

**EUROPEAN
CURRICULUM VITAE
FORMAT**

PERSONAL INFORMATION

Name **MARIANO BIZZARRI**
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website: www.sbglab.org

Nationality ITALY
Date of birth

WORK EXPERIENCE

- Dates (from – to) 2023 – Currently: **Enabled full professor of Clinical Pathology, University La Sapienza, Rome, Italy**
2021 – Associate Professor of Clinical Pathology, University La Sapienza, Rome, Italy
2013 - 2014 Advisor of the Life Science Board of the European Space Agency (ESA)
2012 – Today. Professor in the PhD course “Morphogenesis and Tissue Engineering” – University Sapienza, Rome.
2012 - 2016 Head of the ESA Telemedicine Program KOSMOMED
2001 - 2012 Professor of Chemistry – Radiology course, University La Sapienza
2011 - 2014 Advisor of the Technological Unit of Italian Space Agency
2011 - 2014 President of the Scientific Committee of the Italian Space Agency
2010 – 2012 today Professor in the PhD course on Biophysics
2010 - today Head of the Systems Biology Group
2005 - 2014 appointed as member of the Scientific Committee of the Italian Space Agency
2003-2009 Professor of Clinical Pathology , post-graduated course in Oncology, University La Sapienza
1997-2000 Lecturer on Biochemistry, University La Sapienza
1981-1999 Fellow in Biochemistry
- Name and address of employer University Sapienza, via A. Scarpa 16, 00160, Rome, Italy
 - Type of business or sector Department of Experimental Medicine
 - Occupation or position held Aggregate Professor – qualified as Full professor in Clinical and general pathology (December 2017)
- Main activities and responsibilities Head of the Systems Biology Group, Experimental Research, Scientific Planning and Policy,

Teaching in Clinical Pathology (Medicine Faculty)
Teaching in Biophysics, PhD course in "Morphogenesis and Tissue Engineering"

EDUCATION AND TRAINING

- Dates (from – to)
 - 1975 Baccalaureate in Paris
 - 1975-1981 Bachelor's degree in Medicine and Surgery, University La Sapienza, Rome.
 - 1982 Master in Liquid Chromatography
 - 1996-2000 PhD in Experimental Surgery
- Name and type of organization providing education and training
 - University Sapienza, Rome, Italy
- Principal subjects/occupational skills covered
 - Analytical Chemistry and Liquid Chromatography
 - Biochemistry and Molecular Biology
 - Non equilibrium Thermodynamics and Metabolomics
 - Systems Biology
 - Experimental Oncology
 - Embryo and oocyte cultures, in 2D and 3D
 - Pharmacology of natural compounds (Melatonin, Grape Seed Extracts, Inositol)
 - Telemedicine
 - Space Biomedicine
- Title of qualification awarded
 - Head of the main Italian System Biology Group (Sapienza University, www.sbqlab.org)
 - In 1986, he won the national award "Corrado Montemaggiori" for Cancer Research.
 - In 2002 he won the "Rome Award" for cancer Research
- Level in national classification (if appropriate)
 - Opinion leader in Melatonin studies
 - Opinion leader in Inositol studies
 - Opinion leader in Space Biomedicine studies

PERSONAL SKILLS AND COMPETENCES

*Acquired in the course of life and career
but not necessarily covered by formal
certificates and diplomas.*

MOTHER TONGUE

ITALIAN

OTHER LANGUAGES

- Reading skills
 - FRENCH**
excellent
- Writing skills
 - excellent
- Verbal skills
 - excellent

- Reading skills
 - ENGLISH**
excellent
- Writing skills
 - good
- Verbal skills
 - good

- Reading skills
 - SPANISH AND ARABIC**
excellent
- Writing skills
 - good
- Verbal skills
 - good

SOCIAL SKILLS

AND COMPETENCES

Living and working with other people, in multicultural environments, in positions where communication is important and situations where teamwork is essential (for example culture and sports), etc.

