

## **ELISABETTA ERBA - CV**

*I, THE UNDERSIGNED, AWARE OF THE PROVISIONS OF ARTICLE 76 OF THE PRESIDENTIAL DECREE 28 DECEMBER 2000 NO. 445, ON THE CRIMINAL LIABILITY WHICH MAY BE ENCOUNTERED IN THE EVENT OF FALSE STATEMENTS/DOCUMENTS AND FALSE DECLARATIONS, AS WELL AS THE PROVISIONS OF ART. 75 OF THE PRESIDENTIAL DECREE 28 DECEMBER 2000 NO. 445, ON THE FORFEITURE OF ANY BENEFITS RESULTING FROM THE PROVISION ISSUED ON THE BASIS OF UNTRUTHFUL DECLARATIONS, PURSUANT TO AND FOR THE PURPOSES OF THE AFOREMENTIONED PRESIDENTIAL DECREE NO. 445/2000 AND UNDER HIS OWN PERSONAL RESPONSIBILITY DECLARES THAT ALL THE INFORMATION INCLUDED IN MY CURRICULUM VITAE IS TRUE.*

RESEARCH INTERESTS: Mesozoic calcareous nannofossils. Biostratigraphy and Timescales. Paleoecology and Paleoceanography. Past Greenhouse worlds. Evolutionary history and dynamics of calcareous nannoplankton. Calcareous nannoplankton biomineralization. Oceanic Anoxic Events and organic C-rich black shales. Cyclostratigraphy. Biogenic nannofossil carbonate fluxes and paleo-pCO<sub>2</sub> reconstructions. Biosphere-geosphere interactions.

(co)Author of ~190 papers on stratigraphy and paleoceanography. The ground-breaking nature of the track record is demonstrated by publications in top peer-reviewed journals such as Science, Nature, and Nature Geoscience; the five most-cited paper (ca. 2000 citations) unravel the interplay between global change, oceanic ecosystem dynamics (calcareous nannoplankton), volcanism, CO<sub>2</sub> and palaeoclimate.

### **BIBLIOMETRICS** (October 2024)

Total Citations: ~10.000 SCOPUS

H Index: 55 SCOPUS

Within the Top Italian Scientists - Earth Sciences since 2015

### **EDUCATION:**

1982: Laurea cum laude in Geological Sciences at the Department of Earth Sciences of the University of Milano, Italy.

1987: PhD in Earth Sciences at the Department of Earth Sciences of the University of Milano, Italy. 1987-1988: post-DOC at Geologisches Ins., ETH-Zurich (Switzerland).

### **POSITION:**

2005- present: Full Professor -Dept. of Earth Sciences, Univ. of Milan

2000-2004: Associate Professor- Dept. of Earth Sciences, Univ. of Milan

1990-2000: Researcher - Dept. of Earth Sciences, Univ. of Milan

### **POSITIONS at the University of Milan:**

2023 – present: Assicuratore Qualità del Dottorato di Ricerca in Scienze della Terra e Corsi di Laurea Sc. Geologiche e Scienze della Terra

2018-2021: Member of the Senato Accademico

2011-2018: Coordinator of the PhD Program in Earth Sciences

2011-2013: Director of the Graduate School of Earth, Environment and Biodiversity

2008-2010: Coordinator of Committee for International programs (Faculty of Natural Sciences)

2007-2008: Member of Commissione d'Ateneo per la Ricerca Scientifica e il Trasferimento Tecnologico

2006-2011: Chair of the Comitato d'Area 4- Geological Sciences

2006-2007: Secretary of Faculty of Natural Sciences

2005-2011: Member of the Council of the Graduate School of Earth, Environment and Biodiversity

2004-2006: Member of Comitato d'Area 4- Geological Sciences

### **NATIONAL AND INTERNATIONAL POSITIONS**

2024-: Member of SAG-ICDP

2024-: Chair of the International Commission on Stratigraphy -IUGS

2022: Socio Nazionale of Accademia Nazionale dei Lincei

2021: Member Comitato di Selezione PRIN 2020 (PE10)

