PI (collaborative proposal with Swiss SNF (PI Stefan Broennimann, Univ, Bern) Project: NSF-SNSF: Variability of Andean hydroclimate extremes - their precursors, predictability and interactions with large-scale dynamics (AGS-2438298)) Source: NSF - Physical & Dynamical Meteorology (PDM) Total Funding to UAlbany: \$400,000
2024-2028	Role: PI (subawards to Co-PI's Bryan Mark (Ohio State Univ.) & Kristen Rasmussen (Colorado State Univ.) Project: AccelNet Implementation Phase 1: Andean Climate Change: Observations, Research and Discovery- ACCORD (OISE - 2412205) Source: NSF-OISE (AccelNet) Total Funding to UAlbany: \$1,499,999
2024-2027	Role: PI Project: An isotope-enabled data assimilation system for the Last Millennium over South America (AGS - 2402113) Source: NSF- Paleo Perspectives on Present and Projected Climate (P4CLIMATE) Total Funding to UAlbany: \$526,171
2023-2026	Role: PI (collaborative research with PI's Jason Smerdon & Lorenzo Polvani, Columbia Univ.) Project: Collaborative Research: Diagnosing global climatic responses to large volcanic eruptions in climate reconstructions and model simulations (AGS-

- 2303353)
Source: NSF- Paleo Perspectives on Present and Projected Climate (P4CLIMATE)
Total Funding to UAlbany: \$282,980
- 2022-2024 Role: PI
Project: Climate adaptation through process understanding, risk assessment, education, and public dialogue
Source: UAlbany Signature Strength Seed Funding
Total Funding to UAlbany: \$49,000
- 2021-2025 Role: PI (collaborative research with PI Bronwen Konecky (Washington Univ.) and Isla Castaneda (Univ. of Massachusetts))
Project: Collaborative Research: Quantitative reconstructions of last millennium hydroclimate and temperature from the tropical high Andes (EAR-2103041)
Source: NSF-Paleo-Perspectives on Climate Change (P2C2)
Total Funding to UAlbany: \$95,900
- 2020-2025 Role: Co-PI (PI Rob Rosenswig, Univ. at Albany)
Project: CNH2-L: Climate change and the coupled dynamics of tropical forest ecology and human food production (DEB-1923957)
Source: NSF-Dynamics of Integrated Socio-Environmental Systems (CNH2)
Total Funding to UAlbany: \$1,599,123
- 2018-2022 Role: PI (collaborative research with PI Laia Andreu-Hayles, Columbia Univ.)
Project: Collaborative Research: Reconstructing South American Monsoon sensitivity to internal and external forcing: Reconciling models and tree-ring proxies in the central Andes (AGS-1702439)
Source: NSF-Paleo-Perspectives on Climate Change (P2C2)
Total Funding to UAlbany: \$231,438
- 2017-2024 Role: PI (subaward to Co-PI Rosanne D'Arrigo, Columbia Univ.)
Project: Climate Research and Education in the Americas using Tree-ring and speleothem Examples - PIRE-CREATE (OISE-1743738)
Source: NSF-OISE (PIRE)
Total Funding to UAlbany: \$4,997,208
- 2015-2016 Role: PI
Project: Supplement to High-resolution reconstruction of the South American monsoon history from isotopic proxies and forward modeling (AGS-1523288)
Source: NSF-Paleo-Perspectives on Climate Change (P2C2)
Total Funding to UAlbany: \$58,330
- 2013-2017 Role: PI
Project: High-resolution reconstruction of the South American monsoon history from isotopic proxies and forward modeling (AGS-1303828)
Source: NSF-Paleo-Perspectives on Climate Change (P2C2)
Total Funding to UAlbany: \$512,951
- 2013-2014 Role: Co-PI (PI Peter Shea, Univ. at Albany)
Project: SUNY Collaboratory for Immersive Environments in STEM Learning II
Source: SUNY System Office of the Provost
Total Funding to UAlbany: \$52,800

- 2011-2016 Role: PI
 Project: Andean Climate Change Inter-American Observatory Network (ACCIÓN, S-LMAQM-11-GR-086)
 Source: Bureau of Western Hemisphere Affairs (WHA), U.S. Department of State
 Total Funding to UAlbany: \$1,071,622
- 2010-2014 Role: PI
 Project: Multi-scale analysis of stable isotope - climate relationships in tropical proxy records. (AGS-1003690)
 Source: NSF-Paleo-Perspectives on Climate Change (P2C2)
 Total Funding to UAlbany: \$289,574
- 2009-2012 Role: PI (collaborative research with PI James Russell, Brown University)
 Project: High-frequency variations in the Indian Ocean Dipole during the past millennium reconstructed from East African and Indonesian lake sediment cores (NA09OAR4310090)
 Source: NOAA-Climate Change Data Detection (CCDD)
 Total Funding to UAlbany: \$69,430
- 2008-2010 Role: PI
 Project: Impact and consequences of predicted climate change on Andean glaciation and runoff (EAR-0836215, transfer of funds from Univ. of Mass. to Univ. at Albany)
 Source: NSF-Hydrologic Sciences
 Total Funding to UAlbany: \$44,503
- 2006-2008 Role: PI
 Project: Impact and consequences of predicted climate change on Andean glaciation and runoff (EAR-0519415)
 Source: NSF-Hydrologic Sciences
 Total Funding to Univ. of Mass.: \$217,602
- 2006-2011 Role: Co-PI (Lead PI B. Luckmann, Univ. of Western Ontario)
 Project: Documenting, understanding and projecting changes in the hydrological cycle in the American Cordillera. (IAI-CRN II)
 Source: Inter-American Institute for Global Change Research (IAI)
 Total Funding: \$750,000 (no direct funding to Univ. of Mass.)
- 2003-2006 Role: PI
 Project: Past and present climatic controls on the stable isotope composition of precipitation at low latitude proxy sites (ATM-0317693)
 Source: NSF-Earth System History (ESH)
 Total Funding to Univ. of Mass.: \$145,514
- 2003-2006 Role: PI
 Project: Climatic conditions in East Africa and Arabia – Implications for paleoclimatic interpretations (NA030AR4310046)
 Source: NOAA- Office of Global Programs (OGP)
 Total Funding to Univ. of Mass.: \$237,390

- 2002-2005 Role: PI (collaborative research with PI Julio Betancourt, USGS / Univ. of Arizona)
Project: Past and modern variability in summer and winter rainfall on the Pacific slope of the central Andes (ATM-0214285)
Source: NSF-Earth System History (ESH)
Total Funding to Univ. of Mass.: \$53,319
- 2000-2002 Role: Co-PI (PI R.S. Bradley, Univ. of Mass.)
Project: Meteorological data acquisition: Mt. Kilimanjaro, Tanzania
Source: NSF-Paleoclimate
Total Funding to Univ. of Mass.: \$64,626
- 2000-2002 Role: Co-PI (PI R.S. Bradley, Univ. of Mass.)
Project: Stable isotope variability in precipitation at low-latitude sites: An observational and modeling study (ATM-9909201)
Source: NSF-Paleoclimate
Total Funding to Univ. of Mass.: \$187,548
- 1997-1999 Role: Co-PI (PI R.S. Bradley, Univ. of Mass.)
Project: Precipitation variability in the inter-tropical Andes - Climatological studies for paleoclimatic reconstruction (ATM-9707698)
Source: NSF-Climate Dynamics
Total Funding to Univ. of Mass.: \$107,848
- 1997-1999 Role: PI
Project: Climate Change in the tropical Andes (8220-050401)
Source: Swiss-NSF
Total Funding to Univ. of Mass.: \$52,670
- 1996-1997 Role: PI
Project: Climate variability in the tropical and subtropical Andes
Source: Swiss-NSF
Total Funding to Univ. of Mass.: \$24,600

Consultancies

- 2015 Role: PI
Project: The impact of glacier retreat in the Andes: International multidisciplinary network for adaptation strategies
Source: UNESCO-International Hydrologic Program (IHP)
Total Funding: \$1,500
- 2012 Role: PI
Project: Water, glaciers, Andes (SR2012)
Source: Inter-American Development Bank (IDB)
Total Funding: \$10,000
- 2011 Role: PI
Project: Melting glaciers in the Andes - Science and policy for adaptation to cope with complexity in the context of climate change
Source: UNESCO-International Hydrologic Program (IHP)
Total Funding: \$5,000

2006-2007 Role: PI
 Project: Design and Implementation of Climate Change Adaptation programs for the tropical Andes region
 Source: World Bank
 Total Funding: \$37,071

REFEREED PUBLICATIONS

(* denotes Student/Postdoc papers)

Submitted

Vasconcelos, L.C., F.W. Cruz, J.P. Bernal, M.C. Campos, P. Piacsek, H. Zhang, N. Strikis, **M. Vuille**, G. Utida, C. Millo, R.L. Edwards and H. Cheng: The coupling between monsoon rainfall and sea surface temperatures in the subtropical South Atlantic during the Last Glacial Period. *Global Planet. Change* (in review.)

