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RESEARCH SUMMARY

My research interest is on membrane proteins of medical relevance with a focus on structure/ function studies. In particular, I contributed to develop a method to improve the crystallisability of G protein-coupled receptors (GPCRs). Current work is focused on NADPH oxidases (NOXs) and the transporter FLVCR1 with the aim to unveil molecular mechanisms of their activity and enable drug development.

CURRENT POSITION

Since February 2022: Senior assistant professor (RTDB, 05/E2, SSD BIO/11) at the Dept. of Biology and Biotechnology, University of Pavia (Italy).

PREVIOUS POSITIONS

- -Jan 2017-Jan 2022: Assistant professor (RTDA, BIO/11) at the Dept. of Biology and Biotechnology, University of Pavia (Italy).
- -May 2014-Jan 2017: Research fellow at the Dept. of Biology and Biotechnology, University of Pavia (Italy) in Andrea Mattevi's lab.
- -Jan 2012- Oct 2013: Scientist at Confometrx, Inc (Santa Clara, California USA).
- -March 2009-Dec 2011: Postdoctoral fellow at the Dept. of Molecular Biology, University of Aarhus (Denmark). Supervisor: Gregers Rom Andersen.
- -Apr 2005-March 2009: Postdoctoral Career and Development Fellowship at the Laboratory of Molecular Biology-MRC (Cambridge, UK). Supervisors: Chris Tate and Richard Henderson.
- -July 2004-March 2009: Research assistant at the Conway Institute, University College Dublin. Supervisor: Jana Haase.

EDUCATION

- -July 2004: PhD in Biochemistry at the Trinity College Dublin (Ireland).
- -July 1999: Degree in Molecular biology at the University of Bologna (Italy), score: 110/110.

PUBLICATIONS

See my Google scholar account.

PATENTS

-Mutant G-protein coupled receptors and methods for selecting them (WO EP US CN JP AT AU CA DK ES GB HR PL PT AU2008228085B2)

Inventors: Richard Henderson, Francesca Magnani, Maria Josefa Serrano-Vega, Yoko Shibata, Christopher Gordon Tate, Antony Johannes Warne, Malcolm Peter Weir.

Priority 2007-03-22 • Filed 2008-03-20 • Granted 2011-12-08 • Published 2011-12-08

-Mutant adenosine receptors with improved stability (WO EP US CN JP AT AU CA DK ES GB HR PL PT GB2456237A)

Inventors: Antony Johannes Warne, Christopher Gordon Tate, Francesca Magnani, Malcolm Peter Weir, Maria Josefa Serrano-Vega, Richard Henderson, Yoko Shibata.

Priority 2007-03-22 • Filed 2008-03-20 • Granted 2009-10-28 • Published 2009-07-15

-Mutant neurotensin receptors with improved stability (GB GB2456904A)

Inventors: Antony Johannes Warne, Christopher Gordon Tate, Francesca Magnani, Malcolm Peter Weir, Maria Josefa Serrano-Vega, Richard Henderson, Yoko Shibata.

Priority 2007-03-22 • Filed 2008-03-20 • Granted 2009-10-28 • Published 2009-08-05

-Methods for screening for binding partners of G-protein coupled receptors (WO EP US JP AU CA GB US10126313B2)

Malcolm Peter Weir, Richard Henderson, Christopher Gordon Tate, Francesca Magnani, Maria Josefa Serrano-Vega, Yoko Shibata, Antony Johannes Warne.

Priority 2007-12-20 • Filed 2016-01-06 • Granted 2018-11-13 • Published 2018-11-13

-Selective ligands for the angiotensin ii receptors (WO EP US CN JP AU CA WO2013091883A3)

Inventors: Andreas Tzakos, Francesca Magnani

Priority 2011-12-23 • Filed 2012-12-21 • Published 2013-10-24

-Mutated form of NADPH oxidases (WO WO2018014939A1)

Inventors: Mattevi Andrea, Nenci Simone, Magnani Francesca Priority 2016-07-19 • Filed 2016-07-19 • Published 2018-01-25

TEACHING ACTIVITIES

- -Since 2022: Basic Molecular Biology course (48 hours) for the Molecular Digital Biology master degree
- -2021-2022: Molecular Pharmacology (8 hours) for the Molecular Biology and Genetics master degree
- -Since 2017: Molecular Biology II (16 hours) for the bachelor degree in Biology