

Curriculum Vitae
Cristina Mammucari

PERSONAL INFORMATION

Date of birth: January 17th, 1974

Nationality: Italian

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PRESENT POSITION

Associate Professor of General Pathology, Department of Biomedical Sciences, University of Padua, Italy.

NATIONAL SCIENTIFIC HABILITATION

2024 National Scientific Habilitation (ASN) to apply for permanent positions of Full Professor in General Biochemistry in Italian Universities.

2024 National Scientific Habilitation (ASN) to apply for permanent positions of Full Professor in Experimental Biology in Italian Universities.

2021 National Scientific Habilitation (ASN) to apply for permanent positions of Full Professor in General Pathology in Italian Universities.

EDUCATION

2004 Ph.D. in Molecular and Cell Biology, University of Turin, Italy.

1998 Master degree in Pharmaceutical Chemistry and Technology, *cum laude* (University of Padua, Italy).

RESEARCH ACTIVITY

2019-present

Associate professor.

Department of Biomedical Sciences, University of Padua, Italy.

Main research topics: pathophysiological role of mitochondrial Ca^{2+} signaling in the control of skeletal muscle metabolism and trophism, in adulthood and aging.

Identification and characterization of mitochondrial Ca^{2+} uptake-targeting compounds.

2008-2019

Assistant professor.

Department of Biomedical Sciences, University of Padua, Italy.

Main research topics: pathophysiological role of mitochondrial Ca^{2+} signaling in the control of skeletal muscle homeostasis.

Role of mitochondrial Ca^{2+} accumulation in triple-negative breast cancer metastasis.

2005- 2008

Post-doctoral fellow.

Venetian Institute of Molecular Medicine (VIMM), Padova, Italy. Supervisor: S. Schiaffino.

Research topic: role of Akt-FoxO pathway in the regulation of muscle autophagy and as a therapeutic strategy for muscular dystrophies.

2003- 2005

Graduate student (until February 2004) and post-doctoral fellow.

Institut de Biochimie, Université de Lausanne, Switzerland. Supervisor: Gian Paolo Dotto.
Research topic: mouse keratinocytes growth and differentiation control: integration of Notch1 and Calcineurin/NFAT signaling pathways.

1999- 2002

Graduate student.

Cutaneous Biology Research Center, Massachusetts General Hospital and Harvard Medical School, Charlestown, USA. Supervisor: Gian Paolo Dotto.

Research topic: mouse keratinocytes growth and differentiation control: identification of a novel Notch-interacting protein and its role in the modulation of Notch-1 function.

1997- 1999

Undergraduate student (nov 1997-oct 1998) and graduate research fellow (nov 1998-sept 1999)

Department of Pharmaceutical Sciences, University of Padua, Italy.

Research topic: Drug and enzyme controlled release from polymeric hydrogels.

1996

Undergraduate student ("Erasmus" fellowship).

Department of Chemistry of North Wales, Bangor, UK.

Synthesis of acetals between pyruvate derivatives and 1,3-butanediol (and derivatives).

SCIENTIFIC COMMITTEES AND MEETING ORGANIZATION

2024 Co-Chair of the 2024 Gordon Research Conference on Calcium Signaling.

2022 Vice-Co-Chair of the Gordon Research Conference on Calcium Signaling (Ventura, CA).

2014-2019 Member of the Scientific Committee Italian University Institute of Myology and organization of the annual congress.

ORAL PRESENTATIONS UPON INVITATION

2024 Annual Meeting of the German Physiological Society, Austrian Physiological Society and Life Sciences Switzerland Physiology, Vienna, Austria.

