

Elisa Malinverno, born in Como, Italy, September 13th, 1974.

EDUCATION:

2000: Degree in Geological Sciences, 110/110 cum Laude. Thesis title: Living Coccolithophores in the Eastern Mediterranean and Black Sea (in Italian)

2004: PhD in Geological Sciences and Geotechnologies for the Earth and the Environment. Thesis title: Biogeochemical Fluxes in the Eastern Mediterranean. Unpublished PhD Thesis, in English

ACADEMIC POSITION:

2004-2005: contract with CoNISMa under the National Italian project "Censimento" funded by the Ministry for the Environment and Territory Conservation

2006-2007: 10 months position at the University of Athens - Department of Historical Geology-Paleontology under 04EP59/ENTER project of the European Union, General Secretariat for Research and Technology / Greek Ministry for Development

2007-2008: Post-Doc at the University of Milano-Bicocca, Department of Geological Sciences and Geotechnologies

2008-2017: Researcher at the University of Milano-Bicocca, Department of Earth and Environmental Sciences.

Since 2017: Associate Professor at the University of Milano-Bicocca

RESEARCH ACTIVITY:

My scientific activity is related to the study of microfossils from present-day and past environments. In particular, the main research targets are:

- Ecology, distribution and fluxes of mineralized plankton from different oceanographic contexts.

I focused in particular on the taxonomy, morphometry and distribution of extant coccolithophores in the Mediterranean Sea

as well as in the equatorial Pacific and Southern Ocean, assessed their contribution to sinking fluxes and their use as paleoceanographic proxies. More recently, I have been working on the distribution, morphology, morphometry and taxonomy of extant silicoflagellates, from the Mediterranean Sea and Southern Ocean, and extended my studies to other mineralized plankton groups, in particular focusing on their relation with oceanographic fronts.

- Paleoecological and (bio) stratigraphic reconstructions of past environments – case studies (in chronological order):

a) The white coral ecosystem at Santa Maria di Leuca (Ionian Sea offshore Puglia, Italy): within the Italian project Aplabes, our research group carried an accurate seafloor mapping and geomorphological study of the white coral ecosystem and I provided a stratigraphic characterization of the site and its Pleistocene evolution.

b) The canyon system offshore Calabria (Southern Italy): within the Italian project Vector, I was part of the team that carried out a geomorphological survey for the characterization of the steep Ionian margin of Calabria.

c) The Deep Hypersaline Anoxic Basins of the Eastern Mediterranean: within the EU project Biodeep, our research group carried out a morphological characterization and visual exploration of these peculiar deep features which also involved important microbiological discoveries.

d) The submarine ecosystem of the Mud Volcanoes of the Hyblean Plateau, Mediterranean Sea: within the Italian project Mesc, our research group provided a geomorphological and biostratigraphic characterization of this peculiar ecosystem and I am currently working on planktonic and benthic foraminifera from sediment cores to trace the environmental evolution of the site throughout the major sea-level oscillations of the last 2 glacial cycles.

e) The eastern Mediterranean sapropels: I carried out paleoecological studies on Pleistocene-Holocene sediment sequences from the Eastern Mediterranean also in collaboration with microbiological and geochemical work.

f) The Pisco Basin fossil Lagerstätte: within the Italian project PRIN, I contributed to the geological and thematic mapping, (bio)stratigraphic and geochronological characterization, (micro)paleontological and geochemical study of the Pisco Formation and of older formations in the area of the Ica desert, Peru.

I participated, also as chief scientist, to several oceanographic cruises on board Italian, European and US Research vessels as well as Commercial and small ships. The oceanographic cruises took place in the Mediterranean Sea, equatorial Pacific Ocean, Southern Ocean and Ross Sea within International and Italian scientific research projects as well as for commercial seafloor mapping projects.

