Curriculum vitae

Paolo Bergese

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EDUCATION

2003 PhD in Materials Engineering, University of Brescia, Italy.
1999 MSc in Physics, University of Torino, Italy. Final grade 110/110.

CURRENT POSITIONS

2019 – today Full Professor of Chemistry, School of Medicine, Un. of Brescia, Italy.
2019 – today Associate Researcher, Consiglio Nazionale delle Ricerche (CNR), Institute for Research and Biomedical Innovation, Palermo Italy.
2011 – today Associate Researcher, Center for Colloids and Surface Science (CSGI), Florence, Italy.

PREVIOUS POSITIONS

2015 – 2019 Associate Professor of Chemistry, School of Medicine, Un. of Brescia, Italy.
2013 – 2015 Key researcher, Research Center Pharmaceutical Engineering GmbH, Gratz, Austria.
2010 – 2012 Visiting Professor, MIT - Massachusetts Institute of Technology, Cambridge, USA.
2005 – 2015 Associate Professor of Chemistry, School of Engineering, Un. of Brescia, Italy.

FELLOWSHIPS AND AWARDS

2003 – 2004 Postdoc, School of Engineering, Un. of Brescia, Italy.
2003 – 2004 Postdoc, National Institute for Nuclear Physiscs (INFN), Trieste, Italy.
2005 Award for the best PhD Thesis in nanotechnology, Informatica Delta S.p.A. in memory of Angelo Sandro Vezzoli, Botticino, Italy.
2002 Young scientist award. European Materials Research Society (E-MRS), Strasbourg, France.
2002 – 2003 Young researcher award and grant (2000 €) for the project *Microwave generation of pharmaceutical nanocomposites*, Università Cattolica del Sacro Cuore, Milano, Italy.
2002 – 2003 Young researcher award and grant (2000 €) .*Development of X-ray diffraction techniques for quantitative analysis of pharmaceutical nanocomposites*, Un. of Brescia, Italy.
1999 – 2002 PhD fellowship, thesis project: *Microwave induced nanocomposite to make insoluble drugs soluble – MIND*, Un. of Brescia, Italy.

SUPERVISION OF STUDENTS AND OF POSTDOCTORAL FELLOWS

Tutoring students and young researcher has been a constant since the beginning of his tenure track, driving them to open minded learning ability and the attitude to try to solve problems inventively and autonomously, but also promoting to be collaborative, well-educated and generous with colleagues and technical and and administrative staff. Tutor > 40 undergraduate thesis projects; Tutor > 15 PhD students (Un. of Brescia, Un. of Florence, ETH Zurich); Supervisor > 15 Postdoc fellows (Un. of Brescia, Un. of Florence, MIT).

TEACHING ACTIVITIES

DEGREE PROGRAMS

2004 – today Titular teacher – GENERAL CHEMISTRY, several BSc degree programs, School of Engineering and School of Medicine, University of Brescia.
2021 – today Titular teacher – PHARMACEUTICAL NANOTECHNOLOGY, degree program in Pharmacy, University of Brescia.
2019 – today Titular teacher – NANOCHEMISTRY, MSc degree program in Medical Biotechnology, University of Brescia.
2017 – today Coordinator – course ELEMENTS OF BIOLOGY AND BIOMEDICINE and titular teacher of the included course BIOLOGICAL SURFACES AND INTERFACES, BSc degree programs in Engineering, University of Brescia.
2004 – 2019 Titular teacher – BIONANOTECHNOLOGY, several MSc degrees programs School of Engineering and School of Medicine, University of Brescia.
2000 – 2010 Assistant teacher - GENERAL CHEMISTRY, PHYSISCAL CHEMISTRY, PHYSICS, several MSc degrees programs University of Brescia, Università Cattolica del Sacro Cuore.

OTHER (significative exsamples)

2017 Lecture, Fundamentals of surfaces and surface modifications, *International School of Physical Chemistry: Materials for Biomedical Applications*. Venice, organized by Un. of Florence.

2016 Lecture, SURFACE SCIENCE AND TRANSLATIONAL MEDICINE", International Winter PhD School *MOLECULES@SURFACES*. Villaggio Olimpico, Bardonecchia, organized by Un. of Torino

2006 Lecture cicle NANOSTRUCTURES FOR BIODIAGNOSTICS AND THERAPEUTICS, post graduate master *Design in micro and nanotechnology for bioartificial systems*, Politecnico di Torino.

