



Andrea Amaroli

ID: CA91926SE | **Date of birth:** 17/11/1971 | **Place of birth:** Cogoleto, Italy |

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(Work)

WORK EXPERIENCE

UNIVERSITY OF GENOA – GENOA, ITALY

FIXED-TERM RESEARCHER (TYPE A) – 01/02/2023 – CURRENT

- **Research activities in biophotonics**, focusing on the effects of light on **cell biology**, **mitochondrial energy metabolism**, **tissue regeneration**, and **neurodegeneration prevention**. Involvement in national and international research projects and publication of scientific articles in peer-reviewed journals.
- **Teaching activities**, both in-class and laboratory-based, within the Bachelor's and Master's degree programs in **Biological Sciences** (BSc – *Comparative Anatomy Laboratory*; MSc – *Forensic Cytology and Histology*) and **Medical-Pharmaceutical Biotechnology** (MSc – *Animal Models for Biotechnology*), with full responsibility for course instruction, exam preparation and administration, as well as student mentoring and office hours.
- **Supervision of undergraduate, graduate, and PhD theses**, providing methodological and scientific support for the development of student research projects.
- **Member of the Research Committee** of the Department of Earth, Environmental and Life Sciences (DISTAV), University of Genoa, contributing to the evaluation of internal research proposals, promoting participation in competitive funding calls, and coordinating scientific dissemination activities.
- Active **collaboration with national and international colleagues**, participation in scientific conferences as speaker, and **peer reviewer** for academic journals.
- **Participation in institutional and organizational activities** of the Department and the University.

FACULTY OF DENTISTRY, I.M. SECHENOV FIRST MOSCOW STATE MEDICAL UNIVERSITY – MOSCOW, RUSSIA

ADJUNCT PROFESSOR – 01/02/2022 – 30/06/2022

FACULTY OF DENTISTRY, I.M. SECHENOV FIRST MOSCOW STATE MEDICAL UNIVERSITY – MOSCOW, RUSSIA

ADJUNCT PROFESSOR – 01/07/2022 – 31/12/2022

UNIVERSITY OF GENOVA - DISC – GENOA, ITALY

ADJUNCT PROFESSOR – 01/01/2021 – 01/01/2022

Basic principles of photobiomodulation at the cellular level. Tissue regeneration induced by photobiomodulating laser light

FACULTY OF DENTISTRY, I.M. SECHENOV FIRST MOSCOW STATE MEDICAL UNIVERSITY – MOSCOW, RUSSIA

ADJUNCT PROFESSOR – 01/07/2021 – 31/12/2021

FACULTY OF DENTISTRY, I.M. SECHENOV FIRST MOSCOW STATE MEDICAL UNIVERSITY – MOSCOW, RUSSIA

ADJUNCT PROFESSOR – 01/02/2021 – 30/06/2021

FACULTY OF DENTISTRY, I.M. SECHENOV FIRST MOSCOW STATE MEDICAL UNIVERSITY – MOSCOW, RUSSIA

ADJUNCT PROFESSOR – 27/01/2019 – 30/01/2021

FACULTY OF DENTISTRY, I.M. SECHENOV FIRST MOSCOW STATE MEDICAL UNIVERSITY – MOSCOW, RUSSIA

RESEARCH MANAGER – 01/01/2020 – 31/12/2022

UNIVERSITY OF GENOVA – DIPARTIMENTO DISC – GENOA, ITALY

POSTDOCTORAL RESEARCH FELLOW – 01/02/2019 – 31/01/2020

Effect of photobiomodulation using a diode laser

 **UNIVERSITY OF GENOVA - DISC** – GENOA, ITALY

ADJUNCT PROFESSOR – 01/01/2019 – 01/01/2020

Basic principles of photobiomodulation at the cellular level. Tissue regeneration induced by photobiomodulating laser light

 **UNIVERSITY OF GENOVA – DIPARTIMENTO DISC** – GENOA, ITALY

POSTDOCTORAL RESEARCH FELLOW – 01/02/2018 – 31/01/2019

Effect of photobiomodulation using a diode laser

 **UNIVERSITY OF GENOVA - DISC** – GENOA, ITALY

ADJUNCT PROFESSOR – 01/01/2017 – 01/01/2018

Basic principles of photobiomodulation at the cellular level. Tissue regeneration induced by photobiomodulating laser light

