

PERSONAL INFORMATION

Benedetta Bussolati

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Sex F / Date of birth 25/11/1969

Enterprise	University	EPR
☐ Management Level	☒ Full professor	☐ Research Director and 1st level Technologist / First Researcher and 2nd level Technologist
☐ Mid-Management Level	☐ Associate Professor	☐ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

March 2022 – until now	Full Professor of Laboratory Medicine , Department of Molecular Biotechnology and Health Sciences, University of Torino
2020-2022	Associate Professor of Laboratory Medicine , Department of Molecular Biotechnology and Health Sciences, University of Torino
06/09 2015	Visiting Professor at the Saban Research Center, Saban Research Center, Children Hospital, Laboratory for Organ Regenerative Research and Cell Therapeutics in Urology, Los Angeles, USA.
2006-2020	Associate Professor of Nephrology , Department of Molecular Biotechnology and Health Sciences, Molecular and Biotechnology Center, University of Torino
2001-2006	Assistant Professor of Pharmacology , Department of Biological and Clinical Sciences, University of Torino;
1999-2001	PostDoctoral Fellowship at the Laboratory of Renal Immunopathology, University of Torino
1998-1999	Research Visiting Fellow at the Laboratory of Vascular and Reproductive Physiopathology, directed by Prof. Asif. Ahmed, University of Birmingham, UK

EDUCATION AND TRAINING

07/1994	University of Torino	M.D.	Medicine
10/1998	University of Parma	PHD	Nephrology
1999	University of Birmingham, UK	Post-Doc	Vascular Physiopathology
2001	University of Torino	Post-Doc	Nephrology

OTHER EXPERIENCES AND PROFESSIONAL MEMBERSHIPS

Awards	2020-now Member of the Task Force on Regulatory Affairs and Clinical Use of Extracellular vesicle-based Therapeutics of the International Society for Extracellular Vesicles (ISEV) 2019-now Member of the Task Force on Urinary Extracellular Vesicles di ISEV 2018-now President of EVita , Italian Society of extracellular vesicles 2016-2018- Honorary Secretary of the European Vascular Biology Organization (EVBO)
Editorial Activity	- 2018 Award for Scientific Contribution from the Spanish Society of Nephrology. From 2021 Associate Editor, Journal of Extracellular Biology From 2021 Editorial Board Member of Extracellular Vesicles and Circulating Nucleic Acids From 2019 Editorial Board Member of Scientific Reports From 2016 Editorial Board Member of J. Nephrology From 2015 Academic Editor of Plos One
Invited presentations	Prof. Bussolati has in the last 10 years made more than 40 invited presentations at national and international Congresses. She will be speaker at the next Gordon Conference 2022 on Extracellular

Vesicles, and will give a Keynote speech at the International Society for Extracellular Vesicle congress 2022 in Lyon.

- Ongoing grants**
- 2018-2022 European H2020 project RenalToolBox H2020-MSCA-ITN-2018 PI <https://renaltoolbox.org/>
 - 2020-2025. NIH R01 Grant No. R01DK121037 Extracellular vesicles derived from amniotic fluid stem cells normalize glomerular function during progressive kidney disease, Co-PI.
 - 2019-2022 European H2020 project iPLACENTA: H2020-MSCA-ITN-2017 Goal of the project: study, modelling and visualization of the placenta to enhance investigation and prognosis of complicated pregnancies. <https://www.iplacenta.eu/>, PI
 - 2016-2023 Unicyte EG AV Pre-clinical development of stem cell-derived EVs for treatment of Renal Carcinomas. Goal: This project aims to establish preclinical models for development of stem cell-derived miRNA therapeutic strategies for renal carcinomas. PI

Patents

1. M. Herrera Sanchez, B. Bussolati, G. Camussi, S. Buttiglieri. Liver progenitor cells. N.: [WO2006/126236A1](#).
2. G. Camussi, S.a Bruno, B. Bussolati. Isolated Multipotent Mesenchymal Stem Cell from Human Adult Glomeruli (Hgl-Msc), A Method Of Preparing Thereof And Uses Thereof In The Regenerative Medicine Of The Kidney. N.: [WO2010/052192](#).
3. M.C. Deregibus, B. Bussolati, G. Camussi, V. Dimuccio. Method and kit for capturing extracellular vesicles (EVs) on a solid surface. N.: [WO2020/0182865](#).
5. L. Perin, S. Sedrakyan, B. Bussolati, R. De Filippo. Extracellular Vesicles from Stem Cells to Treat and/or Prevent Disease. N.: [WO2020/0121729](#).
6. G. Camussi, B. Bussolati, T. Lopatina. Pharmaceutical carriers containing miRNAs for use in the treatment of renal cancer. N.: [WO2021/10069231](#).
7. B. Bussolati G. Camussi, V. Dimuccio. A method for in vitro diagnosis of renal glomerular disease or for monitoring the progression of renal glomerular disease. Numero: [WO/2021078796](#).
8. B. Bussolati, G. Bussolati. Preservation of nucleic acid sequences by fixing tissues in buffered formalin prepared with acid-deprived formaldehyde. N. [WO2021/122613 A1](#).
9. B. Bussolati; Gi. Camussi, V. Fonsato. A combination of active ingredients for the treatment of tumor. N.: [WO2019197442A1](#).

