


Curriculum Vitae (2012–2019)

Notarization. I have read the following and certify that this *curriculum vitae* is a current and accurate statement of my professional record.

Signature



Date **September 12, 2019**

I. Personal Information

I.A. UID, Last Name, First Name, Middle Name, Contact Information

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Evans, Michael, Neil

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I.B. Academic Appointments at UMD

2008–2019, Associate Professor, Geology & ESSIC

2009–2019, Affiliate Assoc. Prof., Atmos. & Oceanic Science

2009–2019, Affiliate Assoc. Prof., Appl. Math & Statistics and Sci. Computation Program

2019– Professor, Geology & ESSIC ; Affiliate Prof, Atmos. & Oceanic Science, Appl. Math & Statistics and Sci. Computation Program

I.D. Other Employment

1992–1999, Graduate Fellow, Columbia University

1999–2000, Postdoctoral Research Scientist, Lamont-Doherty Earth Observatory, Columbia University

2000–2019 Adjunct Associate Research Scientist, Lamont-Doherty Earth Observatory, Columbia University

2000–2001, NCAR Climate & Global Change Postdoctoral Fellow, Earth & Planetary Sciences, Harvard University

2001–2007 Assistant Professor, Laboratory of Tree-Ring Research, University of Arizona

2003–2008 Courtesy Asst. Prof., Geosciences, University of Arizona

2004–2008 Joint appointment, Atmospheric Sci., University of Arizona

2007–2008 Associate Prof., Laboratory of Tree-Ring Research, University of Arizona

2008–2019 Adj. Assoc. Prof., Laboratory of Tree-Ring Research, University of Arizona

2019– Adjunct Senior Research Scientist, Lamont-Doherty Earth Observatory, Columbia University

I.E. Educational Background

1988–1992, A.B. *magna cum laude*, Special Concentration in Environmental Science and Policy, Harvard College

1992–1999 Ph.D., Earth and Environmental Sciences, Columbia University

II. Research, Scholarly and Creative Activities

★ Senior author

Corresponding or presenting author underlined

♣ Undergraduate student

† Graduate student

‡ Postdoctoral research scientist

§ Invited contribution for workshop, conference or journal

II.C. Articles in Refereed Journals

28. **2019** Zeng, X.†, **M.N. Evans**, X. Liu, W. Wang, G. Xu, G. Wu, L. Zhang, Spatial patterns of precipitation-induced moisture availability and their effects on the divergence of tree growth in the western and eastern parts of China's semi-arid region, *Forest Ecol and Mgt*, 451, 117524, doi: 10.1016/j.foreco.2019.117524.
27. **2019** Neukom, R.A., L.A. Barboza, M.P. Erb, F. Shi, J. Emile-Geay, **M.N. Evans**, J. Franke, D.S. Kaufman, L. Lücke†, K. Rehfeld, A. Schurer, F. Zhu†, S. Brönnimann, G.J. Hakim, B.J. Henley, F. Charpentier Ljungqvist, N. McKay, V. Valler†, L. von Gunten, Global multi-decadal temperature variability over the Common Era, *Nature Geoscience*, 12, 643-649, doi: 10.1038/s41561-019-0400-0.
26. **2019** Saenger, C.P. and **M.N. Evans**, Calibration and validation of environmental controls on planktic foraminifera Mg/Ca using global core-top data, *Paleoceanography*, 34, doi: 10.1029/2018PA003507.
25. **2019** C.S.M. Turney, H.V. McGregor, P. Francus, N. Abram, **M.N. Evans**, H. Goosse, L. von Gunten, D. Kaufman, H. Linderholm, M.-F. Loutre, and R. Neukom, Introduction to the special issue "Climate of the past 2000 years: regional and trans-regional syntheses", *Clim. Past*, 15, 611-615, doi: 10.5194/cp-15-611-2019.
24. **2018** D.S. Kaufman and the PAGES 2K special issue editorial team (N.J. Abram, **M.N. Evans**, P. Francus, H. Goosse, H.W. Linderholm, M.F. Loutre, B. Martrat, H.V. McGregor, R. Neukom, S. St. George, C. Turney, L. von Gunten, Technical note: Open-paleo-data implementation pilot – the PAGES 2k special issue, *Clim. Past*, 14, 593600, www.clim-past.net/14/593/2018/.
23. **2017** ‡D. Martin-Benito, K.J. Anchukaitis, **M.N. Evans**, M. del Río, H. Beeckman, I. Cañellas, Effects of drought on xylem anatomy and water-use efficiency of two co-occurring pine species, *Forests*, 8(9), 332, doi: 10.3390/f8090332.
22. **2017** PAGES2k Consortium (many authors including **M.N. Evans**; author contributions listed here), A global multiproxy database for temperature reconstructions of the Common Era. *Scientific Data*, 4, 170088, doi: 10.1038/sdata.2017.88.
21. **2017** JungCLAUS, J., E. Bard, M. Baroni, P. Braconnot, J. Cao, L.P. Chini, T. Egorova, **M. Evans**, J.F. González-Rouco, H. Goosse, G.C. Hurrett, F. Joos, J.O. Kaplan, M. Khodri, K.K. Goldewijk, N. Krivova, A.N. LeGrande, S.J. Lorenz, J. Luterbacher, W. Man, M. Meinshausen, A. Moberg, C. Nehrbass-Ahles, B.I. Otto-Bliesner, S.J. Phipps, J. Pongratz, E. Rozanov, G.A. Schmidt, H. Schmidt, W. Schmutz, A. Schurer, A.I. Shapiro, M. Sigl, J.E. Smerdon, S.K. Solanki, C. Timmreck, M. Toohey, I.G. Usoskin, S. Wagner, C.-Y. Wu, K.L. Yeo, D. Zanchettin, Q. Zhang, and E. Zorita, The PMIP4 contribution to CMIP6 – Part 3: the Last Millennium, Scientific Objective and Experimental Design for the PMIP4 past1000 simulations, *Geosc. Model Devel.*, doi: 10.5194/gmd-2016-278.
20. **2017** X. Zeng†, X. Liu, K. Treydte, **M.N. Evans**, W. Wang, W. An, W. Sun, G. Xu, G. Wu, X. Zhang, Climate signals in tree-ring $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ from southeastern Tibet: insights from observations and forward modelling of intra- to interdecadal variability, *New Phytologist*, doi: 10.1111/nph.14750.
19. **2017** Schollaert-Uz, S.†, T.M. Smith, **M.N. Evans**, A.J. Busalacchi, Decadal variability in tropical Pacific basin-wide chlorophyll from a statistical reconstruction: 1958-2008, *J. Clim.*, 30(18), 7293-7315, doi: 10.1175/JCLI-D-16-0202.1.
18. **2017** Hackert, E.C.†, A.J. Busalacchi, J.A. Carton, R. Murtugudde, P.A. Arkin, **M.N. Evans**, The role of the Indian Ocean sector for prediction of the coupled Indo-Pacific system: Impact of atmospheric coupling, *J. Geophys. Res. – Oceans*, 122, 2813-2829, DOI: 10.1002/2016JC012632.
17. **2016** Abram, N.J., H.V. McGregor, J.E. Tierney, **M.N. Evans**, N.P. McKay, D.S. Kaufman and the PAGES 2k Consortium, Early onset of industrial-era warming across the oceans and continents, *Nature* 536, 411-418,

DOI: 10.1038/nature19082, dataset and reconstructions archived as: Global and Regional 500 Year Temperature Reconstructions, <https://www.ncdc.noaa.gov/paleo/study/20083>, 8/2016.

