FEDERICO BOSCHI, born in Trento (TN), Italy, on June 3, 1969.

Education and training

2000: degree in Physics (Astrophysics) at University of Milan (110/110).

2001-2004 Fellowship of Astronomical Observatory of Padua; research at Astrophysical Observatory of Asiago (VI).

2005-2007: Ph.D. degree in Fisiopatologia Metabolica Congenita at University of Verona. Thesis: Tecniche di Optical Imaging per lo studio del Metabolismo". Tutor: Prof. Andrea Sbarbati.

Employment and research experience

Post-doc fellowship:

2008-2009: Research on "Applicazioni di Imaging Ottico per la valutazione del passaggio di particelle attraverso barriere biologiche con particolare riferimento alla barriera ematoencefalica" Tutor: Prof. Andrea Sbarbati at Department of Morphological-Biomedical Science, University of Verona.

2010-11: Research on "Tecniche di Optical Imaging per lo studio della biodistribuzione di nanoparticelle luminescenti". Tutor: Prof. Andrea Sbarbati at Department of Morphological-Biomedical Science, University of Verona.

2011-13: Research on "Applicazioni di Imaging ottico per lo studio di patologie oncologiche". Tutor: Prof. Andrea Sbarbati at Department of Neurological, Neuropsychological, Morphological and Motor Sciences, University of Verona.

2013-2019 Assistant Professor in Applied Physics

2013 National Academic Qualification as Associate Professor in Applied Physics.

2019 - today Associate Professor in Applied Physics, PHYS-06A.

2021 National Academic Qualification as Full Professor in Applied Physics.

Teaching activity:

2009: Professor, Master's FSE (European Social Fund) project "Elaborazione informatica di dati biomedici, microrobot e nanotecnologie in medicina", Faculty of Medicine, University of Verona.

2009: Professor, Master's project "Sustainable Regional Health Systems" organized by Dipartimento di Sanità Pubblica, Sezione di Igiene, University of Verona, in collaboration with University of Vilnius, Deusto and Budapest.

2010-2013: Professor, Electronic Bioengineering, University of Verona.

2011-2013 Professor, Physics/Mathematics, University of Verona.

2013-2026: Professor, Fundamentals of Applied Physics, University of Verona

Main Projects

Principal Investigator of the Joint Research 2024-5 project , SMART – Simulation of Magnetic nanoparticles for Advanced Research in Thermal applications in collaboration with Fondazione di Ricerca Nanoteranostica per la cura del Cancro RNC.

Involved in the project titled Development of optical methods for preclinical imaging using radiotracers (Project Code:GR-2010-2309585) of RICERCA FINALIZZATA Bando Progetti di Ricerca Giovani Ricercatori, PI: dott. Antonello Spinelli.

Involved in "Development of a CF, IL-8/NF-KB transgenic mouse model for the in vivo long-term monitoring of the inflammatory response induced by bacteria treated or not with azithromycin" (prog. FFC#18/2013). PI: prof. Fernandez Maria Del Mar Lleò, founded by Fondazione Italiana per la Ricerca sulla Fibrosi Cistica.

Principal Investigator of the project FFC#21/2017 “Testing the anti-inflammatory effects of matrix metalloprotease inhibitors in P. aeruginosa-infected CFTR-knockout mice by in vivo imaging techniques” for one year, funded for 45 thousand euros by Fondazione Ricerca Fibrosi Cistica – Onlus, Italian cystic fibrosis research foundation.

Involved in the project " Investigating Achromobacter xylosoxidans pathogenicity and clinical role in CF lung infection" (prog. FFC#18/2019). Principal Investigator: prof.ssa Fernandez Maria Del Mar Lleò; 2 years, founded for 80 thousand euros by Fondazione Italiana per la Ricerca sulla Fibrosi Cistica.

Involved in the project“The ciliary neurotrophic factor: a possible novel regulator of body weight and energy balance in mammals” for 3 years, funded for 400 thousand euros by the Fondazione CARIVERONA, Principal Investigator Prof. Antonio Giordano.

Patent

J.M. Dominguez Vera, N. Galvez Rodriguez, B. Fernandez Lopez, E. Valero Romero, F. Boschi, L. Calderan, P. Marzola, J.J. Calvino Gamez, A.B. Hungria Hernandez, R. Cuesta Martos, Nanoestructuras multifunctionales como agentes de diagnosis trimodal MRI-OI-SPECT, P200931146, OEPM Madrid

Awards

“The Galileo Galilei Award 2015 is awarded to Antonello E. Spinelli and Federico Boschi for their paper: Novel biomedical applications of Cerenkov radiation and radioluminescence imaging (Volume 31, Issue 2, Pages 120–129). The Editorial team selected this paper as the best publication in EJMP in 2015. This paper highlights how basic physics science and ingenious investigation may lead medical physics research to produce new functional imaging procedures using unconventional contrast source mechanisms, of potential interest for medical diagnosis”.

Publications

F. B. signed more than 150 publications in refereed journals.

Verona, 17th March 2026