

PERSONAL INFORMATION

Maria Felice Brizzi



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Female | Date of birth 12/03/1962 | Nationality Italian

SSD: MED/09

Key words: angiogenesis, diabetes, oncology

PhD: 1997

H-index Scopus: 38

Citation Scopus: 4593

Publications from 2012 to 2022: 55 IF: 358,131 IF medio 6,5

Table with 3 columns: Enterprise, University, EPR. Rows include checkboxes for Management Level, Mid-Management Level, Employee / worker level, Full professor, Associate Professor, and Researcher and Technologist of IV, V, VI and VII level / Technical collaborator.

WORK EXPERIENCE

Replace with occupation or position held

From 1999-2023 she works as MD in the Clinic of Internal Medicine, University of Torino
2006-2023 Associate Professor and MD in Internal Medicine at the University of Torino.
1999: Position as Assistant Professor and MD in Internal Medicine at the University of Torino;

She was involved in studies of pathophysiology, including HEMATOLOGIC, INFLAMMATORY, METABOLIC and NEOPLASTIC diseases, aimed to identify novel therapeutic targets.

She has experience in studies of stem and vascular cell-derived exosomes/extracellular vesicles. In addition, she has specifically worked on and published works on 1) inflammatory and tumor experimental model of angiogenesis 2) marrow and tissue derived leukemic and normal stem cell separation and characterization, 3) renal damage 4) purification and characterization of serum and stem cell derived extracellular vesicles and characterization of their protein, mRNA and miRNA content. In particular, she investigated the tumor activity and proangiogenic potential of endothelial cell-derived extracellular vesicles. Particular attention has been devoted in defining mechanisms of disease and potential targets. She has worked with a highly skilled and dedicated research group and collaborated with Professor Camussi and Dr. Quesenberry in the NIH grants UH2-TR000880, UH3TR000880-03S1 on "Regulation of renal and bone marrow injury by extracellular vesicle non-coding RNA". Specifically, in the last 10 years she was

mainly involved in studying the role of **extracellular vesicles (EVs)** in physiological and pathological settings as theranostic and/or delivery system.

EDUCATION AND TRAINING

- 1997-1999: Post-doctorate fellowship from University of Torino;
- 1998: "Visiting scientist" in the laboratories of Prof. Yosef Yarden Department of Biochemistry of the Weizman Institute of Science, Israel, for a joint project on the c-kit receptor (spending alternative periods in Italy and in Israel)
- 1994-1997: PhD in Cytomorphology at the University of Bologna;
- 1993: "Visiting scientist" in the laboratories of Prof. Yosef Yarden Department of Biochemistry of the Weizman Institute of Science, Israel, for a joint project on the c-kit receptor (spending alternative periods in Italy and in Israel)
- 1993: Specialization in Internal Medicine University of Torino
- 1990-1992: Fellowship Associazione Ricerca sul Cancro (AIRC); University of Torino
- 1989/1990: Fellowship "A. Bossolasco" University of Torino
- 29/3/1988 Doctoral Degree: BACHELOR OF MEDICINE; University of Torino

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s) English C

Job-related skills Waitress during my bachelor. .

Digital skills Excel, Power Point, Word, Graphpad-Prism, Image-J

Other skills

- ***Administrative Activites:*** She has been MEMBER OF THE TECHNICAL PEDAGOGICAL COMMITTEE, School of Medicine of the University of Turin and VICE PRESIDENT of the School of Medicine, University of Turin. She is currently a member of the EDUCATIONAL AND SCIENTIFIC COMMITTEE of the "MD-PhD Programme " School of Medicine University of Turin; member OF THE BIOETHICS COMMITTEE, University of Torino; and MEMBER OF THE SCIENTIFIC EDUCATIONAL COMMITTEE of the ACCADEMIC PhD School "Medical Pathophysiology", School of Medicine.

