

UNIVERSITÀ DEGLI STUDI DI PADOVA

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10 selected publications of the last 10 years:

1: De Stefani D, Raffaello A, Teardo E, Szabò I, Rizzuto R. A forty-kilodalton protein of the inner membrane is the mitochondrial calcium uniporter. *Nature*. 2011 Jun 19;476(7360):336-40. doi: 10.1038/nature10230. PubMed PMID: 21685888; PubMed Central PMCID: PMC4141877

2: De Stefani D, Rizzuto R, Pozzan T. Enjoy the Trip: Calcium in Mitochondria Back and Forth. *Annu Rev Biochem*. 2016 Jun 2;85:161-92. doi:10.1146/annurev-biochem-060614-034216. Epub 2016 May 4. Review. PubMed PMID:27145841.

3: 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. Epub 2015 Feb 26. PubMed PMID: 25732818; PubMed Central PMCID: PMC4351162.

4: Patron M, Checchetto V, Raffaello A, Teardo E, Vecellio Reane D, Mantoan M, Granatiero V, Szabò I, De Stefani D, Rizzuto R. MICU1 and MICU2 finely tune the mitochondrial Ca²⁺ uniporter by exerting opposite effects on MCU activity. *Mol Cell*. 2014 Mar 6;53(5):726-37. doi: 10.1016/j.molcel.2014.01.013. Epub 2014 Feb 20. PubMed PMID: 24560927; PubMed Central PMCID: PMC3988891.

5: Raffaello A, De Stefani D, Sabbadin D, Teardo E, Merli G, Picard A, Checchetto V, Moro S, Szabò I, Rizzuto R. The mitochondrial calcium uniporter is a multimer that can include a dominant-negative pore-forming subunit. *EMBO J*. 2013 Aug 28;32(17):2362-76. doi:10.1038/emboj.2013.157. Epub 2013 Jul 30. PubMed PMID:23900286; PubMed Central PMCID: PMC3771344.

6: Tosatto A, Sommaggio R, Kummerow C, Bentham RB, 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 Mol Med*. 2016 May 2;8(5):569-85. doi: 10.15252/emmm.201606255. Print 2016 May. PubMed PMID: 27138568; PubMed Central PMCID: PMC4864890.

7: Vecellio Reane D, Vallese F, Checchetto V, Acquasaliente L, Butera G, De Filippis V, Szabò I, Zanotti G, Rizzuto R, Raffaello A. A MICU1 Splice Variant Confers High Sensitivity to the Mitochondrial Ca²⁺ Uptake Machinery of Skeletal Muscle. *Mol Cell*. 2016 Nov 17;64(4):760-773. doi: 10.1016/j.molcel.2016.10.001. Epub 2016 Nov 3. PubMed PMID: 27818145

8: Logan CV, Szabadkai G, Sharpe JA, Parry DA, Torelli S, Childs AM, Kriek M, Phadke R, Johnson CA, Roberts NY, Bonthron DT, Pysden KA, Whyte T, Munteanu I, Foley AR, Wheway G, Szymanska K, Natarajan S, Abdelhamed ZA, Morgan JE, Roper H, Santen GW, Niks EH, van der Pol WL, Lindhout D, Raffaello A, De Stefani D, den Dunnen JT, Sun Y, Ginjaar I, Sewry CA, Hurler M, Rizzuto R; UK10K Consortium, Duchon MR, Muntoni F, Sheridan E. Loss-of-function mutations in MICU1 cause a brain and muscle disorder linked to primary alterations in mitochondrial calcium signaling. *Nat Genet*. 2014 Feb;46(2):188-93. doi: 10.1038/ng.2851. Epub 2013 Dec 15. PubMed PMID: 24336167.

9. Granatiero V, Giorgio V, Cali T, Patron M, Brini M, Bernardi P, Tiranti V, Zeviani M, Pallafacchina G, De Stefani D, Rizzuto R. Reduced mitochondrial Ca²⁺ transients stimulate autophagy in human fibroblasts carrying the 13514A>G mutation of the ND5 subunit of NADH dehydrogenase. *Cell Death Differ*. 2016 Feb;23(2):231-41. doi: 10.1038/cdd.2015.84. Epub 2015 Jul 24. PubMed PMID:26206091; PubMed Central PMCID: PMC4716301.

10. 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.