*He, Z., E. Tejedor, J.E. Smerdon, **M. Vuille**, L.V. Polvani R. Seager, and I. Sugiura, 2025: Comparison of global climatic responses to large tropical volcanic eruptions over the last millennium in paleoclimatic reconstructions and model simulations *J. Climate*, (in review).

*Turner, S., **M. Vuille** and A. Rabatel: Constraining future projections of freezing level height and equilibrium line altitudes in the tropical Andes based on CMIP6. *J. Geophys. Res.*, (in revision).

Godoy-Veiga, M., G. Assis-Pereira, B.B.L. Cintra, R. Brienens, M.C.A. Torbenson, L. Andreu-Hayles, N.M. Strikis, M.H. Shimizu, F.W. Cruz, L. Regev, E. Boaretto, P.F.S.M. Buarque, A.C.M.C. Barbosa, R.M. dos Santos, V.F. Novello, M. Tomazzelo-Filho, G. Ceccantini, V. Angyalossy, **M. Vuille** and G.M. Locosselli: No evidence for sustained growth declines in trees from a tropical hotspot of global warming. *Proc. Acad. Natl. Sci.*, (in review).

Published

2025 (154) Sae-Lim, J. B.L. Konecky, J.A. Hutchings, N. Michelutti, C. Grooms, **M. Vuille**, I.S. Castañeda, and J.P. Smol, 2025: Biomarker evidence for arid intervals during the past ~1,800 years in the central Andean highlands. *Earth Planet Sc. Lett.*, 662, 119407, doi:10.1016/j.epsl.2025.119407.

2025 (153) Sulca, J.C, **M. Vuille**, K. Takahashi, P. Roundy, B. Dong, V. Mayta, J.C. Tacza Anaya and J. Apaéstegui: Multi-time scale analysis of the water level minima in Lake Titicaca over the past 103 years. *Front. Clim.*, 7, 1564040. doi:10.3389/fclim.2025.1564040.

2025 (152) Maksic, J., M.H. Shimizu, G. Sampaio, C.M. Chiessi, M. Prange, **M. Vuille**, G. Utida, F.W. Cruz, and M.R. Lemes, 2025: Simulated isotopic fingerprint of the Atlantic Multidecadal Oscillation over South America and its relation to the Little Ice Age. *Palaeogeogr. Palaeoclimatol. Palaeoecol.*, 659, 112629, doi:10.1016/j.palaeo.2024.112629

- 2024 (151) *Lyu, Z., **M. Vuille**, H. Goosse, R. Orrison, V.F. Novello, F.W. Cruz, J. Cauhy and N. M. Strikis, 2024: South American monsoon intensification during the last millennium driven by joint Pacific and Atlantic forcing. *Sci. Adv.* 10, eado9543, doi:10.1126/sciadv.ado9543
- 2024 (150) *Orrison, R., **M. Vuille**, J. Cauhy Rodrigues, N. Strikis, F. Cruz, M. Rodriguez-Caton, and L. Andreu Hayles, 2024: Pacific interannual and multidecadal variability recorded in $\delta^{18}\text{O}$ of South American Summer monsoon precipitation *J. Geophys. Res.*, 129(17), e2024JD040999, doi:10.1029/2024JD040999.
- 2024 (149) *He, Z., A. Dai, B.E.J. Rose and **M. Vuille**, 2024: Influence of the Pacific and Atlantic multidecadal variability on Arctic sea ice in pacemaker simulations during 1920-2013. *J. Climate*, 37(17), 4481-4506, doi:10.1175/JCLI-D-23-0520.1.
- 2024 (148) *Tejedor E., L.M. Polvani, N.J. Steiger, **M. Vuille**, and J.E. Smerdon:, 2024: No evidence of winter warming in Eurasia following large, low-latitude volcanic eruptions during the Last Millennium. *J. Climate*, 37, 5653-5673. doi:10.1175/JCLI-D-23-0625.1.
- 2024 (147) *He, Z., A. Dai and **M. Vuille**, 2024: Impacts of Atlantic and Pacific multidecadal variability on South American precipitation and temperature in CESM1 simulations and observations *J. Geophys. Res.*, 129, e2023JD039675, doi:10.1029/2023JD039675.
- 2024 (146) Rodriguez-Caton, M., M.S. Morales, M.P. Rao, T. Nixon, **M. Vuille**, J.A. Rivera, R. Oelkers, D.A. Christie, A.M. Varuolo-Clarke, M.E. Ferrero, T. Magney, V. Daux, R. Villalba, and L. Andreu-Hayles, 2024: A 300-year tree-ring $\delta^{18}\text{O}$ precipitation reconstruction for the South American Altiplano highlights decadal hydroclimate teleconnections. *Nature Commun. Earth Environ.*, 5, 269, doi:10.1038/s43247-024-01385-9.
- 2024 (145) Strikis, N.M, P.F.S.M. Buarque, F.W. Cruz, J.P. Bernal, **M. Vuille**, *E. Tejedor, M.S. Santos, M.H. Shimizu, A. Ampuero, W. Du, G. Sampaio, H.R. Sales, J.L. Campos, M.T. Kayano, J. Apaéstegui, R.R. Fu, H. Cheng, R.L. Edwards, V.C. Mayta, D.S. Francischini, M.A.Z. Arruda and V.F. Novello, 2024: Modern anthropogenic drought in Central Brazil unprecedented during last 700 years. *Nature Commun.*, 15, 1728, doi:10.1038/s41467-024-45469-8.
- 2024 (144) **Vuille, M**, 2024: Ice core records from South America. In: Elias, S. (eds.) *Encyclopedia of Quaternary Science, 3rd Edition*. Vol. 3, pp. 310-323. UK: Elsevier, doi:10.1016/B978-0-323-99931-1.00147-1.
- 2023 (143) Ramirez, V.M., F.W. Cruz, **M. Vuille**, V.F. Novello, N.M. Strikis, H. Cheng, H.W. Zhang, J.P. Bernal, W.J. Du, A. Ampuero, M. Deininger, C.M. Chiessi, E. Tejedor, J.L. Campos, Y. Ait Brahim, and R.L. Edwards, 2023: Summer insolation controlled movements of Intertropical Convergence Zone during last glacial cycle in northern South America. *Nature Commun. Earth Environ.*, 4(495), doi:10.1038/s43247-023-01124-6.
- 2023 (142) Utida, G., F.W. Cruz, **M. Vuille**, A. Ampuero, V.F. Novello, J. Maksic, G. Sampaio, H. Cheng, H. Zhang, F.R.D. de Andrade and R.L. Edwards, 2023: Spatiotemporal Intertropical Convergence Zone dynamics during the last 3 millennia in northeastern Brazil and related impacts in modern human history. *Clim. Past*, 19, 1975–1992, doi:10.5194/cp-19-1975-2023.

