Vincitori Premio Tarone Under 45

SVEVA BOLLINI
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CURRENT POSITION

15/09/2017 – present: Associate Professor in Cellular and Experimental Biology (BIOS-10/A, 05/BIOS-10) Dept. of Experimental Medicine (DIMES), University of Genova, L.go R. Benzi 10, 16132, Genova; tel. +39 010 5558294.

EDUCATION:

- 10/11/2020: National Scientific Qualification as Full Professor (DM n. 2175/2018, call 2018/20) in Cellular and Experimental Biology (BIOS-10/A).
- 20/03/2009: PhD in *Medicina dello Sviluppo e Scienze della Programmazione*, University of Padova, Padova.
- 06/04/2005: Master of Science Degree in Medical Biotechnology Summa Cum Laude, Faculty of Medicine, University of Padova.

PREVIOUS POSITIONS

- 2014-2017: Tenure-Track Assistant Professor in Cellular and Experimental Biology (*Ricercatore a tempo determinato B art. 24 c.3-b L. 240/10 in 05/F1 - SSD BI0/13*), Dept. of Experimental Medicine, University of Genova, Genova.
- 2013-2014: Post Doctoral Research Fellow in the Regenerative Medicine Laboratory, IRCCS Ospedale Policlinico San Martino, Genova.
- 2011-2013: Post Doctoral Research Associate, Department of Physiology, Anatomy and Genetics, University of Oxford, Oxford OX1 3PT, UK.
- 2009-2011: Post Doctoral Research Associate, Molecular Medicine Unit, UCL- Institute of Child Health, London WC1N 1EH, UK.
- 2006-2009: PhD student in *Medicina dello Sviluppo e Scienza della Programmazione*, University of Padova.

GRANTS

Funding organization	*Project Title*	*Budget*	*Duration*	*Role*
Marie Skłodowska-Curie Action - Doctoral Network Horizon 2023	Exploring the therapeutic potential of perinatal cell SECRETomes – SECRET	259,438 Euro	2024-2028	Team Leader-Beneficiary Partner
ERA4Health Joint Transnational Call for Proposals 2023 CARDINNOV,	Defining the ideal human Amniotic progenitor Secretome forMulation for future cArdioprotective paRacrine Therapy – *AmnioSMART*	235,950 Euro	2024-2027	Coordinator of Consortium – PI
PRIN PNRR 2022 (MUR)	Precise cardiac organ-on-chip modeling to improve extracellular vesicle-based paracrine therapy against myocardial injury – *RECOVERY*	72,380 Euro	2023-2026	Team Leader - Partner
PRIN 2022 (MUR)	Design and validation of an advanced delivery system for microRNAs and stem cell-derived extracellular vesicles for direct cardiac reprogramming through a mechanically-stimulated human cardiac scar model – *DESIRE*	63,205 Euro	2023-2026	Team Leader - Partner
Curiosity Driven Under 40 Starting Grant – University of Genova	Triggering CARDIOmyocyte renewal by harnessing STem cell pARacrine potential – *CARDIOSTAR*	59,500 Euro	2019-2021	PI
2012 Rita Levi Montalcini Program for Young Researchers (MIUR)	Analysis of the cardiac regenerative potential of the human amniotic fluid stem cell Secretome.	247,273 Euro	2014-2017	PI

HONORS and AWARDS

- Guido Tarone Under 45 Investigator Award from Associazione Italiana di Biologia e Genetica – A.I.B.G., XXIII Meeting, 18/09/2025, Chieti, Italy.
- Elected Member of the European Society of Cardiology Working Group on Cardiovascular Regenerative and Reparative Medicine Nucleus, 2024-2026;
- Elected Member of the International Society for Heart Research – European Section Council (ISHR-ES), from 2025.
- Elected Member of the international European Society of Cardiology Scientist of Tomorrow Nucleus, 2019-2022.
- Invited Member of the Cardiovascular SubCommittee of the International Society for Cell and Gene Therapy (ISCT), from 2019;
- Front Cover of Stem Cells Translational Medicine, Volume 6, Issue 5, April-May 2017
- Young Investigator Award as part of the 2012 Rita Levi Montalcini Program for Young Researchers from MIUR, February 2014.

