

List of publications

RNDr. Marta Novotová CSc.

In extenso in peer- reviewed journals and book series

1. Jakic K, Selc M, Razga F, Nemethova V, Mazancova P, Havel F, Sramek M, Zarska M, Proska J, Masanova V, Uhnakova I, Makovicky P, **Novotova M**, Vykoukal V, Babelova A (2024). Long-term accumulation, biological effects and toxicity of BSA-coated gold nanoparticles in the mouse liver, spleen, and kidneys. *Int J Nanomedicine* 19: 4103-4120. doi: 10.2147/IJN.S443168.
2. Koci J, **Novotova M**, Slavikova M, Klempa B, Zahradnik I (2022): SARS-CoV-2 Exploits Non-Canonical Autophagic Processes to Replicate, Mature, and Egress the Infected Vero E6 Cells. *Pathogens* 11: 1535.
3. Grimbert L, Sanz MN, Gressette M, Rucker-Martin C, **Novotova M**, Solgadi A, Karoui A, Gomez S, Bedouet K, Jacquet E, Lemaire C, Veksler V, Mericskay M, Ventura-Clapier R, Piquereau JM, Garnier A (2021): Spatiotemporal AMPK alpha 2 deletion in mice induces cardiac dysfunction, fibrosis and cardiolipin remodeling associated with mitochondrial dysfunction in males only. *Biol Sex Differ* 12: 52.
4. Piquereau J, Veksler V, **Novotova M**, Ventura-Clapier R (2020): Energetic interactions between subcellular organelles in striated muscles. *Front Cell Dev Biol* 8: 581045.
5. Selc M, Razga F, Nemethova V, Mazancova P, Ursinyova M, **Novotova M**, Kopecka K, Gabelova A, Babelova A (2020): Surface coating determines the inflammatory potential of magnetite nanoparticles in murine renal podocytes and mesangial cells. *RSC Adv* 10: 23916–23929.
6. **Novotova M**, Zahradnikova A Jr, Nichtova Z, Kovac R, Kralova E, Stankovicova T, Zahradnikova A, Zahradnik I (2020): Structural variability of dyads relates to calcium release in rat ventricular myocytes. *Sci Rep* 10: 8076.
7. Pires Da Silva J, Monceaux K, Guilbert A, Gressette M, Piquereau J, **Novotova M**, Ventura-Clapier R, Garnier A, Lemaire C (2020): SIRT1 protects the heart from ER stress-Induced injury by promoting eEF2K/eEF2-dependent autophagy. *Cells* 9: E426.
8. Duranova H, Pozgajova M, **Novotova M**, Lukac N, Knazicka Z (2019): Fission yeast schizosaccharomyces pombe as a model system for ultrastructural investigations using transmission electron microscopy. *J Microbiol Biotech Food Sci* 9: 160–165.
9. Sramkova M, Kozics K, Masanova V, Uhnakova I, Razga F, Nemethova V, Mazancova P, Kapka-Skrzypczak L, Kruszewski M, **Novotova M**, Puntès VF, Gabelova A (2019): Kidney nanotoxicity studied in human renal proximal tubule epithelial cell line TH1. *Mutat Res* 845: 403017.
10. Prola A, Nichtova Z, Pires Da Silva J, Piquereau J, Monceaux K, Guilbert A, Gressette M, Ventura-Clapier R, Garnier A, Zahradnik I, **Novotova M**, Lemaire C (2019): Endoplasmic reticulum stress induces cardiac dysfunction through architectural modifications and alteration of mitochondrial function in cardiomyocytes. *Cardiovasc Res* 115: 328-342.
11. Cagalinec M, Zahradnikova A, Zahradnikova A Jr, Kovacova D, Paulis L, Kurekova S, Hotka M, Pavelkova J, Plaas M, **Novotova M**, Zahradnik I (2019). Calcium signaling and contractility in cardiac myocyte of wolframin deficient rats. *Front Physiol* 10: 172.
12. Ragni CV, Diguët N, Le Garrec JF, **Novotova M**, Resende TP, Pop S, Charon N, Guillemot L, Kitasato L, Badouel C, Dufour A, Olivo-Marin JC, Trouvé A, McNeill H, Meilhac SM. (2017): Amotl1

mediates sequestration of the Hippo effector Yap1 downstream of Fat4 to restrict heart growth. *Nat Commun* 27: 14582.

