

Marta Murgia

Department of Biomedical Sciences, University of Padova, Padua, Italy

Department of Proteomics and Signal Transduction, Max-Planck-Institute of Biochemistry,
Martinsried, Germany

Email: marta.murgia@unipd.it

Education

PhD: Molecular and Cellular Biology and Pathology, University of Padua

Professional history

Present: Associate Professor of General Pathology, University of Padova, Italy

Past: Post-doctoral scientist at Max-Planck-Institute of Biochemistry, Martinsried, Germany. Department of Signal Transduction, Director Prof. Axel Ullrich. October 2000-January 2004. EMBO Fellowship, Marie-Curie Fellowship.

Institutional activities at the University of Padua

Member of the Teaching Board of the PhD School in Biomedical Sciences.

Member of the Scientific and Resources Committee of the Department of Biomedical Sciences of the University of Padua.

Teaching activities

General Pathology, Physiology and Cell Biology in the Medical School of the University of Padua. The tasks include conceptualization of the program, choice of teaching strategies and examination methods and official grading. Consistently positive reviews of students in the official evaluation of teaching.

Research activities

Extensive research experience in different fields of muscle physiology, metabolism and signal transduction in relation to human health. Experimental work on a variety of scientific projects and topics, managing to obtain publications in different laboratories, different scientific environments and different countries.

Current research interests: proteomics based on mass spectrometry of single muscle fibers. Proteomics of human plasma

Selected publications in peer reviewed journals (2020-2024)

Stefano Schiaffino, Simon M. Hughes, **Marta Murgia**, Carlo Reggiani (2024). MYH13, a superfast myosin expressed in extraocular, laryngeal and syringeal muscles. *THE JOURNAL OF PHYSIOLOGY*, vol. 602, p. 427-443

Marta Murgia, Jörn Rittweger, Carlo Reggiani, Roberto Bottinelli, Matthias Mann, Stefano Schiaffino, Marco V. Narici (2024). Spaceflight on the ISS changed the skeletal muscle proteome of two astronauts. *NPJ MICROGRAVITY*, vol. Volume 10, ISSN: 2373-8065, doi: 10.1038/s41526-024-00406-3

Hilda Delgado de la Herran, Denis Vecellio Reane, Yiming Cheng, Máté Katona, Fabian Hosp, Elisa Greotti, Jennifer Wettmarshausen, Maria Patron Hermine Mohr, Natalia Prudente de Mello, Margarita Chudenkova, Matteo Gorza, Safal Walia, Michael Sheng-Fu Feng, Anja Leimpek Dirk Mielenz, Natalia S Pellegata, Thomas Langer, György Hajnóczky, Matthias Mann, **Marta Murgia**, and Fabiana Perocchi (2024). Systematic mapping of mitochondrial calcium uniporter channel (MCUC)-mediated calcium signaling networks. *EMBO JOURNAL*, ISSN: 1460-2075, doi: 10.1038/s44318-024-00219-w

Marta Murgia, Lorenza Brocca, Elena Monti, Martino V. Franchi, Maximilian Zwiebel, Sophia Steigerwald, Emiliana Giacomello, Roberta Sartori, Sandra Zampieri, Giovanni Capovilla, Mladen Gasparini, Gianni Biolo, Marco Sandri, Matthias Mann and Marco V. Narici (2023). Plasma proteome profiling of healthy subjects undergoing bed rest reveals unloading-dependent changes linked to muscle atrophy. *JOURNAL OF CACHEXIA, SARCOPENIA AND MUSCLE*, vol. 14, p. 439-451

Murgia, Marta, Ciciliot, Stefano, Nagaraj, Nagarjuna, Reggiani, Carlo, Schiaffino, Stefano, Franchi, Martino V, Pišot, Rado, Šimunič, Boštjan, Toniolo, Luana, Blaauw, Bert, Sandri, Marco, Biolo, Gianni, Flück, Martin, Narici, Marco V, Mann, Matthias (2022). Signatures of muscle disuse in spaceflight and bed rest revealed by single muscle fiber proteomics. *PNAS NEXUS*, ISSN: 2752-6542, doi: 10.1093/pnasnexus/pgac086

Marta Murgia, Leonardo Nogara, Martina Baraldo, Carlo Reggiani, Matthias Mann, Stefano Schiaffino (2021). Protein profile of fiber types in human skeletal muscle: a single-fiber proteomics study. *SKELETAL MUSCLE*, vol. 11, ISSN: 2044-5040, doi: 10.1186/s13395-021-00279-0

Stefano Schiaffino, Carlo Reggiani, **Marta Murgia** (2020). Fiber type diversity in skeletal muscle explored by mass spectrometry-based single fiber proteomics. *HISTOLOGY AND HISTOPATHOLOGY*, vol. 35, p. 239-246