 **UNIVERSITY OF GENOVA - DISC** – GENOA, ITALY

FIXED-TERM RESEARCH CONTRACT – 01/01/2016 – 31/12/2016

Effect of photobiomodulation using a diode laser

 **UNIVERSITY OF GENOVA - DISC** – GENOA

FIXED-TERM RESEARCH CONTRACT – 01/01/2014 – 31/12/2014

Effect of photobiomodulation using a diode laser

 **UNIVERSITY OF GENOVA – DIPTERIS / DISTAV** – GENOA

POSTDOCTORAL RESEARCH FELLOW – 01/02/2013 – 31/01/2014

Dictyostelium discoideum as a model for studying aquaporins in tumor cell migration

 **UNIVERSITY OF GENOVA – DIPTERIS / DISTAV** – GENOA

POSTDOCTORAL RESEARCH FELLOW – 02/01/2012 – 01/01/2013

Electromagnetic fields (EMF) effects on cholinesterase activity in Dictyostelium discoideum

 **UNIVERSITY OF GENOVA – DIPTERIS / DISTAV** – GENOA, ITALY

POSTDOCTORAL RESEARCH FELLOW – 01/06/2010 – 31/05/2011

Electromagnetic fields (EMF) effects on cholinesterase activity in Dictyostelium discoideum

 **UNIVERSITY OF GENOVA – SCHOOL OF MEDICINE** – GENOA

ADJUNCT PROFESSOR – 01/01/2010 – 01/01/2012

Applied Zoology: Parasitology, Course: Environmental and Occupational Health Prevention Techniques

 **UNIVERSITY OF GENOVA – DIPTERIS / DISTAV** – GENOA, ITALY

POSTDOCTORAL RESEARCH FELLOW – 02/05/2008 – 01/05/2009

Electromagnetic fields (EMF) effects on cell-cell communication

 **UNIVERSITY OF GENOVA – DIPTERIS / DISTAV** – GENOA, ITALY

POSTDOCTORAL RESEARCH FELLOW – 01/08/2006 – 31/07/2007

Electromagnetic fields (EMF) effects on cell-cell communication in Protists

● **EDUCATION AND TRAINING**

Genoa, Italy

MASTER'S DEGREE IN BIOLOGICAL SCIENCES (FORMER 5-YEAR SINGLE-CYCLE PROGRAM) University of Genova

Website <https://unige.it/> | Level in EQF EQF level 7

01/01/2000 – 01/01/2001 Genova, Italy

POSTGRADUATE INTERNSHIP AND PROFESSIONAL QUALIFICATION AS BIOLOGIST University of Genoa, in partnership with the University of Eastern Piedmont

Website <https://unige.it/>

01/03/2003 – 28/02/2006 Genova, Italy

DOCTORAL DEGREE IN EARTH AND MARINE SCIENCES (ENVIRONMENTAL SCIENCES – MARINE SCIENCE, 18TH CYCLE) University of Genova

Website <https://unige.it/> | Level in EQF EQF level 8

Erice, Italy

INTERNATIONAL ADVANCED MASTER'S DEGREE: METHODOLOGIES IN EXPERIMENTAL BIOELECTROMAGNETIC INVESTIGATIONS Ettore Majorana Centre, European BioElectromagnetics Association & Bioelectromagnetics Society

Website <https://www.ebea.org/> | Level in EQF EQF level 7

NATIONAL SCIENTIFIC QUALIFICATION FOR ASSOCIATE PROFESSOR – SECTOR 05/B2: COMPARATIVE ANATOMY AND CYTOLOGY Ministero dell'Università e della Ricerca

Website <https://abilitazione.mur.gov.it/public/index.php>

2005 – CURRENT

RECOGNIZED SUBJECT SPECIALIST IN THE SCIENTIFIC-DISCIPLINARY SECTOR BIO/05 – ZOOLOGY University of Genova

● LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B1	C1	B2	B1	B2
FRENCH	A2	B1	A2	A2	A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● SKILLS

Gestione autonoma della posta e-mail | Social Network | Padronanza del Pacchetto Office (Word Excel PowerPoint ecc) | discuss research proposals | promote the transfer of knowledge | manage research data | apply for research funding | assist scientific research | monitor developments in field of expertise | Windows | Utilizzo del browser | GoogleChrome | speak different languages | think abstractly | mentor individuals | manage open publications

● PUBLICATIONS

[Author of 114 peer-reviewed publications indexed in Scopus and Web of Science. Please refer to Scopus and ORCID profiles for full list](#)