2023 SPS-FEBS meeting "Physiology in Focus", Tallinn, Estonia;

2023 50th European Muscle Conference, Florence, Italy;

2023 Cellular and Organellar Calcium Signalling Conference, Haifa, Israel;

2023 1st "Symposium between the Universities of Lyon, Padua, Lausanne and the Nestlé Institute of Health Sciences (Lausanne)", Padua, Italy;

2021 XXXVI Annual Meeting - Chilean Society of Physiological Sciences (SChCF), online;

2021 FASEB Science Research Conference "The Calcium and Cell Function Conference", online;

2019 17th Congress of the French Society of Myology, Marseille, France;

2016 FASEB Science Research Conference on Calcium and Cell Function, Lisbon, Portugal;

2015 EMBO Workshop "Molecular mechanisms of muscle growth and wasting in health and disease", Ascona, Switzerland;

2015 Gordon Research Conference "Calcium signalling", Sunday River (ME), USA;

2015 Abcam symposium "Mitochondria, energy metabolism and cancer", London, UK;

2012 17th European Bioenergetics Conference, Freiburg, Germany;

2011 Congress of the Italian Physiology Society, Sorrento, Italy;

2010 3rd International Congress on Cell Membranes and Oxidative Stress, Isparta, Turkey.

AWARDS AND FELLOWSHIPS

2016 Short Talk Award, FASEB Science Research Conference, Lisbon, Portugal;
2008 Poster award, Gordon Research Conference, Ventura, CA, (USA);
2006 Poster award, 4th International Symposium on Autophagy, Mishima, Japan;
2005 Postdoctoral fellowship of the University of Padua for researchers returning from abroad.
1999 Poster award, Drug Delivery for the Third Millennium, Pisa, Italy.
1999 Fellowship of the University of Padua to perform research activity abroad.

GRANTS

Italian Ministry of Research – PNRR – CN3 (2023-2025)
Italian Ministry of Research - PRIN (2023-2025)
AFM-Telethon (2023-2025)
Veneto region (2020-2022)
AFM-Telethon (2019-2021)
Nestlé Institute of Health Sciences (2018-2020)
Italian Ministry of Research - PRIN (2016-2019)
AFM-Telethon (2015-2017)
Italian Ministry of Research - FIRB (2012-2017)
University of Padova “Progetto di Ateneo” (2010-2011)

PATENTS

Inventor of the patents No. PCT/EP2020/063329 and PCT/EP2023/061479

PEER-REVIEW AND EDITORIAL ACTIVITY

2021-present Member of the editorial board of Cell Calcium.
2016 Guest editor of a special issue of Frontiers in Oncology.

Prof. Mammucari routinely acts as a reviewer for international scientific journals (Journal of biological chemistry, EMBO Reports, Journal of muscle research and cell motility, Trends in biochemical sciences, Physiological reviews, Frontiers in mitochondrial research, Cancer Cell, EMBO Molecular Medicine, Journal of Physiology, Oncogene, Oncotarget, Cell Reports, Science Signaling, Nature Aging) and granting agencies (the French AFM-Telethon association, the Belgian Foundation for Alzheimer Research, the Italian Ministry of Research, the Swiss Muscle foundation, the French National Research Agency-ANR, the Austrian Science Fund-FWF).

INSTITUTIONAL APPOINTMENTS

2024-present Director of the graduate school of Clinical Pathology and Biochemistry;
2021-2024 Vice-director of the graduate school of Clinical Pathology and Biochemistry;
2021- present Member of evaluation commissions of the School of Medicine and Surgery;
2019- present Member of commissions of the Department of Biomedical Sciences;
2018-present Member of the Padua University animal care commission.

COMMITTEES

I routinely serve as member of national and international Ph.D. Thesis committees.

TEACHING ACTIVITY

Undergraduate schools

2020-present Clinical pathology for the School of Medicine and Surgery;
2020-present General pathology for the School of Pharmacy;
2016-2019 General pathology for the Biotechnology course;
2009-2012 Genetic pathology for Biotechnology course;
2009-2020 General pathology for Obstetrics course;
2009-2020 Histopathology laboratory for the School of Medicine and Surgery;
2003-2005 Biochemistry laboratory for the School of Medicine and Surgery.

Graduate schools

2020-present General pathology for the graduate school in Clinical Pathology and Biochemistry;
2014- present Ph.D. program in Biomedical Sciences;
2009-2014 Ph.D. program in Biology and Biotechnology;
2009-2014 General pathology for graduate school in Nutrition Sciences;
2008-2014 General pathology for graduate school in Clinical Pathology.