- 2023 (141) Apaéstegui, J., C. Romero, **M. Vuille**, J. Sulca and A. Ampuero, 2023: Moisture sources and rainfall $\delta^{18}\text{O}$ variability over the Central Andes of Peru – A case study from the Mantaro River Basin. *Water*, 15, 1867, doi:10.3390/w15101867.
- 2023 (140) Medina, N.M.M., F.W. Cruz, A. Winter, H. Zhang, A. Ampuero, **M. Vuille**, V.C. Mayta, M.C. Campos, V.M. Rámirez, G. Útida, A.C. Zúñiga, and H. Cheng, 2023: Atlantic ITCZ variability during the Holocene based on high-resolution speleothem isotope records from northern Venezuela. *Quaternary Sci. Rev.*, 307, 108056, doi:10.1016/j.quascirev.2023.108056.
- 2022 (139) Sulca, J., **M. Vuille**, and B. Dong 2022: Interdecadal variability of the austral summer precipitation over the Central Andes. *Frontiers Earth Sci.*, 10, 954954. doi: 10.3389/feart.2022.954954.
- 2022 (138) *Orrison, R., **M. Vuille**, J.E. Smerdon, J. Apaestegui, V. Azevedo, J.L.P.S. Campos, F.W. Cruz, M.E. Della Libera, and N.M. Strikis, 2022: South American Monsoon variability over the last millennium in paleoclimate records and isotope-enabled climate models. *Clim. Past*, 18, 2045–2062, doi:10.5194/cp-18-2045-2022.
- 2022 (137) Jimenez, A., A. Ampuero, B.G. Valencia, V.C. Mayta, F.W. Cruz, **M. Vuille**, V.F. Novello, N.M. Strikis, N. Aranda and B. Conicelli, 2022: Stable isotope variability of precipitation and cave drip-water at Jumandy cave, western Amazon River basin (Ecuador). *J. Hydrol.*, 610, 127848, doi:10.1016/j.jhydrol.2022.127848.
- 2022 (136) Antico, A., and **M. Vuille**: 2022: ENSO and Paraná flow variability: Long-term changes in their connectivity. *Int. J. Climatol.*, 42(14), 7269-7279, doi:10.1002/joc.7643.
- 2022 (135) Steinman, B.A., N.D. Stansell, M.E. Mann, C.A. Cooke, M.B. Abbott, **M. Vuille**, B.W. Bird, M.S. Lachniet and A. Fernandez, 2022: North-south antiphasing of neotropical precipitation over the past millennium. *Proc. Natl. Acad. Sci.*, 119(17), e2120015119, doi:10.1073/pnas.2120015119.
- 2022 (134) Segura, H., J.C. Espinoza, C. Junquas, T. Lebel, **M. Vuille**, and T. Condom, 2022: Extreme austral winter precipitation events over the South-American Altiplano: Regional atmospheric features. *Clim. Dynam.*, 59, 3069-3086, doi:10.1007/s00382-022-06240-1.
- 2022 (133) Jomelli, V., D. Swingedouw, **M. Vuille**, V. Favier, B. Goehring, J. Shakun, R. Braucher, I. Schimmelpfennig, L. Menviel, A. Rabatel, L.C.P. Martin, P.-H. Blard, T. Condom, M. Lupker, M. Christl, *Z. He, D. Verfaillie, A. Gorin, G. Aumaitre, D.L. Bourles and K. Keddadouche, 2022: In-phase millennial-scale glacier changes in the tropics and North Atlantic regions during the Holocene. *Nature Commun.*, 13, 1419, doi:10.1038/s41467-022-28939-9.
- 2022 (132) Della Libera, M.E., V.F. Novello, F.W. Cruz, *R. Orrison, **M. Vuille**, S.Y. Maezumi, J. de Souza, J.C. Rodriguez, J.L.P.S. Campos, A. Ampuero, G. Utida, N.M. Strikis, C. Fernandes Stumpf, V. Azevedo, H. Zhang, R.L. Edwards and H. Cheng, 2022: Paleoclimatic and paleoenvironmental changes in Amazonian lowlands over the last three millennia. *Quaternary Sci. Rev.*, 279, 107383, doi:10.1016/j.quascirev.2022.107383.
- 2022 (131) Pepin, N.C., E. Arnone, A. Gobiet, K. Haslinger, S. Kotlarski, C. Notarnicola, E. Palazzi, P. Seibert, S. Serafin, W. Schöner, S. Terzago, J.M. Thornton, **M. Vuille** and C. Adler, 2022: Climate changes and their elevational patterns in the mountains of the world. *Rev. Geophys.* 60, e2020RG000730, doi:10.1029/2020RG000730.

- 2022 (130) Rodriguez-Caton, M., L. Andreu-Hayles, V. Daux, **M. Vuille**, A. Varuolo-Clarke, R. Oelkers, D.A. Christie, R. D'Arrigo, M.S. Morales, M. Palat Rao, A.M. Srur, F. Vimeux and R. Villalba, 2022: Hydroclimate and ENSO variability recorded by oxygen isotopes from tree rings in the South American Altiplano. *Geophys. Res. Lett.*, 49, e2021GL095883, doi:10.1029/2021GL095883.
- 2022 (129) *Chimborazo, O., J.R. Minder and **M. Vuille**, 2022: Observations and simulated mechanisms of elevation-dependent warming over the tropical Andes. *J. Climate*, 35, 1021-1044. doi:10.1175/JCLI-D-21-0379.1.
- 2021 (128) *He, Z., A. Dai and **M. Vuille**, 2021: The joint impacts of Atlantic and Pacific multidecadal variability on South American precipitation and temperature. *J. Climate*, 34(19), 7959-7981. doi:10.1175/JCLI-D-21-0081.1.
- 2021 (127) Shahgedanova, M., C. Adler, A. Gebrekirstos, R. Grau, C. Huggel, R. Marchant, N. Pepin, V. Vanacker, D. Viviroli and **M. Vuille**, 2021: Mountain Observatories: Status and prospects to enhance and connect a global community. *Mountain Res. Devel.* 41(2), A1-A15, doi:10.1659/MRD-JOURNAL-D-20-00054.1.
- 2021 (126) *Tejedor E., N. Steiger, J.E. Smerdon, R. Serrano-Notivoli and **M. Vuille**, 2021: Global temperature response to tropical volcanic eruptions in paleo data assimilation products and climate model simulations over the last millennium. *Paleoceanogr. Paleoclimatol.*, 36, e2020PA004128, doi:10.1029/2020PA004128.
- 2021 (125) Azevedo, V., N.M. Strikis, V.F. Novello, C.L. Roland, F.W. Cruz, R.V. Santos, **M. Vuille**, G. Utida, F.R.D. de Andrade, H. Cheng and R.L. Edwards, 2021: Paleovegetation seesaw in Brazil since the Late Pleistocene: A multiproxy study of two biomes. *Earth Planet. Sc. Lett.*, 563, 116880, doi:10.1016/j.epsl.2021.116880.
- 2021 (124) *Tejedor E., N. Steiger, J.E. Smerdon, R. Serrano-Notivoli and **M. Vuille**, 2021: Global hydroclimate response to volcanic eruptions over the last millennium. *Proc. Natl. Acad. Sci.*, 118(12), e2019145118. doi:10.1073/pnas.2019145118.
- 2021 (123) Novello, V.F., F.W. Cruz, **M. Vuille**, J.L.P.S. Campos, N.M. Strikis, J. Apaéstegui, J.S. Moquet, V. Azevedo, A. Ampuero, G. Utida, X. Wang, G.M. Paula-Santos, P. Jaqueto, L.C.R. Pessenda, D.O. Breecker, and I. Karmann, 2021: Investigating $\delta^{13}\text{C}$ values in stalagmites from tropical South America for the last two millennia. *Quaternary Sci. Rev.*, 255, 106822, doi:10.1016/j.quascirev.2021.106822.
- 2021 (122) *Chimborazo, O., and **M. Vuille**, 2021: Present-day climate and projected future temperature and precipitation changes in Ecuador. *Theor. Appl. Climatol.*, 143, 1581–1597, doi:10.1007/s00704-020-03483-y.
- 2021 (121) Sulca, J.C., **M. Vuille**, O. Elison Timm, B. Dong, and R. Zubieta, 2021: Empirical-statistical downscaling of austral summer precipitation over South America during extreme El Niño episodes, with a focus on the central Andes of Peru and the equatorial Amazon basin. *J. Appl. Meteorol. Climatol.*, 60, 65-85. doi:10.1175/JAMC-D-20-0066.1.
- 2021 (120) Serrano-Notivoli, R., *E. Tejedor, P. Sarricolea, O. Meseguer-Ruiz, **M. Vuille**, M. Fuentealba, and M. de Luis, 2021: Hydroclimatic variability in Santiago (Chile) since the 16th century. *Int. J. Climatol.*, 41, (Suppl. 1), E2015– E2030. doi:10.1002/joc.6828.
- 2020 (119) Utida, G., F.W. Cruz, R.V. Santos, A.O. Sawakuchi, H. Wang, L.C.R. Pessenda, V.F. Novello, **M. Vuille**, A.M. Strauss, A.C. Borella, N.M. Strikis, C.C.F. Guedes, F.R.D. de Andrade, H. Zhang, H. Cheng and R.L. Edwards, 2020: Climate