Articles: 114; h-Index: 24 - Number of citations: 1.843

<https://www.scopus.com/authid/detail.uri?authorId=6507689224>

<https://orcid.org/0000-0002-0494-7942>

● EDITORIAL BOARDS

Principali attività

Editorial and Peer Review Activities

- **Associate Editor**
 - *Frontiers in Medicine, Section Translational Medicine* (Q1)
 - [Profile link](#)
 - **From October 25, 2021 – Present**
- **Reviewer Editor**
 - *Frontiers in Photonics, Section Biophotonics; Frontiers Group*
 - [Profile link](#) | [Journal link](#)
 - **From March 29, 2020 – Present**
- **Guest Editor**
 - **Special Issue:** “*Light as a Cure: Photobiomodulation, from the Cell to the Clinical Application*”
 - *Photonics* (MDPI Group) (Q2, IF 2.5)
- **Guest Editor**
 - **Special Issue:** “*Photodynamic Therapy: Outlook and Future Direction*”
 - *International Journal of Molecular Sciences* (Q1, IF 6.2)
- **Guest Editor**
 - **Special Issue:** “*Photobiomodulation Therapy in Immune Regulation*”
 - *International Journal of Molecular Sciences* (Q1, IF 6.2)

Reviewer for International Indexed Journals (Scopus/Web of Science)

- *Frontiers in Physiology*
- *General and Comparative Endocrinology*
- *ACTA Protistologica*
- *International Journal of Radiation Biology*
- *Journal of Selected Topics in Quantum Electronics*
- *Journal of Photochemistry and Photobiology B: Biology*
- *Lasers in Medical Science*
- *Photochemistry and Photobiology*
- *Photobiomodulation, Photomedicine, and Laser Surgery*
- *BMC Oral Health*
- *Journal of Biophotonics*
- *Journal of International Medical Research*
- *Radiation Medicine and Protection*
- *Cancer Cell International*

EDITORIAL SERIES INVOLVEMENT

Attività principali

Book Chapter Author:

The Effects of Pesticides on Dictyostelium Cholinesterase, from Basic to Applied Research, in the book *Pesticides in the Modern World - Pests Control and Pesticides Exposure and Toxicity Assessment* [Internet]. Editor: Stoytcheva M. London: IntechOpen; 2011. 628 pages. ISBN 978-953-307-457-3

Indexed in Web of Science: Accession Number WOS:000386855800028

Available from: <https://www.intechopen.com/books/430>

DOI: 10.5772/948

Book Chapter Author:

Part Two: Experimental data on the effect of diode laser on human and animal tissue, in the book *ATLAS of laser therapy - IV edition (The state of the art)*. Editor: Teamwork Media, 2016. 470 pages. ISBN 88-89626-02-X

Co-Author of the Book:

Photobiomodulation with flat top handpiece - From Research to the Clinic, Master Class Academy

Book Chapter Author:

- *La tecnologia laser. Nuova frontiera del sorriso* (2019). ISBN 9788897314493

SCIENTIFIC SOCIETIES LEADERSHIP AND PARTICIPATION

CURRENT

Main Collaborations

- Member of the *Italian Society of Photobiology* (since 2024)
- Member of the *Italian Embryological Group – Italian Society of Developmental and Cellular Biology* (since 2023)
- Member of the *Italian Society of Protozoology*, now *Italian Society of Protistology Onlus* (since 2004)
- Member of the *Laser and Health Academy (LA&HA®)*, Ljubljana, Slovenia (2017–2022)
- *The Laser and Health Academy (LA&HA)* is a non-profit organization dedicated to the advancement, education, and research on laser therapy.
- Secretary of the Board of Directors of the *Italian Society of Protistology Onlus* (2012–2015)
- (Partner society of the *International Society of Protistologists*)

- Auditor of the *Italian Society of Protistology Onlus* for the two-year period 2008–2010
- Auditor of the *Italian Society of Protistology Onlus* for the two-year period 2006–2008

● CONFERENCES AND THIRD MISSION ACTIVITIES

Attività Principali

Congresses:

- Scientific and Organizing Committee, University of Genoa, *New Technologies in Laser Dentistry* Conference. Committee Chair: Prof. Stefano Benedicenti. Sanremo, Imperia (Italy). September 26 – October 1, 2016.
- Scientific and Organizing Committee, University of Genoa, International Conference: *Laser Dentistry: From Science to the Clinic*. Committee Chair: Prof. Stefano Benedicenti. Monaco (France). September 2–5, 2013.
- Technical Organizing Secretariat, 70th National Congress of the Italian Zoological Union. Rapallo (Genoa), Italy. September 21–24, 2009. Dip.Te.Ris. (Department for the Study of the Territory and its Resources), Di.Bio. (Department of Biology), University of Genoa.
- Scientific and Organizing Committee, 24th Conference of the Italian Society of Protozoology, Rapallo, Italy. October 1–2, 2004.

