

INFORMAZIONI PERSONALI

Marco Sandri



 Dipartimento Scienze Biomediche, Via U. Basi 58/b, 35121, Padova, Italia

 +39 049 8276363  +39 347 5737862

 [marco.sandri@unipd.it](mailto:marco.sandri@unipd.it)

 [Sostituire con sito web personale](#)

Data di nascita 05/11/1967 | Nazionalità Italiana

POSIZIONE RICOPERTA

Professore Ordinario di Patologia Clinica, Direttore del Dipartimento di Scienze Biomediche, Scuola di Medicina, Università di Padova

TITOLO DI STUDIO

Laurea in Medicina e Chirurgia e Specializzato in Patologia Clinica

ESPERIENZA PROFESSIONALE

- 
- 2005-2009 **Assistant Telethon Scientist**  
Dulbecco Telethon Institute, Venetian Institute of Molecular Medicine (VIMM), Padova. Italia
  - 2006-2013 **Ricercatore Universitario**  
Dipartimento di Scienze Biomediche. Università di Padova. Italia
  - 2006-presente **Group Leader**  
Venetian Institute of Molecular Medicine (VIMM), Padova. Italia
  - 2010-2015 **Associate Telethon Scientist**  
Dulbecco Telethon Institute, Venetian Institute of Molecular Medicine (VIMM), Padova. Italia
  - 2011-presente **Professore Aggiunto**  
Department of Medicine, McGill University, Montreal, Canada
  - 2013-2014 **Professore Associato**  
Dipartimento di Scienze Biomediche, Università di Padova, Padova. Italia
  - 2013-2015 **Principal Investigator**  
Istituto Telethon di Genetica e Medicina (TIGEM), Pozzuoli, Napoli, Italia
  - 2013-2019 **Direttore**  
Centro di Miologia (CiR-Myo), Dipartimento di Scienze Biomediche, Università di Padova, Padova. Italia
  - 2014-presente **Professore Ordinario**  
Dipartimento di Scienze Biomediche, Università di Padova, Padova. Italia
  - 2019-presente **Direttore**  
Dipartimento di Scienze Biomediche, Università di Padova, Padova. Italia

ISTRUZIONE E FORMAZIONE

---

- 1996 **Laurea in Medicina e Chirurgia**  
Università di Padova, Padova, Italia
- 2001 **Laurea in Medicina e Chirurgia**  
Università di Padova, Padova, Italia
- 1989-2000 **Internato**  
Dipartimento di Scienze Biomediche, Università di Padova, Padova, Italia
- 1996-2000 **Borsista**  
Istituto di Medicina di Laboratorio e Sperimentale, Università di Padova, Padova, Italia
- 2002-2005 **Post-dottorato**  
Department of Cell Biology, Harvard Medical School, Boston ,USA

PREMI INTERNAZIONALI

---

- 1997 "Luigi Casati" prize, conferred by National Academy of Lincei.
- 2003 "Terme Euganee Award" on Skeletal Muscle Regeneration, Reconstruction and Engineering
- 2004 Selected between the five finalist for the world-wide award "Young Cell Signaller 2004" on "Regulation and therapeutic potential of the PI3-kinase/PKB signalling pathway".
- 2005 Dulbecco Telethon Institute carrier award (Assistant Level)
- 2010 Dulbecco Telethon Institute carrier award (Assistant Level)
- 2017 ERC panel member of LS3 Cellular and Developmental Biology

PANNELLO EDITORIALE

---

- PLOS ONE
- SKELETAL MUSCLE
- CELL STRESS
- LIFE ALLIANCE
- JOURNAL OF CACHEXIA SARCOPENIA AND MUSCLE

PUBBLICAZIONI SU RIVISTE INTERNAZIONALI CON IMPACT FACTOR

---

159 publications, h-index:63 (Scopus) 73 (Google Scholar). Total citations: 23434 (Scopus), 31533 (Google Scholar). i10-index: 199

1) Carraro U, Rizzi C, **Sandri M**. SDS PAGE: Effective recovery by KCl precipitation of highly diluted muscle proteins solubilized with sodium dodecyl sulfate. *Electrophoresis* 1991; 112: 1005-1010.

2) **Sandri M**, C. Rizzi, C Catani, Carraro U. Selective Removal of Free Dodecyl Sulfate from 2-Mercaptoethanol-SDS-Solubilized Proteins before KDS-protein Precipitation. *Anal. Biochem.* 1993;

213: 34-39.

3) Carraro U, Rizzi C, **Sandri M**, Doria D. A new two-step precipitation method removes free-SDS and Thiol reagents from diluted solutions, and then allows recovery and quantitation of proteins. *Biochem. Bioph. Res. Com.* 1994; 200: 916-924.

4) Rossini K, Rizzi C, **Sandri M**, Bruson A, Carrararo U. High-resolution sodium dodecyl sulfate-polyacrylamide gel electrophoresis and immunochemical identification of the 2X and embryonic myosin heavy chains in complex mixtures of isomyosin. *Electrophoresis* 1995; 16: 101-104.

5) Carraro U, Bruson A, Catani C, Dalla Libera L, Massimino ML, Rizzi C, Rossini K, **Sandri M**, Cantini M. Effects of beta1-Integrin Antisense Phosphorothioate-Modified Oligonucleotide on Myoblast Behaviour *In Vitro*. *Cell Biochem. Funct.* 1995; 13: 99-104.

6) **Sandri M**, Carraro U, Podhorska-Okolov M, Rizzi C, Arlsan P, Monti D, Franceschi C. Apoptosis, DNA damage and ubiquitin expression in normal and *mdx* muscle fibers after exercise. *FEBS Lett.* 1995 ; 373: 291-295.

7) **Sandri M**, Podhorska-Okolov M, Geromel V, Rizzi C, Arlsan P, Franceschi C, Carraro U. Exercise induces myonuclear ubiquitination and apoptosis in dystrophin deficient muscle of mice. *J. Neuropath. Exp. Neur.* 1997; 56: 45-57.

8) **Sandri M**, Massimino ML, Cantini M, Giurisato E, Sandri C, Arlsan P, Carraro U. Dystrophin deficient myotubes undergo apoptosis in mouse primary muscle cell culture after DNA damage. *Neurosci Lett.* 1998; 252: 123-126.

9) **Sandri M**, Minetti C, Pedemonte M, Carraro U. Apoptotic myonuclei in human Duchenne muscular dystrophy. *Lab. Invest.* 1998; 78: 1005-1016.

10) Podhorska-Okolov M, **Sandri M**, Zampieri S, Brun B, Carraro U. Apoptosis of myofiber and satellite cells: exercise induced damage in skeletal muscle of mouse. *Neuropath. Appl. Neuro.* 1998; 24: 518-531.

11) Vescovo G, Zennaro R, **Sandri M**, Carraro U, Leprotti C, Ceconi C, Ambrosio GB, Dalla Libera L. Apoptosis of skeletal muscle myofibers and interstitial cells in experimental heart failure. *J. Mol. Cell Cardiol.* 1998; 30: 2449-2459.

12) **Sandri M**, Carraro U. Apoptosis of skeletal muscles during development and disease. *Int. J. Biochem. Cell. Biol.* 1999; 31: 1373-1390.

13) Dalla Libera L, Zennaro R, **Sandri M**, Ambrosio GB, Vescovo G. Apoptosis and atrophy in rat slow skeletal muscle in chronic heart failure. *Am. J. Physiol.* 1999; 277: C982-C986.

14) Biral D, Jakubiec-Puka A, Ciechomska I, **Sandri M**, Rossini K, Carraro U, Betto R. Loss of dystrophin and some dystrophin-associated proteins with concomitant signs of apoptosis in rat leg muscle overworked in extension. *Acta Neuropathol.* 2000; 100: 618-626.

15) Vescovo G, Volterrani M, Zennaro R, **Sandri M**, Ceconi C, Lorusso R, Ferrari R, Ambrosio GB, Dalla Libera L. Apoptosis in the skeletal muscle of patients with heart failure: is it associated with clinical and biochemical changes? *Heart* 2000; 84: 431-437.

16) **Sandri M**, Sandri C, Brun B, Giurisato E, Cantini M, Rossini K, Destro C, Arslan P, Carraro U. Inhibition of FasL sustains phagocytic cells and delays myogenesis in regenerating muscles fibers. *J. Leukocyte Biol.* 2001; 69: 482-489.

17) Dalla Libera L, Ravara B, Angelini A, Rossini K, **Sandri M**, Tiene G, Ambrosio GB, Vescovo G. Beneficial effects on skeletal muscle of the ATII blocker irbesartan in experimental heart failure. *Circulation* 2001; 103: 2195-2200.

18) **Sandri M**, El Meslemani A, Sandri C, Schjerling P, Vissing K, Andersen JL, Rossini K, Carraro U, Angelini C. Caspase 3 Expression Correlates With Skeletal Muscle Apoptosis in Duchenne and

Facioscapulo Human Muscular Dystrophy. A potential target for pharmacological treatment. *J. Neuropath. Exp. Neur.* 2001; 60: 302-312.

19) Dalla Libera L, Sabbadini R, Renken C, Ravara B, **Sandri M**, Betto R, Angelini A, Vescovo G. Apoptosis in the skeletal muscle of rats with heart failure is associated with increased serum levels of TNF $\alpha$  and sphingosine. *J. Mol. Cell Cardiol.* 2001; 33: 1871-1878.

20) Vescovo G, Ravara B, Angelini A, **Sandri M**, Carraro U, Ceconi C, Dalla Libera L. Effect of thalidomide on the skeletal muscle in experimental heart failure. *Eur. J. Heart Fail.* 2002; 4(4):455-60.