ORGANISATION OF SCIENTIFIC MEETINGS

2023 Member of the Scientific Committee. *XXVII SCHOOL OF PURE AND APPLIED BIOPHYSICS: Extracellular vesicles: from biophysical to translational challenges*. Venice, Italy - February 6-10 2023. http://venice2023.ibf.cnr.it/

2021 Chair. ISEV Workshop *massivEVs - an ISEV workshop on massive production of EVs*, 28th-29th October 2021. Desenzano del Garda, Italy. (https://www.isev.org/index.php?option=com_jevents&task=icalrepeat.detail&evid=1&Itemid=115&year=2021&month=10&day=28&title=massiveevs-workshop&uid=25bd26489811d8898c243c5e1f64e2de)

2019 Chair. *First clustering event on extracellular vesicles*, November 6th 2019. Palermo, Italy. (https://digital-strategy.ec.europa.eu/en/library/first-clustering-event-extracellular-vesicles)

INSTITUTIONAL RESPONSIBILITIES

2019 – today Holder of the Chair of Chemistry, School of Medicine, Un. of Brescia.

2021 – today Member, Supervisor group for the departmental research, Un. of Brescia.

2019 – today Vice President of the MSc degree program in Medical Biotechnology, University of Brescia.

2018 – today Secretary General of the PhD school in *Precision Medicine*, University of Brescia

2005 – today President/member of examination boards for degree program dissertations, PhD defenses and public competitions for postdoc, tenure track and associate professor positions.

2009 – 2016 Board Member of PhD Schools at Un. of Brescia (*Technologies and systems for the mechanical industry, Materials Enginering, Technology for Health*).

REVIEWING ACTIVITES

2005 – today Reviewer for major international journals (e.g. Nature, ACS, RCS, Elsevier). External reviewer for several funding programs and other evaluation procedures (e.g. FIRB and VQR programs of the Italian Ministry of University and Research – MUR).

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

- Founding member. Italian Society of Extracellular Vesicles, evITA, https://evitasociety.it .
- Member. International Society of Extracellular Vesicles.
- Member. INSTM - National Inter-university Consortium of Materials Science and Technology.

(major ongoing) COLLABORATIONS

- Synergistic collaboration(s) with the partners projects he coordinates: *BOW* https://www.bowproject.eu and *evFOUNDRY* http://www.evfoundry.eu/ and the other ongoing projects (see the Appendix for details).
- *Kimberly Hamad-Schifferli*, University of Massachusetts Boston, https://blogs.umb.edu/kimhamad/.
- *Marco Monopoli*, RCSI, Ireland https://www.rcsi.com/people/profile/marcomonopoli.
- Several colleagues of the Un. of Brescia, e.g. *Nicola Latronico*, Director of the Un. Dep. of Medical and Surgical Specialties, Radiological Sciences and Public Health, Un. of Brescia and and of the Dep. of Anesthesia, Critical Care and Emergency, Spedali Civili Hospital of Brescia https://anestesia.unibs.it/.
- Dolores Di Vizio, Cedars-Sinai, LA https://www.cedars-sinai.edu/research/labs/di-vizio.html

OUTREACH AND THIRD MISSION

- Constantly committed in fostering scientific culture by pivoting on his academic role and research. On average 5 dissemination lectures/year for high schools and general public, e.g. at the *2020 Future Tech Week* http://www.fetfx.eu/?na=view&id=27 or at the initiatives of *Procida Capitale della Cultura 2022*.
- Teacher of the refresher course for first grade schoolteachers, program "*I Lincei per una nuova didattica nella scuola: una rete nazionale"*, polo Un. degli Studi di Brescia-Un. Cattolica del Sacro Cuore.
- Member (volunteer) of the Committee "Acqua Bene Comune", established by the Mayor of Brescia for monitoring the quality of the public drinking water and aqueduct of Brescia, which serves 350.000 users. https://www.comune.brescia.it/servizi/ambienteeverde/Ambiente/Pagine/Osservatorio-Acqua-Bene-Comune.aspx.