INVITED TALKS

- ESC 2026 Annual Meeting 28-31/08/2026, Munich, Germany.
- ISHR Winter Council Meeting, 22-23/01/2026, Toulouse, France.
- Online webinar for the "CMC Grand Rounds in Cardiovascular Research", Centre for Molecular Cardiology, Zurich University, 11/09/2025.
- Denmark, UK and Italy in Genova Meeting "Decoding the Heart: Mechanisms, Models, and Molecular Therapies", 03/07/2025, Genova, Italy.
- 59th ESCI (European Society for Clinical Investigation) Meeting, 21-23/5/2025, Genova.
- Invited seminar at UKEssen-UniversitätsklinikumEssen, 16/12/2024 Essen, Germany.
- International Placenta Stem Cell Society (IPLASS) and CTESS Joint Meeting, Izola, Slovenia, 19-20/09/2024.
- Biennial Meeting of the ESC Working Group on Cellular Biology of the Heart & Myocardial Function, 25-7/11/2023, Naples, Italy.
- International Pancreas & Islet Transplant Association- International Xenotransplantation Association-Cell Transplantation and Regenerative Medicine Society (IPITA-IXA-CTMRS) 2023 joint Congress, 26-29/10/2023, San Diego, US.
- "Extracellular Vesicles In Cardiovascular Disease: Therapeutic Approach And Biomarker Tools" webinar for the EVCNA (Extracellular Vesicle and Circulating Nucleic Acid) Journal, 05/05/23.
- International Journal of Molecular Sciences (IJMS) 2021 invited Lecture for the "Amniotic Fluid and Placental Membranes As Sources Of Stem Cells" webinar, 11/11/2021.
- On-line seminar for the Institute of Hepathology, 29/09/2020, King's College London, London, UK.
- ESC Joint Meeting Working Group Cellular Biology of the Heart and Myocardial Function, 9-10 Maggio 2019, Naples, Italy.
- IPLASS 2018 Meeting, 6-7/9/2018 Berna, Switzerland.
- Invited seminar at Molecular Biotechnology Centre, University of Turin, 03/07/18, Turin, Italy.
- IX Stem Cell Research Italy National Meeting, 21-23/6/2018, Milan, Italy.
- Invited seminar at CardioCentro Ticino Foundation, 26/04/2018 Taverne, Switzerland.
- ESCI Annual Meeting, 17-19/5/2017, Genova.
- Invited seminar at Ludwig Boltzmann Institute of Experimental and Clinical Traumatology, 19/12/2016 Wien, Austria.
- IV EUSTM (European Society for Translational Medicine) Meeting 17-20/10/2016, Prague, Czech Republic.

PUBLICATIONS

H-index: 30; total citations: 6262 (www.scopus.com). 5 selected research articles as first-last-corresponding author:

1. Senesi G*, Guerricchio L*, Ghelardoni M*, […], **Bollini S.** *Extracellular vesicles from II trimester human amniotic fluid as paracrine conveyors counteracting oxidative stress*. Redox Biol 2024 Sep:75:103241.
2. Costa A, […], **Bollini S**. *Investigating the Paracrine Role of Perinatal Derivatives: Human Amniotic Fluid Stem Cell-Extracellular Vesicles Show Promising Transient Potential for Cardiomyocyte Renewal*. Front Bioeng Biotechnol. 2022 Jun 8;10:902038.
3. Villa F, […], **Bollini S**. *The human fetal and adult stem cell secretome can exert cardioprotective paracrine effects against cardiotoxicity and oxidative stress from cancer treatment*. Cancers (Basel). 2021 Jul 24;13(15):3729.
4. Balbi C, […] **Bollini S**. *Reactivating endogenous mechanisms of cardiac regeneration via paracrine boosting using the human amniotic fluid stem cell secretome*. Int J Cardiol. 2019 Jul 15;287:87-95.

5. Balbi C, […], **Bollini S**. *First characterization of human amniotic fluid stem cell extracellular vesicles as a powerful paracrine tool endowed with regenerative potential*. Stem Cells Transl Med. 2017 May;6(5):1340-1355.

RESEARCH INTERESTS and MAIN COLLABORATIONS

Intercellular communication and paracrine biology for cardiac repair and regeneration following myocardial injury and drug-induced cardiotoxicity. Major ongoing collaboration:

- Dr. Lucio Barile, Laboratory for Cardiovascular Theranostics, Istituto Cardiocentro Ticino and Translational Laboratories, Ente Ospedaliero Cantonale, Lugano, Switzerland;
- Associate Prof. Dr. Monika M. Gladka, Medical Biology Department, Amsterdam University Medical Center, The Netherlands;
- Professor Bernd Giebel and Prof. Dirk Hermann, UKEssen - Universitätsklinikum Essen, Essen, Germany
- Professor Peter Ponsaerts, Laboratory for Experimental Hematology, University of Antwerp, Antwerp, Belgium;
- Professor Ornella Parolini, University Sacro Cuore Cattolica and Fondazione Policlinico Universitario Gemelli IRCCS, Rome, Italy;
- Professor Rui L. Reis, I3Bs – Research Institute on Biomaterials, Biodegradables and Biomimetics University of Minho, Portugal;
- Professor Maurilio Sampaolesi, Department of Development and Regeneration, KU Leuven, Belgium;
- Professor Valeria Chiono, Biomedical Engineering Lab, Politecnico di Torino, Turin;
- Professor Marco Rasponi, Biomechanics Group, Microfluidics and biomimetic Microsystems Laboratory, Politecnico Milano, Milan.