Great susceptibility to interpersonal relationships and innate ability to establish and maintain effective working relationships in a multi-cultural and multi-ethnic milieu

ORGANIZATIONAL SKILLS

AND COMPETENCES

Coordination and administration of people, projects and budgets; at work, in voluntary work (for example culture and sports) and at home, etc.

Structured approach to problem-solving capacity accompanied by synthesis and assignment of tasks with particular emphasis on the achievement of objectives.

Strong leadership skills in competitive workplaces achieved thanks to long stay abroad (France, Russia, Arabic countries, Cuba).

Staff motivation skill by means of "Pro-active" and "Goal Oriented" approach.

TECHNICAL SKILLS

AND COMPETENCES

With computers, specific kinds of equipment, machinery, etc.

- Laboratory expertise (ELISA, PCR, Western-blot, cell culture, spectrophotometer)
- Analytical chemistry instrumentation (HPLC, mass spectrometry); expertise in the creation of innovative protocols and analytical methods (dosage of melatonin, sialic acids, drugs, and tryptophan metabolism).
- Expert in the use of laboratory animals for experimental studies in vivo.
- Expertise in simulated microgravity techniques (with Random Positioning Machine).
- Expertise in statistical analysis (principal component analysis) and complex pathways (apoptosis, metabolomics, cell proliferation) studies.
- Expertise in software advanced programs (office, Corel draw, design tablet, Mat-lab).
- He has developed model and programs of fractal analysis.

ARTISTIC SKILLS

AND COMPETENCES

Music, writing, design, etc.

- winner of three international competitions in painting
- achieved a diction course for tenor voice (Maestro: Cesare Rufini)

OTHER SKILLS

AND COMPETENCES

Competences not mentioned above.

PATENTS

- Patent for the extraction of pharmacological principles from cultured embryonic Zebrafish (2003)
- Patent for inducing the reversion of cancer phenotype in culture through oocyte extracts (2010)
- Patent 102021000030629 (2021) for establishing a miRNA-based treatment against cancer
- Patent 102021000029462 for extracting antibiotics from cultures of microorganisms growing in microgravity (2022)
- Director of the journal Space Magazine (since 2009) and Chairman of its Scientific Committee.
- It has been referee for the project on Melatonin's Founding Research and Policy Division (Health Research Board Ireland) (June 2004).
- Over the past two years, he has served as referee, among others, for the following journals: PlosOne, J Med Food, J Spectroscopy, BBL, Acta Oncol, Food Chem, Cell Mol Life Sci, Recent Patents on Anti-Cancer Drug Disc, Ann Oncol, BioSystems, MBC, Apoptosis, JNCI, J Mol Life Sci, Frontiers Physiol, Comp Struct Biotech, Nature microgravity, and BMC.
- He has held courses of Molecular Biology of Cancer in Crimea (Simferopol University), Systems Biology in Tomsk (Siberia) and Saudi Arabia (King Saud University).
- Editor in chief of *ORGANISMS journal of Biological Sciences*
- Assistant Editor in *Cancer Cell International* (2014); and of *Cells* (2019).
- He is member of the editorial board of the following journals: Biophysics and Bioengineering Letters, the International Journal of Safety and Security Engineering, the Journal of Aerospace Medicine (since 2012), International Journal of Chronic Diseases, World Research Journal of Biochemistry (2013), Current Synthetic and Systems Biology, Oncobiology and Targets (2014).