2019: Socio eletto dell'Istituto Lombardo di Scienze e Lettere

2019-present: President of IODP-Italia  
2018: Member of the Società Geologica Italiana Council  
2015-2020: Member of the IODP (International Ocean Discovery Program) Curatorial Board  
2015-2018: Member of the Committee IODP-Italia  
2015-2017: President of the Società Geologica Italiana  
2013- 2022: Member of Accademia Nazionale dei Lincei  
2011-2012: Member of the national Research Evaluation Committee – ANVUR VQR 2004-2010 (GEV04-Earth Sciences)  
2010: Member of the IODP Third Review Panel  
2009-2014: Vice-President of the Società Geologica Italiana  
2009-2014: Member of Council of the Società Geologica Italiana  
2008- 2014: President of Comitato IODP-Italia  
2008- 2014: Italian Delegate in ESSAC (ECORD)  
2006-2007: Vice-President of Gruppo di Riferimento IODP-Italia  
2005-2010: Permanent Alternate ECORD in IODP-SSEP  
2004- 2007: CONISMA delegate in the Gruppo di Riferimento IODP-Italia  
2003-2004: ANDRILL Italian Steering Committee  
2000-2008: Voting member of International Subcommission on Cretaceous Stratigraphy (IUGS)  
2000-2006: Member of Council of the Società Paleontologica Italiana  
1997-2000: Secretary of the Società Paleontologica Italiana  
1995-1998: Member of the Ocean History Panel (ESCO delegate) of the Ocean Drilling Program 1994 - present:  
Chairman of the APTIAN Working Group of the Int. Subcom. on Cretaceous Stratigraphy (IUGS)  
1989-1990: Scientific Coordinator of ESCO (ESF Scientific Committee for the ODP)

#### **AWARDS AND HONORS**

2022 - J.B. Lamarck Medal – European Geoscience Union  
2017 - Finalist Premio ROSA (Risultati Ottenuti Senza Aiuti) - XIII edizione - del CANOVA Club  
2016 - Premio Donna 2016 “Eccellenze femminili del territorio” attribuito da FIDAPA (Federazione Italiana Donne Arti Professioni Affari)-BPW Italy (INTERNATIONAL FEDERATION OF BUSINESS AND PROFESSIONAL WOMEN\_BPW ITALY)  
2013 - Elected Member of the Academia Europaea - Section Earth and Cosmic Sciences  
2012 - Tartufari Prize for Geosciences of the Accademia Nazionale dei Lincei  
2006 - “Exceptional Reviewer” for the journal GEOLOGY

#### **FUNDED PROJECTS**

2023-2025: “Conservation of life on Earth: the fossil record as an unparalleled archive of ecological and evolutionary responses to past warming events” (Bando PRIN 2020)  
2019-2021: “Biota resilience to global change: biomineralization of planktic and benthic calcifiers in the past, present and future” (Bando PRIN 2017 - **PI**)  
2017-2018: “Depositional characterization of organic-rich facies in deep and ultra-deep water areas: Biostratigraphic and Paleoceanographic characterization” (**PI** di Convenzione con Eni spa)  
2013-2015: Past ExcessCO<sub>2</sub> worlds: biota responses to extreme warmth and ocean acidification (PRIN 2010-2011 – **PI**)  
2010: Fondazione Cariplo “Promuovere la formazione di capitale umano d’eccellenza” – Project: “pCO<sub>2</sub> effects on the production of pelagic biogenic carbonate: case histories from the Cretaceous ocean”  
2007-2009: Calcareous plankton evolutionary accelerations and their relationships to global changes during the Mesozoic and Cenozoic. Do global changes matter or not? (Grant MIUR-PRIN 20072007W9B2WE\_001, **PI**)  
2005-2007: Biotic Evolution and Global Change: selected Late Mesozoic-Early Cenozoic case histories of pelagic ecosystems archived in the Ocean Drilling Program (ODP) and land-section sediments. (Grant MIUR-PRIN n. 2005044839\_001, **PI**)  
2003-2005: Climatic variability and transitions from greenhouse to icehouse worlds: Evidence from deep-sea (ODP) and land pelagic sediments (Valanginian to Oligocene). (Grant MIUR-PRIN n. 2003041915\_001, **PI**)  
2001-2003: Cretaceous to Paleogene extreme climates and transient climatic events as documented in ODP sediments and on land pelagic successions. (Grant MIUR-SAUS n. 2001048975\_001)

2000-2003 C/T-Network - Rapid global change during the Cenomanian/Turonian oceanic anoxic event:  
Examination of a natural climatic experiment in Earth history. EC- funded Human Potential Programme  
Research Training Network HPRN-CT-1999-00055 (Scientific Coordinator of the Milan Unit)  
1999-2001: Calcareous nannofossil and planktonic foraminiferal high-resolution biostratigraphy of  
Cretaceous to Pleistocene deep-sea sedimentary successions from the Pacific, Atlantic and Indian Oceans.  
(Grant MIUR-SAUS n. 9904152971\_001)  
1998-2000 SAP – Spropels and Paleoceanography EC- funded project MAS3-CT97-0137  
(**Scientific Coordinator** of the Milan Unit)  
1996-1999 – APTICORE Project Co-funded by U. S. National Science Foundation grant EAR9405108 to  
R.L.Larson and by Italian Consiglio Nazionale delle Ricerche grant  
CT.05.115.29570B/0004 to E.Erba (**PI**)