EDUCATIONAL ACTIVITIES

2024 “AIRC Campus” teaching activity, outreaching initiative promoted by the Italian Association for Cancer research (AIRC) for undergraduate students;
2024 Workshop on scientific research for high school students;
2016-2017 “AIRC Campus” committee member, outreaching initiative promoted by the Italian Association for Cancer research (AIRC) for undergraduate students.

METRICS (Scopus)

60 publications, > 9,800 citations, h-index 34.

LIST OF PUBLICATIONS

Gherardi G, Weiser A, ..., Rizzuto R*, Feige JN*, **Mammucari C***, De Marchi U*. Mitochondrial Calcium Uptake Declines during Aging and is Directly Activated by Oleuropein to Boost Energy Metabolism and Skeletal Muscle Performance. *Cell Metab.* 2024 Nov 23:S1550-4131(24)00417-0. doi:10.1016/j.cmet.2024.10.021. PMID: 39603237. *co-corresponding authors.

Mammucari C. The intricacies of mitochondrial calcium and enzyme regulation in liver metabolism. *Cell Calcium.* 2024 Oct 5;124:102958. doi: 10.1016/j.ceca.2024.102958.

Confalonieri S, Matoskova B, Pennisi R, Martino F, De Mario A, Miloro G, Montani F, Rotta L, Ferrari ME, Gilardi L, Ceci F, Grana CM, Rizzuto R, **Mammucari C**, Di Fiore PP, Lanzetti L. A PET-Surrogate Signature for the Interrogation of the Metabolic Status of Breast Cancers. *Adv Sci (Weinh).* 2024 May 17:e2308255. doi: 10.1002/advs.202308255. PMID: 38757578

De Mario A, Trevellin E, Piazza I, Vindigni V, Foletto M, Rizzuto R, Vettor R, **Mammucari C.** Mitochondrial Ca²⁺ signaling is a hallmark of specific adipose tissue-cancer crosstalk. *Sci Rep.* 2024 Apr 11;14(1):8469. doi: 10.1038/s41598-024-55650-0. PMID: 38605098

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.PMID: 38233399

Tonolo F, Coletta S, Fiorese F, Grinzato A, Albanesi M, Folda A, Ferro S, De Mario A, Piazza I, **Mammucari C**, Arrigoni G, Marin O, Cestonaro G, Nataloni L, Costanzo E, Lodovichi C, Rigobello MP, de Bernard M. Sunflower seed-derived bioactive peptides show antioxidant and anti-inflammatory activity: From in silico simulation to the animal model. *Food Chem.* 2024 May 1;439:138124. doi: 10.1016/j.foodchem.2023.138124. Epub 2023 Dec 2.PMID: 38064839

Marmolejo-Garza A, Krabbendam IE, Luu MDA, Brouwer F, Trombetta-Lima M, Unal O, O'Connor SJ, Majerníková N, Elzinga CRS, **Mammucari C**, Schmidt M, Madesh M, Boddeke E, Dolga AM. Negative modulation of mitochondrial calcium uniporter complex protects neurons against ferroptosis. *Cell Death Dis.* 2023 Nov 25;14(11):772. doi: 10.1038/s41419-023-06290-1.PMID: 38007529

De Mario A, D'Angelo D, Zanotti G, Raffaello A, **Mammucari C**. The mitochondrial calcium uniporter complex-A play in five acts. *Cell Calcium.* 2023 Jun;112:102720. doi: 10.1016/j.ceca.2023.102720. Epub 2023 Mar 24. PMID: 37001308.

Filadi R, De Mario A, Audano M, Romani P, Pedretti S, Cardenas C, Dupont S, **Mammucari C**, Mitro N, Pizzo P. Sustained IP3-linked Ca²⁺ signaling promotes progression of triple negative breast cancer cells by regulating fatty acid metabolism. *Front Cell Dev Biol.* 2023 Mar 13;11:1071037. doi:10.3389/fcell.2023.1071037. PMID: 36994106; PMCID: PMC10040683.

