

EDUCATION and EXPERIENCES

- June 2019 – now **Postdoc** at Biophysics Institute on the CNR (Pisa, Italy).
Project: SENSOR. Development of a fluorescence sensor for the measurements of DOM in drinking water.
- September 2017 – May 2019 **Postdoc** at Sejong University (Seoul, South Korea).
Project: DOM characterization and dynamics in the Arctic Ocean.
- November 2013 – March 2017 **Ph.D.** at University of Pisa and CNR – Biophysics Institute.
- October 2015 **Training Visit** at PROTEE Lab of Toulon University (France).
- June – July 2013 **Summer school:** “*Microbial Oceanography: The Biogeochemistry, Ecology and Genomics of Oceanic Microbial Ecosystems*” at the Bermuda Institute of Ocean Science.
- September 2012 –September 2013 **Fellowship** at CNR – Biophysics Institute (Pisa, Italy).
- March – June 2012 **Gori Fellowship** at the Woods Hole Oceanographic Institution (Massachusetts, USA).
- October 2009 – July 2012 **Master’s Degree** in Marine Biology (University of Pisa)
- September 2005 – April 2009 **Bachelor’s Degree** in Biodiversity and Ecology (University of Pisa).

PUBLICATIONS

- **Retelletti Brogi S.**, Jung, J. Y., Ha, S. Y., & Hur, J. **2019**. Seasonal differences in dissolved organic matter properties and sources in an Arctic fjord: Implications for future conditions. *Science of The Total Environment*, 694, 133740.
- Derrien, M., **Retelletti Brogi S.**, & Gonçalves-Araujo, R. **2019**. Characterization of aquatic organic matter: Assessment, perspectives and priorities of research. *Water research*, 114908.
- **Retelletti Brogi S.**, Derrien, M., & Hur, J. **2019**. In-depth assessment of the effect of sodium azide on the optical properties of dissolved organic matter. *Journal of Fluorescence*, 29(4), 877-885.
- Lee, H. S., Hur, J., Lee, M. H., **Retelletti Brogi S.**, Kim, T. W., & Shin, H. S. **2019**. Photochemical release of dissolved organic matter from particulate organic matter: Spectroscopic characteristics and disinfection by-product formation potential. *Chemosphere*, 235, 586-595.
- **Retelletti Brogi S.**, Kim J.H., Ryu J.S., Jin Y.K., Lee Y.K., Hur J. **2019**. Exploring sediment porewater dissolved organic matter (DOM) in a mud volcano: clues of a thermogenic DOM source from fluorescence spectroscopy. *Marine Chemistry*
- Galletti Y., Gonnelli M., **Retelletti Brogi S.**, Vestri S., Santinelli C. **2019**. *DOM dynamics in open waters of the Mediterranean Sea: New insights from optical properties*. *Deep Sea Research Part I*, 144, 95-114.
- **Retelletti Brogi S.**, Ha SY., Kim K., Derrien M., Lee YK., Hur J., **2018**. *Optical and molecular characterization of dissolved organic matter (DOM) in the Arctic ice core and the underlying seawater (Cambridge Bay, Canada): Implication for increased autochthonous DOM during ice melting*. *Science of The Total Environment*, 627, 802-11.
- Gonnelli M., Galletti Y., Marchetti E., Mercadante L., **Retelletti Brogi S.**, Ribotti A., Sorgente R., Santinelli C., **2016**. *Dissolved organic matter dynamics in surface waters affected by oil spill pollution: results from the Serious Game exercise*. *Deep Sea Research Part II: Topical Studies in Oceanography* 133, 88-99.

- Santinelli C., Follett C., **Retelletti Brogi S.**, Xu L., Repeta D., **2015**. *Carbon isotope measurements reveal unexpected cycling of dissolved organic matter in the deep Mediterranean Sea*. *Marine Chemistry*, 177, 267-277.
- **Retelletti Brogi, S.**, Gonnelli, M., Vestri, S., Santinelli, C., **2015**. *Biophysical processes affecting DOM dynamics at the Arno river mouth (Tyrrhenian Sea)*. *Biophysical chemistry*, 197, 1-9.