## **EDITORIAL BOARDS**

Associate Editor: Rendiconti Lincei – Scienze Fisiche e Naturali (since 2016); Newsletters on Stratigraphy (since 2012); Italian Journal of Geosciences (2009-2014); Terra Nova (2008-2015); Swiss Journal of Geosciences (2004-2012)

## **ORGANISATION OF INTERNATIONAL CONFERENCES**

### **EUG 11 (Strasbourg, France, 8-12 April 2001)**

\* Co-convener of Symposium EVO5: Rapid changes in Mesozoic paleoceanography: micropaleontological, sedimentological and geochemical proxies.

### **9th International Nannoplankton Association Conference (Parma, Italy, 9-12 Sept. 2002)**

\* Member of the Organizing Scientific Committee

\* Co-convener of Workshop on “Nannofossil paleoceanography”

### **EGS-AGU-EUG Joint Assembly (Nice, France, 6-11 April, 2003)**

\* Co-convener of Session CL11.25 “Extreme climates during the Paleogene and Cretaceous: evolution and impacts”

### **32nd International Geological Congress (Florence, Italy, 20-28 August 2004)**

\* Co-convener of Topical Symposium T18.03 “Biomineralization in the Cretaceous oceans”

### **AGU Fall Meeting 2006 (San Francisco, USA, 11-15 December 2006)**

\* Co-convener of Special Session PP05: “Oceanic Anoxic Events: Current understanding, future challenges”

### **IODP-WORKSHOP “Investigating Large Igneous Province Development and Consequences”**

(Coleraine, N Ireland, 22-25 July 2007)

\* Member of the Scientific and Steering Committee

### **VI Forum Italiano di Scienze delle Terra GEOITALIA 2007 (Rimini, Italy, 11-14 Sept. 2007)**

\* Co-convener of Workshop W-11 Partecipazione italiana al Progetto di Perforazione Oceanica IODP (Integrated Ocean Drilling Program)

### **AGU Fall Meeting 2008 (San Francisco, USA, 15-19 December 2008)**

\* Co-convener of Session V24A “Large Igneous Provinces, Mass Extinctions, Impacts, and Global Environmental Change”

### **IUGS- SubCommission on Cretaceous Stratigraphy - 3rd Jurassic/Cretaceous boundary workshop**

(Milano, Italy, 6-8 March 2009)

\* Convener

\* Organizer and Leader of the Field trip

### **VII Forum Italiano di Scienze delle Terra GEOITALIA 2009 (Rimini, Italy, 11 -13 Sept. 2009) \* Co-**

Convener of Session R2 “La perforazione oceanica: risultati scientifici dalle campagne Ocean Drilling Program e Integrated Ocean Drilling Program”

### **International Conference “The Colors of Cretaceous and Paleogene Oceans” (VerbaniaPallanza, Italy, 16-19 May 2010) \* Principal Organizer**

### **EarthTime-EU Project (ESF) – Workshop on calcareous plankton biostratigraphy (Milano, 15-16 January 2011)**

\* Principal Organizer

### **AAPG-ICE (International Conference & Exhibition) (Milano, 23-26 October 2011)**

\* Chair of the “Short Courses” Committee

### **AGU Fall Meeting 2011 (San Francisco, USA, 5-9 December 2011)**

\*Co-convener of Session V27: Origin, Structure, and History of Oceanic Plateaus

**IODP Workshop "Exploring the Cretaceous Greenhouse through Scientific Drilling" April 15-17, 2013 - London, United Kingdom**

\*Co-Convener

**CHIKYU International Workshop (April 21-23, 2013 - Tokyo, Japan)**

\* Member of the Steering Committee

**International Workshop EARTHTIME-EU: Exploring the Cretaceous world: data and numerical models at work to fill gaps (Torretta Granitola, Italy - 2 - 4 October 2014) \*Member of the Steering Committee**

**The future of Italian Geosciences –Congress of Italian Geological Society (Milano, 8-12 September 2014)**

\* Chair of the Congress

**Workshop “Guiding questions for an Italian carbon initiative” (Milano, 13 Sept. 2014)**

\* co-Chair

**Workshop "Le geoscienze e il ciclo del carbonio" (Milano, 18-19 Febbraio 2015)**

\* co-Chair

**International Nannoplankton Association Meeting 16 (Athens, Greece, 24-28 September 2017) \*Member of the Scientific Committee**

**AAPG Workshop “Biogenic Gas and Hydrates: New Opportunities and Future Challenges” (Milano, Italy – 20-21 June 2018)**

\* Co-Chair

**STRATI 2019 (Milano, Italy, 2-6 July 2019)**

\* co-Chair

**Il tempo del pianeta Terra e il tempo dell’uomo: le Geoscienze tra passato e futuro –Congress of Italian Geological Society (Parma 16-19 September 2019)**

\* Member of the Scientific Committee

**Geology without Borders –Congress of Italian Geological Society (Trieste, 14-17 September 2021)**

\*Member of the Scientific Committee

#### **TUTOR OF PhD STUDENTS:**

Davide Castradori PhD 1992 Francesca Lozar PhD 1993 Fabrizio Tremolada PhD 2004.