16. **2016** Evans, M.N., K.J. Selmer†, B.T. Breeden†, A.S. Lopatka†, R.E. Plummer, Correction algorithm for on-line continuous flow $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ carbonate and cellulose stable isotope analyses, *Geochemistry, Geophysics, Geosystems*, 8, Q07008, DOI: 10.1002/2016GC006469.
15. **2016** Lorrey, A.M., T.H. Brookman†, **M.N. Evans**, N.C. Fauchereau, C. Macinnis-Ng, M.A. Barbour, A. Criscitiello, G. Eischeid, A.M. Fowler, T.W. Horton and D.P. Schrag, Stable oxygen isotope signatures of early season wood in New Zealand kauri *Agathis australis* tree rings: Prospects for palaeoclimate reconstruction, *Dendrochronologia*, 40, 1-14, DOI: 10.1016/j.dendro.2016.03.012.
14. **2016** Zeng, X.†, X. Liu, **M.N. Evans**, W. Wang, W. An, G. Xu, G. Wu, Seasonal incursion of Indian monsoon humidity and precipitation onto the southeastern Tibetan Plateau inferred from intra-seasonal resolution tree ring oxygen isotopic measurements, *Earth and Planetary Sci. Letters*, 443, 9-19, DOI: 10.1016/j.epsl.2016.03.011.
13. **2015** PAGES2k-PMIP3 group (including H. Goosse and **M.N. Evans**), Continental-scale temperature variability in PMIP3 simulations and PAGES 2k regional temperature reconstructions over the past millennium, *Clim. Past.*, DOI: 10.5194/cp-11-1673-2015, www.clim-past.net/11/1673/2015/.
12. **2015** McGregor, H.V., **M.N. Evans**, H. Goosse, G. Leduc, B. Martrat, J.A. Addison, P.G. Mortyn, D.W. Oppo, M.-S. Seidenkrantz, M.-A. Sicre, S.J. Phipps, K. Selvaraj, K. Thirumalai, H.L. Filipsson and V. Ersek, Robust global ocean cooling trend for the pre-industrial Common Era, *Nat. Geosci.*, DOI: 10.1038/NCEO2510, dataset archived as: PAGES Ocean2k Synthesis Data Set, www.ncdc.noaa.gov/paleo/study/18718, 8/2015.
11. **2015** Zhang, Q.-B., **M.N. Evans**, and L. Lyu, Moisture dipole over the Tibetan Plateau during the past five and a half centuries, *Nat. Comm.*, 6, 8062, doi: 10.1038/ncomms9062.
10. **2015** Comboul, M.E.†, J. Emile-Geay, G.J. Hakim, **M.N. Evans**, Paleoclimate sampling as a sensor placement problem, *J. Clim.*, 28(19), 7717-7740, DOI: 10.1175/JCLI-D-14-00802.1.
9. **2015** Dee, S.†, J. Emile-Geay, **M.N. Evans**, A. Allam, E.J. Steig, D.M. Thompson, PRYSM: An open-source framework for PRoxY System Modeling, with applications to oxygen isotope systems, *J. Adv. Mod. Earth Sys.*, 7(3), 1220-1247, doi: 10.1002/2015MS000447.
8. **2015** Tierney, J.E., N.J. Abram, K.J. Anchukaitis, **M.N. Evans**, C. Giry, K.H. Kilbourne, C.P. Saenger, H.C. Wu, J. Zinke, Tropical sea surface temperature for the past four centuries reconstructed from coral archives, *Paleoceanography*, 30, doi: 10.1001/2014PA002717, dataset and reconstructions archived as: PAGES Ocean2K 400 Year Coral Data and Tropical SST Reconstructions, <http://ncdc.noaa.gov/paleo/study/17267>, 3/2015.
7. **2014** Evans, M.N., J.E. Smerdon, A. Kaplan, S.E. Tolwinski-Ward and J.F. González-Rouco, Climate field reconstruction uncertainty arising from multivariate and nonlinear properties of predictors, *Geophysical Res. Lett.*, DOI: 10.1002/2014GL062063.
6. **2014** Boysen, B.M.M.♣, **M.N. Evans**, P.J. Baker, $\delta^{18}\text{O}$ in the tropical conifer *Agathis robusta* records ENSO-related precipitation variations, *PLOS One*, 9(7), doi: 10.1371/journal.pone.0102336.
5. **2014** Tolwinski-Ward, S.E.†, M.P. Tingley, **M.N. Evans**, M.K. Hughes, and D.W. Nychka, Probabilistic reconstructions of local temperature and soil moisture from tree-ring data with potentially time-varying climatic response, *Clim. Dyn.*, doi: 10.1007/s00382-014-2139-z.
4. **2014** Comboul, M.E.†, J. Emile-Geay, **M.N. Evans**, N. Mirnateghi, K.M. Cobb and D.M. Thompson‡, A probabilistic model of chronological errors in layer-counted climate proxies: applications to annually-banded coral archives, *Clim. Past.*, 10, 825-841, doi: 10.5194/cp-10-825-2014.
3. **2013** §M.N. Evans, S.E. Tolwinski-Ward†, D.M. Thompson‡, and K.J. Anchukaitis, Applications of proxy system modeling in high resolution paleoclimatology, *Quat. Sci. Rev.*, 76, 16-28, doi: 10.1016/j.quascirev.-2013.05.024.
2. **2013** Tolwinski-Ward, S.E.†, K.J. Anchukaitis and **M.N. Evans**, Bayesian parameter estimation and interpretation for an intermediate model of tree-ring width, *Clim. Past.*, 9, 615-645, doi: 10.5194/cp-9-1481-2013.
1. **2012** Anchukaitis, K.J., P. Breitenmoser, K.R. Briffa, A. Buchwal, U. Buntgen, E.R. Cook, R.D. D'Arrigo, J. Esper, **M.N. Evans**, D. Frank, Gunnarson, B.E., M.K. Hughes, A.V. Kirilyanov, C. Korner, P.J. Krusic, B. Luckman, T.M. Melvin, M.W. Salzer, A.V. Shashkin, C. Timmreck, E.A. Vaganov, R.J.S. Wilson, Tree rings and volcanic cooling, *Nature Geosci.*, doi: 10.1038/ngeo1645.

II.E. Conferences, Workshops, and Talks

II.E.1. Keynotes

2017 M.N. Evans§, On the creation and management of a (PAGES) working group, keynote lecture delivered at the 3rd PAGES Young Scientists Meeting, “Global Challenges for our Common Future”, Morillo de Tou, Spain, 7-9 May 2017.