CONFERENCES

- **Retelletti Brogi S.**, Kim J.H., Ryu J.S., Jin Y.K., Lee Y.K., Hur J., (2019). *Exploring sediment porewater dissolved organic matter (DOM) in a mud volcano: clues of a thermogenic DOM source from fluorescence spectroscopy*. 25th International Symposium on Polar Sciences, Incheon (South Korea).
- **Retelletti Brogi S.**, Kim J.H., Ryu J.S., Jin Y.K., Lee Y.K., Hur J., (2019). *Exploring sediment pore water dissolved organic matter (DOM) in a mud volcano: Evidence of a deep thermogenic DOM source from fluorescence spectroscopy*. ASLO Aquatic Science Meeting, San Juan (Puerto Rico)
- **Retelletti Brogi S.**, Balestra C., Casotti R., Durrieu G., Garnier C., Gonnelli M., Misson B., Omanovic D., Radakovich O., Santinelli C., (2016). *Organic matter dynamics along the Arno River (Italy) and its estuary*. 41th CIESM Congress proceedings.
- **Retelletti Brogi S.**, Gonnelli M., Galletti Y., Vestri S., Casotti R., Balestra C., Margiotta F., Santinelli C. (2015). *Dynamics of Dissolved Organic Matter at the Arno River mouth*. International Estuarine Biogeochemistry Symposium, Bordeaux - France.
- **Retelletti Brogi, S.**; Gonnelli, M.; Vestri, S.; Santinelli, C. (2015). *DOC and CDOM dynamics in the Arno river (Italy)*. 2015 Aquatic Science Meeting, Granada (Spain)
- **Retelletti Brogi S.**, Gonnelli M., Lavezza R., Santinelli C., (2013). *Dissolved organic matter dynamics in a coastal area of the Tyrrhenian Sea strongly impacted by river inputs*. 40th CIESM Congress proceedings.
- **Retelletti Brogi S.**, Gonnelli M., Lavezza R., Santinelli C. (2012) *Biophysical controls of dissolved organic carbon fluxes from rivers to the sea. A contribution to the understanding of Mediterranean carbon cycle*. XXI congresso Società Italiana Biofisica Pura ed Applicata. Ferrara (Italy)

OUTREACH

September 2014, 2015, 2016, 2019 European Researchers Night in Pisa.
 October – November 2014 Science Festival (Genova, Italy).

FIELD EXPERIENCE

September 2018	Cruise “ARA09C” on board of the Korean Icebreaker Araon in the East Siberian Sea and the Chukchi Sea.
April 2018	Arctic expedition “NICE18A” at the Korean DASAN station (Ny-Alesund, Svalbard).
May/June 2017	Cruise “Sentinel3” on board of the Italian r/v in the Ionian Sea.
June 2016	Mesocosm experiment “Input: Integrative pelagic ecosystem responses to nutrients fertilization and microplastics addition” in the Gulf of Naples.
March/April 2015	Cruise “Cosimo 2015” on board of Italian r/v in the Adriatic Sea.
April 2014	Cruise “WMed-Bioopt 2014” on board of Italian r/v in the Med Sea.
February 2014	Cruise “Adrex 2014” on board of Italian r/v in the Adriatic Sea
July/August 2013	Cruise “MedBlack GEOTRACES” on board of Dutch r/v “Pelagia” in the Western Med Sea.
April 2013	Cruise “WMed-Bioopt 2013” on board of Italian r/v in the Tyrrhenian Sea

November/December 2011 Cruise “SICSIA 2011” on board of Italian r/v in the Ionian and Tyrrhenian Sea
October/November 2010 Cruise “Tyr01” on board of Italian r/v in the Tyrrhenian Sea.

CERTIFICATES

February 2018 Basic Polar Region Safety Training
March 2013 Proficiency in Personal Survival Techniques course (STCW '95)

LANGUAGES

Mother tongue Italian
Other languages English CEFR level C1 (Academic English) released by the University of Pisa

LABORATORY SKILLS AND COMPETENCES and DATA ANALYSIS

Basic chemical and biological lab skills, including DOC analysis, absorption measurements, collection and processing of fluorescence spectra (emission, excitation, and matrix spectra). Water filtration and samples preparation for POC analysis, flow cytometry, gene sequencing, FT-ICR-MS analysis, LC-OCD-OND analysis

The main programs I deal with for data analysis are: Matlab, Ocean Data View, Sigma Plot, Origin