

Most Recent Publications

1. Liesa M and **Shirihai O.S**, (2013) Mitochondrial dynamics in the regulation of nutrient utilization and energy expenditure. *Cell Metabolism*. In Press [PMID: 23562075](#)
2. Lovy A, Molina AJ, Cerqueira FM, Trudeau K, and **Shirihai OS** (2012) A Faster, High Resolution, mtPA-GFP-based Mitochondrial Fusion Assay Acquiring Kinetic Data of Multiple Cells in Parallel Using Confocal Microscopy. *J Vis Exp*. [PMID: 22847388](#)
3. Wikstrom JD, Stiles L, Sereda S, Liesa MR, Ferrick D and **Shirihai OS**. (2012). A novel high-throughput assay for islet respiration reveals uncoupling of rodent and human islets. *PLoS One*, 2012, 7, e33023. [PMCID: PMC3351473](#)
4. Hu J, Hwang SS, Liesa M, Gan B, Sahin E, Jaskelioff M, Ding Z, Ying H, Boutin AT, Zhang H, Johnson S, Ivanova E, Kost-Alimova M, Protopopov A, Wang YA, **Shirihai OS**, Chin L, and Depinho RA (2012) Antitelomerase Therapy Provokes ALT and Mitochondrial Adaptive Mechanisms in Cancer. *Cell*, 2012, 148, 651-663. [PMID: 22341440](#)
5. Gall JM, Wang Z, Liesa M, Molina A, Havasi A, Schwartz JH, **Shirihai O**, Borkan SC, and Bonegio RG (2012) Role of mitofusin 2 in the renal stress response. *PLoS One*, 2012, 7, e31074. [PMCID: PMC3266928](#)
6. Hyde B, Liesa M, Elorza A, Qiu W., Haigh SE, Richey L, Mikkola HK, Schlaeger T, and **Shirihai OS**. (2012) The mitochondrial transporter ABC-me (ABCB10), a downstream target of GATA-1, is essential for erythropoiesis in vivo. *Cell Death and Differentiation*, 2012 19, 1117-1126. [PMID: 22240895](#)
7. Las G, Sereda S, Wikstrom JD, Twig G, and **Shirihai OS** (2011) Fatty acids suppress autophagic turnover in cells. *J Biol Chem*, 2011, 286, 42534-42544. [PMCID: PMC3234912](#)
8. Liesa M, Luptak I, Qin F, Hyde BB, Sahin E, Siwik DA, Zhu Z, Pimentel DR, Xu XJ, Ruderman NB, Huffman KD, Doctrow SR, Richey L, Colucci WS, **Shirihai OS**. (2011) The mitochondrial transporter ABC-me (ABCB10) is a novel gene required for cardiac recovery after ischemia-reperfusion. *Circulation*, 2011, 124, 806-813. [PMID: 21788586](#)
9. Sahin E, Colla S, Liesa M, Moslehi J, Muller FL, Guo M, Cooper M, Kotton D, Fabian AJ, Walkey C, Maser RS, Tonon G, Foerster F, Xiong R, Wang YA, Shukla SA, Jaskelioff M, Martin ES, Heffernan TP, Protopopov A, Ivanova E, Mahoney JE, Kost-Alimova M, Perry SR, Bronson R, Liao R, Mulligan R, **Shirihai OS**, Chin L, and Depinho RA (2011) Telomere dysfunction induces metabolic and mitochondrial compromise. *Nature*, 2011, 470, 359-365. <http://www.nature.com/nature/journal/v470/n7334/full/nature09787.html>
10. Twig G, Liu X, Liesa M, Wikstrom JD, Molina AJ, Las G, Yaniv G, Hajnoczky G, and **Shirihai OS**. Biophysical properties of mitochondrial fusion events in pancreatic beta-cells and cardiac cells unravel potential control mechanisms of its selectivity. *Am J Physiol Cell Physiol*, 2010 299, C477-C487. [PMCID: PMC2928626](#)
11. Molina A J, Wikstrom J D, Stiles L, Las G, Mohamed H, Elorza A, Walzer G, Twig G, Katz S, Corkey B E, **Shirihai O S**. Mitochondrial networking protects beta-cells from nutrient-induced apoptosis. *Diabetes* 2009; (58): 2303-2315. [PMCID: PMC2750232](#)
12. Molina A J, **Shirihai O S**. Monitoring mitochondrial dynamics with photoactivatable green fluorescent protein. *Methods Enzymol* 2009; (457): 289-304. [PMID: 19426874](#)

13. Mouli P K, Twig G, **Shirihai** O S. Frequency and selectivity of mitochondrial fusion are key to its quality maintenance function. *Biophys J* 2009; (96): 3509-3518. [PMCID: PMC2711405](#)
14. Elorza A, Hyde B, Mikkola H K, Collins S, **Shirihai** O S. UCP2 modulates cell proliferation through the MAPK/ERK pathway during erythropoiesis and has no effect on heme biosynthesis. *J Biol Chem* 2008; (283): 30461-30470. [PMCID: PMC2576537](#)
15. Twig G, Elorza A, Molina A J, Mohamed H, Wikstrom J D, Walzer G, Stiles L, Haigh S E, Katz S, Las G, Alroy J, Wu M, Py B F, Yuan J, Deeney J T, Corkey B E, **Shirihai** O S. Fission and selective fusion govern mitochondrial segregation and elimination by autophagy. *EMBO J* 2008; (27): 433-446. <http://www.nature.com/emboj/journal/v27/n2/abs/7601963a.html>