Exhibitions:

- *Nobody's Perfect: Biology in Space*, Civic Museum of Natural History "G. Doria", Genoa (Italy), April–September 2013. Sponsored by: European Space Agency, Italian Space Agency, National Institute of Nuclear Physics, University of Genoa, Italian Society of Protistology onlus, and National Antarctic Research Program.
- Exhibition event for the Genoa Science Festival 2012: *Micropolis. Tales from the Invisible*, Civic Museum of Natural History "G. Doria", Genoa (Italy), October 2012–January 2013. Sponsored by: Italian Society of Protistology onlus, University of Genoa, Liguria Region, Municipality of Genoa, and Genoa Museums.
- International Exhibition: *Nobody's Perfect; Stories of Ordinary Microscopy*, Civic Museum of Natural History "G. Doria", Genoa (Italy), May 2012. Sponsored by: University of Genoa, National Antarctic Research Program, Liguria Region, Municipality of Genoa, and Genoa Museums.

● SPEAKER AT CONGRESSES AND CONFERENCES

Principali Attività Internazionali

Invited Speaker at the WFLD (World Federation For Laser Dentistry) 2023 Congress, Poland, April 14–16, 2023.

Title: *Steering Multipotent Mesenchymal Cells towards an Anti-inflammatory and Osteogenic Bias through Photobiomodulation Therapy: Achieving Dual Benefits*.

Speaker: **Andrea Amaroli**.

Invited Speaker at the NAALT (North American Association for Photobiomodulation Therapy) / WALT (World Association for Photobiomodulation Therapy) 2020 Conference, Washington DC, USA, August 2020 (postponed to October 2021 due to COVID).

Title: *Photobiomodulation and Release of the Neurotransmitter Glutamate*.

Speakers: Stefano Benedicenti, Manuela Marcoli, Chiara Cervetto, Simone Pelassa, Guido Maura, **Andrea Amaroli**.

Invited Speaker at the 5th International Congress SGOLA, Locarno, Switzerland, Workshops November 15–16, 2019.

Title: *Photobiomodulation: from Science to the Clinic*.

Speakers: **Andrea Amaroli**, **Stefano Benedicenti**.

Invited Speaker at the 7th European Division Congress of the World Federation for Laser in Dentistry "Sound of Light," Parma, Italy, June 20–22, 2019.

Title: *Photobiomodulation with Flat-top Hand-piece: From Research to the Clinic*.

Speaker: **Andrea Amaroli**.

Speaker at the VI European Congress of Protistology, Berlin, Germany, July 25–29, 2011.

Title: *Dictyostelium discoideum: A Bioethical Model for the Study of the Effects of Extremely Low-Frequency Electromagnetic Fields (ELF-EMF)*.

Speakers: **Andrea Amaroli**, Bianca Bianco, Maria Grazia Chessa.

Speaker at the X International Conference of the European Bioelectromagnetics Association, Rome, Italy, February 21–24, 2011.

Title: *Dictyostelium discoideum (Protozoa): A Bioethical Model for the Study of the Effects of Extremely Low-Frequency Electromagnetic Fields (ELF-EMF)*.

Speakers: **Andrea Amaroli**, Bianca Bianco, Maria Grazia Chessa.

Speaker at the Congress of the European Bioelectromagnetics Association (EBEA), Budapest, Hungary, November 13–15, 2003.

Title: *Time-varying ELF Fields Effects on the Single-cell Dictyostelium discoideum (Protista)*.

Speakers: **Andrea Amaroli**, Fabio Trielli, Bianca Bianco, Stefano Giordano, Enrico Moggia, Maria U. Delmonte Corrado.

Speaker at the European Congress of Protistology and 10th European Conference on Ciliate Biology, San Benedetto del Tronto, Italy, August 31 – September 5, 2003.

Title: *Effects of Exposure to Time-variant Low Frequency Electromagnetic Field on Dictyostelium discoideum*.

Speakers: **Andrea Amaroli**, Fabio Trielli, Bianca Bianco, Stefano Giordano, Enrico Moggia, Maria U. Delmonte Corrado.

Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n. 196 - "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR 679/16 - "Regolamento europeo sulla protezione dei dati personali".