2013 M.N. Evans§, Modeling and interpretation of paleodata, keynote lecture delivered at the 12th International Swiss Climate Summer School “From Climate Reconstructions to Climate Predictions”, Grindelwald, Switzerland, 1-6 Sept.

II.E.2. Invited Talks

2019 M.N. Evans§, PAGES 2k network – overview and recent progress, African Center of Excellence in Water Management/PAGES Scientific Steering Committee meeting, University of Addis Ababa, Addis Ababa, Ethiopia, 27 March.

2018 M.N. Evans§, Replication and reproducibility in (paleo)climate science, presentation to the National Academy of Sciences Panel on Replication and reproducibility in climate science, <https://www8.national-academies.org/pa/projectview.aspx?key=49906>, Washington, DC (via teleconference), 9 May 2018.

2018 M.N. Evans§ and the Global Research Program Executive Directors, Overview of the Global Research Programs of Future Earth, Future Earth Advisory Committee Annual Meeting, Montevideo, Uruguay, 27 April.

2017 M.N. Evans§, Pathologies of paleoenvironmental data, Université Catholique de Louvain, Louvain-la-Nouve, Belgium, 29 May.

2016 M.N. Evans§ and H.V. McGregor, The PAGES2k network: Overview and recent progress, University of Wollongong, Wollongong, NSW Australia, 4 August.

2016 M.N. Evans§ and H.V. McGregor, The PAGES2k network: Overview and recent progress, Australian Nuclear Science and Technology Organization, Lucas Heights, NSW Australia, 2 August.

2016 M.N. Evans§ and N.J. Abram, The PAGES2k network: Overview and recent progress, Australian National University, Canberra, NSW Australia, 29 July.

2016 M.S. Allen and M.N. Evans§, On the Tail of the Tuna and the Road of the Winds: Past and Future Human-Climate Interactions in Tropical Polynesia, University of Washington Quaternary Research Center, Seattle, Washington, 12 May 2016 (invited talk and panel discussion in conjunction with collaborator Melinda S. Allen).

2016 M.N. Evans§, The PAGES/Ocean2k Project: Past and Future, University of Maryland Center for Environmental Science/Chesapeake Bay Laboratory, Solomons, MD, 27 Jan.

2015 M.N. Evans§, The Ocean2k project: Introduction and welcome to the first in-person conference; a vision for phase 2, Barcelona, Spain, 4 Oct (not delivered because of personal situation).

2015 M.N. Evans§, Climate change fingerprinting using paleoclimate observations directly, Oeschger Center for Climate Change Research Biannual Colloquium, Bern, Switzerland, 3 Sept.

2015 M.N. Evans§, Proxy system modeling: Principles, Applications, Challenges, Last Millennium Reanalysis Project Workshop on Proxy System Modeling, Catalina Island, CA, 4 May.

2014 J. Emile-Geay§, S.G. Dee, **M.N. Evans**, J. Adkins, The Paleoclimate Uncertainty Cascade: Tracking Proxy Errors Via Proxy System Models, Abstract PP44B-01 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.

2014 M. Comboul‡ §, J. Emile-Geay, **M.N. Evans**, N. Mirnateghi‡, K. Cobb, D. Thompson‡, A Probabilistic Model of Chronological Errors in Layer-Counted Climate Proxies, Abstract PP44B-04 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.

2014 M.N. Evans§ and the Ocean2k Working Group, Marine surface temperature records for the past two millennia: the PAGES/Ocean2k project, USGS/Powell Center/PAGES Nam2K Workshop, Fort Collins, CO, 23-27 June.

2013 J. Emile-Geay§, M. Comboul‡, D. Guillot, **M.N. Evans**, T. Correge, M. Carre, R.E. Driscoll, M. Elliott, H.V. McGregor, A.W. Tudhope, J.E. Cole, B. Rajaratnam, Multiproxy reconstructions of the El Niño-Southern Oscillation: Progress and Challenges, Abstract PP23D-08 presented at the 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

2013 Evans, M.N.§, G.A. Schmidt, Uncertainty estimation for intercomparison of paleoclimatic observations and simulations, Abstract PP41D-01 presented at the 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

2013 M. Widmann§, H. Goosse§, and M.N. Evans§, Data assimilation for reconstructing paleoclimate, PMIP3/PAGES2K workshop on integrated analyses of reconstructions and multi-model simulations for the past two millennia, Madrid, Spain, 4-6 Nov.

2013 Tierney, J.E.§, N. Abram, K. Anchukaitis, **M. Evans**, C. Giry, H. Kilbourne, C. Saenger, H. Wu, J. Zinke and the Ocean2k Working Group, Tropical SSTs for the past 400 years: A synthesis of coral archives, Lecture L-012 delivered at the 11th International Conference on Paleoceanography, Barcelona, Spain, 1-6 Sept.

2013 M.N. Evans§, Marine surface climate change over the past two millennia: First-order results from the PAGES/Ocean2k project, Northern Illinois University, Geology and Environmental Sciences, 25 April.

2012 M.N. Evans§, S.E. Tolwinski-Ward†, D.M. Thompson†, K.J. Anchukaitis, Applications of proxy system modeling in high resolution paleoclimatology, Abstract PP23E-06 presented at the 2012 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

2012 M.N. Evans§ and the Ocean2K Working Group, Synthesis of marine sediment-derived sea surface temperature records for the past 2 millennia: First-order results from the PAGES/Ocean2K project, Department of Earth and Planetary Sciences, Johns Hopkins University, Sept. 20.

2012 M.N. Evans§, An introduction to ENSO theory, history and outstanding questions, National Institute of Water and Atmosphere, Auckland, New Zealand, 1 Jul.

II.E.7. Non-Refereed Presentations

2019 R. Neukom, L.A. Barboza, J. Emile-Geay, M.P. Erb, J. Franke, L. Lücke, A. Schurer, F. Shi, V. Valler, M.N. Evans, S. Brönnimann, G.J. Hakim, W. He, B.J. Henley, D.A. Kaufman, F. Charpentier Ljungqvist, N. McKay, S. Phipps, K. Rehfeld, L. von Gunten, J. Werner, F. Zhu, Reconstruction and attribution of multidecadal temperature variability over the Common Era, 99th American Meteorological Society Annual Meeting, 32nd Conference on Climate Variability and Change, Phoenix, AZ, 6-9 Jan.

2018 C.P. Saenger, M.N. Evans, A.N. LeGrande, S. Pennington♣, J.C. Tindall, M. Werner, K. Thirumalai, Development and evaluation of Proxy Surrogate Reconstructions as a tool for characterizing Common Era climate variability, AGU Fall Meeting, Washington, DC, 10-14 Dec.

2018 A.S. Lopatka†, M.N. Evans, A.M. Lorrey, K.H. Kilbourne, and H.V. McGregor, Medieval Climate Anomaly hydroclimatic variation inferred from Aitutaki corals, AGU Fall Meeting, Washington, DC, 10-14 Dec.