21) Valenti MT, Sartore S, Azzarello G, Balducci E, Amadio M, **Sandri M**, Pappagallo GL, Tacchetti G, Bari M, Manconi R, D'Andrea MR, Silvestri B, Vinante O. Human fibroblasts from normal and malignant breast tissue grown in vitro show a distinct senescence profile and telomerase activity. *Histochem J.* 2002; 34: 403-10.

22) **Sandri M**. Apoptotic signaling in skeletal muscle fibers during atrophy. *Curr Opin Clin Nutr Metab Care.* 2002; 5(3): 249-53.

23) Vescovo G, Ravara B, Gobbo V, **Sandri M**, Angelini A, Della Barbera M, Dona M, Peluso G, Calvani M, Mosconi L, Dalla Libera L. L-Carnitine: a potential treatment for blocking apoptosis and preventing skeletal muscle myopathy in heart failure. *Am J Physiol Cell Physiol.* 2002; 283: C802-10.

24) Valenti MT, Azzarello G, Balducci E, Sartore S, **Sandri M**, Manconi R, Sicari U, Bari M, Vinante O. Conditioned medium from MCF-7 cell line induces myofibroblast differentiation, decreased cell proliferation, and increased apoptosis in cultured normal fibroblasts but not in fibroblasts from malignant breast tissue. *Histochem J.* 2001; 33: 499-509.

25) Rizzi C, Rossini K, Bruson A, **Sandri M**, Dal Belin Peruffo A, Carraro U. Fully reversible procedure for silver staining improves densitometry of complex mixtures of biopolymers resolved by sodium dodecyl sulfate-polyacrylamide gel electrophoresis. *Electrophoresis.* 2002; 23: 3266-3269

26) **Sandri M**, Bortoloso E, Nori A, Volpe P. Electrotransfer in differentiated myotubes: a novel, efficient procedure for functional gene transfer. *Exp Cell Res.* 2003; 286: 87-95.

27) Dona M, **Sandri M**, Rossini K, Dall'Aica I, Podhorska-Okolow M, Carraro U. Functional in vivo gene transfer into the myofibers of adult skeletal muscle. *Biochem. Biophys. Res. Com.* 2003; 312(4): 1132-8.

28) **Sandri M**, Sandri C, Gilbert A, Skurk C, Calabria E, Picard A, Walsh K, Schiaffino S, Lecker SH, Goldberg AL. Foxo transcription factors induce the atrophy-related ubiquitin ligase atrogin-1 and cause skeletal muscle atrophy. *Cell.* 2004; 117, 399-412.

29) Skurk C., Izumiya Y., Maatz H., Razeghi P., Shiojima I., **Sandri M.**, Sato K., Zeng L., Schiekhofer S., Pimentel D., Lecker S., Taegtmeyer H., Goldberg A.F., and Walsh K. The FOXO3a transcription factor regulates cardiac myocyte size downstream of AKT signaling. *J. Biol. Chem.*, 2005, 280(21):20814-23

30) **Sandri M.**, Lin J., Handschin C., Yang W., Arany Z., Lecker S., Goldberg A.L., Spiegelman B.M. PGC-1 $\alpha$  protects skeletal muscle from atrophy by suppressing FoxO3 action and atrophy-specific gene transcription. *Proc Natl Acad Sci U S A.*; 2006. 103(44):16260-5.

31) Schiaffino S., **Sandri M**, Murgia M. Activity-dependent signaling pathways controlling muscle diversity and plasticity *Physiology*, 2007, 22:269-78.

32) Mieulet V, Roceri M, Espeillac C, Sotiropoulos A, Ohanna M, Oorschot V, Klumperman J, **Sandri M**, Pende M. S6 Kinase inactivation impairs growth and translational target phosphorylation in muscle cells maintaining proper regulation of protein turnover. *Am J Physiol Cell Physiol.* 2007, 293(2):C712-22.

33) Aguilar V, Alliouachene S, Sotiropoulos A, Sobering A, Athea Y, Djouadi F, Miraux S, Thiaudiere E, Foretz M, Viollet B, Diolez P, Bastin J, Benit P, Rustin P, Carling D, **Sandri M**, Ventura-Clapier R, Pende M. S6 Kinase Deletion Suppresses Muscle Growth Adaptations to Nutrient Availability by

Activating AMP Kinase. *Cell Metab.* 2007 Jun;5(6):476-87

34) Mammucari C, Milan G, Romanello V, Masiero E, Ruediger R, Del Piccolo P, Burden S.J., Di Lisi R., Sandri C, Zhao J., Goldberg A.L., Schiaffino S., **Sandri M.** FoxO3 controls autophagy in skeletal muscle in vivo. *Cell Metab.* 2007 Dec;6(6):458-71.

35) Zhao J, Brault J.J., Schild A, Peirang C., **Sandri M**, Schiaffino S., Lecker S., Goldberg A.L. FoxO3 Coordinately Activates Protein Degradation by the Autophagic (Lysosomal) and Proteasomal Pathways in Atrophying Muscle Cells. *Cell Metab.* 2007 Dec;6(6):472-83

36) Klionsky D.J., Abeliovich H., Agostinis P., Agrawal D.K., Aliev G., Askew D.S., Baba M., Baehrecke E.H., Bahr B.A., et al. Guidelines for the use and interpretation of assays for monitoring autophagy in higher eukaryotes. *Autophagy.* 2008 Mar-Apr;4(2):151-75.

37) Mammucari C., Schiaffino S., **Sandri M.** Downstream of Akt: FoxO3 and mTOR in the regulation of autophagy in skeletal muscle. *Autophagy.* 2008;4(4):524-26.

38) **Sandri M.** Signaling in muscle atrophy and hypertrophy. *Physiology*, 2008; 23:160-70

39) Schiaffino S., Mammucari C., **Sandri M.** The role of autophagy in neonatal tissues: just a response to starvation? *Autophagy.* 2008; 4(5):727-30.

40) 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; 17(23): 3686-3696

41) Dobrowolny G., Aucello M., Rizzato E., Beccafico S., Mammucari C., Boncompagni S., Belia S., Wannenes F., Nicoletti C., Del Prete Z., Rosenthal N., Molinaro M., Protasi F., Fano G., **Sandri M.**, Musaro A. Skeletal muscle is a primary target of SOD1G93A-mediated toxicity. *Cell Metab.* 2008 Nov; 8(5): 425-436.

42) 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.

43) 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.

44) 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

45) Masiero E, **Sandri M.** Autophagy inhibition induces atrophy and myopathy in adult skeletal muscles. *Autophagy.* 2010, Feb;6(2):307-9.

46) **Sandri M.** Autophagy in health and disease: 3. Autophagy Involvement in Muscle Atrophy. *Am J Physiol Cell Physiol.* 2010 Jun;298(6):C1291-7.

47) **Sandri M.** Autophagy in skeletal muscle. *FEBS Lett.* 2010, Apr 2;584(7):1411-6.

48) Romanello V, Guadagnin E, Gomes L, Roder I, Sandri C, Petersen Y, Milan G, Masiero E, Del Piccolo P, Foretz M, Scorrano L, Rudolf R, **Sandri M.** Mitochondrial fission and remodelling contributes to muscle atrophy. *EMBO J.* 2010, 29(10):1774-85.

49) Loro E, Rinaldi F, Malena A, Masiero E, Novelli G, Angelini C, Romeo V, **Sandri M**, Botta A, Vergani L. Normal myogenesis and increased apoptosis in myotonic dystrophy type-1 muscle cells. *Cell Death Differ.* 2010, 17(8):1315-24.

50) Stella R, Massimino ML, **Sandri M**, Sorgato MC, Bertoli A. Cellular prion protein promotes regeneration of adult muscle tissue. *Mol Cell Biol.* 2010, 30(20):4864-76.

- 51) Raffaello A, Milan G, Masiero E, Carnio S, Lee D, Lanfranchi G, Goldberg AL, **Sandri M**. JunB Transcription Factor Maintains Skeletal Muscle Mass and Promotes Hypertrophy. *J. Cell Biol.* 2010, 191(1):101-13
- 52) Grumati P\*, Coletto L\*, Sabatelli P, Cescon M, Angelin A, Bertaggia E, Blaauw B, Urciolo A, Tiepolo T, Merlini L, Maraldi NM, Bernardi P, **Sandri M**#, Bonaldo P#. Autophagy is defective in collagen VI muscular dystrophies and its reactivation rescues myofiber degeneration. *Nat Med.* 2010, Nov;16(11):1313-20.  
\* Co-first Authors, # Co-corresponding Authors
- 53) Romanello V, **Sandri M**. Mitochondrial biogenesis and fragmentation as regulators of muscle protein degradation. *Curr Hypertens Rep.* 2010, Dec;12(6):433-9.
- 54) **Sandri M**. New findings of lysosomal proteolysis in skeletal muscle. *Curr Opin Clin Nutr Metab Care.* 2011, May;14(3):223-9.
- 55) Grumati P, Coletto L, **Sandri M**#, Bonaldo P#. Autophagy Induction Rescues Muscle Dystrophy. *Autophagy.* 2011, Apr; 7(4):426-28.  
# Co-corresponding Authors
- 56) Grumati P, Coletto L, Schiavinato A., Castagnaro S., Bertaggia E., **Sandri M**#, Bonaldo P#. Physical exercise stimulates autophagy in normal skeletal muscles but is detrimental for collagen VI-deficient muscles. *Autophagy.* 2011, Dec; 7(12): 1-9.  
# Co-corresponding Authors
- 57) Kern H, Pelosi L, Coletto L, Musarò A, **Sandri M**, Vogelauer M, Trimmel L, Cvecka J, Hamar D, Kovarik J, Löfler S, Sarabon N, Protasi F, Adami N, Biral D, Zampieri S, Carraro U. Atrophy/hypertrophy cell signaling in muscles of young athletes trained with vibrational-proprioceptive stimulation. *Neurol Res.* 2011 Dec;33(10):998-1009.
- 58) Bertaggia E, Coletto L, **Sandri M**. Post-translational modifications control foxo3 activity during denervation. *Am J Physiol Cell Physiol.* 2012, Feb;302(3):C587-96.
- 59) Matsakas A, Macharia R, Otto A, Elashry M, Mouisel E, Romanello V, Sartori R, Amthor H, **Sandri M**, Narkar V, Patel K. Exercise-training attenuates the hyper-muscular phenotype and restores skeletal muscle function in the myostatin null mouse. *Exp Physiol.* 2012, 97(1):125-40.
- 60) Nascimbeni AC, Fanin M, Masiero E, Angelini C, **Sandri M**. The role of autophagy in the pathogenesis of glycogen storage disease type II (GSDII). *Cell Death Differ.* 2012, Oct;19(10):1698-708
- 61) Brocca L, Cannavino J, Coletto L, Biolo G, **Sandri M**, Bottinelli R, Pellegrino MA. The time course of the adaptations of human muscle proteome to bed rest and the underlying mechanisms. *J Physiol.* 2012, Oct 15;590(Pt 20):5211-30.
- 62) **Sandri M**. FOXOphagy path to inducing stress resistance and cell survival. *Nat Cell Biol.* 2012, 14 No 8: 786-788
- 63) Romanello V, **Sandri M**. Mitochondrial biogenesis and fragmentation as regulators of protein degradation in striated muscles. *J. Mol. Cell Cardiol.* 2013, 55: 64–72.
- 64) Nascimbeni A, Fanin M, Masiero E, Angelini C, **Sandri M**. Impaired autophagy contributes to muscle atrophy in glycogen storage disease type ii (gsdii) patients. *Autophagy.* 2012 Nov;8(11):1697-700
- 65) Klionsky DJ, Abdalla FC, Abeliovich H, Abraham RT, et al. Guidelines for the use and interpretation of assays for monitoring autophagy. *Autophagy.* 2012. Apr;8(4):445-544.
- 66) Mofarrahi M, Sigala I, Guo Y, Godin R, Davis EC, Petrof B, **Sandri M**, Burelle Y, Hussain SN. Autophagy and skeletal muscles in sepsis. *PLoS One.* 2012;7(10): e47265. doi:

10.1371/journal.pone.0047265.

67) Zaglia T, Milan G, Franzoso M, Bertaggia E, Pianca N, Piasentini E, Voltarelli VA, Chiavegato D, Brum PC, Glass DJ, Schiaffino S, **Sandri M**, Mongillo M. Cardiac sympathetic neurons provide trophic signal to the heart via  $\beta$ 2- adrenoceptor dependent regulation of proteolysis. *Cardiovasc Res*. 2013 Feb 1;97(2):240-50

68) Hussain SN, **Sandri M**. Role of autophagy in COPD skeletal muscle dysfunction. *J Appl Physiol*. 2013 May;114(9):1273-81. doi: 10.1152/jappphysiol.00893.2012.

69) Matsakas A, Romanello V, Sartori R, Masiero E, Macharia R, Otto A, Elashry M, **Sandri M**, Patel K. Food Restriction Reverses the Hyper-Muscular Phenotype and Force Generation Capacity Deficit of the Myostatin Null Mouse. *Int J Sports Med*. 2013, Mar;34(3):223-31.

70) De Palma C, Morisi F, Cheli S, Pambianco S, Cappello V, Vezzoli M, Rovere-Querini P, Moggio M, Ripolone M, Francolini M, **Sandri M**<sup>#</sup>, Clementi E<sup>#</sup>. Autophagy as a new therapeutic target in Duchenne muscular dystrophy. *Cell Death Dis*. 2012, Nov 15;3:e418. doi: 10.1038/cddis.2012.159  
# Co-corresponding Authors

71) Bonaldo P, **Sandri M**. Cellular and molecular mechanisms of muscle atrophy. *Dis Model Mech*. 2013, Jan;6(1):25-39.

72) Madaro L, Marrocco V, Carnio S, **Sandri M**, Bouché M. Intracellular signaling in ER stress-induced autophagy in skeletal muscle cells. *FASEB J*. 2013, May;27(5):1990-2000.

73) Schiaffino S, Dyar KA, Ciciliot S, Blaauw B, **Sandri M**. Mechanisms regulating skeletal muscle growth and atrophy. *FEBS J*. 2013, Sep;280(17):4294-314. doi: 10.1111/febs.12253.

74) Nemazany I, Blaauw B, Paolini C, Caillaud C, Protasi F, Mueller A, Proikas-Cezanne T, Russell RC, Guan KL, Nishino I, **Sandri M**, Pende M, Panasyuk G. Defects of Vps15 in skeletal muscles lead to autophagic vacuolar myopathy and lysosomal disease. *EMBO Mol Med*. 2013 Jun;5(6):870-90. doi: 10.1002/emmm.201202057. Epub 2013 Apr 30.

75) **Sandri M**. Protein breakdown in muscle wasting: Role of autophagy-lysosome and ubiquitin-proteasome. *Int J Biochem Cell Biol*. 2013 Oct;45(10):2121-9. doi: 10.1016/j.biocel.2013.04.023.

76) **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. doi: 10.1007/s10522-013-9432-9. Epub 2013 May 19.

77) Sartori R., Schirwis E., Blaauw B., Bortolanza S., Zhao J., Enzo E., Stantzou E., Mouisel E., Toniolo L., Ferry A., Stricker S., Goldberg AL., Dupont S., Piccolo S., Amthor H., and **Sandri M**. BMP signaling controls muscle mass. *Nat. Genet*. 2013 Nov;45(11):1309-18. doi: 10.1038/ng.2772.

78) **Sandri M**, Coletto L, Grumati P, Bonaldo P. Misregulation of autophagy and protein degradation systems in myopathies and muscular dystrophies. *J Cell Sci*. 2013 Dec 1;126(Pt 23):5325-33. doi: 10.1242/jcs.114041.

79) Khan MM, Strack S, Wild F, Hanashima A, Gasch A, Brohm K, Reischl M, Carnio S, Labeit D, **Sandri M**, Labeit S, Rudolf R. Role of autophagy, SQSTM1, SH3GLB1, and TRIM63 in the turnover of nicotinic acetylcholine receptors. *Autophagy*. 2014 Jan;10(1):123-36. doi: 10.4161/auto.26841. Epub 2013 Nov 8.

80) Guo Y, Gosker HR, Schols AM, Kapchinsky S, Bourbeau J, **Sandri M**, Jagoe RT, Debigaré R, Maltais F, Taivassalo T, Hussain SN. Autophagy in locomotor muscles of patients with chronic obstructive pulmonary disease. 2013. *Am J Respir Crit Care Med*. 2013 Dec 1;188(11):1313-20. doi: 10.1164/rccm.201304-0732OC.

81) Vainshtein A, Grumati P, **Sandri M**, Bonaldo P. Skeletal muscle, autophagy, and physical activity:

the ménage à trois of metabolic regulation in health and disease. *J Mol Med (Berl)*. 2014 Feb;92(2):127-37. doi: 10.1007/s00109-013-1096-z.

82) **Sandri M**, Robbins J. Proteotoxicity: An underappreciated pathology in cardiac disease. *J Mol Cell Cardiol*. 2014 Jun;71:3-10. doi: 10.1016/j.yjmcc.2013.12.015.

83) Collins-Hooper H, Sartori R, Macharia R, Visanuvimol K, Foster K, Matsakas A, Flaskamp H, Ray S, Dash PR, **Sandri M**, Patel K. Propeptide-Mediated Inhibition of Myostatin Increases Muscle Mass Through Inhibiting Proteolytic Pathways in Aged Mice. *J Gerontol A Biol Sci Med Sci*. 2014 Sep;69(9):1049-59. doi: 10.1093/gerona/glt170.

84) Zaglia T, Milan G, Ruhs A, Franzoso M, Bertaggia E, Pianca N, Carpi A, Carullo P, Pesce P, Sacerdoti D, Sarais C, Catalucci D, Krüger M, Mongillo M, and **Sandri M**. Inhibition of the ubiquitin ligase Atrogin-1/MAFbx impairs CHMP2B turnover blocks autophagy flux and causes cardiomyopathy. *J Clin Invest*. 2014 Jun 2;124(6):2410-24. doi: 10.1172/JCI66339.

85) Zampieri S, Pietrangelo L, Loeffler S, Fruhmann H, Vogelauer M, Burggraf S, Pond A, Grim-Stieger M, Cvecka J, Sedliak M, Tirpáková V, Mayr W, Sarabon N, Rossini K, Barberi L, De Rossi M, Romanello V, Boncompagni S, Musarò A, **Sandri M**, Protasi F, Carraro U, Kern H. Lifelong Physical Exercise Delays Age-Associated Skeletal Muscle Decline. *J Gerontol A Biol Sci Med Sci*. 2015 Feb;70(2):163-73. doi: 10.1093/gerona/glu006.

86) Mosole S, Carraro U, Kern H, Loeffler S, Fruhmann H, Vogelauer M, Burggraf S, Mayr W, Krenn M, Paternostro-Sluga T, Hamar D, Cvecka J, Sedliak M, Tirpakova V, Sarabon N, Musarò A, **Sandri M**, Protasi F, Nori A, Pond A, Zampieri S. Long-Term High-Level Exercise Promotes Muscle Reinnervation With Age. *J Neuropathol Exp Neurol*. 2014 Apr;73(4):284-94. doi: 10.1097/NEN.0000000000000032.

87) Chacon-Cabrera A, Femoselle C, Urtreger AJ, Mateu-Jimenez M, Diament MJ, de Kier Joffé ED, **Sandri M**, Barreiro E. Pharmacological Strategies in Lung Cancer-Induced Cachexia: Effects on Muscle Proteolysis, Autophagy, Structure, and Weakness. *J Cell Physiol*. 2014 Nov;229(11):1660-72. doi: 10.1002/jcp.24611.