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NON-REFEREED PUBLICATIONS, REPORTS & PODCASTS

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- 2023 The PIRE-CREATE Project. *AGU-TV*, 2023.
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- 2023 Can the ski industry survive climate change? – *The climate question BBC Sounds*, 2023. <https://www.bbc.co.uk/sounds/play/w3ct3kbb>
- 2018 Climate Change Pt. 2: A Case Study of Peru's Quelccaya Ice Cap. UAlbany podcast.
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- 2018 **Vuille M.**, 2018: We've been studying a glacier in Peru for 14 years – and it may reach the point of no return in the next 30. *The Conversation*.
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- 2018 **Vuille, M.**, 2018: Climate change: A grand challenge that requires global understanding. *Global Synergies*, Vol. 7, p.3.
- 2018 Schoolmeester, T., et al., 2018: The Andean glacier and water Atlas – The impact of glacier retreat on water resources. 2018. *UNESCO and GRID-Arendal*, 80p.
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- 2018 Rivera, A., F. Bown, F. Napoleoni, C. Muñoz and **M. Vuille**, 2017: Balance de masa glaciar con el método glaciológico. *US Department of State / UNESCO / ACCION / CECS Technical document*, Valdivia, Chile, 248pp., (in Spanish).
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- 2017 Carey, M., R. Garrard, C. Cecale, W. Buytaert, C. Huggel and **M. Vuille**, 2017: Climbing for Science and Ice: From Hans Kinzl and Mountaineering-Glaciology to Citizen Science in the Cordillera Blanca. *Revista del INAIGEM*, 1, 59-72.
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- 2001 **Vuille, M.**, D.R. Hardy, C. Braun, F. Keimig and R.S. Bradley, 2001: Climate variability on intraseasonal to interannual timescales on the Bolivian Altiplano with special emphasis on the Nevado Sajama region. *Ecologia en Bolivia*, 35, 17-40.
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- 1998 Messerli, B., C. Ammann, M. Grosjean, B. Jenny, K. Kammer and **M. Vuille**, 1998: Current precipitation, the late Pleistocene snow line, and lake level changes in the Atacama Altiplano (18°S-28°30'S): the problem of the Andean dry diagonal. *Bamberger Geographische Schriften*, 15, 17-34.
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- 1995 Grosjean, M., B. Messerli, C. Ammann, M.A. Geyh, K. Graf, B. Jenny, K. Kammer, L. Nuñez, H. Schreier, U. Schotterer, A. Schwalb, B. Valero-Garcés and **M. Vuille**, 1995: Holocene environmental changes in the Atacama Altiplano and paleoclimatic implications. *Bull. Inst. fr. études andines*, 24(3), 585-594.

SCIENTIFIC PRESENTATIONS

(Only 1st-authored and invited are listed; >400 contributed and co-authored presentations)

International

- 2025 Keynote, Glacier Symposium Pontifical Catholic Univ., Lima, Peru, July 3, 2025.
- 2025 Paramo Symposium, Jorge Tadeo Lozano Univ., Bogota, Colombia, June 3-6, 2025.
- 2025 Society for American Archaeology, Annual Meeting, Denver, April 23-27, 2025.
- 2024 AccelNet-ACCORD 1st Annual Meeting, Washington, D.C., Dec. 7-8, 2024.
- 2024 Deplete and Retreat (DaR) project Meeting, London, UK, Oct. 2024 (*virtual*)
- 2024 PIRE-CREATE Project meeting, Ubatuba, Brazil. Aug. 2024
- 2024 WCRP-CLIC Panel on mountain cryosphere impacts, Vienna, Austria, April 2024
- 2023 S4 Summer School, University of Sao Paulo, Brazil, Aug. 2023
- 2023 Tropospheric lapse rate workshop, Univ. Sorbonne, Paris, France, July 2023
- 2022 Global Monsoon Webinar Series, November 2022 (*virtual*)
- 2022 Panelist, UN General Assembly High-Level Panel on Glacier retreat, New York City, Oct. 2022
- 2022 National Institute for Space Research (INPE), São José dos Campos, Brazil, Seminar, Aug. 2022
- 2022 Department of Forest Sciences, University of Sao Paulo, Piracicaba, Brazil, Seminar, Aug. 2022
- 2022 Panelist, 2nd World High Mountain Summit, USAID, Pereira, Colombia June 2022 (*virtual*)
- 2022 University of Tuebingen, Germany, Seminar, April 2022 (*virtual*)
- 2021 XXIX Meeting Argentinean Assoc. Geophysicists. & Geodesists, Aug. 2021 (*virtual*)
- 2021 Iberoamer. Meteorol. Winter School, Univ. La Molina, Lima, Peru, June 2021 (*virtual*)

- 2020 Virtual High Mountain Summit, IDEAM – Bogota, Colombia, Dec. 2020, (*virtual*)
- 2020 Natl. Inst. for Glacier & Mountain Ecosystem Res., Huaraz, Peru, April 2020 (*virtual*)
- 2019 Lecturer, PIRE-CREATE Summer School, Univ. Sao Paulo, Brazil, July 2019
- 2019 PIRE-CREATE Annual Meeting, Univ. Sao Paulo, Brazil, July 2019
- 2019 Panelist, UNESCO Glacier Meeting, Ministry of Foreign Affairs, Santiago, Chile, Jan. 2019
- 2018 Mountain Research Initiative Scientific Leadership Council, Aeschi, Switzerland, Nov. 2018
- 2018 Plenary Speaker, International Biogeographical Society meeting, Évora, Portugal, March 2018
- 2017 Keynote, SGP International Congress on climate change, Huaraz, Peru, Nov. 2017
- 2017 Keynote, Int. Conference on Integrated Water Management, Cuenca, Ecuador, Oct. 2017
- 2017 UNESCO workshop - Impact of glacier retreat in the Andes, Mendoza, Argentina, Aug. 2017
- 2017 University of Grenoble, France, Seminar, July 2017
- 2017 University of Grenoble, France, Seminar, June 2017
- 2016 Mountain Research Initiative Scientific Leadership Council meeting, Porto, Portugal, Oct. 2016
- 2016 Mountain Research Initiative (MRI) meeting, Lisbon, Portugal, June 2016
- 2016 UNESCO workshop - Impact of glacier retreat in the Andes, Santiago, Chile, Sept. 2015
- 2015 US-BIOTA Meeting, Dimensions of Atlantic Forest Biodiversity, Sao Paulo, Brazil, June 2015
- 2014 UNESCO Climate change & water resources workshop, Koblenz, Germany, Nov. 2014
- 2014 U CLIMATICA conference, Peruvian Ministry of Environment & US Embassy, Lima, Oct. 2014
- 2014 Dept. of Geography, University of Zurich, Switzerland, Seminar, Oct. 2014
- 2014 LOTRED-SA Symposium on South American paleoclimate, Medellin, Colombia, July 2014
- 2013 ACCION/UNESCO/CONDESAN Policy & adaptation workshop, Quito, Ecuador, Nov. 2013
- 2013 Panelist, Mountain workshop, 37th UNESCO General Conference, Paris, France, Nov. 2013
- 2013 Lecturer, Peruvian National Meteorological Service (SENAMHI), Lima, Peru, Sept. 2013
- 2013 Plenary address, Foro Glaciares, Huaraz, Peru, July 2013