2018 M.N. Evans, Y. Zhang, K.J. Anchukaitis, J. Rezsöhazy, H. Goosse, The forest as sensor, a case study in data model intercomparison for improved paleoclimatic data assimilation exercises, AGU Fall Meeting, Washington, DC, 10-14 Dec.

2018 M.N. Evans, C.P. Saenger, A. LeGrande, S. Pennington♣, J. Tindall, M. Werner, Proxy surrogate reconstructions of Common Era Atlantic meridional overturning circulation, 2018 International AMOC Science Meeting, Miami, 24-27 July 2018.

2018 R. Neukom and the PAGES2k Consortium members (including M.N. Evans), Coherent reconstructions of Common Era global mean temperature using the latest PAGES2k data compilation, EGU General Assembly, Vienna, Austria, 9-13 April 2018.

2018 Franke, J., M.N. Evans, G. Hegerl, S. Bronniman, Climate change detection and attribution using high resolution paleoclimate observations, EGU General Assembly, Vienna, Austria, 9-13 April 2018.

2018 M.N. Evans, C.P. Saenger, A. LeGrande, S. Pennington♣, J. Tindall, M. Werner, Proxy surrogate reconstructions of Common Era Atlantic meridional overturning circulation, EGU General Assembly, Vienna, Austria, 9-13 April 2018.

2018 M.N. Evans, H. Goosse, C.P. Saenger and the Ocean2k Working Group, Assimilation of the Ocean2k marine surface temperature database into an intermediate complexity climate model, EGU General Assembly, Vienna, Austria, 9-13 April 2018.

2018 M.N. Evans, I.S. Nurhati, S.Y. Cahyarini, R.D. D'Arrigo, Pilot study: stable isotopes in teak from marine-influenced equatorial Indonesia as local rainfall amount and remote ENSO indicators, EGU General Assembly, Vienna, Austria, 9-13 April 2018.

2018 M.N. Evans, Y. Zhang, K.J. Anchukaitis, J. Rezsöhazy, H. Goosse, The forest as sensor, a case study in data model intercomparison for improved paleoclimatic data assimilation exercises, EGU General Assembly, Vienna, Austria, 9-13 April 2018.

- 2018** A.S. Lopatka†, **M.N. Evans**, Andrew Lorrey, K. Halimeda Kilbourne, Helen McGregor, Medieval Climate Anomaly hydroclimatic variation inferred from Aitutaki corals, EGU General Assembly, Vienna, Austria, 9-13 April 2018.
- 2017** PAGES 2k Consortium members (including **M.N. Evans**), Global mean temperature reconstructions over the Common Era based on the new PAGES2k proxy database, 5th PAGES Open Science Meeting, Zaragoza, Spain, 9-13 May.
- 2017** Kaufman, D. and the PAGES 2k Consortium (including **M.N. Evans**), Data stewardship in the PAGES 2k project, 5th PAGES Open Science Meeting, Zaragoza, Spain, 9-13 May.
- 2017** Franke, J., **M.N. Evans**, G. Hegerl, A. Schurer, S. Brönniman, Climate change detection and attribution using high resolution paleoclimate observations, 5th PAGES Open Science Meeting, Zaragoza, Spain, 9-13 May.
- 2017** McGregor, H., S. Phipps, L. von Gunten, B. Martrat, H. Linderholm, N. Abram, O. Bothe, R. Neukom, S. St. George, **M.N. Evans**, D. Kaufman, H. Goosse, C. Turney, The PAGES 2k Network, Phase 3: Introduction, Goals and Call for Participation, EGU General Assembly, Vienna, Austria, 23-28 April.
- 2016** Schollaert-Uz, S.†, A.J. Busalacchi, T.M. Smith, **M.N. Evans**, C. Brown, The impact of multi-decadal sub-surface circulation changes on sea surface chlorophyll patterns in the tropical Pacific, Abstract OS43C-03 to be presented at the AGU Fall Meeting, San Francisco, 12-16 Dec.
- 2016** Trachsel, M., **M.N. Evans**, G.C. Duke, K. Ide, Towards a proxy model for maximum latewood density, Abstract PP33D-08 to be presented at the AGU Fall Meeting, San Francisco, 12-16 Dec.
- 2016** Saenger, C.P. and **M.N. Evans**, Proxy surrogate reconstructions of Common Era Atlantic meridional overturning circulation, Abstract PP52A-03 to be presented at the AGU Fall Meeting, San Francisco, 12-16 Dec.
- 2016** Evans, M.N. and the PAGES 2k Working Groups, PAGES 2k - Overview of recent products and progress, PAGES Central and Eastern Europe Paleoscience Symposium: From Local to Global, Cluj, Romania, 23 May.
- 2015** Addison, J.A. and the PAGES2K Consortium (including **M.N. Evans**), The importance of cooperation in international paleoclimate science: examples from the PAGES 2k Network and its Ocean2k regional working group, Abstract PA23A-2189 presented at the AGU Fall Meeting, San Francisco, 14-18 Dec.
- 2014** N. English, R. Duffy, D. Balanzategui, P. Baker, M. Evans, The Reconstruction Potential of a 350 year-long, Mid-Elevation Proxy for PDSI in a Tree-Ring Record from Tropical North Queensland, Australia, Abstract PP33A-1218 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.
- 2014** S.G. Dee†, J. Emile-Geay, **M.N. Evans**, D.C. Noone, A Proxy System Modeling Toolbox for Comparing Water Isotope Observations to Simulations, Abstract PP34B-05 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.
- 2014** M. Comboul†, J. Emile-Geay, G. Hakim, **M.N. Evans**, Paleoclimate Sampling as a Sensor Placement Problem, Abstract PP22A-07 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.
- 2014** N. Abram and the PAGES/Ocean2k Working Group (including **M.N. Evans**), Progression of Recent Warming Trends Across the Continents and Oceans, Abstract PP33A-1211 presented at the AGU Fall Meeting, San Francisco, 15-19 Dec.
- 2014** I.S. Nurhati, **M.N. Evans** and R. D'Arrigo, Indonesian tree isotope records of ENSO-sensitive rainfall variations, Abstract BG01-A009, 11th Annual AOGS Meeting, Hokkaido, Japan, 28 Jul. - 1 Aug.
- 2014** H. Goosse and the Ocean2k Working Group (including **M.N. Evans**), Robust global ocean cooling trend for the past two millennia, poster presented at the 3rd PMIP-3 Workshop, Namur, Belgium, 25-30 May.
- 2014** S.G. Dee†, J. Emile-Geay, **M.N. Evans** and D.C. Noone, Multi-proxy system model simulations: A first principles look at tropical paleoclimate interpretations, abstract presented at the 2014 EGU General Assembly, vol. 16, EGU2014-9636, Vienna, Austria, 27 Apr. - 2 May.
- 2014** **M.N. Evans**, K.J. Steele†, B. Breeden, A. Lopatka†, R. Plummer, Correction algorithm for on-line continuous flow stable isotope analyses, 9th International Conference on Dendrochronology, Melbourne, Australia, 13-17 Jan.
- 2014** B. Boysen♣, **M.N. Evans**, P.J. Baker, Oxygen isotopic composition in the tropical conifer *Agathis robusta* records ENSO-related precipitation variations, 9th International Conference on Dendrochronology, Melbourne, Australia, 13-17 Jan.