Appendix: All ongoing and submitted grants and funding of the PI (Funding ID)
<u>Mandatory information</u> (does not count towards page limits)

On-going Grants

[1]*Project Title*	*Funding source*	*Amount (Euros)*	*Period*	*Role of the PI*	*Relation to current ERC proposal*
BOW – Biogenic Organotropic Wetsuits	Horizon Europe Framework Programme (HORIZON): H2020-EU.1.2. - EXCELLENT SCIENCE - Future and Emerging Technologies (FET). Grant ID 952183	Total amount: 4.442.551,25 Amount for the Research Unit: 528.000,00	2020 – 2024	Project Coordinator and Research Unit PI	The main goal of the BOW project is to explore and consolidate the technology able to impart biological surface precision, circulation and targeting abilities of EVs to superparamagnetic nanodevices (Magnetic Bead Devices, MBDs) by "dressing" them with a single- or multi-layer "wetsuit" of EV membrane "fabric". The project is scientifically *complementary* to the ERC application, *without significant overlap.*
National Center for Gene Therapy and Drugs based on RNA Technology	Italian Ministry of University and Research – MUR, through the PNRR program.	Allocated amount to the Un. of Brescia (affiliate to the Center): 1.000.000,00 (about)	2022 – 2025	Coordinator of the Un. of Brescia	The Un. of Brescia will contribute to the Center with studies aimed at identifying therapeutic targets for the treatment of tumors and for the development of drugs based on nucleic acids, as well as nanovesicle systems capable of correctly delivering these drugs to cancer cells. EVs will be explored as a possible option. The project *would leverage* results from the ERC application. *No significant overlap.*
Development of a biotechnological nanoparticle platform for the delivery of antitumor therapies using Patient Derived-Organoid library of	Italian Ministry of University and Research – MUR, through the PRIN program. Grant ID: 2017E3A2NR_004	Total amount: 892.186,00 Amount for the Research Unit: 143.700,00	2019 – 2023	Collaborator	The project aims to screen different biogenic nanoparticles (H-Ferritin and vaults nanocages, DNA origami nanoparticles and EVs) as precision multi-drug carriers against triple negative breast cancer (TNBC). The nanoparticles are being tested on 2D cell lines and in a Patient-Derived Organoid (PDO) system.

[1] Describe clearly any scientific overlap between your ERC application and the current research grant or on-going grant application.

Breast Cancer.					Very likely, the project will be closed or about to be closed before the beginning of the ERC application. Anyhow, the application *could leverage* preliminary results from the ERC application. *No significant overlap* .
Hypermobile Ehlers-Danlos syndrome (hEDS) and Hypermobility spectrum disorders (HSD): destructuring the fibroblast secretome to define bioactive molecules and disease mechanisms, and in vivo translational studies.	Ehlers-Danlos Society, NY, USA	170.000,00	2021 – 2024	Collaborator	The project final goal is to dissect the secretome composition of hEDS and HSD myofibroblasts, by fractioning it into soluble macromolecular components (MCs) and EV populations, to uncover specific RNA species, secreted bioactive mediators, and associated disease pathways that may contribute to the hEDS and HSD pathomechanisms. The application *would take advantage* of analytical advancements from the ERC application. *No significant overlap.*

Grant applications

Project Title	*Funding source*	*Amount (Euros)*	*Period*	*Role of the PI*	*Relation to current ERC proposal*
MENAIDE – Membrane-enclosed nanoparticles and large interfaces: the multiscale quest for determinants	Italian Ministry of University and Research – MUR, through the PRIN program.	Total amount: 300.280,00 Amount for the Research Unit: 100.504,00	2023 – 2025	Research Unit PI	MENAIDE features the experimental investigation of the interaction of a panel of membrane-enclosed artificial, biogenic and hybrid nanoparticles with ad-hoc engineered surfaces. EVs are biogenic nanoparticles. The application is scientifically *complementary* to the ERC application, *without significant overlap.*
EXOTARGET – EXOsome-based gene therapy for TARGETed treatment of solid tumours.	Horizon Europe Framework Programme (HORIZON) Call: HORIZON-EIC-2022-PATHFINDER OPEN-01. (Proposal ID 101098737)	Total amount: 2.977.313,00 Amount for the Research Unit: 390.000,00	2023 – 2027	Research Unit PI	EXOTRGET aims at developing an exosome-based nanoplatform for targeted delivery of tumour suppressor miRNAs. It therefore deals with translation of exosomes as delivery system for small molecules in gene therapy. The application *would leverage* results from the