- 2013 American Geophysical Union Meeting of the Americas, Cancun, Mexico, May 2013
- 2013 IAI-Meeting, Mendoza, Argentina, April 2013
- 2013 World Bank Project meeting, La Paz, Bolivia, March 2013
- 2012 Municipality of Guayaquil, Ecuador, Seminar, Nov. 2012
- 2012 Universidad Casa Grande, Guayaquil, Ecuador, Seminar, Nov. 2012
- 2012 Guayaquil Water Agency Interagua, Guayaquil, Seminar, Ecuador, Nov. 2012
- 2012 Universidad Ecotec, Guayaquil, Ecuador, Seminar, Nov. 2012
- 2012 Universidad San Francisco de Quito, Quito, Ecuador, Seminar, Nov. 2012
- 2012 Lecturer, ACCION glaciology workshop, Centro de Estudios Científicos, Valdivia, Aug. 2012
- 2012 Institute of Geosciences, University of Sao Paulo, Brazil, Seminar, June 2012
- 2012 Panelist, U.S. Center at RIO+20, Rio de Janeiro, Brazil, June 2012
- 2012 UNESCO Forum on Sustainable Development at RIO+20, Rio de Janeiro, Brazil, June 2012
- 2012 Universidad Nacional San Marcos, Lima, Peru, Seminar, June 2012
- 2012 Peruvian Ministry of the Environment, Lima, Peru, Seminar, June 2012
- 2012 US Embassy, Lima, Peru, Interview for their website, June 2012
- 2012 Inter-American Institute for Cooperation on Agriculture (ICA), Huaura, Peru, Seminar, May 2012
- 2012 UNESCO Workshop on Climate Change Adaptation Strategies", Lima, Peru, May 2012
- 2012 IGBP - Mountain Research Initiative (MRI) meeting, Aeschi, Switzerland, April 2012
- 2012 ACCION project meeting, Santiago, Chile, Feb. 2012
- 2011 Universidad Nacional, Medellin, Colombia, Seminar, Nov. 2011
- 2011 IDEAM (Colombian Meteorological Service), Bogota, Colombia, Seminar, Nov. 2011
- 2011 Keynote, 7th Inter-American Dialogue on Water Management, Medellin, Colombia, Nov. 2011
- 2011 UNESCO meeting on Andean glacier retreat, Santiago, Chile, Sept. 2011
- 2011 International Continental Drilling Project (ICDP) meeting, Tarma, Peru, June 2011
- 2011 Keynote, Interamerican Development Bank, Water Division, Santiago, Chile, April 2011
- 2011 IAI Meeting, Tilcara, Argentina, April 2011
- 2010 Keynote, Symposium climate change and human health, Goethe Institute, Lima, Peru, Dec. 2010
- 2010 APECS (Antarctic Polar Early Career Scientists) Mentor Panel, Valdivia, Chile, Oct. 2010

- 2010 International Scientific Conference ECI 2010, Lima, Peru, Aug. 2010
- 2010 Lecturer, Peruvian Meteorological Service (SENAMHI), Lima, Peru, Aug. 2010
- 2010 International Glaciological Conference Ice and Climate Change, Valdivia, Chile, Feb. 2010
- 2009 IRD meeting on climate variability and change in the Andes, Lima, Peru, Sept. 2009
- 2009 Mountain Research Initiative workshop, Goeschenen, Switzerland, Sept. 2009
- 2008 Department of Geography, University of Bern, Switzerland, Seminar, May 2008
- 2006 Lotred-SA-PAGES meeting, Past Climate in South America, Malargue, Argentina, Oct. 2006
- 2006 CONCORD – Climate Change in the American Cordillera, Mendoza, Argentina, April 2006
- 2006 IAI Meeting, Mendoza, Argentina, April 2006
- 2005 Workshop on mountain climate change, Bogotá, Colombia, Nov. 2005
- 2005 NCCR Climate, University of Bern, Switzerland, Seminar, Aug. 2005
- 2003 Workshop on South American paleoclimate, Sao Paulo, Brazil, May 2003
- 2003 Dept. of Geophysics, University of Chile, Santiago, Chile, Seminar, March 2003
- 2001 Int. Workshop on Climate Change at High Elevation Sites, Davos, Switzerland, June 2001
- 1999 Dept. of Geography, University of Bern, Switzerland, Seminar, March 1999
- 1998 Bolivian National Academy of Science, La Paz, Bolivia, June 1998
- 1998 ENSO conference, Bolivian Meteorological Survey (SENAMHI), La Paz, Bolivia, June 1998
- 1996 Dept. of Geography, University of Chile, Santiago, Chile, Seminar, Oct. 1996
- 1995 Int. Workshop on Climate Change at High Elevation Sites, Wengen, Switzerland, Sept. 1995

National

- 2024 Colleges of Natural Science & Engineering, Univ. of Massachusetts, Amherst, MA, Seminar, Dec. 2024.
- 2023 Columbia Univ., Ocean and Climate Physics Seminar, Palisades, NY, Dec. 2023
- 2022 Lightning Talk Water research and resource management, Univ. at Albany, Dec. 2022
- 2022 Lightning Talk Endless Frontiers Seed-Funded Projects, Univ. at Albany, March 2022 (*virtual*)
- 2021 PIRE-CREATE webinars, June 2021 (*virtual*)
- 2020 PIRE-CREATE webinars, June 2020 (*virtual*)
- 2019 Dept. of Earth & Environmental Sciences, Lehigh Univ., Bethlehem, PA, Seminar, Oct. 2019

- 2019 NY State Senate Hearing - Environmental Conservation Committee, Capitol, Albany, Feb. 2019
- 2018 Dept. of Earth, Atmospheric & Planetary Sciences, Purdue Univ., West Lafayette, IN, Oct. 2018
- 2017 American Geophysical Union Fall Meeting, New Orleans, Dec. 2017
- 2017 Dept. of Anthropology, Yale University, New Haven, CT, Oct. 2017
- 2017 Dept. of Geology & Environmental Earth Science, Miami Univ., Oxford, OH, March 2017
- 2016 American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 2016
- 2016 Last Millennium Reanalysis Workshop, San Juan Island, WA, Oct. 2016
- 2016 Dept. of Earth and Atmospheric Sciences, Cornell Univ., Ithaca NY, Seminar, Sept. 2016
- 2016 Dept. of Geology and Planetary Science, Univ. of Pittsburgh, PA, Seminar, April 2016
- 2015 American Geophysical Union Fall Meeting, Union Session, San Francisco, CA, Dec. 2015
- 2015 Dept. of Geological Sciences & Environmental Studies, SUNY Binghamton, NY, May 2015
- 2014 Panelist ECPA Discussion Forum, Organization of American States, Washington, DC, April 2014
- 2013 Panelist Interamerican Development Bank Sustainability Roundtable, Washington, DC, July 2013
- 2012 American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 2012
- 2012 SynTraCE-21, PAGES Working Group meeting, Providence RI, Nov. 2012
- 2012 Panelist, ECPA Conference, Organization of American States, Washington DC, July 2012
- 2012 Dept. of Geosciences, Univ. of Massachusetts, Amherst, MA, Seminar, April 2012
- 2012 Dept. of Environmental Sciences, Rutgers Univ., New Brunswick, NJ, Seminar, March 2012
- 2011 Department of Earth Sciences, Dartmouth College, NH, Seminar, Nov. 2011
- 2011 Lamont-Doherty Earth Observatory, Columbia Univ., Palisades, NY, Seminar, May 2011
- 2010 Dept. of Earth & Environmental Sciences, RPI, Troy, Seminar, NY, April 2010
- 2009 American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 2009
- 2009 Dept. of Geological Sciences & Environmental Studies, SUNY Binghamton, NY, Nov. 2009
- 2009 PAGES Open Science Meeting, Corvallis, OR, July 2009
- 2009 IPICS (International Partnership in Ice Core Science) Workshop, Corvallis, OR, July 2009

