

Curriculum Vitae

Prof. Francesco Lodola, PhD

PERSONAL INFORMATIONS

Nationality: Italian

Languages: Italian, English

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SHORT BIOGRAPHY

I am a physiologist with more than 10 years of experience in cardiovascular research. I graduated in Biotechnology in 2007 and received my PhD in Physiology and Neuroscience at the University of Pavia in 2012. I then joined IRCCS ICS Maugeri in Pavia and later the Center for Nano Science and Technology (IIT@PoliMI) based in Milano. Currently, I act as an associate professor in Physiology at the University of Milano-Bicocca. I have developed a strong interest in biophysics and acquired a hands-on experience in both basic and translational research. My main goal is to solve problems in physiology and medicine of the cardiovascular system through multidisciplinary and ground-breaking approaches.

EDUCATION

- 2012 PhD in Physiology and Neuroscience, University of Pavia, Italy
- 2007 MSc in Industrial Biotechnology, University of Pavia, Italy
- 2004 BSc in Biotechnology, University of Pavia, Italy
- 2001 Scientific High School Diploma. Liceo Scientifico N. Copernico, Pavia, Italy

CURRENT POSITION

- Since 2023 Associate Professor (Settore scientifico-disciplinare: BIO/09 – Fisiologia) at the Dept of Biotechnology and Biosciences, University of Milano-Bicocca, Italy
- Since 2022 Affiliated Researcher at the Italian Institute of Technology, CNST@PoliMi, Milano, Italy

PREVIOUS POSITIONS

- 2020 – 2023 Tenure-track Assistant Professor (ricercatore a tempo determinato tipo b; Settore scientifico-disciplinare: BIO/09 – Fisiologia) at the Dept of Biotechnology and Biosciences, University of Milano-Bicocca, Italy
- 2015 – 2020 Senior postdoc researcher at the Italian Institute of Technology, CNST@PoliMi, Milano, Italy
- 2012 – 2015 Junior postdoc researcher at IRCCS Fondazione S. Maugeri, Pavia, Italy
- 2008 Postgraduate fellow, Department of Physiology, University of Pavia, Italy
- 2006 Student fellow, Departamento de Ciencias Biologicas - Facultad de Ciencias Exactas, Universidad Nacional de La Plata, Argentina

NATIONAL SCIENTIFIC HABILITATION (ASN)

- 2020 National Scientific Habilitation as Associate Professor in Physiology (05/D1). Habilitation obtained by unanimous vote of the National Scientific Committee
- 2018 National Scientific Habilitation as Associate Professor in Applied Biology (05/F1). Habilitation obtained by unanimous vote of the National Scientific Committee

FUNDINGS

- 2023 PRIN 2022 PNRR – “Interaction between myofilament and SERCA2a activators on heart muscle mechanics” from M.I.U.R. - MINISTERO DELL'ISTRUZIONE, DELL'UNIVERSITA' E DELLA RICERCA
- 2021 Fondo Ateneo Quota Competitiva (FAQC, 2021-ATEQC-0046) from University of Milano-Bicocca, Italy
- 2019 Co-PI of the coordinating unit of the EU - Future and Emerging Technologies (FET) project Light and Organic Nanotechnology for Cardiovascular Disease (LION-HEARTED) funded from the European Union’s Horizon 2020 FETOPEN 2018-2020 programme under grant agreement N° 828984

TEACHING ACTIVITIES

- Since 2023 Laboratory of Genetic diseases: from diagnosis to therapy (2 CFU), Faculty of Biology at University of Milano-Bicocca, Italy
- Since 2022 Meccanismi funzionali di adattamento all’ambiente (3 CFU), Faculty of Biology at University of Milano-Bicocca, Italy
- Since 2020 Laboratory of General Physiology (10 CFU), Faculty of Biology at University of Milano-Bicocca, Italy
- 2006 – 2008 Lecturer in Cellular & Molecular Physiology; Faculty of Sciences and in Experimental Biology; Interfaculty MM FF NN at University of Pavia, Italy

SUPERVISION OF GRADUATE STUDENTS, PhD AND POSTDOCTORAL FELLOWS

On-going: 1 post-doc, 2 PhD, 2 MSc and 2 BSc students

Previous: Thesis tutor and advisor for >20 among BSc, MSc, and PhD students at University of Pavia, Italy; Politecnico di Milano, Italy; and University of Milano-Bicocca, Italy

ACADEMIC POSITIONS

- Since 2024 Member of the Academic Board of the PhD program in Converging Technologies for Biomolecular Systems (TeCSBI), University of Milano-Bicocca, Italy
- Since 2023 Member of “Altre conoscenze utili per il mondo del lavoro” committee, Department of Biotechnology and Biosciences, University of Milano-Bicocca, Italy
- Since 2022 Member of “Commissione Dipartimentale Industria e Territorio” committee, Department of Biotechnology and Biosciences, University of Milano-Bicocca, Italy

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

- Since 2022 ESC WG on Cardiac Cellular Electrophysiology
Since 2019 Biophysical Society
Since 2018 Italian Society of Physiology (SIF)
Since 2013 Italian Society of Cardiovascular Research (SIRC)

