

PERSONAL INFORMATION **Andrea Gerbino**



Department of Biosciences, Biotechnologies and Biopharmaceutics of the University of Bari Aldo Moro, Italy

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M | 03/08/1973 | Italian

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input checked="" type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

December 2020-present **Assistant Professor (RTD b) in Physiology;** Department of Biosciences, Biotechnologies and Biopharmaceutics of the University of Bari, Italy. Analysis of Lamin A/C interaction with cardiac ion channels as new potential determinant of cardiomyopathies. Dysregulated myocardial inflammatory responses as innovative diagnostic, prognostic and therapeutic tool against Lamin A/C cardiomyopathies.

November 2019-present **Member of the Board of the PhD Program in Cellular and Molecular Physiology,** Department of Biosciences, Biotechnology and Biopharmaceutics of the University of Bari Aldo Moro,

November 2019-December 2020 **Researcher in Pathophysiology;** Institute of Biomembranes, Bioenergetics and Molecular Biotechnologies of the National Research Council of Italy, Italy. Understanding the role of Lamin A/C Gene Mutations in the Signaling Defects Leading to Cardiomyopathies

November 2019-present **Elected Member of the Directive Board of the Italian Society of Cardiovascular Research (SIRC)**

February 2018-November 2019 **Assistant Professor (RTD a) in Physiology;** Department of Biosciences, Biotechnologies and Biopharmaceutics of the University of Bari, Italy. Evaluation of the functional role of the nuclear lamina in the physiology of cardiomyocytes. Functional characterization of LMNA mutations associated with hereditary cardiomyopathy.

April 2016 to date **Biomedical Research Coordinator** for Apulia, Network Italiano Laminopatie, Section: Dilated Cardiomyopathy.

April 2016-January 2018 **Research fellow in physiology;** Department of Biosciences, Biotechnologies and Biopharmaceutics of the University of Bari, Italy. Apoptosis, Endoplasmic Reticulum-Stress and the Ca²⁺ Signaling in the onset of dilated cardiomyopathy with conduction defects

July 2013-July 2015 **Research fellow in physiology;** Department of Biosciences, Biotechnologies and Biopharmaceutics of the University of Bari, Italy. Evaluation of Cholesterol-lowering therapies for the treatment of nephrogenic diabetes insipidus

June 2005-July 2013 **Research fellow in physiology;** Department of Physiology of the University of Bari, Italy. Intracellular and extracellular signaling mechanisms involved in cardiac hypertrophy in vitro. Role of the extracellular calcium (Ca^R) sensing receptor. Extracellular Ca²⁺ changes in response to mediated calcium agonists: measurements in the lumen of gastric glands in situ

March 2004 to May 2005 **Post-doctoral fellow;** Department of Surgery, Harvard Medical School/Brigham and Women's Hospital and V.A. Boston Healthcare System, Boston, MA, USA. "Dual-mentored fellowship from Harvard Medical School & Brigham and Women's Hospital Boston" entitled "Mechanisms Underlying the Lack of Desensitization of the Ca^R"

June 2002-April 2002 **Research fellow;** Department of Surgery, Harvard Medical School/Brigham and Women's Hospital and the V.A. Boston Healthcare System, Boston, MA, USA. NIH RO1 DK44571 "Role of divalent cations in the physiology of parietal cells of the gastric mucosa"

EDUCATION AND TRAINING

April 2005 **PhD in Physiology** defending a thesis entitled "Extracellular and intracellular calcium modulation of physiological functions", Department of General Physiology of the University of Bari Aldo Moro, Italy.

November 2001-November 2004 **PhD course** in "Cellular and Molecular Technologies in Physiology" at the Department of General Physiology of the University of Bari Aldo Moro, Italy.

25 October 2000 **Master's degree in Biological Sciences-** Pathophysiological section, University of Bari Aldo Moro, Italy.

WORK ACTIVITIES

Awards	<p><u>November 2019</u>; Elected Member of the Directive Board of the Italian Society of Cardiovascular Research (SIRC); <u>September 2019</u>; Abilitazione Scientifica Nazionale, Settore Concorsuale 05/D1 (FISIOLOGIA), Seconda Fascia, Secondo Quadrimestre; <u>April 2016</u>. Biomedical Research Coordinator for Apulia, Network Italiano Laminopatie, Section: Dilated Cardiomyopathy; <u>April 2015</u>. Cover for Biology of the Cell, DOI: 10.1111/boc.201400069; <u>April 2005</u>. Travel Scholarships Winner-Termination of cAMP signals by Ca²⁺ and Gai via extracellular Ca²⁺ sensors-14th International Symposium on Calcium and Calcium Binding Protein in Health and Disease, Banff, Alberta, Canada. <u>March 2004</u>. "Dual-mentored fellowship from Harvard Medical School & Brigham and Women's Hospital Boston"-Boston Healthcare System, Boston and West Roxbury, MA, USA</p>
Editorial activity	<p>https://publons.com/author/1454780/andrea-gerbino#profile; https://loop.frontiersin.org/people/499642/editorial</p>
Invited presentations (most recent)	<p><u>November 6th, 2019</u>; The functional expression of the Lamin A/C mutant Q517X in HL1 cardiomyocytes causes nuclear and cytoskeleton remodelling with reduction in spontaneous action potentials frequency. XXII meeting of the "Italian Society of Cardiovascular research (SIRC)", Imola, Italy. <u>November 13th, 2018</u>; Cardiomyopathy caused by lamin A/C gene mutations: why the functional characterization at cellular level is crucial? COST Action CA15214 EuroCellNet WG4 Meeting, Intranuclear Interactions of Lamins and European Lamin Working Group, A joint meeting with the Italian Network for Laminopathies Meeting, Bologna, Italy; <u>September 20th, 2018</u>; Cardiomyopathy caused by lamin A/C gene mutations: why is the functional characterization at cellular level so crucial? Symposium • New frontiers in cardiovascular physiology and protection. SIRC patronage. 69th SIF National Congress, Italian Physiological Society, Firenze, Italy.</p>
Grants	<p>"Kidney in a box", PON Programma Operativo Nazionale 2014-2020-Dottorati innovativi a caratterizzazione Industriale; "Dual-mentored fellowship from Harvard Medical School & Brigham and Women's Hospital Boston"- Boston Healthcare System, Boston and West Roxbury, MA, USA</p>