Marchioretti C, Zanetti G, Pirazzini M, Gherardi G, Nogara L, Andreotti R, Martini P, Marcucci L, Canato M, Nath SR, Zuccaro E, Chivet M, **Mammucari C**, Pacifici M, Raffaello A, Rizzuto R, Mattarei A, Desbats MA, Salviati L, Megighian A, Sorarù G, Pegoraro E, Belluzzi E, Pozzuoli A, Biz C, Ruggieri P, Romualdi C, Lieberman AP, Babu GJ, Sandri M, Blaauw B, Basso M, Pennuto M. Defective excitation-contraction coupling and mitochondrial respiration precede mitochondrial Ca²⁺ accumulation in spinobulbar muscular atrophy skeletal muscle. *Nat Commun.* 2023 Feb 6;14(1):602. doi: 10.1038/s41467-023-36185-w. PMID: 36746942; PMCID: PMC9902403.

Gherardi G, De Mario A, **Mammucari C**. The mitochondrial calcium homeostasis orchestra plays its symphony: Skeletal muscle is the guest of honor. *Int Rev Cell Mol Biol.* 2021;362:209-259.

De Mario A, Tosatto A, Hill JM, Kriston-Vizi J, Ketteler R, Vecellio Reane D, Cortopassi G, Szabadkai G, Rizzuto R, **Mammucari C**. Identification and functional validation of FDA-approved positive and negative modulators of the mitochondrial calcium uniporter. *Cell Rep.* 2021 Jun 22;35(12):109275.

Mammucari C. In the right place at the right time: ROS and Ca²⁺ are allies in the battle for survival. *Cell Calcium.* 2021 May;95:102354.

De Mario A, Gherardi G, Rizzuto R, **Mammucari C**. Skeletal muscle mitochondria in health and disease. *Cell Calcium.* 2021 Mar;94:102357.

Gherardi G, Monticelli H, Rizzuto R, **Mammucari C**. The Mitochondrial Ca^{2+} Uptake and the Fine-Tuning of Aerobic Metabolism. *Front Physiol*. 2020 Oct 7;11:554904.

Di Marco G, Vallese F, Jourde B, Bergsdorf C, Sturlese M, De Mario A, Techer-Etienne V, Haasen D, Oberhauser B, Schleegeer S, Minetti G, Moro S, Rizzuto R, De Stefani D, Fornaro M, **Mammucari C**. A High-Throughput Screening Identifies MICU1 Targeting Compounds. *Cell Rep*. 2020 Feb 18;30(7):2321-2331.e6.

Gherardi G, Di Marco G, Rizzuto R, **Mammucari C**. Crosstalk between Mitochondrial Ca^{2+} Uptake and Autophagy in Skeletal Muscle. *Oxid Med Cell Longev*. 2019 Sep 8;2019:1845321.

Favaro G, Romanello V, Varanita T, Andrea Desbats M, Morbidoni V, Tezze C, Albiero M, Canato M, Gherardi G, De Stefani D, **Mammucari C**, Blaauw B, Boncompagni S, Protasi F, Reggiani C, Scorrano L, Salviati L, Sandri M. DRP1-mediated mitochondrial shape controls calcium homeostasis and muscle mass. *Nat Commun*. 2019 Jun 12;10(1):2576.

Pendin D, Norante R, De Nadai A, Gherardi G, Vajente N, Basso E, Kaludercic N, **Mammucari C**, Paradisi C, Pozzan T, Mattarei A. A Synthetic Fluorescent Mitochondria-Targeted Sensor for Ratiometric Imaging of Calcium in Live Cells. *Angew Chem Int Ed Engl*. 2019 Jul 15;58(29):9917-9922.

Fedeli C, Filadi R, Rossi A, **Mammucari C**, Pizzo P. PSEN2 (presenilin 2) mutants linked to familial Alzheimer disease impair autophagy by altering Ca^{2+} homeostasis. *Autophagy*. 2019 Dec;15(12):2044-2062.

Gherardi G, **Mammucari C**. Ex Vivo Measurements of Ca^{2+} Transients in Intracellular Compartments of Skeletal Muscle Fibers by Means of Genetically Encoded Probes. *Methods Mol Biol*. 2019;1925:103-109.

