

Curriculum Vitae

Name: Martina Baraldo
Citizenship: Italian
Place of birth: Padova (PD)
Date of birth: 02/06/1989
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EDUCATION

Nov 2014- Apr 2018, **Ph.D.** – University of Padova – School of Biomedical Sciences. Mentors: Bert Blaauw, Marco Sandri

Thesis title: The role of Raptor in adult skeletal muscle.

Oct 2008- Dec 2013, **Master in Science** (5 years) – University of Padova – Chemistry and Pharmaceutical Technologies (110/110). Mentor: Bert Blaauw

Thesis title: Identification of Rapamycin-sensitive and -insensitive targets involved in Akt-induced hypertrophy

RESEARCH EXPERIENCE

Nov 2022 – now, **Post-doctoral Research Fellow** at Biozentrum, University of Basel, Basel, Switzerland. Prof. Christoph Handschin

Apr 2018- Oct 2022, **Post-doctoral Research Fellow** at Department of Biomedical Sciences, University of Padova, Padova, Italy. Prof. Bert Blaauw

Jan 2014- Oct 2014, **Pre-doctoral Research Fellow** at Department of Biomedical Sciences, University of Padova, Padova, Italy. Prof. Bert Blaauw

OTHER RESEARCH EXPERIENCE

20th June 2022- 10th July 2022 **Visiting scientist** at Helmholtz Zentrum München (Munich – Germany; Dr. Kenneth Dyar Lab)

POSTER AT CONFERENCES

2019, Advances in skeletal muscle biology in health and disease conference – Gainesville (Florida)

2019, 12th Cachexia Conference – Berlin (Germany)

2018, XV Interuniversity Institute of Myology – Assisi (Italy)

2017, XIV Interuniversity Institute of Myology – Assisi (Italy)

2017, Advances in skeletal muscle biology in health and disease conference – Gainesville (Florida)

2015, IX Scientific Report DTI (Telethon) – Napoli (Italy)

SELECTED TALKS AND SEMINAR

2020, seminar at Myology Institute, University of Florida (Gainesville, FL)

2016, XIII Interuniversity Institute of Myology – Assisi (Italy)

2014, XI Interuniversity Institute of Myology – Assisi (Italy)

INVITED SPEAKER

2024, "Neural and Myocellular Factors in Skeletal Muscle Contractile Impairment with Aging" Symposium at ACSM Annual Meeting (American College of Sports Medicine-Boston)

AWARDS AND PROFESSIONAL MEMBERSHIP

2023-now, Member of Biozentrum Postdoc Society

2017 – 2021, Member of Young IIM Committee

2017, "Best Poster" prize at XIV Interuniversity Institute of Myology – Assisi (Italy)