2014 **M.N. Evans**, S. Tolwinski-Ward, **K. Anchukaitis**, G. Duke♣, M. Hughes, Applications of proxy system modeling in dendroclimatology, 9th International Conference on Dendrochronology, Melbourne, Australia, 13-17 Jan.

2014 **M.N. Evans**, J.E. Smerdon, A. Kaplan, S.E. Tolwinski-Ward, J. F. González-Rouco (presented by K.J. Steele†), Climate field reconstruction uncertainty arising from tree ring width-like predictors, 9th International Conference on Dendrochronology, Melbourne, Australia, 13-17 Jan.

2013 **Dee, S.G.†**, J. Emile-Geay, D.C. Noone, N.H. Buenning, **M.N. Evans**, Refining the interpretation of hydroclimatic proxies via the integration of a new, efficient isotope-enabled AGM and proxy system modeling: A comparative study, Abstract PP23C-1990 presented at the 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

2013 **Evans, M.N.** and the PAGES/Ocean2k Working Group, Intercomparison of modeled and observed marine surface climate variations over the pre-anthropogenic last millennium: First-order results from the PAGES/Ocean2k project, Abstract PP51A-1925 presented at the 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

2013 **H.V. McGregor** and the Ocean2K Working Group (including **M.N. Evans**), A global synthesis of marine sediment-derived SST records for the past two millennia: Results from the PAGES/Ocean2k project, 11th International Conference on Paleoceanography, Barcelona, Spain, 1-6 Sept.

2013 **Gedalof, Z.**, M.G. Clark, K. Schutten and **M.N. Evans**, The stable isotope record of tropical hurricanes in southwestern Ontario – A test of concept, poster presented at the 2nd American Dendrochronology Conference, Tucson, May 13-17.

2013 **Leduc, G.** and the Ocean2k working group (including **M.N. Evans**), A 2000-year synthesis of marine-derived SST records: Results from the Ocean2k project, talk presented at the 4th PAGES Open Science Meeting, Goa, India, 11-15 Feb.

2013 **Tierney, J.E.**, K.J. Anchukaitis, C. Giry, K.H. Kilbourne, C. Saenger, H. Wu, J. Zinke, and the Ocean2k working group (including **M.N. Evans**), Reconstruction of tropical ocean SST during the last millennium: Results from the PAGES/Ocean2k project, talk presented at the 4th PAGES Open Science Meeting, Goa, India, 11-15 Feb.

2012 **K.J. Anchukaitis**, P. Breitenmoser, K.R. Briffa, A. Buchwal, U. Büntgen, E.R. Cook, R.D. D'Arrigo, J. Esper, **M.N. Evans**, D. Frank, H. Grudd, B. Gunnarson, M.K. Hughes, A.V. Kirilyanov, C. Körner, P.J. Krusic, B. Luckman, T.M. Melvin, M.W. Salzer, A.V. Shashkin, C. Timmreck, E.A. Vaganov, R.J.S. Wilson, The dendroclimatology of Common Era volcanic eruptions, Abstract PP11F-02 presented at the 2012 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

2012 **M.N. Evans** and the Ocean2K Working Group, Synthesis of marine sediment-derived sea surface temperature records for the past 2 millennia: First-order results from the PAGES/Ocean2K project, Abstract PP11F-07 presented at the 2012 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

2012 **G.T. Rustic†**, A. Koutavas, B.K. Linsley, **M.N. Evans**, T.M. Marchitto, T. Herbert, Variability of eastern tropical Pacific climate during the last two millennia from $\delta^{18}\text{O}$ of individual foraminifera, Abstract PP21B-1982 presented at the 2012 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

II.G. 3. Notes

2017 Loutre, M. F., **Evans, M. N.**, Fritz, S. C., Tabor, C., Plumpton, H., Barnett, R., Zhang, Y., Razanatsoa, E., and Dearing Crampton Flood, E. (Eds.): “Global Challenges for our Common Future: a paleoscience perspective”– PAGES Young Scientists Meeting 2017, Clim. Past, https://www.clim-past.net/special_issue-912.html.

2017 **E. Dassie**, K. DeLong, H. Kilbourne, B. Williams, N. Abram, L. Brenner, C. Brahmī, K. Cobb, T. Corrège, D. Dissard, J. Emile-Geay, H. Evangelista, **M. Evans**, J. Farmer, T. Felis, M. Gagan, D. Gillikin, N. Goodkin, M. Khodri, A.C. Lavagnino, M. LaVigne, C. Lazareth, B. Linsley, J. Lough, H. McGregor, I. Nurhati, G. Ouellette, L. Perrin, M. Raymo, B. Rosenheim, M. Sanstrom, B. Schöne, A. Sifeddine, S. Stevenson, D. Thompson, A. Waite, A. Wanamaker, and H. Wu, Saving our Marine Archives, EOS Trans. AGU, 24 February, <https://eos.org/project-updates/saving-our-marine-archives>.

2014 **D. Kaufman**, K. Anchukaitis, U. Büntgen, J. Emile-Geay, **M. Evans**, H. Goosse, J. Luterbacher, J. Smerdon, M. Tingley, L. von Gunten, D. Anderson, E. Cook, Fidel González-Rouco, J. Gergis, M. Grosjean, A.

Hormes, A. Lorrey, N. McKay, R. Neukom, J. Tierney, E. Wahl, H. Wanner, J. Werner, A community-driven framework for climate reconstructions, *EOS Trans. AGU*, 95(40), 361.

2012 **Evans, M.N.**, H. Goosse, T. Kiefer, V. Masson-Delmotte, H.V. McGregor and D.W. Oppo, Ocean2k Working Group – Call for Participation, *PAGES News* 20(1), 4.

2012 Ocean2k Project Members (including **M.N. Evans**), Placing historical marine conditions into the context of the past 2000 years, *CLIVAR/Exchanges* 58(17(1)), 15-17.

II.H.9. Websites

2016– HDR Masterclass: Spatiotemporal data analysis workshop, <http://one.geol.umd.edu/hdr/>

2012– Stable Isotope Laboratory, <http://www.geol.umd.edu/facilities/SIL/>

2012– Paleoclimate CoLaboratory Intranet, <http://one.geol.umd.edu/intranet>

2012– Michael N. Evans, Research Interests pages, <http://one.geol.umd.edu/research/>

2012– Michael N. Evans, Teaching Portfolio pages, <http://one.geol.umd.edu/tp/>

2012– Michael N. Evans, Data and Contributions, <http://one.geol.umd.edu/data/>

II.J. Sponsored Research

II.J.1. Grants

2019–2021 “P2C2: Collaborative Research: Hydroclimatic response of ENSO to natural and anthropogenic radiative forcing”, PI: M.N. Evans, co-PI: R.D. D’Arrigo, NSF/P2C2, \$253,878 (at UMD), 8/15/2019–7/31/2021.