88) Sala D, Ivanova S, Plana N, Ribas V, Duran J, Bach D, Turkseven S, Laville M, Vidal H, Karczewska-Kupczewska M, Kowalska I, Straczkowski M, Testar X, Palacín M, **Sandri M**, Serrano AL, Zorzano A. Autophagy-regulating TP53INP2 mediates muscle wasting and is repressed in diabetes. *J Clin Invest*. 2014 May 1;124(5):1914-27. doi: 10.1172/JCI72327.

89) Soares RJ, Cagnin S, Chemello F, Silvestrin M, Musaro A, De Pitta C, Lanfranchi G, **Sandri M**. Involvement of miRNAs in the Regulation of Muscle Wasting during Catabolic Conditions. *J Biol Chem*. 2014 Aug 8;289(32):21909-25. doi: 10.1074/jbc.M114.561845.

90) Nicot AS, Lo Verso F, Ratti F, Pilot-Storck F, Streichenberger N, **Sandri M**, Schaeffer L, Goillot E. Phosphorylation of NBR1 by GSK3 modulates protein aggregation. *Autophagy*. 2014 Jun 1;10(6):1036-53. doi: 10.4161/auto.28479

91) Bertaggia E, Scabia G, Dalise S, Lo Verso F, Santini F, Vitti P, Chisari C#, **Sandri M**#, Maffei M#. Haptoglobin is required to prevent oxidative stress and muscle atrophy. *PLoS One*. 2014 Jun 19;9(6):e98106. doi: 10.1371/journal.pone.0098106.  
#Co-corresponding Authors

92) Pulliero A, Seydel A, Camoirano A, Saccà SC, **Sandri M**, Izzotti A. Oxidative damage and autophagy in the human trabecular meshwork as related with ageing. *PLoS One*. 2014 Jun 19;9(6):e98106. doi: 10.1371/journal.pone.0098106.

93) Kern H, Barberi L, Loeffler S, Sbardella S, Burggraf S, Fruhmann S, Carraro U, Mosole S, Sarabon N, Vogelauer M, Mayer W, Krenn M, Cvecka J, Romanello V, Pietrangelo L, Protasi F, **Sandri M**, Zampieri S, Musarò A. Electrical stimulation (ES) counteracts muscle decline in seniors. *Front. Aging Neurosci*. 2014 Jul 24;6:189. doi: 10.3389/fnagi.2014.00189

94) Camio S, LoVerso F, Baraibar MA, Longa E, Khan MM, Maffei M, Reischl M, Caneparì M, Loeffler S, Kern H, Blaauw B, Friguet B, Bottinelli R, Rudolf R, and **Sandri M**. Impairment of autophagy in

muscle induces neuro-muscular junction degeneration and precocious ageing. *Cell Reports*. 2014 Sep 11;8(5):1509-21. doi: 10.1016/j.celrep.2014.07.061.

95) Lo Verso F, Carnio S, Vainshtein A, and **Sandri M**. Autophagy is not required to sustain exercise and prkaa1/ampk activity but is important to prevent mitochondrial damage during physical activity. *Autophagy*. 2014 Nov 2;10(11):1883-94. doi: 10.4161/auto.32154.

96) Sartori R, Gregorevic P, and **Sandri M**. TGF  $\beta$  and BMP signaling in skeletal muscle: potential significance for muscle-related disease. *Trends Endocrinol Metab*. 2014 Sep;25(9):464-471. doi: 10.1016/j.tem.2014.06.002.

97) Cannavino J, Brocca L, **Sandri M**, Bottinelli R, Pellegrino MA. PGC1-alpha over-expression prevents metabolic alterations and soleus muscle atrophy in hindlimb unloaded mice. *J Physiol*. 2014, Oct 15;592(Pt 20):4575-89. doi: 10.1113/jphysiol.2014.275545.

98) Sabatelli P, Castagnaro S, Tagliavini F, Chrisam M, Sardone F, Demay L, Richard P, Santi S, Maraldi NM, Merlini L, **Sandri M** and Bonaldo P. Aggresome-Autophagy Involvement in a Sarcopenic Patient with Rigid Spine Syndrome and a p.C150R Mutation in FHL1 Gene. *Front. Aging Neurosci*. 2014 Aug 19;6:215. doi: 10.3389/fnagi.2014.00215.

99) Ratti F, Ramond F, Moncollin V, Simonet T, Milan G, Mejat A, Thomas JL, Streichenberger N, Gilquin B, Matthias P, Khochbin S, **Sandri M**, Schaeffer L. Histone Deacetylase 6 is a FoxO transcription factor-dependent effector in skeletal muscle atrophy. *J Biol Chem*. 2015 Feb 13;290(7):4215-24. doi: 10.1074/jbc.M114.600916.

100) De Palma C, Morisi F, Pambianco S, Assi E, Touvier T, Russo S, Perrotta C, Romanello V, Carnio S, Cappello V, Pellegrino P, Moscheni C, Bassi MT, **Sandri M**, Cervia D, Clementi E. Deficient nitric oxide signalling impairs skeletal muscle growth and performance: involvement of mitochondrial dysregulation. *Skelet Muscle*. 2014 Dec 12;4(1):22. doi: 10.1186/s13395-014-0022-6.

101) Conte M, Vasuri F, Bertaggia E, Armani A, Santoro A, Bellavista E, Degiovanni A, D'Errico-Grigioni A, Trisolino G, Capri M, Franchi MV, Narici MV, **Sandri M**, Franceschi C, Salvioli S. Differential expression of perilipin 2 and 5 in human skeletal muscle during aging and their association with atrophy-related genes. *Biogerontology*. 2015 Jun;16(3):329-40. doi: 10.1007/s10522-014-9549-5.

102) Nascimbeni AC, Fanin M, Tasca E, Angelini C, **Sandri M**. Impaired Autophagy Affects acid  $\alpha$  - Glucosidase Processing and Enzyme Replacement Therapy Efficacy in Late-Onset Glycogen Storage Disease Type II. *Neuropathol Appl Neurobiol*. 2015 Jan 5. doi: 10.1111/nan.12214.

103) Cannavino J, Brocca L, **Sandri M**, Grassi B, Bottinelli R, Pellegrino MA. The role of alterations in mitochondrial dynamics and PGC-1alpha over-expression in fast muscle atrophy following hindlimb unloading. *J Physiol*. 2015 Jan 7. doi: 10.1113/jphysiol.2014.286740.

104) Benveniste O, Stenzel W, Hilton-Jones D, **Sandri M**, Boyer O, van Engelen BG. Amyloid deposits and inflammatory infiltrates in sporadic inclusion body myositis: the inflammatory egg comes before the degenerative chicken. *Acta Neuropathol*. 2015 May;129(5):611-24. doi: 10.1007/s00401-015-1384-5.

105) **Sandri M**. BMP signalling and muscle mass. *Curr Opin Clin Nutr Metab Care*. 2015 May;18(3):215-20. doi: 10.1097/MCO.0000000000000172.

106) Milan G, Romanello V, Pescatore F, Armani A, Paik JH, Frasson F, Seydel A, Zhao J, Abraham R, Goldberg AL, Blaauw B., DePinho RA, **Sandri M**. Regulation of autophagy and ubiquitin-proteasome system by FoxO transcriptional network during muscle atrophy. *Nat. Comm*. 2015 Apr 10;6:6670. doi: 10.1038/ncomms7670.

107) Medina DL, Di Paola S, Peluso I, Armani A, De Stefani D, Venditti R, Montefusco S, Scotto-Rosato A, Prezioso C, Forrester A, Settembre C, Wang W, Gao Q, Xu H, **Sandri M**, Rizzuto R, De Matteis MA, Ballabio A. Lysosomal calcium signalling regulates autophagy through calcineurin and TFEB. *Nat Cell Biol*. 2015 Feb 27;17(3):288-299. doi: 10.1038/ncb3114.