- She served as referee for the following research agencies:
"GRANTS": National Health and Medical Research Council (Australia, Holland), Castang Foundation (UK), and Cancer Research (Poland and France). She also served as referee for Dutch Research Council (NWO), Hellenic Foundation for Research and Innovation (H.F.R.I.), 21-FWO-SBO-M-011

ADDITIONAL INFORMATION

2016:Invited Speaker at the "Gordon Research Conferences on Extracellular vesicles"

1. She collaborated with the **University of Coimbra, Portugal**, for a joint project on Ghrelin and Mitochondria (**from 2015-2017**)
2. She collaborated with the **University of Bergen, Norway**, for a joint project on extracellular vesicle proteomics (**from 2018-2020**)
3. She collaborated with the **University of Athens, Greece**, for a joint project on target therapy in cardiovascular diseases (**from 2017 still active**)

PATENTS

1. WO2009150214-A2; US2010016226-A1; WO2009150214 A3-; AU2009256558-A1; CA2723270-A1; EP2310041-A2; CN102065883-A; US2011160121-A1; MX2010013677-A1; IN201007544-P4; JP2011522864-W; EP2310041-B1; US8476408-B2; AU2009256558-B2; JP5481473-B2; MX319282-B Unacylated ghrelin and analogs as therapeutic agents for vascular remodeling in diabetic patients and treatment of cardiovascular disease Patent Assignee: ALIZE PHARMA; ALIZE PHARMA SAS Inventor (s): BRIZZI M F; And GHIGO; MUCCIOLI G.

2. US2014378380-A1; WO2014203074-A2 Use of unacylated ghrelin, fragments and analogs thereof as antioxidant Patent Assignee: BRIZZI M F; And GHIGO; ALIZE PHARMA SAS Inventor (s): BRIZZI M F; GHIGO E.

Publications

1. HUMAN LIVER STEM CELL DERIVED EXTRACELLULAR VESICLES ALLEVIATE KIDNEY FIBROSIS BY INTERFERING WITH THE B-CATENIN PATHWAY THROUGH MIR29B. Kholia S, Herrera

- Sanchez MB, Deregibus MC, Sassoè-Pognetto M, Camussi G, **Brizzi MF. Int J Mol Sci. 2021.** doi: 10.3390/ijms221910780.
2. PERCUTANEOUS CORONARY INTERVENTION (PCI) REPROGRAMS CIRCULATING EXTRACELLULAR VESICLES FROM ACS PATIENTS IMPAIRING THEIR CARDIO-PROTECTIVE PROPERTIES. Femminò S, D'Ascenzo F, Ravera F, Comità S, Angelini F, Caccioppo A, Franchin L, Grosso A, Thairi C, Venturelli E, Cavallari C, Penna C, De Ferrari GM, Camussi G, Pagliaro P, and **Brizzi MF. Int. J. Mol. Sci. 2021** doi: 10.3390/ijms221910270
 3. EXTRACELLULAR VESICLES FROM PATIENTS WITH ACUTE CORONARY SYNDROME IMPACT ON ISCHEMIA-REPERFUSION INJURY. D'Ascenzo F, Femminò S, Ravera F, Angelini F, Caccioppo A, Franchin L, Grosso A, Comità S, Cavallari C, Penna C, De Ferrari GM, Camussi G, Pagliaro P, **Brizzi MF. Pharmacol Res. 2021** doi: 10.1016/j.phrs.2021.105715.
 4. TARGETING IL-3R α ON TUMOR-DERIVED ENDOTHELIAL CELLS BLUNTS METASTATIC SPREAD OF TRIPLE-NEGATIVE BREAST CANCER VIA EXTRACELLULAR VESICLE REPROGRAMMING. Lopatina T, Grange C, Cavallari C, Navarro-Tableros V, Lombardo G, Rosso A, Cedrino M, Pomatto MAC, Koni M, Veneziano F, Castellano I, Camussi G, **Brizzi MF. Oncogenesis. 2020** doi: 10.1038/s41389-020-00274-y
 5. EXTRACELLULAR VESICLES FROM ADIPOSE STEM CELLS PREVENT MUSCLE DAMAGE AND INFLAMMATION IN A MOUSE MODEL OF HIND LIMB ISCHEMIA: ROLE OF NEUREGULIN-1. Figliolini F, Ranghino A, Grange C, Cedrino M, Tapparo M, Cavallari C, Rossi A, Togliatto G, Femminò S, Gugliuzza MV, Camussi G, **Brizzi MF. Arterioscler Thromb Vasc Biol. 2020** doi: 10.1161/ATVBAHA.119.313506
 6. THE INFLAMMATORY CYTOKINE IL-3 HAMPERS CARDIOPROTECTION MEDIATED BY ENDOTHELIAL CELL-DERIVED EXTRACELLULAR VESICLES POSSIBLY VIA THEIR PROTEIN CARGO. Penna C, Femminò S, Tapparo M, Lopatina T, Fladmark KE, Ravera F, Comità S, Alloatti G, Giusti I, Dolo V, Camussi G, Pagliaro P, **Brizzi MF. Cells. 2020** doi: 10.3390/cells10010013
 7. IL-3R-ALPHA BLOCKADE INHIBITS TUMOR ENDOTHELIAL CELL-DERIVED EXTRACELLULAR VESICLE (EV)-MEDIATED VESSEL FORMATION BY TARGETING THE B-CATENIN PATHWAY. Lombardo G, Gili M, Grange C, Cavallari C, Dentelli P, Togliatto G, Taverna D, Camussi G, **Brizzi MF. Oncogene. 2018** doi: 10.1038/s41388-017-0034-x
 8. PDGF-BB CARRIED BY ENDOTHELIAL CELL-DERIVED EXTRACELLULAR VESICLES REDUCES VASCULAR SMOOTH MUSCLE CELL APOPTOSIS IN DIABETES. Togliatto G, Dentelli P, Rosso A, Lombardo G, Gili M, Gallo S, Gai C, Solini A, Camussi G, **Brizzi MF. Diabetes. 2018** doi: 10.2337/db17-0371
 9. OBESITY REDUCES THE PRO-ANGIOGENIC POTENTIAL OF ADIPOSE TISSUE STEM CELL-DERIVED EXTRACELLULAR VESICLES (EVS) BY IMPAIRING MIR-126 CONTENT: IMPACT ON CLINICAL APPLICATIONS. Togliatto G, Dentelli P, Gili M, Gallo S, Deregibus C, Biglieri E, Iavello A, Santini E, Rossi C, Solini A, Camussi G, **Brizzi MF. Int J Obes (Lond). 2016** doi: 10.1038/ijo.2015.123