2019 “2nd DAPS Workshop support”, PI: M.N. Evans, PAGES/NSF/SCNAT, \$9,000, 7/1/2018–6/30/2019.

2016–2018 “P2C2: Hydroclimatic response of the tropical Pacific to past changes in mean state: Observations and synthesis”, PI: M.N. Evans, NSF/AGS, \$140,988, 8/15/2016–7/31/2019.

2015–2017 “Collaborative Research: Common Era Climate Variability from Marine Proxy Surrogate Reconstructions”, PIs: C. Saenger, M.N. Evans, NSF/MG&G, \$205,790 (UMD component: \$60,014), 8/15/2015–7/31/2018.

2013–2014 “Tree isotope records of past rainfall variability in the Indonesian Maritime Region”, PI: S.Y. Cahyarini (US partner: M.N. Evans), USAID/NSF/PEER, \$80,000 (UMD component: \$36,000), 5/2013–11/2015.

2011–2014 “Kauri chemistry tells a tempestuous tale”, PI: A. Lorrey, co-PIs: M.N. Evans, D.P. Schrag, T. Horton, A. Fowler, Marsden Foundation (New Zealand), NZD\$260,870 (USD\$41,600 at UMD).

2011–2014 “Detecting prehistoric human-climate dynamics in central Polynesia using high-precision marine archives”, PI: M.S. Allen, co-PIs: A. Lorrey, M.N. Evans, Marsden Foundation (New Zealand), NZD\$826,293 (USD\$48,844 at UMD).

2009–2012 “Global decadal hydroclimate variability, predictability and change: A data-enriched modeling study”, PIs: R. Seager, M. Cane, M. Ting, Y. Kushnir, J. Smerdon, A. Kaplan, M. Evans, L. Polvani, NOAA OCP, \$2,383,473.

2009–2012 “ENSO paleoclimatology in Queensland, Australia”, PI: M.N. Evans, NSF AGS09-02794, \$485,258.

2009–2012, “Maximizing the potential of tropical climate proxies through integrated climate-proxy forward modeling”, Lead PI: J. Emile-Geay, co-PIs: M.N. Evans, D.C. Noone, D. Thompson, NOAA NA10OAR4310116, \$428,983 (\$44,177 at UMD).

2009–2012, “Locally-constrained climate field reconstruction of the last millennium: Methods and application”, PI: J.E. Smerdon, co-PIs: A. Kaplan and M.N. Evans, NSF ATM09-02436, \$274,418.

II.J.2. Contracts

2018: 2042 isotopic analyses for 3 clients, \$23,127.

2017: 4,257 isotopic analyses for 2 clients, \$51,084.

2016: 4,769 isotopic analyses for 5 clients, \$55,359.

2015: 1,763 isotopic analyses for 5 clients, \$13,209.

2014: 1,867 isotopic analyses for 3 clients, \$19,598.

2013: 3,036 isotopic analyses for 4 clients, \$22,060.

2012: 4,983 isotopic analyses for 2 clients, \$33,655.

II.L. Submissions and Works in Progress

II.L.2. Manuscripts in Preparation

2019 Lopatka, A.S.†, **M.N. Evans**, A.M. Lorrey, G.C. Duke♣, H.V. McGregor, K.H. Kilbourne, M.S. Allen, A.E. Morrison‡, Last millennium observations and simulations suggest limited change in ENSO variance between the Medieval Climate Anomaly and the Little Ice Age, in preparation for submission to *Clim. Past*.

2019 Franke, J., **M.N. Evans**, G. Hegerl, S. Bronniman, Climate change detection and attribution using realistic high resolution paleoclimate observations, in preparation for submission to *Clim. Past*.

2019 Nurhati, I.C., **M.N. Evans**, R.D. D'Arrigo, S.Y. Cahyarini, Pilot study: stable isotopes in teak from marine-influenced equatorial Indonesia as local rainfall amount and remote ENSO indicators, in preparation for submission to *Geochim. et Cosmochim. Acta*.

2019 Saenger, C.P., **M.N. Evans**, A. LeGrande, S. Pennington, J. Tindall, M. Werner, K. Thirumulai, Proxy surrogate reconstructions of Common Era Atlantic meridional overturning circulation, in preparation for submission to *Clim. Past*.

2019 Trachsel, M.‡, **M.N. Evans**, K. Ide, M. Tingley, Case studies in Bayesian hierarchical modeling of multivariate paleoclimate through mean climate transitions, in preparation for submission to *Clim. Past*.

2019 Trachsel, M.‡, **M.N. Evans**, K. Ide, G. Duke, S.E. Tolwinski-Ward, K.J. Anchukaitis, M.K. Hughes, Towards an intermediate complexity data model for maximum latewood density suitable for Bayesian Hierarchical reconstruction of paleoclimate, in preparation for submission to *Clim. Past*.

2019 Anchukaitis, K.J., **M.N. Evans**, M.K. Hughes, E.A. Vaganov, An interpreted language implementation of the Vaganov-Shashkin tree-ring proxy system model, in preparation for submission to *Dendrochronologia*.

2019 Ektvedt, T.M.†, D.A. Falk, **M.N. Evans**, R.C. Penniston♣, S. R. White♣, and P.R. Sheppard, Dendrochronology and isotope chronology of *Juglans neotropica* and its response to El Niño events in tropical highlands of Piura, northern Peru, in preparation for submission to *Dendrochronologia*.

II.L.3. Manuscripts under Review

2019 revised Paul Szejner‡, T. Clute, E. Anderson, **M.N. Evans**, J. Hu, Reduction in lumen area increases the amount of $\delta^{18}\text{O}$ exchange with source water during cellulose synthesis, *New Phytologist*.

III. Teaching, Mentoring and Advising.

III.A. Courses Taught

Year	Course	Enrollment
Fall 2019	489G/789G Geosci. Modeling	17
Spring 2019	123 (I-Series) Causes & Conseq. of Global Change	117 (sole instructor)
Fall 2018	351/651/Statistics for Geosci.	27
Spring 2018	789C/Adv. Data Analysis Wksp	5
Spring 2018	437/Global Climate Change	13
Fall 2017	789G/Geosci. Modeling	8
Spring 2017	123 (I-Series) Causes & Conseq. of Global Change	121 (sole instructor)
Fall 2016	351/651/Statistics for Geosci.	21
Summer 2016	Masterclass: data analysis (At Univ. Wollongong) <i>on sabbatical AY 2015-2016</i>	19
Spring 2015	123 (I-series) Causes & Conseq. of Global Change	119 (sole instructor)
Fall 2014	351/651/Statistics for Geosci.	7
Spring 2014	437/Global Climate Change	14
Spring 2014	789C/Adv. Data Analysis Wksp	2
Fall 2013	789G/Geosci. Modeling	9
Spring 2013	123 (I-Series) Causes & Conseq. of Global Change	118 (sole instructor)
Fall 2012	489V/789V/Statistics for Geosci.	12
Spring 2012	123/Causes and Consequences of Global Change	188 (team-taught; lead instructor)
Spring 2012	437/Global Climate Change	14

III.B. Teaching Innovations

III.B.5. Course or Curriculum Development

Spring 2018, Fall 2018 UMD/Elevate fellow, proposal to “flip” classroom for GEOL 351/651 (Statistics for Geoscientists) and 345/645 (Geoscientific Modeling).