- 108) 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 Trophism In Vivo. *Cell Rep*. 2015 Mar 3;10(8):1269-79. doi: 10.1016/j.celrep.2015.01.056.
- 109) Lapierre LR, Kumsta C, **Sandri M**, Ballabio A, Hansen M. Transcriptional and Epigenetic Regulation of Autophagy in Aging. *Autophagy*. 2015 Jun 3;11(6):867-80. doi: 10.1080/15548627.2015.1034410.
- 110) Vainshtein A, Desjardins EM, Armani A, **Sandri M**, Hood DA. PGC-1 $\alpha$  modulates denervation-induced mitophagy in skeletal muscle. *Skelet Muscle*. 2015 Mar 18;5:9. doi: 10.1186/s13395-015-0033-y.
- 111) Collins-Hooper H, Sartori R, Giallourou N, Matsakas A, Mitchell R, Mararenkova H, Flaskkamp H, Macharia R, Ray S, Swann JR, **Sandri M**, Patel K. Symmorphosis through Dietary Regulation: A Combinatorial Role for Proteolysis, Autophagy and Protein Synthesis in Normalising Muscle Metabolism and Function of Hypertrophic Mice after Acute Starvation. *PLoS One*. 2015 Mar 25;10(3):e0120524. doi: 10.1371/journal.pone.0120524.
- 112) Varanita T, Soriano ME, Romanello V, Zaglia T, Quintana-Cabrera R, Semenzato M, Menabò R, Costa R, Civiletto G, Pesce P, Viscomi P, Zeviani M, Di Lisa F, Mongillo M, **Sandri M**, Scorrano L. Controlled overexpression of the mitochondria shaping protein Optic Atrophy 1 counteracts cellular damage in vivo. *Cell Metab*. 2015 Jun 2;21(6):834-44. doi: 10.1016/j.cmet.2015.05.007.
- 113) Sartori R, **Sandri M**. Bmps and the Muscle-Bone Connection. *Bone*. 2015 May 30. pii: S8756-3282(15)00204-5. doi: 10.1016/j.bone.2015.05.023.
- 114) **Sandri M**. Protein Breakdown in Cancer Cachexia. *Seminars - Cell and Dev. Biol*. 2015 Nov 11. pii: S1084-9521(15)00248-7. doi: 10.1016/j.semcdb.2015.11.002.
- 115) **Sandri M**. Memory or Amnesia: the dilemma of stem cell therapy in muscular dystrophies. *J Clin Invest*. 2015 Dec 1;125(12):4331-3. doi: 10.1172/JCI85002
- 116) García-Prat L, Martínez-Vicente M, Perdiguero E, Ortet L, Rodríguez-Ubveja J, Rebollo E, Ruiz-Bonilla V, Gutarra S, Ballestar E, Serrano AL, **Sandri M**, Muñoz-Cánoves P. Autophagy maintains stemness by preventing senescence. *Nature*. 2016 Jan 7;529(7584):37-42. doi: 10.1038/nature16187.
- 117) Rudolf R, Deschenes MR, **Sandri M**. Neuromuscular junction degeneration in muscle wasting. *Curr Opin Clin Nutr Metab Care*. 2016 May;19(3):177-81. doi: 10.1097/MCO.0000000000000267.
- 118) Klionsky DJ, et al. Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). *Autophagy*. 2016 Jan 2;12(1):1-222.
- 119) Rocchi A, Milioto C, Parodi S, Armirotti A, Borgia D, Pellegrini M, Urciuolo A, Molon S, Morbidoni V, Marabita M, Romanello V, Gatto P, Blaauw B, Bonaldo P, Sambataro F, Robins DM, Lieberman AP, Sorarù G, Vergani L, **Sandri M**, Pennuto M. Glycolytic-to-oxidative fiber-type switch and mTOR signaling activation are early-onset features of SBMA muscle modified by high-fat diet. *Acta Neuropathol*. 2016 Jul;132(1):127-44. doi: 10.1007/s00401-016-1550-4.
- 120) Romanello V, **Sandri M**. Mitochondrial quality control and muscle mass maintenance. *Front Physiol*. 2016 Jan 12; 6:422. doi: 10.3389/fphys.2015004222.
- 121) Ferlin A, De Toni L, **Sandri M**, Foresta C. Relaxin and INSL3 in the muscolo-skeletal system: from bench to bedside. *Br J Pharmacol*. 2017 May;174(10):1015-1024.
- 122) Davey JR, Watt KI, Parker BL, Chaudhuri R, Ryall JG, Cunningham L, Qian H, Sartorelli V, **Sandri M**, Chamberlain J, James DE, Gregorevic P. Integrated expression analysis of muscle hypertrophy identifies Asb2 as a negative regulator of muscle mass. *JCI Insight*. 2016 Apr 21;1(5). pii: e85477.

- 123) Kalamgi RC, Salah H, Gastaldello S, Martinez-Redondo V, Ruas J, Fury W, Bai Y, Gromada J, Sartori R, Guttridge DC, **Sandri M**, Larsson L. Mechano signaling pathways in an experimental intensive critical illness myopathy model. *J Physiol*. 2016 Mar 16. doi: 10.1113/JP271973.
- 124) Castagnaro S, Pellegrini C, Pellegrini M, Chrisam M, Sabatelli P, Toni S, Grumati P, Ripamonti C, Pratelli L, Maraldi NM, Cocchi D, Righi V, Faldini C, **Sandri M\***, Bonaldo P\*, Merlini L\*. Autophagy activation in COL6 myopathic patients by a low-protein-diet pilot trial. *Autophagy*. 2016 Dec;12(12):2484-2495.  
\* Co-corresponding Authors
- 125) Malena A, Pantic B, Borgia D, Sgarbi G, Solaini G, Perissinotto E, Holt IJ, Spinazzola A, **Sandri M\***, Baracca A\*, Vergani L\*. Mitochondrial quality control: Cell-type-dependent responses to pathological mutant mitochondrial DNA *Autophagy*. 2016 Nov;12(11):2098-2112.  
\* Co-corresponding Authors
- 126) Omairi S, Matsakas A, Degens H, Kretz O, Hansson KA, Solbrå AV, Bruusgaard JC, Joch B, Sartori R, Giallourou N, Mitchell R, Collins-Hooper H, Foster K, Pasternack A, Ritvos O, **Sandri M**, Narkar V, Swann JR, Huber TB, Patel K. Enhanced exercise and regenerative capacity in a mouse model that violates size constraints of oxidative muscle fibres. *Elife*. 2016 Aug 5;5. pii: e16940. doi: 10.7554/eLife.16940.
- 127) Conte M, Franceschi C, **Sandri M**, Salvioli S. Perilipin 2 and Age-Related Metabolic Diseases: A New Perspective. *Trends Endocrinol Metab*. 2016 Dec 27 (12): 893-903. doi: 10.1016/j.tem.2016.09.001.
- 128) Brocca L, Toniolo L, Reggiani C, Bottinelli R, **Sandri M**, Pellegrino MA. FoxO-dependent atrogenes vary among catabolic conditions and play a key role in muscle atrophy induced by hindlimb suspension. *J Physiol*. 2016 Oct 21. doi: 10.1113/JP273097.
- 129) Zampieri S, Mammucari C, Romanello V, Barberi L, Pietrangelo L, Fusella A, Mosole S, Gherardi G, Höfer C, Löffler 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. doi: 10.14814/phy2.13005.
- 130) Mansueto M, Armani A, Viscomi C, D'Orsi L, De Cegli R, Polishchuk EV, Lamperti C, Di Meo I, Romanello V, Marchet S, Saha PK, Zong H, Blaauw B, Solagna F, Tezze C, Grumati P, Bonaldo P, Pessin JE, Zeviani M, **Sandri M\*#**, Ballabio A\*. Transcription Factor EB Controls Metabolic Flexibility During Exercise. *Cell Metab*. 2017 Jan 10;25(1):182-196. doi: 10.1016/j.cmet.2016.11.003  
\* Co-corresponding Authors; #Lead Corresponding author
- 131) Nascimbeni AC, Fanin M, Angelini C, **Sandri M**. Autophagy Disregulation in Danon Disease. *Cell Death Dis*. 2017 Jan 19;8(1):e2565. doi: 10.1038/cddis.2016.475.
- 132) Pastore N, Vainshtein A, Klisch TJ, Armani A, Huynh T, Herz NJ, Polishchuk EV, **Sandri M**, Ballabio A. TFE3 regulates whole-body energy metabolism in cooperation with TFEB. *EMBO Mol Med*. 2017 May;9(5):605-621. doi: 10.15252/emmm.201607204.
- 133) Tezze C, Romanello V, Desbats MA, Fadini GP, Albiero M, Favaro G, Ciciliot S, Soriano ME, Morbidoni V, Cerqua C, Loeffler S, Kern H, Franceschi C, Salvioli S, Conte M, Blaauw B, Zampieri S, Salviati L, Scorrano L, **Sandri M**. Age-Associated Loss of OPA1 in Muscle Impacts Muscle Mass, Metabolic Homeostasis, Systemic Inflammation, and Epithelial Senescence. *Cell Metab*. 2017 Jun 6;25(6):1374-1389.e6. doi: 10.1016/j.cmet.2017.04.021..
- 134) Ripolone M, Violano R, Ronchi D, Mondello S, Nascimbeni A, Colombo I, Fagiolari G, Bordoni A, Fortunato F, Lucchini V, Saredi S, Filosto M, Musumeci O, Tonin P, Mongini T, Previtali S, Morandi L, Angelini C, Mora M, **Sandri M**, Sciacco M, Toscano A, Comi GP, Moggio M. Effects of short-to-long term Enzyme Replacement Therapy (ERT) on skeletal muscle tissue in Late Onset Pompe disease (LOPD). *Neuropathol Appl Neurobiol*. 2017 Jun 2. doi: 10.1111/nan.12414.
- 135) Dobrowolny G, Martini M, Scicchitano BM, Romanello V, Boncompagni S, Nicoletti C,

Pietrangelo L, De Panfilis S, Catizone A, Bouche M, **Sandri M**, Rudolf R, Protasi F, Musaro A. Muscle expression of SOD1G93A triggers the dismantlement of neuromuscular junction via PKC-theta. *Antioxid Redox Signal*. 2018 Apr 20;28(12):1105-1119.

136) Zaglia T, Ceriotti P, Campo A, Borile G, Armani A, Carullo P, Prando V, Coppini R, Vida V, Stølen TO, Ulrik W, Cerbai E, Stellin G, Faggian G, De Stefani D, **Sandri M**, Rizzuto R, Di Lisa F, Pozzan T, Catalucci D, Mongillo M. Content of mitochondrial calcium uniporter (MCU) in cardiomyocytes is regulated by microRNA-1 in physiologic and pathologic hypertrophy. *Proc Natl Acad Sci U S A*. 2017 Oct 24;114(43):E9006-E9015. doi: 10.1073/pnas.1708772114.

137) Segatto M, Fittipaldi R, Pin F, Sartori R, Dae Ko K, Zare H, Fenizia C, Zanchettin G, Pierobon ES, Hatakeyama S, Sperti C, Merigliano S, **Sandri M**, Filippakopoulos P, Costelli P, Sartorelli V, Caretti G. Epigenetic targeting of bromodomain protein BRD4 counteracts cancer cachexia and prolongs survival. *Nat Commun*. 2017 Nov 22;8(1):1707. doi: 10.1038/s41467-017-01645-7

138) Li M, Sala V, De Santis MC, Cimino J, Cappello P, Pianca N, Di Bona A, Margaria JP, Martini M, Lazzarini E, Pirozzi F, Rossi L, Franco I, Bombaum J, Heger J, Rohrbach S, Perino A, Tocchetti CG, Lima BHF, Teixeira MM, Porporato PE, Schulz R, Angelini A, **Sandri M**, Ameri P, Sciarretta S, Lima-Júnior RCP, Mongillo M, Zaglia T, Morello F, Novelli F, Hirsch E, Ghigo A. Phosphoinositide 3-Kinase Gamma Inhibition Protects from Anthracycline Cardiotoxicity and Reduces Tumor Growth. *Circulation*. 2018 Jan 18. pii: CIRCULATIONAHA.117.030352. doi: 10.1161/CIRCULATIONAHA.