- 2009 Dept. of Biology, Univ. at Albany, Seminar, March 2009
- 2008 Dept. of Geology and Planetary Science, Univ. of Pittsburgh, PA, Seminar, Sept. 2008
- 2008 American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 2008
- 2008 Speaker Meteorology Banquet, Dept. of Earth Sciences, SUNY Oneonta, NY, May 2008
- 2008 Greenfield Community College, Greenfield, MA, Seminar, April 2008
- 2007 Dept. of Earth & Atmospheric Sciences, Cornell Univ., Ithaca, NY, Seminar, Oct. 2007
- 2007 Department of Earth & Atmospheric Sciences, Univ. at Albany, Seminar, March 2007
- 2007 Int. Research Institute Climate & Society (IRI), Columbia Univ., Palisades, NY, Feb. 2007
- 2006 The World Bank, Climate Change Workshop, Washington D.C., Nov. 2006
- 2006 Brown Univ., Dept. of Geological Sciences, Providence, RI, Seminar, Oct. 2006
- 2006 Briefing of Congressional staffers (by invitation of Pew Center) Washington D.C., Oct. 2006
- 2006 AMQUA 2006 Biennial meeting, Bozeman, MT, Aug. 2006
- 2005 NSF-ESH PI Science Meeting, AGU Washington, D.C., May 2005
- 2005 Nicholas School of the Environment & Earth Sciences, Duke Univ., Durham, NC, Feb. 2005
- 2004 American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 2004
- 2004 Workshop on tropical glaciation and climate dynamics, Univ. Washington, Seattle, May 2004
- 2004 Dartmouth College, Department of Earth Sciences, NH, Seminar, Feb. 2004
- 2002 Conference on Hadley Circulation, Int. Pacific Research Center, Honolulu, HI, Nov. 2002
- 2002 Dept. of Geological Sciences & Environmental Studies, SUNY Binghamton, NY, April 2002
- 2001 Dept. of Geological Sciences & Environmental Studies, SUNY Binghamton, NY, Oct. 2001
- 2001 Central Andean Paleoclimate Workshop, Tucson, AZ, Jan. 2001

PUBLIC ENGAGEMENT ACTIVITIES

(1st-authored and invited only)

- 2025 Speaker, RiseHigh 10th Grade Environmental Education, Schenectady, NY, April 2025
- 2025 Keynote, Five Rivers Environmental Education Center Annual Meeting, DEC, NY, Feb. 2025

- 2025 Speaker, Peebles Island State Park, DEC, NY, Jan. 2025
- 2024 Speaker, Grafton Lakes State Park, DEC, NY, Nov. 2024
- 2024 Speaker, Burnt Hills / Ballston Spa Rotatory Club, Ballston Spa, NY, June 2024
- 2024 Speaker, Youth Climate Summit, RPI, Troy, NY, April 2024
- 2023 Panelist, Rising Tides – Art & Climate Change, Univ. at Albany, NY, Sept. 2023
- 2023 Instructor, PIRE Academy, SUNY Purchase, NY, April 2023
- 2022 Speaker, Bethlehem Public Library, Delmar, NY, August 2022
- 2022 Speaker, Bethlehem High School, Delmar, NY, April 2022
- 2022 Instructor, PIRE Academy, SUNY Oswego, NY, April 2022
- 2021 Speaker, Sustainable Futures Conference, Albany, NY, April 2021 (*virtual*)
- 2021 Speaker, Democracy Matters Meeting, Univ. at Albany, NY, April 2021 (*virtual*)
- 2020 Panelist, Democracy Matters Panel, Univ. at Albany, NY, Nov. 2020 (*virtual*)
- 2020 Speaker, Academy of the Holy Names, Albany, NY, March 2020
- 2019 Moderator, Climate Science Panel, Univ at Albany Emeritus Center, Nov. 2019
- 2019 Speaker, Science on Tap, Saratoga Springs, NY, April 2019
- 2019 Instructor, PIRE Academy, Purchase College, NY, April 2019
- 2019 Skype with a Scientist, SUNY Student Association & Univ. at Albany, Sept. 2018
- 2018 Speaker, Albany Jewish Community Center, Albany, NY, May 2018
- 2018 Panelist, Land Use & Sustainability Symposium, Albany Pine Bush Preserve, May 2018
- 2018 Keynote, Environmental Day, Greenville High School, Greenville, NY, April 2018
- 2017 Keynote, Science Teachers Association of New York State, Rochester, NY, Nov. 2017
- 2017 Speaker, Campus Conversations in Standish Series, University at Albany, Nov. 2017
- 2017 Speaker, Bethlehem Town Hall, Bethlehem, NY, April 2017
- 2017 Panelist, Faculty-lead discussion on role of Arts and Humanities, Univ. at Albany, Feb. 2017
- 2016 Speaker, University Art Museum, University at Albany, NY, Dec. 2016
- 2016 Speaker, Questar III BOCES Summer Institute for Science Teachers, Castleton, NY, July 2016
- 2016 Film Introduction, The Cooper Union Institute for Sustainable Design, New York, March 2016
- 2015 Speaker, Five Rivers Environmental Education Center, Delmar, NY, Nov. 2015
- 2015 Panelist, Anthropocene Panel, University at Albany, NY, Nov. 2015
- 2015 SUNY Business & Education Coop. Southern Tier (SUNYBEST), Binghamton, NY. Oct. 2015
- 2015 Plenary talk, Innovation Day, SUNY Binghamton, NY, April 2015

- 2015 Speaker, Capital District Humanist Society, Sage College, Albany, NY, Feb. 2015
- 2014 Plenary talk, Science Teachers Association of New York State, Rochester, NY, Nov. 2014
- 2013 Speaker, Explore UAlbany, University at Albany, Aug. 2013
- 2013 Lecturer, Summer Astronomy Institute for Science Teachers, RPI, Troy, NY, July 2013
- 2013 Speaker, The Doane Stuart School, Rensselaer, N.Y., April 2013
- 2013 Speaker, Virtual field trip on Climate Change, University at Albany, Oct. 2012
- 2012 Speaker, Academy of the Holy Names, Albany, NY, April 2012
- 2012 Keynote, Greater Capital Region Science & Engineering Fair, RPI, Troy, NY, March 2012
- 2011 Speaker, Falconer Natural History Lecture Series, Albany, NY, March 2011
- 2007 Host of “Swiss Climate Trail”, Kids Science Festival, Boulder, CO, Sept. 2007
- 2007 Host of Climate booth at Cambridge Climate Trail, Boston, MA, April 2007

TEACHING

Courses taught University at Albany

- 2011-present ENV 450 / ATM 550 *Paleoclimatology* (2011-present)
- 2009-present ENV 490 *Major Topics in Environmental Science* (2009 - present)
- 2009-present ATM 552 *Climatic Change* (2009 - present)
- 2018 ATM 103: *Introduction to Climate Change* (2018)
- 2010-2013 ENV 395Z *Writing in Environmental or Geological Science* (2010-2013)
- 2008-2010 ATM 522 *Climate Variability and Predictability* (2008-2010)

Courses taught Humanities Institute for Lifelong Learning (HILL), Delmar NY

- 2020 & 2021 Global Warming: Impacts, Uncertainties, & Challenges Ahead

Courses taught University of Massachusetts

- 2006-2007 GEO-SCI 458 *Climatic Change* (2006-2007)