13. Misuth M, Joniova J, Horvath D, Dzurova L, Nichtova Z, **Novotova M**, Miskovsky P, Stroffekova K, Huntosova V. (2017): The flashlights on a distinct role of protein kinase C δ : Phosphorylation of regulatory and catalytic domain upon oxidative stress in glioma cells. *Cell Signal* 34: 11–22.
14. Huntosova V, **Novotova M**, Nichtova Z, Balogova L, Maslanakova M, Petrovajova D, Stroffekova K (2017): Assessing light-independent effects of hypericin on cell viability, ultrastructure and metabolism in human glioma and endothelial cells. *Toxicol In Vitro* 40: 184–195.
15. **Novotova M**, Tarabova B, Tylkova L, Ventura-Clapier R, Zahradnik I (2016): Ultrastructural remodelling of slow skeletal muscle fibres in creatine kinase deficient mice: a quantitative study. *Gen Physiol Biophys*. 35: 477–486.
16. Huntosova V, Stroffekova K, Wagnieres G, **Novotova M**, Nichtova Z, Miskovsky P (2014): Endosomes: guardians against [Ru(Phen)] photo-action in endothelial cells during in vivo pO₂ detection? *Metallomics*. 6: 2279-2289.
17. Caffin F, Prola A, Piquereau J, **Novotova M**, David D J, Garnier A, Fortin D, Alavi M, Veksler V, Ventura-Clapier R, Joubert F (2013): Altered skeletal muscle mitochondrial biogenesis but improved endurance capacity in trained OPA1-deficient mice. *J Physiol*. 591: 6017-6037.
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19. Piquereau J, Caffin F, **Novotova M**, Lemaire C, Veksler V, Garnier A, Ventura-Clapier R, Joubert F (2013): Mitochondrial dynamics in the adult cardiomyocytes: which roles for a highly specialized cell? *Front Physiol*. 4: 102.
20. Piquereau J, **Novotova M**, Garnier A, Joubert F, Veksler V, Ventura-Clapier R (2013): Cardiac metabolic adaptation during postnatal development. In *Cardiac adaptations, Advances in biochemistry in health and disease*. Vol. 4, Ed. B. Ostadal, N.S. Dhalla, Springer science+Business Media, New York, ISBN 978-1-4614-5203-4, p.79-98.
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22. Nichtova Z, **Novotova M**, Kralova E, Stankovicova T (2012): Morphological and functional characteristics of models of experimental myocardial injury induced by isoproterenol. *Gen. Physiol Biophys*. 31: 141-151.
23. Piquereau J, Caffin F, **Novotova M**, Prola A, Garnier A, Mateo P, Fortin D, Huynh Le H, Nicolas V, Alavi M V, Brenner C, Ventura-Clapier R, Veksler V, Joubert F (2012): Down-regulation of OPA1 alters mouse mitochondrial morphology, PTP function, and cardiac adaptation to pressure overload. *Cardiovasc. Res*. 94: 408-417.
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29. Athea Y, Viollet B, Mateo P, Rousseau D, **Novotova M**, Garnier A, Vaulont S, Wilding J R, Grynberg A, Veksler V, Hoerter J, Ventura-Clapier R (2007): AMP-activated protein kinase alpha 2 deficiency affects cardiac cardiolipin homeostasis and mitochondrial function. *Diabetes.* 56: 786-794.
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32. Lipska E, **Novotova M**, Radzyukevich T, Zahradnik I (2005): Ultrastructural changes accompanying development of fatigue in frog twitch skeletal muscle fibres. *Endocr. Regul.* 39: 43-52.
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58. Parulek J, Zahradnik I, **Novotova M**, Sramek M (2006): Geometric modeling of muscle cells: Computer aided generation of complex structural models of muscle cells. *G.I.T. Imaging & Microscopy*. 8: 58-59.