ADDITIONAL INFORMATION

Total number of publications in peer-review journals last 10 years: **71**
 Total Impact Factor (IF) (average IF/paper) last 10 years: 430 (**6,0**/paper)
 Total number of citations: **16380**
 H index: **53**

RELEVANT PUBLICATIONS

1. Generation of Spike-Extracellular Vesicles (S-EVs) as a Tool to Mimic SARS-CoV-2 Interaction with Host Cells. Verta R, Grange C, Skovronova R, Tanzi A, Peruzzi L, Deregibus MC, Camussi G, **Bussolati B**. Cells. 2022 Jan 3;11(1):146. doi: 10.3390/cells11010146.
2. Surface Marker Expression in Small and Medium/Large Mesenchymal Stromal Cell-Derived Extracellular Vesicles in Naive or Apoptotic Condition Using Orthogonal Techniques. Skovronova R, Grange C, Dimuccio V, Deregibus MC, Camussi G, **Bussolati B**. Cells. 2021 Oct 29;10(11):2948. doi: 10.3390/cells10112948.
3. Coincubation as miR-Loading Strategy to Improve the Anti-Tumor Effect of Stem Cell-Derived EVs. Brossa ATapparo M, Fonsato V, Papadimitriou E, Delena M, Camussi G, **Bussolati B**. Pharmaceutics. 2021 Jan 8;13(1):76. doi: 10.3390/pharmaceutics13010076.
4. International Society for Extracellular Vesicles and International Society for Cell and Gene Therapy statement on extracellular vesicles from mesenchymal stromal cells and other cells. Börger V, Weiss DJ, Anderson JD, Borrás FE, **Bussolati B**, et al.. Cytotherapy. 2020 Sep;22(9):482-485. doi: 10.1016/j.jcyt.2020.05.002.
5. Extracellular vesicles from human liver stem cells inhibit renal cancer stem cell-derived tumor growth in vitro and in vivo. Brossa A, Fonsato V, Grange C, Tritta S, Tapparo M, Calvetti R, Cedrino M, Fallo S, Gontero P, Camussi G, **Bussolati B**. Int J Cancer. 2020 Sep 15;147(6):1694-1706. doi: 10.1002/ijc.32925.
6. Urinary Extracellular Vesicles Carrying Klotho Improve the Recovery of Renal Function in an Acute Tubular Injury Model. Grange C, Papadimitriou E, Dimuccio V, Pastorino C, Molina J, O'Kelly R, Niedernhofer LJ, Robbins PD, Camussi G, **Bussolati B**. Mol Ther. 2020 Feb 5;28(2):490-502. doi: 10.1016/j.ymthe.2019.11.013.
7. Improved Loading of Plasma-Derived Extracellular Vesicles to Encapsulate Antitumor miRNAs. Pomatto MAC, **Bussolati B**, D'Antico S, Ghiotto S, Tetta C, Brizzi MF, Camussi G. Mol Ther Methods Clin Dev. 2019 Jan 9;13:133-144. doi: 10.1016/j.omtm.2019.01.001.
8. Extracellular vesicles from human liver stem cells inhibit tumor angiogenesis. Lopatina T, Grange C, Fonsato V, Tapparo M, Brossa A, Fallo S, Pitino A, Herrera-Sanchez MB, Kholia S, Camussi G, **Bussolati B**. Int J Cancer. 2019 Jan 15;144(2):322-333. doi: 10.1002/ijc.31796.
9. Human liver stem cell-derived extracellular vesicles enhance cancer stem cell sensitivity to tyrosine kinase inhibitors through Akt/mTOR/PTEN combined modulation. Fonsato V, De Lena M, Tritta S, Brossa A, Calvetti R, Tetta C, Camussi G, **Bussolati B**. Oncotarget. 2018 Nov 16;9(90):36151-36165. doi: 10.18632/oncotarget.26319.
10. Endothelial progenitor cell derived microvesicles activate an angiogenic program in endothelial cells by a horizontal transfer of mRNA. Deregibus MC, Cantaluppi V, Calogero R, Lo Iacono M, Tetta C, Biancone L, Bruno S, **Bussolati B** Camussi G. Blood. 2007 Oct 1;110(7):2440-8. doi: 10.1182/blood-2007-03-078709.