STUDENTS & POSTDOCS ADVISED

Habilitation committees

- 2016 Thomas Condom. Univ. Joseph Fourier, Grenoble, France. Member

Postdoctoral Research Associates

2023-present	Zhiqiang Lyu. Univ. at Albany. Host
2023-2024	Zhaoxiangrui He. Univ. at Albany. Host
2020	Roberto Serrano. Univ. at Albany. Host
2018-2022	Ernesto Tejedor. Univ. at Albany. Host
2014-2016	John Hurley. Univ. at Albany. Host

Doctoral Dissertation committees

In progress	Karen Conron Chamberlain. Univ at Albany. Chair
In progress	Robert Ford. Univ at Albany. Member
In progress	Sumar Hart. Univ at Albany. Member
In progress	Skylar Hooler. Univ. at Albany. Member
In progress	Matthew Lynne. Univ. at Albany. Member
In progress	Angela Ampuero. Univ. Sao Paulo, Brazil. External Referee
In progress	Shelby Turner. Northern Illinois Univ. Member
2025	Nadja Landshuter. Univ. Erlangen-Nürnberg, Germany. External Referee
2024	Rebecca Orrison. Univ. at Albany. Chair
2024	Matthew Jenkins. Univ. at Albany. Member
2024	Fangze Zhu. Univ. at Albany. Member
2023	Zhaoxiangrui He. Univ. at Albany. Chair
2023	Minn Lin Wong. Nanyang Technological Univ, Singapore. External Referee
2022	Shengzhe Chen. Univ. at Albany. Member
2022	Philémon Autin. Univ. Grenoble-Alpes, France. Member
2021	Arielle Woods. Univ. Pittsburgh. Member
2019	Oscar Chimborazo. Univ. at Albany. Chair
2018	Chao-Yuan Yang. Univ. at Albany. Member
2018	Christian Yarleque. Univ. at Albany. Chair
2017	Matthew Gibbons. Univ. at Albany. Member
2017	Bo Dong. Univ. at Albany. Member
2016	Chris Colose. Univ. at Albany. Chair
2016	Léo Martin. Univ. de Lorraine, Nancy, France. Member
2015	Lise Mourre. Univ. Joseph Fourier, Grenoble, France. Member
2015	Ruben Basantes. Univ. Joseph Fourier, Grenoble, France. Member
2013	Bronwen Konecky. Brown Univ. Member
2012	Emilie Dassie. Univ. at Albany. Member
2011	Lisa Kanner. Univ. of Massachusetts. Member
2011	Marlis Hofer. Univ. of Innsbruck, Austria. External Referee
2011	Sophie Lewis. Australian National Univ. External Referee
2011	Samantha Langton. Univ. at Albany. Member
2010	Henry Wu. Univ. at Albany. Member
2010	Kinuyo Kanamaru. Univ. of Massachusetts. Member
2009	Ambarish Karmalkar. Univ. of Massachusetts. Member
2009	Broxton Bird. Univ. of Pittsburgh. Member
2006	James Bradbury. Univ. of Massachusetts. Member
2006	Roland Zech. Univ. of Bern, Switzerland. Member
2003	Edson Ramirez. Univ. of Paris, France. Member

Master's theses

In progress	Derick Appiah Kubi. Univ. at Albany. Chair
2023	Shelby Turner. Univ. at Albany. Chair

2023	Erin Potter. Univ. at Albany. Member
2022	Thomas Favata. Univ. at Albany. Member
2017	Hans Segura. Univ. Joseph Fourier, Grenoble, France. Member
2015	Juan Sulca. Univ. at Albany. Chair
2015	Ahmed Shaaban. Univ. at Albany. Member
2014	Lauren Slawsky. Univ. at Albany. Member
2013	Eric Franquist. Univ. at Albany. Chair
2012	Gavin Lemley. Univ. at Albany. Member
2011	Dana McGlone. Univ. at Albany. Chair
2008	Rocio Urrutia. Univ. of Massachusetts. Chair
2007	Ezra Small. Univ. of Massachusetts. Member
2006	Rebecca Chan. Univ. of Massachusetts. Chair
2006	Jeanne Thibeault. Univ. of Massachusetts. Member
2006	Rachel Sorauf. Univ. of Massachusetts. Member

Visiting Students

2015-2016	Valdir Novello (Ph.D, 2016, Univ. of Sao Paulo). Host
2014	Claudio Bravo (M.S., 2014, Univ. of Chile). Host
2009-2010	Su Bin (Berkshire High School student). Mentor

SERVICE

DEPARTMENT SERVICE

2024-2025	SUNY Prodigy+ Search Committee. Chair
2017-present	DAES Diversity, Equity & Inclusion Committee. Member
2008-present	DAES Undergraduate Committee. Member
2008-present	DAES ENV Internship Supervisor. Chair
2019-2020	DAES Faculty Search Committee. Chair
2013-2014	DAES Program Review Committee. Member
2012-2013	DAES Faculty Search Committee. Member
2011-2012	DAES Faculty Search Committee. Chair
2010-2011	DAES Faculty Search Committee. Member

COLLEGE AND UNIVERSITY SERVICE

2025	Panelist, New Faculty Academy on Research Excellence, Univ. at Albany, Feb. 2025
2024	Instructor, Grant Writing Workshop for Postdocs, Univ. at Albany, Aug. 2024
2023	UAlbany Presidents Award for Excellence in Research Selection Committee. Member
2020-2022	UAlbany Carbon Offset Advisory Group. Member

2020-2022	College of Arts & Sciences (CAS) Diversity and Inclusion Committee. Member
2017-2021	Advisory Committee - Center for Intl. Education & Global Strategy. Member
2017-2020	UAlbany Sustainability Plan – Research & Development Subcommittee. Member
2017	Selection Committee for Excellence Award in Librarianship. Member
2017	Strategic Planning Committee for Mapping Service Excellence. Member
2016	Terra Award Selection Committee. Member
2016	Presidential Innovation Fund for Research and Scholarship. Reviewer
2015-2016	Library and Information Science Subcommittee (2015-16). Chair
2014-2016	At-Large University Senator for College of Arts & Sciences. Member
2014-2016	Council on Libraries, Information Science and Computing (LISC). Member
2013-2014	Internationalization Working Group. Member
2009-2014	Paul C. Lemon Thesis Award Committee. Member
2012-2013	ASRC Director Search Committee. Member
2011-2012	ASRC Director Search Committee. Member
2010-2012	CAS Faculty Council (Acad. Planning & Acad. Support committees). Member

PROFESSIONAL SERVICE

Review Panels

NSF-P4Climate (National Science Foundation – Paleo Perspectives on Present and Projected Climate) Panel, (*virtual*).

NSF-OISE Global Centers Panel, (*virtual*).

NSF-OISE PIRE (Partnerships for International Research and Education) Panel, (*virtual*).

French National Research Agency (ANR) Panel, Paris, France (*served on 6 different ANR panels – 5 in person & 1 virtual*).

UK National Environmental Research Council (NERC) Panel, Lima, Peru.

NSF-P2C2 (National Science Foundation – Paleo-Perspectives on Climate Change) Panel, Alexandria, VA.

ECPA (Energy and Climate Partnership of the Americas, US Department of State) Small Competition Grant Panel, (*virtual*).

NOAA-CPO-CCDD (National Oceanic and Atmospheric Administration, Climate Program Office, Climate Change Data and Detection) Panel, Silver Spring, MD.

NOAA-OGP-CCDD (National Oceanic and Atmospheric Administration, Office of Global Programs, Climate Change Data and Detection) Panel, Silver Spring, MD.