Bianca De Bernardi PhD 2005

Paola Tamagnini PhD 2008

Cristina E. Casellato PhD 2009

Daniele Tiraboschi PhD 2010

Cinzia Bottini PhD 2011

Fabio Russo PhD 2014

Gabriele Gambacorta PhD 2014

Giulia Faucher PhD 2015

Stefano Visentin, PhD 2020

Fancesco Miniati, PhD 2021

Liyenne Cavalheiro, PhD 2022

Mara Fant, ciclo 39

#### **Post-DOCs:**

Alessandra Negri, 1993-1995

Ben Walsworth-Bell, 2000-2003 Bianca De Bernardi, 2005-2009

Cristina E. Casellato, 2011-2016

Giulia Faucher, 2015-2019

Silvia Gilardoni, 2017-2018

Carla Moeller, 2017-2018

Victor Giraldo Gomez, 2018-2021

Stefano Visentin, 2021-2022

#### **OUTREACH activities**

- 2024: Salone del Libro di Torino:** E. Erba presenta "*Storie di supervulcani, oceani, fiori, ghiaccio*". Padiglione Oval-Bosco degli Scrittori, 13 Maggio 2024, ore 15.15-16.15. Evento organizzato dalla Società geologica Italiana. Con Luigi Bignami e Rodolfo Carosi
- 2023: Giornata Internazionale delle Donne e Ragazze nella Scienza: LE ACCADEMICHE LINCEE INCONTRANO... LE FUTURE SCIENZIATE** - Accademia Nazionale dei Lincei, 11 Febbraio 2023  
\*Co-Organizzatrice e Relatrice
- 2022: Partecipazione al programma RAI "KILIMANGIARO"** – intervista andata in onda il 14 Agosto 2022.
- 2021: #iogeologo: iniziativa per promuovere la figura del geologo e l'orientamento in ingresso ai corsi di laurea in Scienze Geologiche** – *Ideato e finanziato dalla Società Geologica Italiana*  
\*Co-Organizzatrice
- 2021: Film Festival ON THE ROCKS 2021** – *Società Geologica Italiana*  
\*Co-Organizzatrice
- 2021: Giornata Internazionale delle donne e delle ragazze nella Scienza 2021** - Anche la cancellazione è violenza: storie di donne di Scienza – *Iniziativa dell'Istituto Nazionale di Gofisica e Vulcanologia*  
"Da allieva a maestra: E. Erba intervista I. Premoli Silva"  
<https://www.youtube.com/watch?v=PChWv79lzIs&feature=youtu.be>
- 2020: Le Serie di Rai Cultura - I Lincei per il clima**  
Rai Cultura, in collaborazione con L'Accademia Nazionale dei Lincei, presenta 16 puntate sul clima e il cambiamento climatico in un momento storico in cui il complesso delle condizioni meteorologiche muta repentinamente in ogni angolo del pianeta.  
\* Autrice e Docente della puntata " Le rocce raccontano il clima negli ultimi 700 milioni di anni"
- 2019: Inspiring Girls** Istituto Comprensivo R. Massa in Via Quarenghi, 12, Milano. 29/03/2019  
\*Role Model
- 2019: Video contest ON THE ROCKS 2019** – *Società Geologica Italiana*  
\*Co-Organizzatrice
- 2018: Video contest ON THE ROCKS 2018** – *Società Geologica Italiana*  
\*Co-Organizzatrice
- 2017: Video contest ON THE ROCKS 2017** – *Società Geologica Italiana*  
\*Co-Fondatore, Co-Organizzatrice
- 2015: Geospettacolo "TERRA CAMBIA"** – Firenze, 4 Settembre 2015. Università degli Studi di Firenze (Aula Magna)  
\*Co-Ideatrice, Co-Organizzatrice, Attrice
- 2014: Geospettacolo "GEOLOGI, NON PER CASO"**– Milano, 12 Settembre 2014. Università degli Studi di Milano (Aula Magna) \*Co-Ideatrice, Co-Organizzatrice