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					ERC application. *No significant overlap.*
Muscle tissue extracellular vesicles: novel biomarkers for sepsis related Intensive Care Unit Acquired Weakness (ICU-AW)	Italian Ministry of Health – through the program Ricerca Finalizzata	Total amount: 837.347,00 Amount for the Research Unit: 147.823,00	2023 - 2026	Research Unit PI	The project will investigate the possibility for EVs to be biomarkers of muscles damage in sepsis. Biochemical and biophysical properties, metabolites and lipid content of EVs from patient blood and muscle biopsies will be systematically analyzed. The application *would take advantage* of analytical advancements from the ERC application. *No significant overlap.*
EXACT – EXtracellular vesicles-based platform for Adjustable bi-modal Cancer Therapy	Merck KGaA, Darmstadt, Germany, through the program Research. Grants & Challenges	To be defined in the second application step. (100.000,00 – 500.000,00 EUR/ year)	2023 – 2026	Collaborator	The main goal of the EXACT project is to set up a biocompatible, flexible and adjustable EV-based nanoplatform for performing chemotherapy and immunotherapy simultaneously and with high precision. The application *would leverage* results from the ERC application. *No significant overlap.*
US-Italy Collaboration for Interdisciplinary Student Research on Extracellular Vesicles	National Sanitation Foundation - NSF, USA. Program OISE - IRES Track I: IRES Sites (IS) proposal number 2246129	$ 99.002,00	2023 – 2026	PI for the Italian lab. site.	The goal of the project is to engage/train cohorts of 5 UMass Boston (UMB) undergraduate students in cutting- edge bioengineering research (namely, on EVs) with a leading Italian (our) lab. Student participants will prepare in a 4.5-month pre-departure course at UMB, conduct research for 7 weeks in Italy during the summer, and bring closure to their international research experience through post-visit activities at UMB. Over the 3-year project term, 15 UMB undergraduate students will participate in the program. *The students will train on experimental techniques for EV separation and analysis established in UMB and our labs. No significant overlap.*

Ten-year achievements track-record

I grew up as a scientist at the bio-nano frontier, where I realized colloid and surface chemistry can raise and answer original biological questions. Totally fascinated by biogenic (extracellular) nanoparticles, I funded in 2015 the bioCSI – biogenic colloid surfaces and interfaces lab. – at the Dep. of Molecular and Translational Medicine of Un. of Brescia, a multidisciplinary team featuring one of the first stories of integration of chemistry, nanotechnology and molecular biology in extracellular vesicle research, now evolving to other extracellular nanoparticles. In the last 5 years I also established within the Center for Colloids and Surface Science (CSGI, https://www.csgi.unifi.it/), with Debora Berti (Un. of Florence), Francesco Valle (CNR, Bologna) and Marina Cretich (CNR, Milano) a lab network with the critical know how and facilities for advanced physicochemical characterization of EVs, concretized in the coordination of two European projects (*BOW* https://www.bowproject.eu and *evFOUNDRY* http://www.evfoundry.eu/)

PUBLICATIONS

84 publications in peer-review journals (cit. 7420, H index 29, Google Scholar); 7 book chapters.

TEN-YEAR SELECTION (corresponding or senior author for all)