Pietrangelo L, Michelucci A, Ambrogini P, Sartini S, Guarnier FA, Fusella A, Zamparo I, **Mammucari C**, Protasi F, Boncompagni S. Muscle activity prevents the uncoupling of mitochondria from Ca^{2+} Release Units induced by ageing and disuse. *Arch Biochem Biophys*. 2019 Mar 15;663:22-33.

Gherardi G, Nogara L, Ciciliot S, Fadini GP, Blaauw B, Braghetta P, Bonaldo P, De Stefani D, Rizzuto R, **Mammucari C**. Loss of mitochondrial calcium uniporter rewires skeletal muscle metabolism and substrate preference. *Cell Death Differ*. 2019 Jan;26(2):362-381.

Díaz-Vegas AR, Cordova A, Valladares D, Llanos P, Hidalgo C, Gherardi G, De Stefani D, **Mammucari C**, Rizzuto R, Contreras-Ferrat A, Jaimovich E. Mitochondrial Calcium Increase Induced by RyR1 and IP3R Channel Activation After Membrane Depolarization Regulates Skeletal Muscle Metabolism. *Front Physiol*. 2018 Jun 25;9:791.

Mammucari C*, Raffaello A, Vecellio Reane D, Gherardi G, De Mario A, Rizzuto R. Mitochondrial calcium uptake in organ physiology: from molecular mechanism to animal models. *Pflugers Arch.* 2018 Aug;470(8):1165-1179. * corresponding author

Mammucari C*, Gherardi G, Rizzuto R*. Structure, Activity Regulation, and Role of the Mitochondrial Calcium Uniporter in Health and Disease. *Front Oncol.* 2017 Jul 10;7:139. doi: 10.3389/fonc.2017.00139. eCollection 2017. Review. PubMed PMID: 28740830; PubMed Central PMCID: PMC5502327. * corresponding author

Wright LE, Vecellio Reane D, Milan G, Terrin A, Di Bello G, Belligoli A, Sanna M, Foletto M, Favaretto F, Raffaello A, **Mammucari C**, Nitti D, Vettor R, Rizzuto R. Increased mitochondrial calcium uniporter in adipocytes underlies mitochondrial alterations associated with insulin resistance. *Am J Physiol Endocrinol Metab.* 2017 Dec 1;313(6):E641-E650. doi: 10.1152/ajpendo.00143.2016. Epub 2017 Aug 8. PubMed PMID: 28790027.

Granatiero V, Gherardi G, Vianello M, Salerno E, Zecchini E, Toniolo L, Pallafacchina G, Murgia M, Blaauw B, Rizzuto R, **Mammucari C**. Role of p66shc in skeletal muscle function. *Sci Rep.* 2017 Jul 24;7(1):6283.

Mammucari C*, Gherardi G, Rizzuto R*. Structure, activity regulation and role of the Mitochondrial Calcium Uniporter in health and disease. *Front Oncol.* 2017 Jul 10;7:139. *corresponding author

Zampieri S, **Mammucari C**, Romanello V, Barberi L, Pietrangelo L, Fusella A, Mosole S, Gherardi G, Höfer C, Löfler S, Sarabon N, Cvecka J, Krenn M, Carraro U, Kern H, Protasi F, Musarò A, Sandri M, Rizzuto R. Physical exercise in aging human skeletal muscle increases mitochondrial calcium uniporter expression levels and affects mitochondria dynamics. *Physiol Rep.* 2016 Dec;4(24). pii: e13005.

Tosatto A, Rizzuto R, **Mammucari C**. Ca(2+) Measurements in Mammalian Cells with Aequorin-based Probes. *Bio Protoc.* 2017 Mar 5;7(5).

Raffaello A*, **Mammucari C***, Gherardi G, Rizzuto R*. Calcium at the Center of Cell Signaling: Interplay between Endoplasmic Reticulum, Mitochondria, and Lysosomes. *Trends Biochem Sci.* 2016 Sep 28. * corresponding author.

Tosatto A, Sommaggio R, Kummerow C, Bentham R.B., Blacker TS, Berecz T, Duchen MR, Rosato A, Bogeski I, Szabadkai G, Rizzuto R, **Mammucari C**. The Mitochondrial Calcium Uniporter regulates breast cancer progression via HIF-1 α . *EMBO Molecular Medicine.* 2016 Apr 4 published online.