139) Smuder AJ, Sollanek KJ, Nelson WB, Min K, Talbert EE, Kavazis AN, Hudson MB, **Sandri M**, Szeto HH, Powers SK. Crosstalk between autophagy and oxidative stress regulates proteolysis in the diaphragm during mechanical ventilation. *Free Radic Biol Med*. 2018 Feb 1;115:179-190. doi: 10.1016/j.freeradbiomed.2017.11.025.

140) Rodríguez-Nuevo A, Díaz-Ramos A, Noguera E, Díaz-Sáez F, Duran X, Muñoz JP, Romero M, Plana N, Sebastián D, Tezze C, Romanello V, Ribas F, Seco J, Planet E, Doctrow SR, González J, Borràs M, Liesa M, Palacín M, Vendrell J, Villarroya F, **Sandri M**, Shirirhai O, Zorzano A. Mitochondrial DNA and TLR9 drive muscle inflammation upon Opa1 deficiency. *EMBO J*. 2018 May 15;37(10). pii: e96553. doi: 10.15252/embj.201796553.

141) Mota R, Parry TL, Yates C, Qiang Z, Eaton SC, Mwiza JM, Tulasi D, Schisler JC, Patterson C, Zaglia T, **Sandri M**, Willis MS. Increasing Cardiomyocyte Atrogin-1 Reduces Aging-Associated Fibrosis and Regulates Remodeling In Vivo. *Am J Pathol*. 2018 May 11. pii: S0002-9440(17)30956-2. doi: 10.1016/j.ajpath.2018.04.007.

142) 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 May 1;23(5):1342-1356. doi: 10.1016/j.celrep.2018.03.136.

143) Filippi A, Dal Sasso E, Iop L, Armani A, Gintoli M, **Sandri M**, Gerosa G, Romanato F, Borile G. Multimodal label-free ex vivo imaging using a dual-wavelength microscope with axial chromatic aberration compensation. *J Biomed Opt*. 2018 Mar;23(9):1-9. doi: 10.1117/1.JBO.23.9.091403

144) Kravic B, Harbauer AB, Romanello V, Simeone L, Vögtle FN, Kaiser T, Straubinger M, Huraskin D, Böttcher M, Cerqua C, Martin ED, Poveda-Huertes D, Buttgerit A, Rabalski AJ, Heuss D, Rudolf R, Friedrich O, Litchfield D, Marber M, Salviati L, Mougiakakos D, Neuhuber W, **Sandri M**, Meisinger C, Hashemolhosseini S. In mammalian skeletal muscle, phosphorylation of TOMM22 by protein kinase CSNK2/CK2 controls mitophagy. *Autophagy*. 2018;14(2):311-335. doi: 10.1080/15548627.2017.1403716.

145) Conte M, Ostan R, Fabbri C, Santoro A, Guidarelli G, Vitale G, Mari D, Sevini F, Capri M, **Sandri M**, Monti D, Franceschi C, Salvioli S. Human aging and longevity are characterized by high levels of mitokines. *J Gerontol A Biol Sci Med Sci*. 2018 Jun 27. doi: 10.1093/gerona/gly153

146) Kustermann M, Manta L, Paone C, Kustermann J, Lausser L, Wiesner C, Eichinger L, Clemen CS, Schröder R, Kestler HA, **Sandri M**, Rottbauer W, Just S. Loss of the novel Vcp (valosin containing protein) interactor Washc4 interferes with autophagy-mediated proteostasis in striated muscle and leads to myopathy in vivo. *Autophagy*. 2018;14(11):1911-1927.

- 147) Ferlin A, De Toni L, Agoulnik AI, Lunardon G, Armani A, Bortolanza S, Blaauw B, **Sandri M\***, Foresta C\*. Protective Role of Testicular Hormone INSL3 From Atrophy and Weakness in Skeletal Muscle. *Front Endocrinol (Lausanne)*. 2018 Sep 28;9:562.  
\* Co-corresponding Authors
- 148) Zecchini S, Giovarelli M, Perrotta C, Morisi F, Touvier T, Di Renzo I, Moscheni C, Bassi MT, Cervia D, **Sandri M**, Clementi E, De Palma C. Autophagy controls neonatal myogenesis by regulating the GH-IGF1 system through a NFE2L2- and DDIT3-mediated mechanism. *Autophagy*. 2018 Sep 10:1-20. doi: 10.1080/15548627.2018.
- 149) Conte M, Armani A, Conte G, Serra A, Franceschi C, Mele M, **Sandri M**, Salvioli S. Muscle-specific Perilipin2 down-regulation affects lipid metabolism and induces myofiber hypertrophy. *J Cachexia Sarcopenia Muscle*. 2019 Feb;10(1):95-110.
- 150) Larsson L, Degens H, Li M, Salviati L, Lee YI, Thompson W, Kirkland JL, **Sandri M**. Sarcopenia: Aging-Related Loss of Muscle Mass and Function. *Physiol Rev*. 2019 Jan 1;99(1):427-511.
- 151) De Toni L, Agoulnik AI, **Sandri M**, Foresta C, Ferlin A. INSL3 in the musculo-skeletal system. *Mol Cell Endocrinol*. 2019 May 1;487:12-17. doi: 10.1016/j.mce.2018.12.021.
- 152) Gonçalves DA, Silveira WA, Manfredi LH, Graça FA, Armani A, Bertaglia E, O'Neill BT, Lautherbach N, Machado J, Nogara L, Pereira MG, Arcidiacono D, Realdon S, Kahn CR, **Sandri M**, Kettelhut IC, Navegantes LCC. Insulin/IGF1 signalling mediates the effects of  $\beta$ 2 -adrenergic agonist on muscle proteostasis and growth. *J Cachexia Sarcopenia Muscle*. 2019 Apr 1. doi: 10.1002/jcsm.12395
- 153) Chemello F, Grespi F, Zulian A, Cancellara P, Hebert-Chatelain E, Martini P, Bean C, Alessio E, Buson L, Bazzega M, Armani A, **Sandri M**, Ferrazza R, Laveder P, Guella G, Reggiani C, Romualdi C, Bernardi P, Scorrano L, Cagnin S, Lanfranchi G. Transcriptomic Analysis of Single Isolated Myofibers Identifies miR-27a-3p and miR-142-3p as Regulators of Metabolism in Skeletal Muscle. *Cell Rep*. 2019 Mar 26;26(13):3784-3797.e8. doi: 10.1016/j.celrep.2019.02.105.
- 154) Conte M, Martucci M, **Sandri M**, Franceschi C, Salvioli S. The Dual Role of the Pervasive "Fattish" Tissue Remodeling With Age. *Front Endocrinol (Lausanne)*. 2019 Feb 26;10:114. doi: 10.3389/fendo.2019.00114
- 155) 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. doi: 10.1038/s41467-019-10226-9.
- 156) Romanello V, Scalabrin M, Albiero M, Blaauw B, Scorrano L, **Sandri M**. Inhibition of the Fission Machinery Mitigates OPA1 Impairment in Adult Skeletal Muscles. *Cells*. 2019 Jun 15;8(6). pii: E597. doi: 10.3390/cells8060597.
- 157) Henriksen TI, Wigge LV, Nielsen J, Pedersen BK, **Sandri M**, Scheele C. Dysregulated autophagy in muscle precursor cells from humans with type 2 diabetes. *Sci Rep*. 2019 Jun 3;9(1):8169. doi: 10.1038/s41598-019-44535-2.
- 158) Tezze C, Romanello V, **Sandri M**. FGF21 as Modulator of Metabolism in Health and Disease. *Front Physiol*. 2019 Apr 17;10:419. doi: 10.3389/fphys.2019.00419.
- 159) Eiber N, Rehman M, Kravic B, Rudolf R, **Sandri M**, Hashemolhosseini S. Loss of Protein Kinase Csnk2b/CK2  $\beta$  at Neuromuscular Junctions Affects Morphology and Dynamics of Aggregated Nicotinic Acetylcholine Receptors, Neuromuscular Transmission, and Synaptic Gene Expression. *Cells*. 2019 Aug 20;8(8). pii: E940. doi: 10.3390/cells8080940