1. A. Zendrini, G. Guerra, K. Sagini, T. Vagner, D. Di Vizio, P. Bergese. *On the surface-to-bulk partition of proteins in extracellular vesicles*. Coll. Surf. B (218) 112728 (2022) doi:10.1016/j.colsurfb.2022.112728.
2 L. Caselli, A. Ridolfi, J. Cardellini, L. Sharpnack, L. Paolini, M. Brucale, F. Valle, C. Montis, P. Bergese and D. Berti: *A plasmon-based nanoruler to probe the mechanical properties of synthetic and biogenic nanosized lipid vesicles.* Nanoscale Horizons, 6(7), 543-550 (2021) doi:10.1039/d1nh00012h
3. A. Ridolfi, M. Brucale, C. Montis, L. Caselli, L. Paolini, A. Borup, A. Boysen, F. Loria, M. van Herwijnen, M. Kleinjan, P. Nejsum, N. Zarovni, M. Wauben, D. Berti, P. Bergese and F. Valle: *AFM-Based High-Throughput Nanomechanical Screening of Single Extracellular Vesicles*. Analytical Chemistry, 92(15), 10274-10282 (2020) doi:10.1021/acs.analchem.9b05716
4. S. Busatto, A. Zendrini, A. Radeghieri, L. Paolini, M. Romano, M. Presta and P. Bergese: *The nanostructured secretome.* Biomaterials Science, 8(1), 39-63 (2020) doi:10.1039/c9bm01007f
5. L. Paolini, S. Federici, G. Consoli, D. Arceri, A. Radeghieri, I. Alessandri and P. Bergese: *Fourier-transform Infrared (FT-IR) spectroscopy fingerprints subpopulations of extracellular vesicles of different sizes and cellular origin*. J. Extracellular Vesicles, 9(1) (2020) doi: 10.1080/20013078.2020.1741174.
6. C. Montis, L. Caselli, F. Valle, A. Zendrini, F. Carla, R. Schweins, M. Maccarini, P. Bergese and D. Berti: *Shedding light on membrane-templated clustering of gold nanoparticles*. Journal of Colloid and Interface Science, 573, 204-214 (2020) doi:10.1016/j.jcis.2020.03.123
7. S. Busatto, A. Giacomini, C. Montis, R. Ronca and P. Bergese: *Uptake Profiles of Human Serum Exosomes by Murine and Human Tumor Cells through Combined Use of Colloidal Nanoplasmonics and Flow Cytofluorimetric Analysis*. Anal. Chem., 90, 7855-7861 (2018) doi:10.1021/acs.analchem.7b04374.
8. C. Montis, S. Busatto, F. Valle, A. Zendrini, A. Salvatore, Y. Gerelli, D. Berti and P. Bergese: *Biogenic Supported Lipid Bilayers from Nanosized Extracellular Vesicles. Advanced Biosystems*, 2(4) (2018) doi:10.1002/adbi.201700200
9. G. Di Noto, A. Bugatti, A. Zendrini, E. Mazzoldi, A. Montanelli, L. Caimi, M. Rusnati, D. Ricotta and P. Bergese: *Merging colloidal nanoplasmonics and surface plasmon resonance spectroscopy for enhanced profiling of multiple myeloma-derived exosomes*. Biosensors & Bioelectronics, 77, 518-524 (2016) doi:10.1016/j.bios.2015.09.061
10. L. Paolini, A. Zendrini, G. Di Noto, S. Busatto, E. Lottini, A. Radeghieri, A. Dossi, A. Caneschi, D. Ricotta and P. Bergese: *Residual matrix from different separation techniques impacts exosome biological activity*. Scientific Reports, 6 (2016) doi:10.1038/srep23550
11. D. Maiolo, L. Paolini, G. Di Noto, A. Zendrini, D. Berti, P. Bergese and D. Ricotta: *Colorimetric Nanoplasmonic Assay To Determine Purity and Titrate Extracellular Vesicles*. Analytical Chemistry, 87(8), 4168-4176 (2015) doi:10.1021/ac504861d
12. C. Montis, D. Maiolo, I. Alessandri, P. Bergese and D. Berti: *Interaction of nanoparticles with lipid membranes: a multiscale perspective*. Nanoscale, 6(12), 6452-6457 (2014) doi:10.1039/c4nr00838c
13. D. Maiolo, S. Mitola, D. Leali, G. Oliviero, C. Ravelli, A. Bugatti, L. Depero, M. Presta and P. Bergese: *Role of Nanomechanics in Canonical and Noncanonical Pro-angiogenic Ligand/VEGF Receptor-2 Activation*. Journal of the American Chemical Society, 134(35), 14573-14579 (2012) doi:10.1021/ja305816p
14. S. Federici, G. Oliviero, D. Maiolo, L. Depero, I. Colombo and P. Bergese: *On the thermodynamics of biomolecule surface transformations*. J. Coll. Int. Sci., 375, 1-11 (2012) doi:10.1016/j.jcis.2012.02.013

EDITORIAL ACTIVITIES

- Editor of the Special Issue "Biogenic, Hybrid and Synthetic Vesicles" of Biochimica et Biophysica Acta General Subjects, https://doi.org/10.1016/j.bbagen.2020.129779.

