

PAOLO GABRIELLI

Byrd Polar & Climate Research Center and School of Earth Sciences
108 Scott Hall, 1090 Carmack Road
The Ohio State University, Columbus, OH 43210-1002
Phone: (614) 292-6664 Fax: (614)-292-4697 Email: gabrielli.1@osu.edu

Professional Preparation

University Ca' Foscari of Venice, Italy	Environmental Sciences,	M.S., 1998
University J. Fourier of Grenoble, France	Ocean Atmosphere Hydrology	Ph.D., 2004
University Ca' Foscari of Venice, Italy	Environmental Sciences	Ph.D., 2004

Appointments

2013-present:	Lecturer, School of Earth Sciences, The Ohio State University
2007-present:	Research Scientist, Byrd Polar and Climate Research Center, The Ohio State University
2004-2007:	Post-doctoral fellow: Paleoclimatic reconstructions from trace elements determined in polar ice cores, University Ca' Foscari of Venice, Italy 2004 -2007
2000-2001:	Safety Health Environment and Quality Assistant at the Cabot Plastics and co-ordinator of the audit plant team in Grigno (Trento Province, Italy)

Recent Publications (among 52 ISI publications; H-index = 25)

- Sierra Hernandez, R.M., **Gabrielli, P.**, Beaudon, E., Wegner, A., Thompson, L.G.. Atmospheric depositions of natural and anthropogenic trace elements on the Guliya ice cap (northwestern Tibetan Plateau) during the last 340 years. *Atmos. Environ.* 176, 91-102, 2018
- Beaudon, E., **Gabrielli, P.**, Sierra Hernandez, R. M., Wegner, A., and Thompson, L. G.: Central Tibetan Plateau atmospheric trace metals contamination: a 500-year record from the Puruogangri ice core, Submitted to *Sci. Total Environ.*, 601–602,1349–1363, 2017.
- Aarons, S. M., Aciego, S. M., Arendt, C. A., Blakowski, M. A., Steigmeyer, A., Gabrielli, P., Sierra-Hernández, M. R., Beaudon, E., Delmonte, B., Baccolo, G., May, N. W., and Pratt, K. A.: Dust composition changes from Taylor Glacier (East Antarctica) during the last glacial-interglacial transition: A multi-proxy approach, *Quat. Sci. Rev.*, 162, 60-71, 2017.
- Gabrielli, P.**, Barbante, C., Bertagna, G., Bertó, M., Binder, D., Carton, A., Carturan, L., Cazorzi, F., Cozzi, G., Dalla Fontana, G., Davis, M., De Blasi, F., Dinale, R., Dragà, G., Dreossi, G., Festi, D., Frezzotti, M., Gabrieli, J., Galos, S., Ginot, P., Heidenwolf, P., Jenk, T. M., Kehrwald, N., Kenny, D., Magand, O., Mair, V., Mikhalenko, V. N., Lin, P. N., Oeggel, K., Piffer, G., Rinaldi, M., Schotterer, U., Schwikowski, M., Seppi, R., Spolaor, A., Stenni, B., Tonidandel, D., Uglietti, C., Zagorodnov, V. S., Zanoner, T., and Zennaro, P.: Age of the Mt. Ortles ice cores, the Tyrolean Iceman and glaciation of the highest summit of South Tyrol since the Northern Hemisphere Climatic Optimum, *The Cryosphere*, 10, 2779–2797, 2016.
- Aarons, S. M., Aciego, S., **Gabrielli, P.**, Delmonte, B., Koorneef, J., Wegner, A., Blakowski, M.A., 2016. The impact of glacier retreat from the Ross Sea on local climate: characterization of mineral dust in the Taylor Dome ice core, East Antarctica, *Earth Planet. Sci. Lett.* 444, 34-44.
- Uglietti, C., **Gabrielli, P.**, Cooke, C.A., Vallelonga, P., Thompson, L.G., Widespread pollution of the South American atmosphere predates the industrial revolution by 240 years. *P. Natl. Acad. Sci. Usa*, 112, 8. 2015.

Gabrielli P., Hardy, D. Kehrwald N., Cozzi G., Turetta, C., Barbante C. and Thompson L., Deglaciated areas of Kilimanjaro as a source of volcanic trace elements deposited on the ice cap during the late Holocene, *Quat. Sci. Rev.* 93, 1-10, 2014.

Gabrielli P. and P. Vallenga, Contaminant records in ice cores, in, *Environmental Contaminants: Using natural archives to track sources and long-term trends of pollution*, Springer, 2015.

Uglietti, C., **Gabrielli, P.**, Lutton, A., Olesik, J., Thompson, L., Large variability of trace element mass fractions determined by ICP-SFMS in ice core samples from worldwide high altitude glaciers, *App. Geochem.*, 47, 109-121, 2014.

Select grants (among 18)

2018 PI Paolo Gabrielli, co-PI John Olesik, “Atmospheric mineral nanoparticles in Antarctic ice during the last climatic cycle”, NSF-OPP-Antarctica. Amount: \$693,000 (pending).

2015 “Analyzing Atmospheric Warming and Environmental Changes from High-Altitude Ice Cores”, NSF-GSS \$239,073

2013 “Collaborative Research: Climate controls on aerosol fluxes to Taylor Dome and Taylor Glacier” Source of Support: NSF-OPP-Antarctica. Amount: \$72,000

2012 “Impact of Atmospheric Trace Elements on the “Third Pole” Glaciers”, NSF-ACP \$588,000

2011 “Cooperative Project: Climate, Ecosystems and Human Society as Recorded in the First Ice Core Extracted from the Tyrolean Alps”, Source of Support: NSF- GSS. Amount: \$100,000.

2008 “MRI: Acquisition of an ICP-SFMS to Extract Atmospheric Trace Element Histories from Ice Cores and Assess Contemporary Water Quality”, NSF-OPP and OSU 409,428 \$

Select field and lab activities

2017 Installed and optimized a melter system for continuous flow analysis of trace elements in ice

2011 Field team leader, drilling project on the Ortles ice cap (3905 m, Italy), 9/1-31/10/2011

2010 Acquired and installed an ICP-SFMS (Element2 Thermo) for ultra trace element analysis in ice

2005 Field team leader, drilling project, Talos Dome, Antarctica, 12/ 2004- 2/2005

Examples of Synergistic Activities

Taught Environmental Geoscience (Earth2203) and Principles of Oceanography (Earth 2206).

Provided two webinars for the Polar Education International, Master Class Italy-USA in Communication of the Climate Change, Ice cores.

Collaborated to launch and to develop a summer school in glaciology for high school students near Passo dello Stelvio (www.ortles.org) (7th edition performed in September 2017).

Part of the panel “Future of ice core sciences” and co-leader of the breakout discussion “Science, family and equity: negotiating the ECR career path” at the Ice Core Young Scientists (ICYS) 1st meeting, in Hobart, Tasmania.

Actively involved in a scientific editorial committee that identifies misleading information on the web (www.climalteranti.it) about climate science.