TEACHING ACTIVITY:

Curricular teaching at Milano-Bicocca

1) 2003-2005: field assistant in training on the techniques of Marine Geology on board R/V *Universitatis*: within the course of Marine Geology

2) 2005-2007 Paleoclimatology – lessons (4 to 5 cfu)

3) 2009-2014: Plankton Paleoecology module within the course of Applied Geobiology – lessons and lab (4 cfu), thereafter Applied Geobiology I – lab (2 cfu)

4) 2011-2012: Geobiology Lab – lab (4 cfu)

5) 2009-today: Paleoceanography and Paleoclimatology – lessons and practicals (6 cfu)

6) 2013 - today: Cartography module within the course of Principles of Geology – lab (2 cfu, 1 to 3 shifts)

7) 2015-today: Plankton module within the course of Biofacies – lessons, lab, field work (4 cfu)

8) 2018: Geological Fieldwork (5 cfu)

Teaching abroad:

1) Program LLP –ERASMUS 2012/2013 (DR n. 0021117/12 del 31.07.2012) at the National and Kapodistrian University of Athens 08-13 April 2013: classes on silicoflagellate taxonomy, ecology and biostratigraphy

2) Program Erasmus+ 2016/17 at the National and Kapodistrian University of Athens 22-26 May 2017: classes on biostratigraphy and paleoecology of the fossil Lagerstätte of the Pisco Basin.

Thesis supervision:

Supervisor of 31 Theses (Bachelor and Master)

PhD supervision:

co-supervisor of 1 PhD (Diatom biostratigraphy in the Pisco Basin)- Karen Gariboldi

Supervisor of 1 PhD (Integrated chronostratigraphy through radiometric dating and biostratigraphy. The Pisco Basin case study) - Giulia Bosio (ongoing)

PROJECTS:

a) National Projects:

2001-2002: “Young Researchers” – Biogenic Fluxes in the Eastern Mediterranean (2001-2002). Coordinator

2000-2003: SINAPSI – Seasonal, INterannual and decAdal variability of the atmosPHERE, oceanS and related marIne ecosystems (MIUR).

2004-2006: ABIOCLEAR – Biogenic Cycled in Antarctica – climatic and paleoclimatic reconstructions (PNRA).

2003-2006: APLABES – White coral buildups in the Ionian Sea - Apulian Plateau Bank (MIUR).

2005-2008: VECTOR - VulnErabilità delle Coste e degli ecosistemi marini italiani ai cambiamenti climaTici e loro ruolo nei cicli del caRbonio mediterraneo (MIUR, MEF, MATT, MPAF con FISR)

2006-2008: MESC – Mud Volcanoes Ecosystem study – Sicily Channel (MIUR)

2011-2013: ROSSLOPE – Past and Present sedimentary dynamics in the Ross Sea: a multidisciplinary approach to the study of the continental slope (PNRA). Coordinator of the local Research Unit of Milano-Bicocca.

2013-2015: ROSSLOPE-II - Past and Present sedimentary dynamics in the Ross Sea: a multidisciplinary approach to the study of the continental slope (PNRA). Coordinator of the local Research Unit of Milano-Bicocca.

2014-2017: PRIN Marine biodiversity and primary productivity in the Neogene Andean forearc basins (PRIN, MIUR). Coordinator of the local Research Unit of Milano-Bicocca.

b) International Projects

1998-2001: SAP – Sappopels and Paleoceanography (EU)

2001-2004: BIODEEP – Biotechnologies from the Deep (EU)

2005-2008: MERF - Quaternary marine ecosystem response to fertilization: Mediterranean sapropel events and implications for marine carbon uptake (ESF – EuroCLIMATE).

2006-2009: MOCCHA - Multidisciplinary study of continental/ocean climate dynamics using high-resolution records from the eastern Mediterranean (ESF – EuroMARC)

2011-2014: MEDSEA – Mediterranean Sea Acidification in a changing climate (EU – 7FP)

LANGUAGES:

Italian (mother language)

English: excellent, written and spoken

Greek: excellent, written and spoken

French, sufficient, written and spoken

Spanish, sufficient, spoken

BIBLIOMETRIC DATA

H-index: 14

Total publications 40

Total citations: 653