Mammucari C*, Raffaello A*, Vecellio Reane D, Rizzuto R*. Molecular structure and pathophysiological roles of the Mitochondrial Calcium Uniporter. *Biochim Biophys Acta.* 2016 Mar 8. *corresponding author.

Chemello F, **Mammucari C**, Gherardi G, Rizzuto R, Lanfranchi G, Cagnin S. Gene expression changes of single skeletal muscle fibers in response to modulation of the mitochondrial calcium uniporter (MCU). *Genom Data*. 2015 May 30;5:64-7.

Mammucari C ^{†*}, Gherardi G[†], Zamparo I, Raffaello A, Boncompagni S, Chemello F, Cagnin S, Braga A, Zanin S, Pallafacchina G, Zentilin L, Sandri M, De Stefani D, Protasi F, Lanfranchi G, Rizzuto R ^{*}. The Mitochondrial Calcium Uniporter controls skeletal muscle mass in vivo. *Cell Reports*. 2015 Mar 3;10:1–11. [†]first author, ^{*}corresponding author.

Alberio T, **Mammucari C**, D'Agostino G, Rizzuto R, Fasano M. Altered dopamine homeostasis differentially affects mitochondrial voltage-dependent anion channels turnover. *Biochim Biophys Acta*. 2014 Sep;1842(9):1816-22.

Sandri M, Barberi L, Bijlsma AY, Blaauw B, Dyar KA, Milan G, **Mammucari C**, Meskers CG, Pallafacchina G, Paoli A, Pion D, Roceri M, Romanello V, Serrano AL, Toniolo L, Larsson L, Maier AB, Muñoz-Cánoves P, Musarò A, Pende M, Reggiani C, Rizzuto R, Schiaffino S. Signalling pathways regulating muscle mass in ageing skeletal muscle. The role of the IGF1-Akt-mTOR-FoxO pathway. *Biogerontology*. 2013 Jun;14(3):303-23.

Patron M, Raffaello A, Granatiero V, Tosatto A, Merli G, De Stefani D, Wright L, Pallafacchina G, Terrin A, **Mammucari C**, Rizzuto R. The mitochondrial calcium uniporter (MCU): molecular identity and physiological roles. *J Biol Chem*. 2013 Apr 12;288(15):10750-8.

Rizzuto R, De Stefani D, Raffaello A, **Mammucari C**. Mitochondria as sensors and regulators of calcium signalling. *Nat Rev Mol Cell Biol*. 2012 Sep;13(9):566-78.

Schiaffino S, **Mammucari C**. Regulation of skeletal muscle growth by the IGF1-Akt/PKB pathway: insights from genetic models. *Skeletal Muscle* 2011 Jan 24;1(1):4

Mammucari C, Patron M, Granatiero V, Rizzuto R. Molecules and roles of mitochondrial calcium signaling. *Biofactors* 2011 May-June;37(3):219-27

Mammucari C, Rizzuto R. Signaling pathways in mitochondrial dysfunction and aging. *Mech Ageing Dev*. 2010 Jul-Aug;131(7-8):536-43

Rossi AC, **Mammucari C**, Argentini C, Reggiani C, Schiaffino S. Two novel/ancient myosins in mammalian skeletal muscles: MYH14/7b and MYH15 are expressed in extraocular muscles and muscle spindles. *J Physiol*. 2010 Jan 15;588(Pt 2):353-64.

Masiero E, Agatea L, **Mammucari C**, Blaauw B, Loro E, Komatsu M, Metzger D, Reggiani C, Schiaffino S, Sandri M. Autophagy is required to maintain muscle mass. *Cell Metab*. 2009 Dec;10(6):507-15.

Blaauw B, Canato M, Agatea L, Toniolo L, **Mammucari C**, Masiero E, Abraham R, Sandri M, Schiaffino S, Reggiani C. Inducible activation of Akt increases skeletal muscle mass and force without satellite cell activation. *FASEB J*. 2009 Nov;23(11):3896-905.

