

Curriculum Vitae

Personal data

First name: Stefania

Surname: Carobbio

Gender: Female

Place and date of birth: Lugano, 21.02.1974

Nationality: Swiss (Ticino)

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Professional Address: -Centro de Investigacion Principe Felipe
Eduardo Primo Yúfera, 3 – 46012 Valencia, Spain

Current Position

- Junior Group Leader, Centro de Investigacion Principe Felipe, Valencia, Spain.
- Visiting Scientist, MRL-Institute of Metabolic Science, Department of Clinical Biochemistry, University of Cambridge, UK.

Diplomas

- DPhil (2006), Department of Cell Physiology and Metabolism, Faculty of Medicine, University of Geneva, Switzerland. Thesis title: “Glutamate Dehydrogenase and the Regulation of Insulin Secretion In Pancreatic β -Cells: *in Vitro* and *in Vivo* Studies”.
- Diploma in Biology (1998), Department of Biochemistry, Faculty of Science, University of Geneva Switzerland. “Analyse des differents ARNm provenant du gène de Hsp104 chez le *Trypanosoma brucei*”.
- Degree in Biology (1996), Faculty of Science, University of Geneva. Switzerland.

Training and education

2001-2006. DPhil. Department of Cell Physiology and Metabolism, Faculty of Medicine, University of Geneva, Switzerland.

1996-1998: Diploma in Biology, Department of Biochemistry, Faculty of Science, University of Geneva, Switzerland

1993-1996: License in Biology, Faculty of Science, University of Geneva, Switzerland.

1989-1993: Maturità Litteraria, Liceo Lugano 1, Ticino, Switzerland.

Professional activities

July 2021-present: Junior Group Leader, Centro de Investigacion Principe Felipe, Valencia, Spain.

July 2021-present: Visiting Scientist at the Institute of Metabolic Science, MRL, Department of Clinical Biochemistry, University of Cambridge, UK.

Feb 2015-July 2021: Senior Research Associate at the Institute of Metabolic Science, MRL, Department of Clinical Biochemistry, University of Cambridge, UK.

Feb 2015-June 2021: Staff Scientist at the Wellcome Sanger Institute, Hinxton, UK.

Feb 2013-Jan 2015: Research Associate at the Wellcome Sanger Institute- Hinxton, CB10 1SA/ Institute of Metabolic Science, MRL, Department of Clinical Biochemistry, University of Cambridge, UK

Apr 2007-Feb 2013: Research associate. Institute of Metabolic Science, MRL, Department of Clinical Biochemistry. University of Cambridge, UK.

Sept2006-Jan 2007: Research associate. Department of Cell Physiology and Metabolism. Faculty of Medicine. University of Geneva, Switzerland.

2001-2006 PhD. Department of Cell Physiology and Metabolism, Faculty of Medicine, University of 2000-September 2001: Research assistant. Department of Medical Biochemistry, Faculty of Medicine, University of Geneva, Switzerland.

Apr1998-Nov2000: Internship. Laboratory of Experimental Oncology, Oncology Institute of Southern Switzerland (IOSI), Locarno in collaboration with the University of Geneva., Switzerland.

Teaching

- Supervision of first year graduate students (NST-Biology of Cells) at Girton college, Cambridge (2018-2019)

- Co-supervision of a PhD student: October 2010-April 2013. Project title: « Role of plasmalogen ethelipids in the metabolic syndrome »
- Co-supervision PhD student: October 2016-present. Project title : « Human Pluripotent Stem Cell-Derived Brown/Beige Adipocyte Models: Investigating Thermogenic Adipocyte Development and Function ».
- Supervisor of visiting PhD and master students
- PhD Examiner

Area of expertise

- Molecular and cell biology, animal and cellular physiology and metabolism, stem cell biology.

Research interests and experience

Thermogenesis: Identifying molecular mechanisms that control energy expenditure via sympathetic tone to brown adipose tissue and also that directly regulate its activation in both mouse and human context.

Lipotoxicity and adipose tissue expansion: Understanding how compensatory adaptive mechanisms taking place in adipose tissue in response to states of obesity and morbid obesity that allow the maintenance of functional adipose organ alongside insulin resistance.

Lipotoxic lipid species: Understanding how the disruption of specific lipid species can affect adipose tissue expansion and lipid metabolism in key metabolic tissues such as liver, muscle and heart.

Lipotoxicity and pancreatic β cells: Adaptation and failure of pancreatic β cell function in mouse models of metabolic syndrome and specific lipid species disruption.

Administration

Writing and reviewing grant proposal for funding acquisition. Administrative and financial management direction as scientific reporting of awarded research and program grants as well as large collaborative grants. Personnel recruitment and administrative line management of young post-docs, RA and PhD students.

Honours and Awards

- Awarded the best thesis at the Faculty of Medicine UNIGE in October 2006.
- FNRS- Bourse pour chercheur débutant « Role of Bone Morphogenic Protein 8b (BMP8b) in energy homeostasis. PBGEA-117090.
- Marie Curie Actions : Intra-European Fellowship (IEF)- “BMP8b and thermogenesis- Role of Bone Morphogenic Protein 8b (BMP8b) in thermogenesis” FP7-PEOPLE-2007-2-1-IEF. 2008-2010.

Technical and scientific roles

Peer reviewer for research manuscript submitted to: International Journal of Food Sciences and Nutrition and Stem cells and development. I also contribute to review manuscripts in high impact journals such as Nature, Nature Medicine, Nature Communications, Cell Metabolism, Cell, Embo Molecular Medicine, BBA-Molecular and Cell biology of Lipids and PLOS biology.

Grants

Administrative and financial management and direction as well as scientific reporting of the following grants:

- « Etherpaths: characterization and modelling of dietary effects mediated by gut microbiota on lipid metabolism”. EU FP7 Cooperation Work Programme: Food, agriculture and fisheries, and biotechnology: Systems Biology and bioanalytical tools for nutrition research (KBBE-2007-2-2-08). Large collaborative project.2010-2013.
- “BETABAT: Development of novel treatment strategies based on knowledge of cellular dysfunction in diabetes.”. EU FP7 collaborative project (topic HEALTH.2011.2.4.3-2), 2011-2014.
- Associate Faculty Pump-priming funding scheme: ES/IPS cells differentiation to brown/beige adipocytes as an antiobesity strategy”-Wellcome Sanger Institute-Hinxton-CB10 1SA. 2013-2015.
- “New players in human BAT differentiation and activation: a human PSC-derived BAT approach combined with state of the art genome engineering and –omics based methodologies”. European Research Council Senior Investigator award. 669879 – StemBAT. 2015-2021.
- "Search for obesity-associated genes with protective effects on metabolic health"-Genes for healthy obesity (R01DK107786).2017-2021.