PUBLICATIONS

1. Gambarotto L, Metti S, Corpetti M, **Baraldo M**, Sabatelli P, Castagnaro S, Cescon M, Blaauw B, Bonaldo P. Sustained oral spermidine supplementation rescues functional and structural defects in COL6-deficient myopathic mice. *Autophagy*. 2023 Dec;19(12):3221-3229. doi: 10.1080/15548627.2023.2241125
2. Tezze C, Amendolagine FI, Nogara L, **Baraldo M**, Ciciliot S, Arcidiacono D, Zaramella A, Masiero G, Ferrarese G, Realdon S, Blaauw B, Detienne G, Beliën AT, Sandri M, Mercken EM. A combination of metformin and galantamine exhibits synergistic benefits in the treatment of sarcopenia. *JCI Insight*. 2023 Aug 8;8(15):e168787. doi: 10.1172/jci.insight.168787..
3. Di Marco G, Gherardi G, De Mario A, Piazza I, **Baraldo M**, Mattarei A, Blaauw B, Rizzuto R, De Stefani D, Mammucari C. The mitochondrial ATP-dependent potassium channel (mitoK_{ATP}) controls skeletal muscle structure and function. *Cell Death Dis*. 2024 Jan 17;15(1):58. doi: 10.1038/s41419-024-06426-x.
4. Masiero G, Ferrarese G, Perazzolo E, **Baraldo M**, Nogara L, Tezze C. Custom-made 3D-printed boot as a model of disuse-induced atrophy in murine skeletal muscle. *PLoS One*. 2024 May 31;19(5):e0304380. doi: 10.1371/journal.pone.0304380.
5. **Baraldo M**, Zorzato S, Tchampta DondJang AH, Geremia A, Nogara L, Dumitras AG, Canato M, Marcucci L, Nolte H, Blaauw B. Inducible deletion of Raptor and mTOR from adult skeletal muscle impairs muscle contractility and relaxation. *J of Physiology* 2022; doi: 10.1113/JP283686.
6. **Baraldo M**, Nogara L, Tchampta DondJang AH, Scalabrin M, Turk C, Telkamp F, Zentilin L, Giacca M, Krüger M, Blaauw B. Raptor is required for increasing the mitochondrial proteome and skeletal muscle force during hypertrophy. *FASEB J* 2021; 35:e22031
7. Murgia M*, Nogara L*, **Baraldo M**, Reggiani C, Mann M, Schiaffino S. Protein profile of fiber types in human skeletal muscle: a single-fiber proteomics study. *Skeletal Muscle* 2021; 11(1):24
8. Geremia A, Sartori R, **Baraldo M**, Nogara L, Balmaceda V, Dumitras GA, Ciciliot S, Scalabrin M, Nolte H, Blaauw B. Activation of Akt.mTORC1 signalling reverts cancer-dependent muscle wasting. *J Cachexia Sarcopenia Muscle* 2022; 13(1):648-661
9. Metti S, Gambarotto L, Chrisam M, **Baraldo M**, Braghetta P, Blaauw B and Bonaldo P. The polyphenol pterostilbene ameliorates the myopathic phenotype of Collagen VI deficient mice via autophagy induction. *Front Cell Dev Biol* 2020; 8:580933
10. Solagna F, Nogara L, Dyar KA, Greulich F, Mir AA, Türk C, Bock T, Geremia A, **Baraldo M**, Sartori R, Farup J, Uhlentaut H, Vissing K, Krüger M, & Blaauw B. (2020). Exercise-dependent increases in protein synthesis are accompanied by chromatin modifications and increased MRTF-SRF signalling. *Acta physiologica* 2020; 230:e13496
11. **Baraldo M**, Geremia A, Pirazzini M, Nogara L, Solagna F, Türk C, Nolte H, Romanello V, Megighian A, Boncompagni S, Krüger M, Sandri M & Blaauw B. Skeletal muscle mTORC1 regulates neuromuscular junction stability. *J Cachexia Sarcopenia Muscle* 2020; 11: 208–225
12. Varone E, Pozzer D, Di Modica S, Chernorudskiy A, Nogara L, **Baraldo M**, Cinquanta M, Fumagalli S, Nur Villar-Quiles R, De Simoni MG, Blaauw B, Ferreira A, Zito E. SELENON (SEPN1) protects skeletal muscle from saturated fatty acid-induced ER stress and insulin resistance. *Redox Biol* 2019;24: 101176
13. Wiederstein JL, Nolte H, Günther S, Piller T, **Baraldo M**, Kostin S, Bloch W, Schindler N, Sandri M, Blaauw B, Braun T, Hölper S, Krüger M. Skeletal Muscle-Specific Methyltransferase METTL21C Trimethylates p97 and Regulates Autophagy-Associated Protein Breakdown. *Cell Rep* 2018;23:1342–1356.
14. Pereira MG, Dyar KA, Nogara L, Solagna F, Marabita M, **Baraldo M**, Chemello F, Germinario E, Romanello V, Nolte H, Blaauw B. Comparative Analysis of Muscle Hypertrophy Models Reveals Divergent Gene Transcription Profiles and Points to Translational Regulation of Muscle Growth through Increased mTOR Signaling. *Front Physiol* 2017;8:968.
15. Marabita M, **Baraldo M**, Solagna F, Ceelen JJ, Sartori R, Nolte H, Nemazanyy I, Pyronnet S, Krüger M, Pende M, Blaauw B. S6K1 Is Required for Increasing Skeletal Muscle Force during Hypertrophy. *Cell Rep* 2016;17:501–513.