Sartori R, Milan G, Patron M, **Mammucari C**, Blaauw B, Abraham R, Sandri M. Smad2 and 3 transcription factors control muscle mass in adulthood. *Am J Physiol Cell Physiol*. 2009 Jun;296(6):C1248-57. Epub 2009 Apr 8.

Dobrowolny G, Aucello M, Rizzuto E, Beccafico S, **Mammucari C**, Boncompagni S, Belia S, Wannenes F, Nicoletti C, Del Prete Z, Rosenthal N, Molinaro M, Protasi F, Fanò G, Sandri M, Musarò A, Skeletal muscle is a primary target of SOD1G93A-mediated toxicity. *Cell Metab*. 2008 Nov;8(5):425-36.

Blaauw B, **Mammucari C**, Toniolo L, Agatea L, Abraham R, Sandri M, Reggiani C, Schiaffino S, Akt activation prevents the force drop induced by eccentric contractions in dystrophin-deficient skeletal muscle. *Hum Mol Genet*. 2008 Aug 27.

Schiaffino S, **Mammucari C**, and Sandri M, The role of autophagy in neonatal tissues. *Autophagy* 2008 June 1; 4:5, 727-730.

Mammucari C, Schiaffino S, Sandri M. Downstream of Akt: mTOR and FoxO3 in the regulation of autophagy in skeletal muscle. *Autophagy* 2008 May 16; 4:4, 524-526.

Mammucari C, Milan G, Romanello V, Rudolph R, Masiero E, Del Piccolo P, Burden SJ, Di Lisi R, Sandri C, Schiaffino S, Sandri M. FoxO3 controls autophagy in skeletal muscle in vivo. *Cell Metab*. 2007 Dec;6:458-71. (Illustrazione di copertina. Commento in *Cell Metab* 2007; 6:425-7. Editoriale in *Cell* 2007; 131:1209).

Devgan V, **Mammucari C**, Millar SE, Briskin C, Dotto GP. p21WAF1/Cip1 is a negative transcriptional regulator of Wnt4 expression downstream of Notch1 activation. *Genes Dev*. 2005 Jun 15;19(12):1485-95.

Mammucari C*, Tommasi di Vignano A*, Sharov AA, Roop DR, Botchkarev VA, Crabtree GR, Dotto GP. Integration of Notch1 and Calcineurin/NFAT signaling pathways in keratinocytes growth and differentiation control. *Dev Cell*. 2005 May;8(5):665-76. *equal contributors.

Oh H, **Mammucari C**, Nenci A, Cabodi S, Cohen SN, Dotto GP. Negative regulation of cell growth and differentiation by TSG101 through association with p21Cip1/WAF1. *Proc Natl Acad Sci USA*. 2002 Apr 16;99(8):5430-5.

Calautti E, Grossi M, **Mammucari C**, Aoyama Y, Pirro M, Ono Y, Li J, Dotto GP. Fyn tyrosine kinase is a downstream mediator of Rho/PRK2 function in keratinocyte cell-cell adhesion. *J Cell Biol*. 2002 Jan 7;156(1):137-48.

Rangarajan A, Talora C, Okuyama R, Nicolas M, **Mammucari C**, Oh H, Aster JC, Krishna S, Metzger D, Chambon P, Miele L, Aguet M, Radtke F, Dotto GP. Notch signaling is a direct determinant of keratinocyte growth arrest and entry into differentiation. *EMBO J*. 2001 Jul 2;20(13):3427-36.

Veronese FM, **Mammucari C**, Schiavon F, Schiavon O, Lora S, Secundo F, Chilin A and Guiotto A. PEGylated enzyme entrapped in poly(vinyl alcohol) hydrogel for biocatalytic application. *Farmaco*. 2001 Aug;56(8):541-7.

Veronese FM, **Mammucari C**, Caliceti P, Schiavon O, Lora S. Influence of PEGylation on the release of low and high molecular-weight proteins from PVA matrices. *J Bioact Compat Polymers*. 1999 14, 315-330.

BOOK CHAPTERS

Pathobiology of Human Disease, Reference Module in Biomedical Sciences, 2014, Pages 124-130