INVITIA CONGRESSI  
INTERNAZIONALI

1. "7th Terme Euganee Meeting on Rehabilitation" 2003 Padova, (Italy);
2. "Regulation and therapeutic potential of the PI3-kinase/PKB signalling pathway" 2004, Dundee (UK);
3. "FISV" 2004 Riva del Garda, Trento (Italy).
4. "3<sup>rd</sup> Cachexia Meeting" 2005, Rome, Italy;
5. EMBO/FEBS workshop "The Molecular and Cellular Mechanisms underlying Skeletal Muscle Formation and Repair"; EMBO workshop 2005, Fontevraud, France;
6. "2<sup>nd</sup> Myores Congress" 2006, Prague, Czech Republic;
7. "Gutmann Memorial, 30-year after The Long Lasting Denervated Muscle" 2007, Padova, (Italy);
8. "2<sup>nd</sup> Italian meeting of Italian Society for Space Biomedicine and Biotechnology" 2007 Bari, Italy;
9. "XXVI European Muscle Conference" 2007, Stockholm, Sweden;
10. Marie Curie Symposium "The ubiquitin-proteasome system in cardiovascular disease" 2007, Hamburg, Germany;
11. Gordon Conference "Autophagy in stress, development and disease" 2008, Ventura, Los Angeles, USA;
12. Cold Spring Harbor Laboratory "Molecular Mechanisms Modulating Skeletal Muscle Mass and Function", 2008, Long Island, New York, USA;
13. "2008 Spring Padua Muscle Days Functional Recovery of Muscle Tissue" 2008, Padova, Italy;
14. "FISV" 2008 Riva del Garda, Trento (Italy);
15. "XXVII European Muscle Conference" 2008, Oxford, UK;
16. EMBO Conference "The molecular and cellular mechanisms regulating skeletal muscle development and regeneration" 2009 Barcelona, Spain;
17. Gordon Conference "Oxidative Stress & Disease." 2009, Ciocco, Lucca, Italy;
18. 38<sup>th</sup> Annual Meeting of the American Aging Association" Workshop "Protein Quality and Aging" 2009, Phoenix, AZ, USA;
19. "XXVIII European Muscle Conference". 2009 Lille, France.
20. EMBO conference "Autophagy. Cell Biology, Physiology and Pathology" 2009, Monte Verita, Ascona, Switzerland.
21. 7<sup>th</sup> Annual Scientific Sessions of the Society for Heart and Vascular Metabolism. "Cardiac metabolism in health and disease. Mitochondria and Oxidative Stress." 2009, Padova, Italy.
22. Gordon Conference "Autophagy in Stress Development and Disease." 2010, Ciocco, Lucca, Italy.;
23. 1<sup>st</sup> International Congress of Translational Research in Human Nutrition "Protein-energy metabolism in aging and chronic diseases: role of nutrition and physical activity" 2010, Clermont-Ferrand, France.
24. XX world congress of the International Society of Heart Research (ISHR) World Congress. 2010, Tokyo, Japan.
25. International conference IFR 83 2010 "Oxidative Metabolism in Health and Diseases", 2010, Paris, France.
26. Heart Failure Association Winter Research Meeting 2011, Les Diablerets, Switzerland.
27. IRB Barcelona BioMed Conference on "Mitochondrial autophagy". 2011, Barcelona, Spain
28. Experimental Biology 2011, American Physiological Society, Environmental and Exercise Physiology Section, "Autophagy in Skeletal Muscle" session, Washington, USA
29. Fourth International Congress of Myology "Myology2011", Lille, France.
30. American Diabetes Association's 71<sup>st</sup> Scientific Session "Autophagy, Ageing and Metabolic Control" session, 2011, San Diego, USA.
31. The 61<sup>st</sup> Annual Scientific Meeting of the British Society for Research on Ageing (BSRA). "The Science of Ageing – Global Progress" 2011, Brighton, UK.
32. EMBO Meeting 2011, Autophagy in disease & development, Vienna, Austria.
33. "XXX European Muscle Conference". 2011 Berlin, Germany.
34. International Conference on Muscle Wasting 2011. "Molecular Mechanisms of Muscle Growth and Wasting in Health and Disease". 2011, Monte Verita, Ascona, Switzerland.
35. Gordon Conference "Autophagy in Stress Development and Disease." 2012, Ventura, USA

36. 7<sup>th</sup> Ascona International Workshop on Cardiomyocyte Biology, "Cardiac Pathway of Differentiation, Metabolism and Contraction". 2012, Monte Verita, Ascona, Switzerland.
37. 15<sup>th</sup> International Biochemistry of Exercise Congress (IBEC). 2012, Stockholm, Sweden.
38. Cancer Cachexia Conference. 2012, Boston, USA.
39. 57<sup>th</sup> Annual Meeting of the German Society of Neuropathology and Neuroanatomy (DGNN). 2012, Erlangen, Germany.
40. "XXXI European Muscle Conference". 2012 Rhodes, Greece
41. Symposium "Skeletal Muscle Dysfunction in the Critical ill". 2012, Montreal, Canada.
42. Experimental Biology (EB) 2013, American Physiological Society, Environmental and Exercise Physiology Section, "Mitochondrial Dynamics and Turnover with exercise". 2013 Boston, USA.
43. V Covian Symposium. 2013 Ribeirão Preto, Brazil.
44. AIM - Associazione Italiana di Miologia. 2013, Stresa, Italy.
45. EMBO Workshop - Molecular Mechanisms of muscle growth and wasting in health and disease. 2013, Monte Verita, Ascona, Switzerland.
46. ABCD 2013, Ravenna, Italy
47. EMBL conference, Myofibrillar Z-disk Structure and Dynamics. 2013, EMBL Hamburg, Germany.
48. ENMC European Neuro-Muscular Center . 201<sup>st</sup> ENMC International Workshop. Autophagy in Muscle Dystrophies, translational approach. 2013, Naarden, The Netherlands.
49. Keystone Symposia, Growth and wasting in Heart and Skeletal Muscle. 2014, Santa Fe, New Mexico, USA
50. Advances in Skeletal Muscle Biology in Health and Disease. 2014, Gainesville, Florida, USA
51. 93<sup>rd</sup> Annual Meeting of the German Physiological Society (DPG 2014). 2014, Mainz, Germany.
52. EMBO conference. Molecular biology of muscle development and regeneration. 2014, Acaya (Lecce) Italy
53. CIM Conference on Inflammation and Metabolism. 2014, Copenhagen, Denmark
54. Special Interest Meeting. Molecular Insight into Muscle Function and Protein Aggregate Myopathies. 2014, Potsdam, Germany.
55. 13<sup>th</sup> International Congress on Neuromuscular Diseases. 2014, Nice, France.
56. Society for Free Radical Research-Europe (SFRR-E) Meeting 2014, Paris, France
57. 65<sup>th</sup> SIF National Congress, (Italian Society of Physiology). 2014 Anacapri, Italy
58. Fall Meeting of the International Graduate School in Molecular Medicine Ulm. 2014, Ulm, Germany
59. 9<sup>th</sup> International Conference on Strength Training (ICST). 2014, Abano Terme (Padova), Italy
60. Australian Physiological Society Meeting 2014, University of Queensland, Brisbane, Australia
61. Experimental Biology 2015, American Physiological Society, Environmental and Exercise Physiology Section, "Autophagy in Muscle", Boston, USA
62. Neurosciences in Critical Care International Symposium (NICIS). 2015, Paris, France
63. Physiology 2015, Cardiff, UK
64. EMBO Workshop -Molecular Mechanisms of muscle growth and wasting in health and disease. 2015, Monte Verita, Ascona, Switzerland.
65. 8<sup>th</sup> International Conference on Cachexia, Sarcopenia and Muscle Wasting. 2015, Paris, France
66. FRIAS Black Forest Winter Conference on "Autophagy Membrane Trafficking & Dynamics in Ageing and Disease. 2016. Friburg, Germany
67. 1<sup>st</sup> INEM International Symposium, Proteostasis in Growth & Disease. 2016, Paris, France
68. Myology 2016. 5<sup>th</sup> International Congress of Myology. 2016. Lyon, France
69. 7<sup>th</sup> Proteasome & Autophagy Workshop. 2016 Clermont-Ferrand, France
70. XXII world congress of the International Society of Heart Research (ISHR) World Congress. 2016, Buenos Aires, Argentina
71. SSIEM (Society for the Study of Inborn Errors of Metabolism) annual symposium. 2016, Roma, Italia
72. 3<sup>rd</sup> Cancer Cachexia Conference. 2016, Washington, USA
73. 1<sup>st</sup> International Conference on targeting Skeletal Muscle Oxidative Metabolism to Treat Human Disease. 2016, London, UK.
74. 16<sup>th</sup> Fondation IPSEN Meeting "Hormone, metabolism and the benefits of exercise". 2016, Paris, France

75. 9<sup>th</sup> International Conference on Cachexia, Sarcopenia & Muscle Wasting. 2016, Berlin, Germany
76. Padua-Innsbruck Joint Meeting 2016 "Mitochondria in Health & Disease". 2016, Innsbruck, Austria
77. Advance in Skeletal Muscle Biology in Health and Disease. 2017, Gainesville, Florida, USA
78. 53 Congresso Associazione Italiana Neuropatologia e Neurobiologia clinica. Workshop: I meccanismi dell'autofagia nelle patologie del sistema nervoso e del muscolo. 2017, Padova, Italy
79. Gordon Conference "Myogenesis" Advanced mechanisms of growth and repair in myogenesis" 2017, Ciocco, Lucca, Italy.
80. 4<sup>th</sup> Ottawa International Conference on Neuromuscular Disease & Biology. 2017, Ottawa, Canada
81. FEPS 2017, the joint meeting of the Federation of European Physiological Societies and the Austrian Physiological Society. 2017, Wien, Austria
82. 4<sup>th</sup> ShanghaiTech- SIAS BioForum. Advances and Perspectives in Integrative Biology of Cellular Processes. 2017, Shanghai, China.
83. SFEIM. La 6<sup>e</sup> edition du livre "Inborn Metabolic Diseases - Diagnosis and Treatment". 2017, Paris, France
84. 10<sup>th</sup> International Conference on Cachexia, Sarcopenia & Muscle Wasting. 2017, Rome, Italy.
85. EMBO Workshop. Lysosome and Metabolism. 2018, Pozzuoli, Napoli, Italy
86. Muscle Development Regeneration and Disease. 2018, Berlin, Germany
87. 8<sup>th</sup> Proteasome and Autophagy Congress. 2018, Clermont Ferrand, France
88. ACSM Conference on Integrative Physiology of Exercise. 2018, San Diego, USA
89. 4<sup>th</sup> Cancer Cachexia Conference, 2018 Philadelphia, USA.
90. 11<sup>th</sup> International Conference on Cachexia, Sarcopenia & Muscle Wasting. 2018, Maastricht, Netherland.
91. Molecular Mechanisms of Muscle Wasting during Ageing and Disease. 2018 Ascona, Switzerland.
92. 7<sup>th</sup> European Symposium: Steps Forward in Pompe Disease. 2018 Copenhagen, Denmark
93. Advances in Skeletal Muscle Biology in Health and Disease. 2019 Gainesville, USA
94. 21<sup>st</sup> Annual Meakins-Christie laboratories international workshop. 2019 Montreal, Canada
95. Gordon Conference "Myogenesis" Advanced mechanisms of growth and repair in myogenesis" 2019, Ciocco, Lucca, Italy.
96. International meeting on Metabolism Meet Function. 2019, Torino Italy
97. ECTS PhD training course, Bologna, Italy
98. ABCD congress. The biennial congress of the Italian Association of Cell Biology and Differentiation. 2019, Bologna, Italy
99. X International Congress on Glycogenosis, 2019 Malaga, Spain