Summer 2016 development of monthlong workshop class in spatiotemporal data analysis, reformulation of assignments in the R programming environment, book proposal developed and submitted to Cambridge University Press.

Fall 2015, 2016, 2017 created and led informal graduate fellowship design workshop for Geology graduate and senior undergraduate students applying to national competitions.

Spring 2014 GEOL 789C Advanced Data Analysis Workshop created.

Spring 2013, 2015 AOSC/GEOL 123 I-Series course created and revised/updated.

Fall 2011, 2013 GEOL 489G/789G Geoscientific Modeling created and revised; GEOL 352/652 established.

Fall 2010, 2012, 2014 GEOL 489V/789V Statistics for Geoscientists (pilot offerings) created and revised; GEOL 351/651 established.

III.C.1. Undergraduate

2019–, research supervisor J. Wollney, GEOL, in progress.

2018–2019, research co-supervisor J. Widmer, GEOL, in progress.

2018–2019, research supervisor A. Froh, AOSC, in progress.

2018–2019, research supervisor J. Chase, GEOL, in progress.

2018–, research supervisor M.A. Nehring, GEOL, in progress.

2017–2019, research supervisor A. Lowien, ENSP, B.S. in progress, NOAA Hollings Fellow.

2017–2018, research supervisor J. Leal, GEOL, B.S. in progress.

2017, research supervisor A. Speciale, College Park Scholars, B.S.

2016–2017, research supervisor K. Haviland, GEOG, PhD program in Biology, Cornell Univ.

2015–2016, advisor Grace Duke, GEOL (B.S. awarded with high honors); PhD program, University of Otago, Department of Marine Sciences.
2014–2015, advisor Grace Duke, AOSC (B.S. awarded with high honors).
2013, advisor Grace Duke, GEOL 499 independent study.
2012, advisor Christina Justice, B.S. (2014), Environmental Science and Policy Program; Geography M.S. program, Univ Maryland.
2012, advisor Laura-Ray Diederich, Biology B.S. (2014).

III.C.2. Master's

2017–, MS Cte. Z. Perez-Delgado, UMCES.
2013–14, MS Cte. A. Statkiewicz, M.S. (2014), GEOL; seeking employment in the Cleveland, OH area.

III.C.3. Doctoral

2019–, PhD Cte, R. Zang (Civil Engineering)
2019 External reviewer, PhD dissertation of Christoph Dätwyler, University of Bern, Geography.
2018–, Dean's Rep, PhD Cte K. Lukens (AOSC)
2017–, PhD Cte Q. Huang, GEOL, in progress.
2015–2017 UMD supervisor for X. Zeng, China Scholarship Council Fellow; PhD 2017; now at State Key Laboratory of Cryospheric Sciences, Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences.
2017, Dean's Rep, PhD Cte. X. Tian (AOSC)
2016–2018, PhD Cte., A. Khare (UMCES); defended M.S. degree; .
2015–, PhD Cte. C. Gao, GEOL (exp 2019); in progress.
2013–2014, advisor Kaitlyn J. Steele, GEOL; research assistant, Paleoclimate CoLaboratory; research assistant, Department of Environmental Sci. and Technol. and USDA/Beltsville.
2013–, PhD Cte. C. Plank, Ph.D. (exp 2016), GEOL; degree in progress.
2013, Dean's Rep, PhD Cte. M. Ganeshan (AOSC)
2012, Dean's Rep, PhD Cte. S. Rabenhorst (AOSC)
2012, Dean's Rep, PhD Cte. M. Martini (AOSC)
2012, Dean's Rep, PhD Cte. E. Nussbaumer (AOSC)
2012–2017, PhD Cte. Eric C. Hackert, PhD (2017) (AOSC)
2012–2018, advisor Alex S. Lopatka, Ph.D. (2018) (GEOL); now Assoc. Editor, American Institute of Physics (Riverdale, MD).
2011-2015, PhD Cte. S. Schollaert-Uz (AOSC); now at NASA/GSFC.

III.C.4. Post-doctoral

2016–2018, supervisor Matthias Trachsel, Dept of Geology and Swiss National Research Foundation Research Fellow; research scientist, Department of Geography, Univ Wisconsin-Madison.

III.C.5. Other Research Directions (K-12 Interactions)

2019–, supervisor Urjoshi Nahid, Poolesville H.S.
2016–2017, supervisor Brendan Shimizu, Eleanor Roosevelt H.S. (2017); undergraduate, UMD.
2014–2015, supervisor Ivie Ebhojiaye, Eleanor Roosevelt H.S. (2014); undergraduate and Banneker-Key Fellow, UMD.
2013–2014, supervisor Ann-Marie Stringer, Eleanor Roosevelt H.S. (2014); undergraduate, Georgia Tech.

2012–2013, supervisor Emily Boluda, Eleanor Roosevelt H.S. (2013); undergraduate, Case Western Reserve University.

2011–2012, supervisor Leah Mudd, Eleanor Roosevelt H.S. (2012); undergraduate, Towson Univ.

III.E. Advising: Other than Research Direction

III.E.1. Undergraduate

2016–2017 Mentor, K. Haviland, graduate school and NSF/GRFP applicant (2018 NSF GRFP awardee); matriculated at Cornell University.

2013–2014 Mentor, G. Jiang, graduate school and NSF/GRFP applicant.

2012–13 Mentor, B.T. Breeden, graduate school applicant; matriculated at UT Austin.

III.E.5. Other Advising Activities

2018 Mentor/panelist, Lamont-Doherty Earth Observatory/Department of Earth and Environmental Sciences Mentoring Program.

2012–2017 Mentor, NSF graduate research fellowship applicants from Geology Dept. and CMNS.

2013 New Faculty Mentor, J.P. Dodd (Asst. Prof, Northern Illinois University, Dept. of Geology and Environmental Sciences).

III.G. Other Teaching Activities

2015, 2016, 2017, 2018, 2019 Graduate fellowship proposal development workshop, Department of Geology, 7, 4, 3, 11, 3 students participating in three workshop meetings, fall semester.

IV. Service and Outreach

IV.A. Editorships, Editorial Boards, and Reviewing Activities

IV.A.1. Editorships

2018– Editor, J. Climate

2017–2018 Guest Editor, Climate of the Past (2 special issues)

2013–2017 Associate Editor, J. Climate

IV.A.3. Reviewing Activities for Journals and Presses

2012–, Reviewer: J. Climate, Clim. Change, Clim. Dyn., Clim. Past, Earth and Planet. Res. Lett., Elsevier, Geophys. Res. Lett., Geochim et Cosmochim Acta, J. Geophys. Res.-Atm, JGR-Oceans, JGR-Biogeosci, Nature, Nature-Geosci., Nature Sci. Data, Nature-Clim. Change, Paleoceanography, Palaeo3, PLOS One, Princeton Univ Press, Science, Trees-Structure and Function, Springer, Quat. Sci. Rev.