BIBLIOMETRIC INDICATORS

- Peer-reviewed publications: 46
H-index: 27 (Scopus); 29 (Google Scholar)
Citations: >1800 (Scopus); >2300 (Google Scholar)
Scopus ID: 53878010000, Research ID: J-8129-2018, ORCID ID: 0000-0002-3506-5619

CONFERENCES

- Since 2009 Scientific communications presented at national and international meetings: >40

Chair/Section Moderator

- 2023 Chair at the XXIV National Congress of the Italian Society of Cardiovascular Research (SIRC)
2021 Chair at the XXIII National Congress of the Italian Society of Cardiovascular Research (SIRC)
2020 Chair at the 81st National Congress of the Italian Society of Cardiology (SIC)
2019 Moderator at the 80th National Congress of the Italian Society of Cardiology (SIC)

Role within Scientific societies

- Since 2023 Board member of the Italian Society of Cardiovascular Research (SIRC)
2020-2023 Auditor for the Italian Society of Cardiovascular Research (SIRC)

Member of organizing committees

- 2023 XXIV Congress of the Italian Society of Cardiovascular Research (SIRC), 18-20 October 2023, Imola, Italy
2019 Kick-off meeting in the framework of the EU project LION-HEARTED, CNST@PoliMi, Milano, Italy

PATENTS

- 2018 Photochromic compounds for use in the treatment of eye disorders (2018 IT; 2019 WO US EP JP)

FELLOWSHIPS AND AWARDS

- 2022 Celebrate Innovation Italy 2021 Prize for the topic “Photobiology” promoted by Cantabria Labs Difa Cooper
2021 Young Researcher Prize of the Italian Society of Physiology (Premio SIF) assigned to the young physiologist who distinguished himself/herself the most in studies and research activities

- 2018 Travel grant award funded by the Italian Society of Cardiovascular Research (SIRC) to attend the 4th SIRC Forum “New Roads in Cardiovascular Research”, Rome, Italy
- 2014 Research fellowship funded by TELETHON: “Creazione e studio di cellule iPS derivate da modelli murini CASQ2”
- 2012 Educational grant award for young researchers offered by Malesci to attend the 73rd SIC Congress, Rome, Italy
- 2012 Research fellowship funded by Ministero della Salute (Bando Giovani Ricercatori): “Mouse and Human induced pluripotent stem cells for myocardial diseases” ii) Research fellowship funded by Fondation Leducq: “Caratterizzazione elettrofisiologica nel modello murino della forma recessiva di CPVT umana”
- 2008 Research fellowship funded by Regione Lombardia: “Functional studies of aquaporin water channels in the human and rodent digestive tube”

EDITOR AND AD HOC REVIEWER FOR JOURNALS AND RESEARCH PROJECTS

Journal Editor

- Since 2022 Associate editor for the Journal of Translational Medicine
- Since 2019 Review editor for Frontiers in Physiology
- Since 2016 Review editor for Frontiers in Cellular Neuroscience

Special Issue Editor

- Since 2024 Guest editor for the special issue of *JoVE* “Touchless communication: Light-mediated methods for non-invasive biological applications”
- 2022-2023 Guest editor for the MDPI special issue “Oxidative Stress in Vascular Pathophysiology”
- 2020-2022 Guest editor for the special issue of *Biology* “Novel Insights into the Role of Heart Cells in Cardiac Function, Remodeling and Regeneration”

Ad hoc Reviewer

- Since 2014 Ad hoc reviewer for Nature Publishing Group (*Nature*), Wiley (*Journal of Cellular Physiology*, *Advanced Healthcare Materials*, *Journal of Cellular and Molecular Medicine*), PLOS (*PLOS ONE*), MDPI (*Biomedicines*, *Biomolecules*, *Cells*, *International Journal of Molecular Sciences*, *Pharmaceutics*) and others

Selected Reviewer of Research projects

- 2022 Moorfields Eye Charity, London, UK
- 2019 Czech Science Foundation (GACR), Czech Republic

ON-GOING COLLABORATIONS

For applications of light actuators in biology: Prof. G. Lanzani, Dr. Maria Rosa Antognazza, Istituto Italiano di Tecnologia, Center for Nano Science and Technology @PoliMi, Istituto Italiano di Tecnologia (IIT), Milano, Italy; Prof. Chiara Bertarelli, Dipartimento di Chimica, Materiali e Ingegneria Chimica “Giulio Natta”, Politecnico di Milano, Italy; Prof. Kevin Kit Parker, Harvard School of Engineering and Applied Sciences, Harvard University, Boston, US.

For cardiac cellular physiology: Prof. Giulio Pompilio, Centro Cardiologico Monzino, Milano, Italy; Prof. José Félix Rodríguez Matas, Dipartimento di Chimica, Materiali e Ingegneria Chimica “Giulio Natta”, Politecnico di Milano, Italy; Prof. Cecilia Ferrantini, Dipartimento di Medicina

Sperimentale e Clinica, Università di Firenze, Italy; Prof. Herman HW Silljé, University of Groningen, NL.