Scientific Organizing Committees

2024	1 st Annual AccelNet-ACCORD Annual project meeting, Washington, DC.
2024	4 th PIRE-CREATE Annual project meeting, Ubatuba, Brazil.
2023	3 rd PIRE CREATE Academy for SUNY Env. Sci. students, SUNY Purchase.
2022	2 nd PIRE CREATE Academy for SUNY Env. Sci. students, SUNY Oswego.
2020	3 rd PIRE-CREATE Annual project meeting (<i>virtual</i>).
2019	Mountain Research Initiative (MRI) Synthesis workshop on future mountain climate change, San Francisco.
2019	PIRE Summer School, Sao Paulo, Brazil.
2019	2 nd PIRE-CREATE Annual project meeting, Sao Paulo, Brazil.
2019	1 st PIRE CREATE Academy for SUNY Env. Sci. students, SUNY Purchase.
2018	1st PIRE-CREATE Annual project meeting, SUNY Albany.
2013	ACCION/UNESCO Workshop on Andean glacier retreat, Quito, Ecuador.
2013	ACCION/UNESCO Climate School on “Andean climate change. Lima, Peru.
2012	ACCION project meeting, Valdivia, Chile.
2012	UNESCO workshop on Andean glacier retreat. Lima, Peru.
2012	ACCION project meeting. Santiago, Chile.
2010	IGBP-PAGES I Symposium on South American paleoclimate. Valdivia, Chile.
2005	International Glaciological Society (IGS) Symposium on high-elevation glaciers and climate records. Lanzhou, China.
2003	Workshop on extreme events in South America. Sao Paulo, Brazil.

Session Convener & Session Chair

2025	International Mountain Conference (IMC). Convener Session: ‘Andean Climate Change: Observations, Research & Discovery’, Innsbruck, Austria.
2024	AGU Fall Meeting. Convener Session: ‘GC044. Climate change, variability and impacts in South America’, Washington, DC.
2023	AGU Fall Meeting. Convener Session: ‘GC026. Climate change, variability and impacts in South America’, San Francisco.
2022	AGU Fall Meeting. Convener Session: ‘GC018. Changes and impacts of climate variability in South America’, Chicago.
2021	AGU Fall Meeting. Convener Session: ‘GC019 Changes and impacts of climate variability in South America’, New Orleans.
2019	AGU Fall Meeting. Convener Session ‘The hydroclimate of the Andes: Current understanding and future challenges’. San Francisco.
2019	AGU Fall Meeting. Convener Session: ‘Mountain weather and climate in a warmer world’, San Francisco.

- 2018 International Biogeographical Society Meeting. Chair Session 2. Évora, Portugal.
- 2016 AGU Fall Meeting. Convener Session ‘PP037: Water Isotope Systematics - Improving Modern and Paleoclimate Interpretations’. San Francisco.
- 2015 UNESCO workshop - Impact of glacier retreat in the Andes. Chair, Session ‘Linking international, national and regional initiatives’. Santiago, Chile.
- 2014 EGU General Assembly. Convener, Session CR3.1 ‘Changing dynamics and environmental services of glacierized low latitude catchments’. Vienna.
- 2013 Foro Internacional Glaciares. Convener, Session ‘Andean climate’. Huaraz, Peru.
- 2013 AGU Meeting of the Americas. Chair, Session GC24A ‘Networks for Sustainable Monitoring of Global Environmental Change’. Cancun, Mexico.
- 2013 EGU General Assembly. Convener, Session CR3.8 ‘Tropical glaciers and climate dynamics’. Vienna.
- 2012 RIO+20 United Nations Conference on Sustainable Development. Convener, Session ‘Water Resources: Uncertainties and opportunities - Case studies from Geographic Hotspots’. Pontifical Catholic University of Rio de Janeiro.
- 2010 PAGES II International Symposium on reconstructing climate variations in South America and the Antarctic Peninsula over the last 2000 years. Chair, Session ‘Modern Climate’. Valdivia, Chile.
- 2010 AGU Meeting of the Americas. Convener, Session ‘Reconstruction and modeling of precipitation over the tropical Americas during the Late Quaternary’. Foz do Iguassu, Brazil.
- 2008 AGU Fall Meeting. Convener, Session ‘GC12A: Mountain ecosystems II: Tropical mountain glaciers, past and present’. San Francisco.
- 2006 PAGES Lotred-SA Meeting. Chair, Session ‘Present climate variability in South America’. Malargue, Argentina.
- 2005 International Glaciological Society (IGS) International Symposium on high-elevation glaciers and climate records. Chair, Session ‘Monsoon records in high-elevation glaciers’ Lanzhou, China.

Associate & Guest Editor / Contributing Author

- 2019-2020 Guest Editor, *Frontiers in Environmental Science*, Special issue on climate change in the Andes.
- 2016-2018 Associate Editor, *Geophysical Research Letters*.
- 2006 Guest Editor, *Annals of Glaciology*, Vol. 43, Special volume on high-elevation glaciers and climate records.
- 2001 Contributing Author, *Climate Change 2001 – The Scientific Basis*. Contribution of WG1 to 3rd Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) – Chapter 2: Observed climate variability and change.

Proposal Reviewer

ANR (Agence Nationale de la Recherche, France) / DAAD (German Academic Exchange Service) / DFG (German Science Foundation) / EC (European Commission), FONDECYT (Chilean Science Foundation) / FWF (Austrian Science Foundation) / IAI (Inter-American Institute for Global Change) / KACST (King Abdulaziz City for Science and Technology, Science Agency of Saudi Arabia) / MRI (Mountain Research Initiative) / National Geographic / NASA (Postdoctoral Program) / NERC (National Environmental Research Council, UK) / NOAA (Climate Change Data and Detection; Climate Prediction Program for the Americas) / NSF (Arctic Sciences; Antarctic Sciences; Office of Polar Programs; Climate & Large-Scale Dynamics; Earth System History; Frontier Research in Earth Sciences, Geography and Regional Science; Geomorphology and Land Use Dynamics; Ocean Sciences; OISE-Partnerships in International Research and Education (PIRE); OISE-Global Centers; P4Climate; Paleoclimate; PaleoPerspectives on Climate Change (P2C2); Pan American Advanced Studies Institutes; Postdoctoral Fellowship Program; Tectonics) / NWO (Netherlands Organization for Scientific Research) / SNSF (Swiss Science Foundation - Division for Physical and Engineering Sciences) / SUNY Empire Innovations Program / The Implementation Group, Inc. / Universidad Mayor de San Andres (Bolivia) / US Department of Energy / U.S. Department of State (Energy and Climate Partnership of the Americas-ECPA) / University of Arizona (ADVANCE Program) / World Bank

Journal Reviewer

Agriculture, Ecosystems and Environment / AGU Advances / Annals of Glaciology / Annals of the American Association of Geographers / Arctic Antarctic and Alpine Research / Boundary Layer Meteorology / Climate Dynamics / Climate of the Past / Climatic Change / Comptes Rendus Géoscience / Earth and Planetary Science Letters / Earth's Future / Earth System Dynamics / Environmental Conservation / Environmental Processes / Environmental Research Letters / EOS / Geochimica et Cosmochimica Acta / Geografiska Annaler / Geology / Geophysical Research Letters / Global and Planetary Change / Hydrological Sciences Journal / Hydrological Processes / Hydrology and Earth System Science / International Journal of Climatology / Journal of Applied Meteorology and Climatology / Journal of Arid Environments / Journal of Biogeography / Journal of Climate / Journal of Geophysical Research – Atmospheres / Journal of Geophysical Research – Earth Surface / Journal of Glaciology / Journal of Hydrology / Journal of Hydrometeorology / Journal of Mountain Science / Journal of South American Earth Sciences / Monthly Weather Review / Nature / Nature Climate Change / Nature Geoscience / Palaeogeography Palaeoclimatology Palaeoecology / Paleoceanography & Paleoclimatology / PloS One / Proceedings of the National Academy of Sciences / Quaternary Research / Quaternary Science Reviews / Rapid Communications in Mass Spectrometry / Science / The Cryosphere / The Holocene / Water Research / Water Resources Research / Zentralblatt fuer Geologie und Palaeontologie

PROFESSIONAL AFFILIATIONS

American Geophysical Union (AGU) / American Meteorological Society (AMS) / American Quaternary Association (AMQUA) / American Association for the Advancement of Science (AAAS) / European Geosciences Union (EGU)