#### PLENARY e KEYNOTE LECTURE

---

1. "XXXIII European Muscle Conference". 2014 Salzburg, Austria
2. 19<sup>th</sup> International Congress of World Muscle Society. 2014, Berlin, Germany
3. 7<sup>th</sup> European Symposium. Steps Forward in Pompe Disease. 2014, Torino, Italy
4. New Pathophysiological Mechanisms in Obesity and Type2 Diabetes. 2015 Padova, Italy.
5. Multifaceted Muscle. 2016, Montreal, Canada
6. 21<sup>th</sup> International Congress of World Muscle Society. 2016, Granada, Spain
7. 2<sup>nd</sup> Annual Research Meeting Amsterdam Movement Science, 2018, Amsterdam, Netherlands.

#### ORGANIZZATORE DI CONGRESSI INTERNAZIONALI

---

1. XXIX European Muscle Conference. 2010, Padova, Italy.
2. Workshop MUSCLE MASS REGULATION, 2011, FP7 MYOAGE, Acaya, Lecce, Italy
3. EMBO conference, Molecular Biology of Muscle Development and Regeneration. 2014, Acaya, Lecce, Italy
4. 2014 Spring Padua Muscle Days 'Activity-dependent trophism of neurons and their target organs in aging, pathology and rehabilitation' 2014, Montegrotto, Padova, Italy.
5. 2015 Spring Padua Muscle Days 'Translational Myology in Aging and Neuromuscular Disorders' 2015, Montegrotto, Padova, Italy.
6. 2016 Spring Padua Muscle Days. Muscle Decline in Aging and Neuromuscular Disorders Mechanisms and Countermeasures. 2016, Montegrotto, Padova, Italy
7. 2018 Spring Padua Muscle Days. Giovanni Salvati Memorial. 2018, Montegrotto, Padova, Italy
8. 2019 Spring Padua Muscle Days. Translational myology and mobility medicine. 2019, Montegrotto, Padova, Italy

#### REVIEWER DI GIORNALI INTERNAZIONALI CON IMPACT FACTOR

---

La mia attività di esperto e di reviewer viene richiesta dai seguenti giornali: Nature, Science, Nature Medicine, Nature Genetics, Nature Cell Biology, Nature Communication, Cell Metabolism, Cell Reports, Blood, EMBO Journal, Journal of Clinical Investigation, Plos Biology, Plos ONE, Journal of Biological Chemistry, EMBO Molecular Medicine, Cardiovascular Research, American Journal of Physiology Cell Physiology, American Journal of Physiology Heart and Circulatory Physiology, Human Molecular Genetics, Autophagy, Cell Death and Differentiation, Cell Death and Disease, FEBS Letters, Developmental Biology, Molecular Medicine, Stem Cells, Trends in Endocrinology and Metabolism, Traffic, Metabolism, Chest, Neuromuscular Disorders, European Journal of Applied Physiology, Acta Physiologica, Journal of Physiology, Biochim Biophys Acta, Experimental Gerontology, J. Muscle Res. Cell Motility, Skeletal Muscle

#### LIBRI O CAPITOLI DI LIBRI DI PATOLOGIA E FISIOPATOLOGIA

---

1. Capitolo 60. PATOLOGIA GENERALE DEL MUSCOLO SCHELETRICO. Carrao U, **Sandri M**, Zampieri S. Tomo II PATOLOGIA GENERALE. IV Edizione, Piccin.
2. Traduzione dell capitolo 27. Skeletal Muscle. RUBIN' S PATHOLOGY: CLINICOPATHOLOGICAL FOUNDATIONS OF MEDICINE. Sixth Edition. **Sandri M**, and Mammucari C. Edizione Piccin 2014
3. PATHOBIOLOGY OF HUMAN DISEASE, A DYNAMIC ENCYCLOPEDIA OF DISEASE MECHANISMS, **Sandri M**. (2014) Atrophy and Hypertrophy: The Balance Between Removal and Synthesis of Proteins and Organelles. Editor: Elsevier; 2014. p. 64-71.
4. Capitolo 62. PATOLOGIA GENERALE DEL MUSCOLO SCHELETRICO. **Sandri M**. Tomo II PATOLOGIA GENERALE. V Edizione, Piccin, 2015
- 5.
- 6.

#### DOCENTE DEI CORSI DI

---

## LAUREA

1. 2004-2017 Docente del corso di Patologia Generale ad Infermieristica, Università di Padova, Padova (IT)
2. 2004-2005 Docente del corso di Fisiologia al Corso per tecnici di laboratorio, Università di Padova, Padova (IT)
3. 2007-2012 Docente del corso di Patologia Generale al Corso di Laurea in Dietistica, Università di Padova, Padova (IT)
4. 2009-2013 Docente del corso di Patologia Generale a Medicina e Chirurgia, Università di Padova, Padova (IT)
5. 2014-present Docente del corso di Patologia Clinica a Medicina e Chirurgia, Università di Padova, Padova (IT)
6. 2015-present Docente del corso di Patologia e Fisiopatologia generale a Medicina e Chirurgia, Università di Padova, Padova (IT)

## FINANZIAMENTI RICEVUTI

TCP04009 Sandri M (PI) 01/04/05-31/01/10

Founding Agency: Telethon Foundation,

Total award 450000,00 euro; year award: 90000,00 euro

*Cell signaling in muscle wasting. Identification of critical targets in FoxO, myostatin and ubiquitin-proteasome pathways to develop new therapeutic strategies for muscular dystrophy.*

AFM, Sandri M (PI) 31/03/2005 31/03/2006

Founding Agency: Association Francaise Contre les Myopathies

Total award 15000,00 euro

*Regulation of the ubiquitin-proteasome system by the FoxO and myostatin pathway in skeletal muscle*

OSMA WP1B33-2 Sandri M (PI) 24/03/07-24/03/09

Founding Agency: ASI (Italian Space Agency),

Total award: 155000,00 euro; year award: 51666,00 euro

*Cell-based high throughput screen to identify inhibitors of muscle atrophy*

PRIN 2007ABK385\_005 Sandri M (PI) 22/10/08-22/10/10

Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale (Research Program of Relevant National Interest),

Founding agency: Italian Ministry of Science

Total award: 32.229 euro; year award: 16114,5 euro

*Molecular Mechanisms of Muscle Wasting*

AFM Sandri M (P.I.) 03/09/2009-03/09/2011

Founding Agency: Association Francaise Contre les Myopathies

Total award: 50000,00 Euro

*Role of Autophagy in maintenance of muscle mass*

CARIPARO project of excellence.

Founding Agency: Fondazione Cassa di Risparmio

Sandri M. (P.I.) 10/01/2010-10/01/2013

Total award 420.000,00 Euro. Euro 210.000,00 available to Sandri M lab

*In vivo analysis of mitochondrial remodelling system and its role in muscle function and signalling.*

MYOAGE Schiaffino S. and Sandri M. (co-P.I.) 1/01/09-1/06/13

Founding Agency: E.U. HEALTH-2007-2.4.5-10.

ID: 223576

Total award: 500.000,00 Euro

*Understanding and combating age-related muscle weakness.*

TCR04003 Sandri M (P.I.) 01/02/10-01/02/15

Founding agency: Telethon Foundation.

Total award 610.000,00 euro

*Defining the molecular signature of muscle wasting. Identification of therapeutic targets to counteract muscle degeneration*

PRIN 2010-11 Sandri M (PI) 1/02/13-1/02/16

Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale (Research Program of Relevant National Interest).

Founding agency: Italian Ministry of Science

total award: 99.120 euro.

*Pathological and Physiological Mechanisms in Skeletal Muscle*

European Research Council (ERC). Starting Grant: Consolidator Program

Founding agency: EU 7th Research Framework Programme

ID: 282310

Sandri M. (P.I.). 01/11/2011-31/10/2016

Total award: 1.250.000,00 Euro

*Defining The Mechanisms Of Age-Related Muscle Loss: Focus On Autophagy (MYOPHAGY)*

Transatlantic Networks of Excellence in Cardiovascular Research Program.

Founding agency: LEDUCQ Foundation.

Sandri M. (P.I.) 01/10/2011-30/09/2017

Total award: 1.000.000,00 \$

*Proteotoxicity: an unappreciated mechanism of heart disease and its potential for novel therapeutics*

Founding agency: Associazione Italiana Ricerca sul Cancro (AIRC)

ID: 17388

Sandri M. (P.I.). 1/02/2016-1/01/2019

Total award: 334.000,00 Euro

*Controlling BMP/MUSA1 axis to prevent cancer cachexia*

Founding agency: Association Francaise Contre les Myopathies (AFM)

ID: 19524

Sandri M. (P.I.). 1/06/2016-1/06/2018

Total award: 84.000,00 Euro

*Dissecting the Retrograde Signal Controlling Neuomuscular Junction*

Founding agency: CARIPARO (Starting Grant)

Sandri M. (P.I.) 1/10/2016-30/09/2019

Total award: 255.388,41 Euro

*Defining the Contribution of Calcium and Mitochondria to Age-Related Muscle Loss*

#### Dati personali

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".