IV.A.4. Reviewing Activities for Agencies and Foundations

2012– NOAA, NERC (UK), IODP, Deutsche Forschungsgemeinschaft (DFG, Germany), Smithsonian Institution, Swiss National Research Foundation (SNRF), Netherlands Organisation for Scientific Research (NWO).

2012, 2013(2), 2014, 2015, 2019 NSF Panelist.

2014 Panelist, AGU/AGI Heads and Chairs webinar on recruiting and retaining graduate students, 21 Feb.

IV.B. Committees, Professional & Campus Service

IV.B.1. Campus Service - Department

2013 Member, Merit Pay Committee, ESSIC.

2013 Representative participant, RTUGeoEd workshop to develop a TUES (Transforming Undergraduate Education) proposal for submission in 2013, PI: K. Prestegard, co-PI's V. Lekic, M.N. Evans, USF/Tampa, 15-17 Feb.

2012 Member, Best Scientific Paper Award Committee, ESSIC.

2012/13, 2014/15, 2018/19 Member, admissions committee, Geology.

IV.B.2. Campus Service - College

2014 Scholars Service Day, faculty on-site supervisor, Science and Global Change Program, Kenilworth Park and Aquatic Gardens, Washington DC, August.

2013 College Park Scholars, Climate and Global Change program, colloquium speaker, April 10.

2012 Participant, NSF Graduate Research Fellowship introduction, CMNS.

IV.B.3. Campus Service - University

2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019 Exhibitor, Maryland Day, Earth Sciences Tent.

2008– Design input, development, funding, commissioning, management and maintenance of Paleoclimate CoLaboratory Cost Center for stable isotope analysis (since 2010, about 30,000 carbonate and organic samples have been analyzed in support of projects in paleoclimatology, archaeology, and geobiology on two IRMSes).

IV.B.7. Leadership Roles in Meetings and Conferences

2019 Co-organizer, Second Data Assimilation and Proxy Systems (DAPS) workshop, College Park, MD, 29 May - 1 June (tentative) (PAGES-IPO support of USD\$9,000 awarded).

2018 Co-convener, AGU Session PP026, New perspectives on past climates: progress in proxy system modeling, reconstruction algorithms and uncertainty quantification, AGU Fall Meeting, Washington, DC, 10-14 Dec.

2018 Co-convener, Session CL1.18, Proxy system modelling and data assimilation in paleoclimatology, EGU 2018 Assembly, Vienna, Austria, 9-13 April; outstanding student presentation judge (3 contributions).

2017 Co-organizer, First Data Assimilation and Proxy Systems (DAPS) workshop, Louvaine-le-Neuve, Belgium, 29 May - 1 June (PAGES-IPO support of EUR\$10,000 awarded).

2015 Co-organizer, 1st PAGES/Ocean2k Workshop, 6-8 October, Barcelona, Spain (PAGES-IPO support of EUR\$15,000 awarded).

2013– Working group 3 (methods), PAGES2K-PMIP3 Working Group on Data-Model Comparison (role developed from 2013 Madrid conference).

IV.B.8. Other Non-University Committees, Memberships, Panels, etc.

2018 Panelist, “Perspectives on Reproducibility and Replication of Results in Climate Science”, NAS Committee on Replication, 9 May.

IV.C. External Service and Consulting

IV.C.2. International Activities

2018 Global Research Program representative (one of two, representing 20 such global research projects) and presenter, “Unlocking the potential of GRP science to contribute to transformations to sustainability: an update from the FE Global Research Projects”, at Future Earth Advisory Council/Governing Council Meeting, 26-28 April, Montevideo, Uruguay.

2018-2021 PAGES SSC Co-chair. Responsible for leading biennial PAGES SSC and EXCOM meetings in 2018, writing proposals for PAGES support beyond FY 2018, representing PAGES within Future Earth.

2016-2021 PAGES/Future Earth Scientific Steering Committee, International Geosphere-Biosphere Program. Responsible for implementation of the PAGES project, scientific guidance and coordination of project activities; annual meeting attendance and participation via email.

2019 UNEP/Intergovernmental Panel on Climate Change, 6th Assessment Report, Expert Reviewer, First Order Draft.

2012–2013 UNEP/Intergovernmental Panel on Climate Change, 5th Assessment Report, Expert Reviewer, First and Second Order Drafts.

2012–2017 PAGES 2K Program Coordinating Committee member. Responsible for overview and direction of the nine PAGES 2K Working Groups, a community-based analysis of climate variation by geographic region (Africa, Antarctica, Arctic, Asia, Australasia, Europe, South America, North America, and the global Oceans).

2017–2019 Co-lead, PAGES Data Assimilation, Reanalysis and Proxy System Modeling Working Group, DAPS Working Group. Co-founded and developed working group to design frameworks and identify challenges in paleoclimate data assimilation and reanalysis, including data/proxy system modeling. Planning and organizing two workshops (Louvain-le-Nouve, Belgium, 29 May - 2 June 2017; College Park, MD, 29-31 May 2019); two conference sessions (EGU 2018, AGU 2018) organized; two manuscripts are in development.

2011–2015 Overall lead, PAGES Ocean2k Working Group, PAGES Ocean2k Working Group. Founded and developed a consensus-based organizational structure for this community science project, including transparent 'crowdsourced' data gathering; organization of communications and records of work; mentoring of junior colleagues in the design, execution and communication of syntheses of marine surface climate over the past 2000 years, resulting in 3 contributed presentations at AGU Fall Meetings (2012, 2013, 2014); 9 other invited and contributed presentations; 3 notes; 4 manuscripts published (*Tierney et al., Paleoceanography*, 2015; *McGregor et al., Nature Geosciences*, 2015; *Abram et al., Nature*, 2016; *Emile-Geay et al.,* 2018); planning/organization of 1st Ocean2k workshop, Barcelona, Spain, 6-8 Oct 2015.

IV.D. Non-Research Presentations

IV.D.1. Outreach Presentations

2019 Science on Tap lecture series, "How good are climate change projections out to ... 2050?", May 29, College Park.

2013, 2014, 2018 Activity leader (5x), Takoma Park 4H.

V. Awards, Honors and Recognition

V.1. Research Fellowships, Prizes and Awards

2017 Visiting Scientist Grant, Université Catholique de Louvain, Louvain-le-Neuve, Belgium.

2016 Vice Chancellor's International Scholarship, University of Wollongong, Wollongong, Australia.

2015 Visiting Scientist Grant, Oeschger Center for Climate Change Research, University of Bern, Switzerland.

2015 Visiting Scientist Grant, Sigrist Foundation, Switzerland.

2015 Visiting International Scientist Short Stay Grant, Swiss National Research Foundation, Switzerland.

V.3 Service Awards and Honors

2018 American Meteorological Society Editor's Award for reviewing for *J. Climate*, "For insightful and constructive reviews that provided key guidance to several challenging manuscripts".