ADDITIONAL INFORMATION

Publications

total number of publications in peer-review journals **43**

total number of citations **682**

H index **16**

<https://pubmed.ncbi.nlm.nih.gov/?term=andrea+gerbino&sort=pubdate&size=100>

Selected papers:

- Roberta De Zio, Giusy Pietrafesa, Serena Milano, Giuseppe Procino, Manuela Bramerio, Martino Pepe, Cinzia Forleo, Stefano Favale, Maria Svelto, **Andrea Gerbino*** and Monica Carmosino*; Role of nuclear Lamin A/C in the regulation of Nav1.5 channel and microtubules: lesson from the pathogenic Lamin A/C variant Q517X; *Front. Cell Dev. Biol.* 2022; 10.3389/fcell.2022.918760;
- **Andrea Gerbino**, Cinzia Forleo, Serena Milano, Francesca Piccapane, Giuseppe Procino, Martino Pepe, Mara Piccolo, Piero Guida, Nicoletta Resta, Stefano Favale, Maria Svelto, Monica Carmosino; Pro-inflammatory cytokines as emerging molecular determinants in cardiomyopathies; *J Cell Mol Med.* 2021; 25:10902-10915;
- **Andrea Gerbino**, Roberta De Zio, Daniela Russo, Luigi Milella, Serena Milano, Giuseppe Procino, Michael Pusch, Maria Svelto, Monica Carmosino 5 6. - Role of PKC in the Regulation of the Human Kidney Chloride Channel ClC-Ka – *Scientific Reports*, 2020 Jun 24;10(1):10268.
- Roberta De Zio*, **Andrea Gerbino***, Cinzia Forleo, Martino Pepe, Serena Milano, Stefano Favale, Giuseppe Procino, Maria Svelto and Monica Carmosino. - Functional study of a KCNH2 mutant: novel insights on the pathogenesis of the LQT2 syndrome – *Journal of Cellular and Molecular Medicine*, 2019, 10.1111/jcmm.14521
- **Andrea Gerbino**, Giuseppe Procino, Maria Svelto, Monica Carmosino - Role of Lamin A/C Gene Mutations in the Signaling Defects Leading to Cardiomyopathies - *Front Physiol.*, 2018, 9:1356. doi: 10.3389/fphys.2018.01356
- **Andrea Gerbino**, Irene Bottillo, Serena Milano, Martina Lipari, Roberta De Zio, Silvia Morlino, Maria Grazia Mola, Giuseppe Procino, Federica Re, Elisabetta Zachara, Paola Grammatico, Maria Svelto and Monica Carmosino - Functional characterization of a novel truncating mutation in Lamin A/C gene in a family with a severe cardiomyopathy with conduction defects- *Cellular Physiology and Biochemistry*, 2017, 44(4):1559-1577.
- Monica Carmosino*, **Andrea Gerbino***, Giorgia Schena, Giuseppe Procino, Rocchina Miglionico, Cinzia Forleo, Stefano Favale and Maria Svelto-The expression of Lamin A mutant R321X leads to endoplasmic reticulum stress with aberrant Ca²⁺ handling -*Journal of Cellular and Molecular Medicine*, 2016, 20(11):2194-2207, 10.1111/jcmm.12926.
- **Andrea Gerbino**, Isabella Maiellaro, Claudia Carmone, Rosa Caroppo, Lucantonio Debellis, Maria Barile, Giovanni Busco, Matilde Colella - Glucose increases extracellular [Ca²⁺] in rat insulinoma (INS-1E) pseudoislets as measured with Ca²⁺-sensitive microelectrodes - *Cell Calcium*, 2012, 51(5):393-401, corresponding author.
- **Andrea Gerbino**, Marianna Ranieri, Stefania Lupo, Rosa Caroppo, Lucantonio Debellis, Isabella Maiellaro, Mariano Caratozzolo, Francesco Lopez, Matilde Colella - Ca²⁺-dependent K⁺ efflux regulates deoxycholate-induced apoptosis of BHK-21 and Caco-2 cells -*Gastroenterology*, 2009, 137(3):955-64, 964.e1-2.
- **Andrea Gerbino**, Warren Ruder, Silvana Curci, Tullio Pozzan, Manuela Zaccolo, Aldebaran M. Hofer - Termination of cAMP signals by Ca²⁺ and Gai via extracellular Ca²⁺ sensors: link to intracellular Ca²⁺ oscillations - *Journal of Cell Biology*, 2005, 171(2): 303–312.
- **Andrea Gerbino**, Aldebaran Hofer, Breda McKay, Bonnie Lau, David Soybel; Divalent cations regulate acidity within the lumen and tubulovesicle compartment of gastric parietal cells; *Gastroenterology*, 2004, 126(1): 182-195.

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