

MARCELLA CANTON

CURRENT POSITION

01/04/2022 - present: Associate Professor of Biochemistry (BIOS-07/A), University of Padova, Dept of Biomedical Sciences, Padova, Italy.

01/01/2017 – present: PI at the Institute of Pediatric Research “Città della Speranza” leading the “Monoamine oxidases in innate immunity” lab.

PREVIOUS POSITIONS

01/01/2006-31/03/2021: Tenure-track Assistant Professor of Biochemistry (05/E1 – BIO/10), University of Padova, Dept. of Biomedical Sciences, Padova, Italy.

Other Experience

1989: C.E.E Erasmus Project fellowship at the Dept. of Organic Chemistry, University of Newcastle upon Tyne (UK);

1991/1995: PhD Training in Molecular and Cellular Biology and Pathology, University of Padova (tutor: Prof. Azzone) on the mechanisms of energy conversion in mitochondria and their alterations due to anaesthetics or hyperthyroidism;

1996/1997: research activity in the Laboratory of Biochemical Microbiology at GlaxoWellcome-Verona; 1997/2003: Post-doc fellowships, Dept of Biological Chemistry, University of Padova (supervisor: Prof Di Lisa). Study of the relationships between mitochondrial dysfunction and cell death;

1999: Dr. J. Van Eyk post-doctoral fellowship, Dept. of Physiology, Queen’s University, Kingston, Canada. Collaborative study on the identification of the oxidative modifications of the myofibrillar proteins;

2003/2005: post-doctoral fellowship FIRB-MIUR project n. RBAU0138CH, Dept. of Biological Chemistry, University of Padova (supervisor: Prof Di Lisa). Research interest: oxidative modifications of myofibrillar proteins in ischemic myocardium and muscular dystrophy along with the mitochondrial sources of ROS.

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

8 postdoctoral fellows, 7 PhD students and 105 master students at the Dept of Biological Chemistry, and at the Dept. of Biomedical Sciences, University of Padova, Italy.

TEACHING ACTIVITIES

1999-present: Biochemistry MD Program for graduation, Faculty of Pharmacy, University of Padova

2004-present: Laboratory of Molecular Biology MD Program for graduation, Faculty of Pharmacy, University of Padova

2008-15: Clinical biochemistry, Program for graduation, Faculty of Pharmacy, University of Padova

INSTITUTIONAL RESPONSIBILITIES

2006-2011: Member of the Dept. of Biological Chemistry, University of Padova, Italy.

2012-present: Member of the Dept. of Biomedical Sciences, University of Padova, Italy.

2012-present: Faculty Member of the PhD Program in Biomedical Sciences, Dept. of Biomedical Sciences, University of Padova, Italy (previously member of the PhD Program in biosciences and biotechnology, University of Padova, Italy).

RESEARCH SUPPORT (last 6 years).

2017-19: PI of a research grant IRP-PENTA entitled “Novel approaches to diagnosis and therapy of sepsis” 200.000 €.

2017-24: PI of a sponsor research agreement with Pharmaxis, Australia 220.000 €

2020-22: Co-PI of the Proof-of Concept ERC grant: "Monoamine oxidase B inhibitors as novel drugs targeting NLRP3 inflammasome" 150.000 €

2024-26: PI of the Telethon grant entitled “Targeting the mitochondrial enzyme monoamine oxidase B to treat mucopolysaccharidoses: a drug repurposing strategy” 217.800 €

PATENTS

“Treatment of Muscular Dystrophies and Associated Conditions by Administration of Monoamine Oxidase Inhibitors” Inventors: Paolo Bonaldo, Marcella Canton, Fabio Di Lisa, Sara Menazza Patent N: US 8,487,008 B2, Date of Patent: Jul. 16, 2013

"Nuovo utilizzo degli inibitori della monoammino ossidasi B" Inventors: Antonella Viola, Marcella Canton. Patent n. 102018000006455 Date of Patent: Jul 7 2020.

“Haloallyamine dual amine oxidase inhibitors” Inventors: Alan Duncan Robertson Alison Dorothy Findlay Alberto Buson Craig Ivan Turner Dieter Wolfgang Hamprecht Jonathan Stuart Foot Mandar Deodhar Wolfgang Jarolimek Serena Becchi Bernard Walter Balleine Marcella Canton Libero Vitiello Bert Blaauw Patent n WO2021258159A1 Date of Patent: Dec 31, 2021

H Index = 29 (Scopus)

Total number of citations = 3443 (Scopus)

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Scopus ID: 7004910913