10. UNACYLATED GHRELIN INDUCES OXIDATIVE STRESS RESISTANCE IN A GLUCOSE INTOLERANCE AND PERIPHERAL ARTERY DISEASE MOUSE MODEL BY RESTORING ENDOTHELIAL CELL MIR-126 EXPRESSION. Togliatto G, Trombetta A, Dentelli P, Gallo S, Rosso A, Cotogni P, Granata R, Falcioni R, Delale T, Ghigo E, **Brizzi MF. Diabetes. 2015** doi: 10.2337/db14-0991.

Projects

- AIRC (Associazione Italiana per la Ricerca sul Cancro) 2016 (**PI** Maria Felice Brizzi).
- **CO-PI**: PTE Federal Award no: 4UH3TR000880-03 Feederal Awarding Agency NCATS/NIH: 2016
- STEM EV (**PI** Maria Felice Brizzi) 01/01/2018-31/12/2023 Agency: 3i3T Scarl, UNITO/Unicyte Pre-clinical development of stem cell- derived SC-EVs for treatment of chronic kidney injury and hind limb ischemia
- HLSC-ISLETS (**PI** Maria Felice Brizzi) 01/01/2018-31/12/2023
- Agency: 3i3T Scarl, UNITO/Unicyte Preclinical study HLSC-ILS-based treatment for Type 1 Diabetes
- PROGRAMMA OPERATIVO REGIONALE "INVESTIMENTI A FAVORE DELLA CRESCITA E DELL'OCCUPAZIONE" F.E.S.R. 2014/2020 (**PI** Maria Felice Brizzi) 31/07/2018-31/12/2022 Agency: Regione Piemonte EV-ER
- PNRR: Drugs based on RNA technology. SPOKE: Cellular-derived vesicles as delivery system for RNA-based drugs (Co-PI Maria Felice Brizzi).