

## Publications

1. Kajstura J., **SOWA G.**, Wronska D. Induction of DNA synthesis by microtubule depolymerization is mediated by actin filaments. **Cytobios** 1993, 76(305): 67-74.
2. Wybranska I., Miszczuk-Jamska B., Baczynska E., Goldsztajn P., **SOWA G.**, Przewlocki R., Gryglewski R., Dembinska-Kiec A. Influence of SIN-1 and sodium nitroprusside (NaNP) on ox-LDL metabolism in macrophages. **Journal of Physiology and Pharmacology** 1994, 45(3): 387-297.
3. **SOWA G.**, Przewlocki R. cAMP analogues and cholera toxin stimulate the accumulation of nitrite in cultures of the rat peritoneal macrophages. **European Journal of Pharmacology** (Molecular Pharmacology Section) 1994, 266: 125-129.
4. **SOWA G.**, Przewlocki R. Enhancing effect of staurosporine on NO production in rat peritoneal macrophages via a protein kinase C-independent mechanism. **British Journal of Pharmacology** 1995, 116: 1711-1712 (Special Report).
5. **SOWA G.**, Przewlocki R. Ouabain enhances the lipopolysaccharide-induced nitric oxide production by rat peritoneal macrophages. **Immunopharmacology** 1997, 36(1):95-100.
6. **SOWA G.**, Gekker G., Lipovski M., Hu S., Chao C.C., Molitor T.W., Peterson P.K. Inhibition of swine microglial cell phagocytosis of *Cryptococcus neoformans* by femtomolar concentrations of morphine. **Biochemical Pharmacology** 1997, 53(6): 823-828.
7. **SOWA G.**, Liu J., Papapetropoulos A., Rex-Haffner M., Hughes TE., and Sessa WC. Trafficking of Endothelial Nitric-oxide Synthase in Living Cells. QUANTITATIVE EVIDENCE SUPPORTING THE ROLE OF PALMITOYLATION AS A KINETIC TRAPPING MECHANISM LIMITING MEMBRANE DIFFUSION. **Journal of Biological Chemistry** 1999, 274: 22524-22531.
8. Morales-Ruiz M, Fulton D, **SOWA G.**, Languino LR, Fujio Y, Walsh K, Sessa WC. Vascular endothelial growth factor-stimulated actin reorganization and migration of endothelial cells is regulated via the serine/threonine kinase Akt. **Circulation Research** 2000, Apr 28; 86(8): 892-6.
9. Paxinou E, Weisse M, Chen Q, Souza JM, Hertkorn C, Selak M, Daikhin Eyudkoff M, **SOWA G.**, Sessa WC, Ischiropoulos H. Dynamic regulation of metabolism and respiration by endogenously produced nitric oxide protects against oxidative stress. **Proc Natl Acad Sci USA** 2001, 98(20): 11575-80.
10. **SOWA G.**, Pypaert M, Sessa WC. Distinction between signaling mechanisms in lipid rafts versus caveolae. **Proc Natl Acad Sci USA** 2001, 98(24): 14072-77.
11. Fulton D, Fontana J, **SOWA G.**, Gratton JP, Li KX, Michell B, Kemp BE, Rodman D, Sessa WC. Localization of Akt phosphorylated endothelial nitric oxide synthase and nitric oxide in Golgi and plasma membrane defines the existence of two pools of active enzyme. **Journal of Biological Chemistry** 2002, 277: 4277-84.

