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APPOINTMENTS

2015- present	Research Geologist United States Geological Survey (USGS), Denver, CO
2011 – present	Research Scientist Department of Environmental Sciences, Informatics and Statistics University of Venice (Ca' Foscari), Italy
2009 - 2011	Marie Skłodowska Curie Post-Doctoral Fellow Italian National Research Council (CNR), Venice, Italy
2009	Visiting Assistant Professor Geology Department Colorado College, Colorado Springs, CO
1999-2001	U.S. Peace Corps, Bolivia Environmental Engineer

EDUCATION

Ph.D. Geological Science, The Ohio State University, 2009
M.S. Geosciences, University of Massachusetts, Amherst, 2004
B.A. Environmental Science/Geology, Colorado College, 1999

RESEARCH EXPERIENCE

Paleoclimatology using ice and lake cores; Water resources and melting glaciers; Adaptation to climate change; Biomass burning and human activity; Anthropogenic alteration of atmospheric chemistry

10 KEY PUBLICATIONS

Kehrwald, N.M. Jasmann, J.R., Dunham, M.E., Ferris, D.G., Osterberg, E.C., Kennedy, J., Havens, J., Barber, L.B., Fortner, K. (2020) Boreal blazes: Biomass burning and vegetation types archived in the Juneau Icefield. *Environmental Research Letters*, DOI: 10.1088/1748-9326/ab8fd2

Vecchiato, M., Gambaro, A., **Kehrwald, N.M.**, Ginot, P., Kutuzov, S., Mikhaleiko, V., Barbante, C. (2020) The Great Acceleration of fragrances and PAHs archived in an ice core from Elbrus, Caucasus. *Scientific Reports*, 10, 10661, DOI: 10.1038/s41598-020-67642-x

Giorio, C., **Kehrwald, N.**, Barbante, C., Kalberer, M., King, A.C.F., Thomas, E., Wolff, E.W., Zennaro, P. (2018) Prospects for reconstructing paleoenvironmental conditions from organic compounds in polar snow and ice, *Quaternary Science Reviews*, 183, 1-22, DOI: 10.1016/j.quascirev.2018.01.007

Argiriadis, E., Battistel, D., McWethy, D.B., Vecchiato, M., Kirchgeorg, T., **Kehrwald**, N.M., Whitlock, C., Wilmshurst, J.M., Barbante, C. (2018) Lake sediment fecal and biomass burning biomarkers provide direct evidence for prehistoric human-lit fires in New Zealand. *Scientific Reports*, 8, 12133, DOI:10.1038/s41598-018-30606-3

Zennaro, P., N. **Kehrwald**, J. Marlon, W. F. Ruddiman, T. Brücher, C. Agostinelli, D. Dahl-Jensen, R. Zangrando, A. Gambaro, and C. Barbante (2015), Europe on fire three thousand years ago: Arson or climate?. *Geophysical Research Letters*, 42, 5023–2033. DOI: 10.1002/2015GL064259

Wang, N., Xiaobo, W., **Kehrwald**, N., Li, Z., Li, Q., Jiang, X., Pu, J. (2015) Fukushima Nuclear Accident Recorded in Tibetan Plateau Snow Pits, *PLoS ONE*, 10 (2) e0116580, DOI: 10.1371/journal.pone.0116580

Zennaro, P., **Kehrwald**, N., McConnell, J., Schüpbach, S., Masselli, O., Marlon, J., Zangrando, R., Vallenga, P., Spolaor, A., Varin, C., Borrotti, M., Gambaro, A., Barbante, B., (2014) Fire in ice: two millennia of Northern Hemisphere fire history from the Greenland NEEM ice core, *Climate of the Past*, 10, 1905–1924, DOI:10.5194/cp-10-1905-2014

Kehrwald, N., Zangrando, R., Gabrielli, P., Barbante, C., Gambaro, A., (2012). Levoglucosan as a specific marker of fire events in Greenland snow. *Tellus B: Chemical and Physical Meteorology*, 64, May. 2012. DOI: 10.3402/tellusb.v64i0.18196 9

Kehrwald, N. McCoy, W., Thibeault, J., Burns, S., Oches, E. (2010) Paleoclimatic implications of modern and LGM European land-snail shell $\delta^{18}\text{O}$, *Quaternary Research*, 74, 1, 167-177, DOI: 10.1016/j.yqres.2010.03.001

Kehrwald, N.M., Thompson, L.G., Yao, T., Mosley-Thompson, E., Schotterer, U., Alfimov, V., Beer, J., Eikenberg, J., Davis, M.E. (2008), Mass loss on Himalayan glacier endangers water resources, *Geophysical Research Letters*, 35, L22503, DOI:10.1029/2008GL035556

HONORS AND RECOGNITION

2020 Nominated for the U.S. National Committee for Quaternary Research, based at the National Academy of Sciences

2012-2015 **European Commission, Destination Europe**, Marie Skłodowska-Curie Actions
The European Commission highlighted my research as one of the successes of their 7-year funding cycle (FP7).

2014 **Teton Gravity Research and Clif Bar**, “Higher” full-length movie that played in theaters nationwide. Provide scientific commentary on melting mountain glaciers and analyze samples that pro snowboarder Jeremy Jones collected for our group in the Himalaya
<https://www.wildandscenicfilmfestival.org/film/adventures-with-a-purpose-a-higher-calling/>

2012 **Keynote address : Kehrwald**, N., Zennaro, P., Zangrando, R., Gabrielli, P., Thompson, L.G., Davis, M.E., Barbaro, E., Gambaro, A., Barbante, C., (2012) Fire in ice: Implications for the global carbon cycle., International Partnerships in Ice Core Sciences First Open Science Conference, Presqu’île de Giens, Côte d’Azur, France, 1-5 October 2012. This is the premier ice core conference and is held once every 4 years.

2012 My 2008 GRL paper triggered the National Academies report and associated Congressional Briefing: National Research Council (2012) “Himalayan Glaciers: Climate Change, Water Resources, and Water Security”. Washington, D.C: *The National Academies Press*. <https://doi.org/10.17226/13449>.

PROFESSIONAL SOCIETY MEMBERSHIPS

AGU (American Geophysical Union)
EGU (European Geosciences Union)