- Editor of "Nanomaterial Interfaces in Biology. Methods and Protocols" (2013), part of the series "Methods in Molecular Biology", Humana Press-Springer. (77k Accesses, 247 Citations, https://link.springer.com/book/10.1007/978-1-62703-462-3).

SELECTED INVITED PRESENTATIONS (of > 20)

- *Colorimetric nanoplasmonics, the Swiss knife for extracellular vesicles*, 11th International Colloids Conference, Lisbon, 12-15 June 2022
- *Physical chemistry for EV diagnostics*. EVIta workshop. Telematic. 25 Settembre 2020
- *evFOUNDRY - The Extracellular Vesicle Foundry*, Horizon2020 FET Seminar Series.10 October 2019, Brussels (Belgium), REA, COV 2 - 18 SDRA.
- *Nanotechnology of cell communication*. Science through Scanning Probe Microscopy 2019 – Extended Version (StSPM19-EV), Bologna, 21-22 Novembre 2019.

RESEARCH GRANTS

In the last 10 years PB has coordinated research projects for a total budget **> 8 M€** and participated to other research projects for a total budget **> 3.2 M€**. Altogether, these activities have brough **> 3 M€ of extramural funding** to his Institutions.

Ongoing: 4 ongoing research grants, please refer to the Appendix for details.

Closed

2018 – 2022	Project Coordinator and Research Unit PI. *The extracellular vesicle foundry — evFOUNDRY* (Horizon 2020-FETOPEN-2016-2017, Grant number 801367, http://www.evfoundry.eu). Total amount € 2.727.000,00; Research Unit amount € 639.375,00.
2016 – 2018	Research Unit PI. *BIOMANE (BIOmarcatori per MAlattie NEurodegenerative): identification of new biomarkers for neurodegenerative diseases associated with aging: a multidisciplinary approach.* Università degli Studi di Brescia, Progetti Health & Wealth di Ateneo 2015. Total amount € 351.600,00.
2016 – 2018	Research Unit PI. *Application of nanomechanical and plasmonic biosensors to improve detection of Bacillus cereus toxins*. Ricerca Corrente 2015. Total amount € 200.000,00.
2013 – 2016	Research Unit PI. *Nanostructured Soft Matter: from Fundamental Research to Novel Applications* (Italian Ministry of University and Research, PRIN 2010-2011, Grant No. 2010BJ23MN_005). Total amount € 850.000,00; Research Unit amount € 100.000,00.
2013 - 2015	Project Coordinator and Research Unit PI. Supramolecular-Nanoparticle Systems for Specific Multiple Labeling of Protein Surfaces - SUPRANANO (INSTM-Regione Lombardia: nuovo bando per progetti innovativi e formazione). Total amount € 70.000,00; Research Unit amount € 35.000,00.
2012 – 2013	PI. *Bringing Bionanomachines to the Real World* (CARIPLO Foundation and Massachusetts Institute of Technology). Total amount € 25.500.
2010-2012	Project Coordinator and Research Unit PI. *Nanomechanical Sensors for Amphetamines - SNAF* (INSTM-Regione Lombardia: bando per progetti innovativi e formazione). Total amount € 100.000,00; Research Unit amount € 50.000,00.
2010 – 2012	Collaborator. *Phononic crystals and near field spectroscopy applied to femtosecond time-resolved optical experiments for studying the dynamics of the biomolecular interactions among angiogenic factors*.(Italian Ministry of University and Research, PRIN, grant No. 2008JWKYXB_002). Total amount € 570.000,00; Research Unit amount € 151.000,00.
2012	PI. *Nanomechanics of the nanoparticle-protein corona*. Short visit grant, in the framework of the Research Networking Programme *EpitopeMap* by ESF. € 1.095,00.

FELLOWSHIPS AND AWARDS

Please, refer to the CV.

MAJOR CONTRIBUTIONS TO THE EARLY CAREERS OF EXCELLENT RESEARCHERS

Majority of my undergraduate/PhD alumni have found a PhD/postdoc position at prestigious national and international institutions. Worth of note, *Stefania Federici* and *Lucia Paolini*, now Assistant Professors of Chemistry and Clinical Biochemistry, respectively, at Un. of Brescia, and *Sara Busatto*, now Research Fellow at Boston Children's Hospital, Harvard Medical School
https://connects.catalyst.harvard.edu/Profiles/display/Person/190199

Brescia 04/10/2022

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