12. **SOWA G**, Pypaert M, Fulton D, Sessa WC. The phosphorylation of caveolin-2 on serines 23 and 36 modulates caveolin-1 dependent caveolae formation. **Proc Natl Acad Sci USA** 2003, 100(11):6511-6.
13. Peterson TE, Abe JI, Kleppel LS, Mueske CS, Mookadam M, Chen L, **SOWA G**, Sessa WC and Simari RD. Caveolin-1 is a target and a modulator of PDGF signaling in vascular smooth muscle cells. **Arterioscler Thromb Vasc Biol.** 2003, 23(9): 1521-7.
14. **SOWA G\***, Xie L, Xu L, Sessa WC. Serine 23 and 36 phosphorylation of caveolin-2 is differentially regulated by targeting to lipid raft/caveolae and in mitotic endothelial cells. **Biochemistry** 2008, 47:101-111.
15. Xie L, Frank PG, Lisanti MP and **SOWA G\***. Endothelial cells isolated from Caveolin-2 knockout mice display higher proliferation rate and cell cycle progression relative to their wild type counterparts. **AJP-Cell Physiology.** 2010 Mar; 298(3): C693-701.
16. Davalos A, Fernandez-Hernando C, **SOWA G**, Derakhshan B, Lin MI, Lee JY, Zhao H, Luo R, Colangelo C and Sessa WC. Quantitative proteomics of caveolin-1 regulated proteins: Characterization of PTRF/Cavin-1 in endothelial cells. **Mol Cell Proteomics.** 2010 Oct;9(10):2109-24.
17. Xie L, Vo-Ransdell C, Abel B, Willoughby C, Jang S and **SOWA G\***. Caveolin-2 is a negative regulator of anti-proliferative function and signaling of transforming growth factor beta in endothelial cells. **AJP-Cell Physiology.** 2011 Nov;301(5):C1161-74.
18. **SOWA G\***. Novel Insights into the Role of Caveolin-2 in Cell- and Tissue-Specific Signaling and Function. **Biochemistry Research International.** 2011. doi:10.1155/2011/809259.
19. **SOWA G\***. Caveolins in Tumor Angiogenesis. **Current Cancer Research (Springer).** 2012, 75-90, DOI: 10.1007/978-1-4614-1001-0\_6.
20. **SOWA G\***. Caveolae, caveolins, cavins and endothelial cell function: new insights. **Frontiers in Vascular Physiology.** 2012; 2:120. doi: 10.3389/fphys.2011.00120.
21. Abel B, Willoughby C, Jang S, Cooper L, Xie L, Vo-Ransdell C and **SOWA G\***. N-terminal tyrosine phosphorylation of caveolin-2 negates anti-proliferative effect of transforming growth factor beta in endothelial cells. **FEBS Letters.** 2012 Sep 21;586(19):3317-23.
22. **SOWA G\***. Regulation of cell signaling and function by endothelial caveolins: implications in disease. **Translational Medicine.** 2012, S8:001. doi: 10.4172/2161-1025.S8-001.
23. **SOWA G\***. Role of caveolin proteins in sepsis. **Pediatrics & Therapeutics** 2012, S2:001. doi:10.4172/2161-0665.S2-001.
24. Liu Y, Xie L, Jang S and **SOWA G\***. Host deficiency in caveolin-2 inhibits lung carcinoma tumor growth by impairing tumor angiogenesis. **Cancer Research.** 2014 Nov 15;74(22):6452-62. doi: 10.1158/0008-5472.CAN-14-1408. Epub 2014 Sep 30.

25. Liu Y and **SOWA G\***. Role of caveolin-2 in subcutaneous tumor growth and angiogenesis associated with syngeneic mouse Lewis lung carcinoma and B16 melanoma models. **Cancer Cell & Microenvironment**. 2014, 1(6). doi: 10.14800/ccm.439.
26. Fernando C, Liu Y, **SOWA G**, Segal SS. Attenuated Rapid-Onset Vasodilation with greater force production in skeletal muscle of caveolin-2<sup>-/-</sup> Mice. **AJP – Heart and Circulatory Physiology**. 2016 Jun 17:ajpheart.00082.2016. doi: 10.1152/ajpheart.00082.2016.
27. Liu Y, Li G, and **SOWA G\***. Caveolin-2 deficiency induces a rapid anti-tumor immune response prior to regression of implanted murine lung carcinoma tumors. **Scientific Reports**. 2019 Dec 12;9(1):18970. doi: 10.1038/s41598-019-55368-4.
28. Liu Y, Wang M, Wang D, Fay WP, Korthuis RJ, **SOWA G\***. Elevated post-ischemic tissue injury and leukocyte-endothelial adhesive interactions in mice with global deficiency in caveolin-2: role of PAI-1. **Am J Physiol Heart Circ Physiol**. 2021 Mar 1;320(3):H1185-H1198. doi: 10.1152/ajpheart.00817.2020. Epub 2021 Jan 8.PMID: 33416452.

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