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ADDITIONAL INFORMATION

- From October 1982 to July 1984, he held the position of Coordinator of the Institute of Medical and Scientific Research.
- He helped establish the Foundation "Carlo Ferri" for the Study and Treatment of Cancer. For the first two years, he held the position of Secretary of the Scientific Committee (1986-1989).
- He was appointed a member of the Superior Council of Scientific and Technical Ministry for Food, Agriculture and Forestry (MIPAF) (2001-2006).
- He was appointed as member of the Committee for the study of Electromagnetic Fields, chaired by the Province of Rome (2001-2003).
- He was appointed member of the Board of Directors of La Sapienza University for the 2001-2003 period.
- He is a founding member of the Genetic Rights Council (2002).
- He was appointed as member of the committee study sponsored by UNESCO on "Genetics and Cancer" (Belgrade, 4-5 November 2004 - consensus conference).
- He is a founding member of the Italian Association of Metabolomics ASSIMET (since 2004).
- He was appointed Chairman of the Scientific Committee of the Telemedicine Project TELESAL sponsored by ASI (2006-2010), who helped manage for a total funding of 20 M €.
- He was selected by the Ministry of Agriculture and Forestry for the development of the research project MIPAF and funded by the Ministry itself for about 200,000 Euro.
- Founder and member of the Board of the Italian Society for Space Biomedicine and Biotechnology (ISSBB) (2006 - present), where he was also appointed General Secretary (2006-2011).
- He has promoted, in 2008, the start-up of the three macro-projects in Space Biomedicine (MOMA, OSMA, and DCMC) for a total of 100 M € (of which EUR 50 million funded by ASI).
- Chairman of the ASI National Committee for the evaluation of Technological Innovation Projects (2007-2008)
- He is a member of the Scientific Board of the Centre for Aerospace Research, University La Sapienza (CRAS), since 2009.
- Chairman of the Committee for the evaluation of research programs related to the Human Spaceflight promoted by ESA (2009 and 2012)
- Scientific advisor of the international project KOSMOMED (Technological Applications for Telemedicine, 2010-today), which is financed with 3 M €.
- Principal investigator the space program LIGRA (Life in Gravity), for a total fund of 600,000 Euro.
- Principal investigator the space program COSYSBY, for a total fund of 300,000 Euro
- Principal investigator the space program CYTOSPACE, right now carried out on board of the International Space Station, for a total fund of 200,000 Euro
- Member of SIPMEL (Società Italiana di Patologia Clinica e Medicina di Laboratorio) since 2016.
- Appointed as Secretary/Treasurer of WASPaLM (World Association of Societies of Pathology and Laboratory Medicine) – 2018
- Appointed as responsible for PE15 Spoke 9 (Space Biomedicine) of the PNRR program on Space Research
- Appointed as member of the Committee for the nomination of the President of the Italian Space Agency
- Appointed as member of the Polish Academy of Sciences "Nicolaus Copernicus" (February, 2023).

PUBLICATIONS

N. of peer-reviewed articles: 194
Citations: 6682 H-index 49

SPACE CV

Currently: appointed as advisor of the Scientific Committee of the Italian Council of Ministers; member of the PNRR program on Space (PE15E, Spoke9). Involved in Biomedicine & Habitat Research activities for Space Exploration.

He is a member of the Board of the Aerospace Research Center of the La Sapienza University (CRAS) since 2009 (2009-today).
Head of the Space Biomedicine Master (La Sapienza University)
Appointments and offices. He was a member of the Scientific Technical Council of the Italian Space Agency (ASI) from 2005 to 2014, also holding the role of Chairman of the Committee (2011-2014).
He is the founder and member of the Board of the Italian Society for Space Biomedicine and Biotechnology (ISSBB) (2006 - today), of which he was also Secretary General (2006-2011).
Coordinator of ASI technology programs (2009-2010)
Member of the commission for space technology programs (2010-2014)
Member of the ESA board for the Human Space Flight Program (2012-2014)
Chairman of the commission for the evaluation of research programs relating to Human Space Flight promoted by ESA (2009 and 2012).
Scientific coordinator of the international ESA-Kosmomed project (2010-2017), Technological Applications for Telemedicine.
Mariano Bizzarri has been the Editor in Chief of Space Magazine (2008-2014). He has authored almost 40 peer-reviewed scientific articles on the specific field.

Rome January, 2024

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