

Publications for Paul Witting

2021

Martin, N., Chami, B., Vallejo, A., Mojadadi, A., Witting, P., Ahmad, G. (2021). Efficacy of the piperidine nitroxide 4-methoxytempo in ameliorating serum amyloid a-mediated vascular inflammation. *International Journal of Molecular Sciences*, 22(9), 4549. [More Information]

Chami, B., Witting, P. (2021). Immunomodulatory effects of intestinal mesenchymal cells in the context of inflammatory bowel disease. *Acta Physiologica*, 233(2), e13721. [More Information]

Leong, H., Watanabe, S., Kuzhiumparambil, U., Fong, C., Moy, H., Yao, Y., Witting, P., Fu, S. (2021). Monitoring metabolism of synthetic cannabinoid 4F-MDMB-BINACA via high-resolution mass spectrometry assessed in cultured hepatoma cell line, fungus, liver microsomes and confirmed using urine samples. *Forensic Toxicology*, 39(1), 198-212. [More Information]

Bottle, S., Eng, G., Witting, P., Chami, B. (2021). Nitroxide Intervention in Oxidative and Free Radical Damage in Biology and Disease. In Olivier Ouari, Didier Gigmes (Eds.), *Nitroxides*, (pp. 449-481). United Kingdom: Royal Society of Chemistry. [More Information]

Parvaneh, M., Witting, P., Ku, J., Moradi, T., Inan Eroglu, E., Freedman, B., Sutherland, G., McCorkindale, A., Guennewig, B., Choowong, P., Bell-Anderson, K., Cooney, G., Eberhard, J., et al (2021). Periodontitis induces endothelial dysfunction in mice. *Scientific Reports*, 11(1), 14993. [More Information]

Al-Zubaidi, Y., Chen, Y., Rahman, M., Umashankar, B., Choucair, H., Bourget, K., Chung, L., Qi, J., Witting, P., Anderson, R., O'Neill, G., Dunstan, C., Murray, M., et al (2021). PTU, a novel ureido-fatty acid, inhibits MDA-MB-231 cell invasion and dissemination by modulating Wnt5a secretion and cytoskeletal signaling. *Biochemical Pharmacology*, 192, 114726. [More Information]

Mojadadi, A., Au, A., Salah, W., Witting, P., Ahmad, G. (2021). Role for selenium in metabolic homeostasis and human reproduction. *Nutrients*, 13(9), 3256. [More Information]

2020

Cai, X., Ahmad, G., Hossain, F., Liu, C., Wang, X., Dennis, J., Freedman, B., Witting, P. (2020). High-density lipoprotein (HDL) inhibits serum amyloid a (SAA)-induced vascular and renal dysfunctions in apolipoprotein e-deficient mice. *International Journal of Molecular Sciences*, 21(4), 1-25. [More Information]

El Kazzi, M., Rayner, B., Chami, B., Dennis, J., Thomas, S.,

Witting, P. (2020). Neutrophil-Mediated Cardiac Damage After Acute Myocardial Infarction: Significance of Defining a New Target Cell Type for Developing Cardioprotective Drugs. *Antioxidants & Redox Signaling*, 33(10), 689-712. [More Information]

El Kazzi, M., Shi, H., Vuong, S., Wang, X., Chami, B., Liu, C., Rayner, B., Witting, P. (2020). Nitroxides mitigate neutrophil-mediated damage to the myocardium after experimental myocardial infarction in rats. *International Journal of Molecular Sciences*, 21(20), 1-22. [More Information]

Cheong, J., Chami, B., Fong, G., Wang, X., Keshava, A., Young, C., Witting, P. (2020). Randomized clinical trial of the effect of intraoperative humidified carbon dioxide insufflation in open laparotomy for colorectal resection. *BJS Open*, 4(1), 45-58. [More Information]

Leong, H., Philp, M., Simone, M., Witting, P., Fu, S. (2020). Synthetic Cathinones Induce Cell Death in Dopaminergic SH-SY5Y Cells via Stimulating Mitochondrial Dysfunction. *International Journal of Molecular Sciences*, 21(4), 1370. [More Information]

Chami, B., San Gabriel, P., Kum Jew, S., Wang, X., Dickerhof, N., Witting, P., Dennis, J. (2020). The nitroxide 4-methoxytempo inhibits the pathogenesis of dextran sodium sulfate-stimulated experimental colitis. *Redox Biology*, 28, 101333. [More Information]

Liu, Y., Burton, T., Rayner, B., San Gabriel, P., Shi, H., El Kazzi, M., Wang, X., Dennis, J., Ahmad, G., Schroder, A., Gao, A., Witting, P., Chami, B. (2020). The role of sodium thiocyanate supplementation during dextran sodium sulphate-stimulated experimental colitis. *Archives of Biochemistry and Biophysics*, 692, 1-14. [More Information]

Ahmad, G., Chami, B., Liu, C., Schroder, A., San Gabriel, P., Gao, A., Fong, G., Wang, X., Witting, P. (2020). The Synthetic Myeloperoxidase Inhibitor AZD3241 Ameliorates Dextran Sodium Sulfate Stimulated Experimental Colitis. *Frontiers in Pharmacology*, 11, 556020. [More Information]

2019

Escobar, S., Fong, G., Winnischofer, S., Simone, M., Munoz, L., Dennis, J., Rocha, M., Witting, P. (2019). Anti-proliferative and cytotoxic activities of the flavonoid isoliquiritigenin in the human neuroblastoma cell line SH-SY5Y. *Chemico-Biological Interactions*, 299, 77-87. [More Information]

Ahmad, G., Chami, B., El Kazzi, M., Wang, X., Moreira, M., Hamilton, N., Maw, A., Hambly, T., Witting, P. (2019). Catalase-Like Antioxidant Activity is Unaltered in Hypochlorous Acid Oxidized Horse Heart Myoglobin.

Antioxidants, 8(9), 1-19. [More Information]

Weekley, C., Jeong, G., Tierney, M., Hossain, F., Maw, A., Shanu, A., Harris, H., Witting, P. (2019). Correction to: Selenite-mediated production of superoxide radical anions in A549 cancer cells is accompanied by a selective increase in SOD1 concentration, enhanced apoptosis and Se-Cu bonding. *Journal of Biological Inorganic Chemistry*. [More Information]

de Moura Escobar, S., Simone, M., Martin, N., de Oliveira Ribeiro, C., Martinez, G., Winnischofer, S., Witting, P., Rocha, M. (2019). Cytotoxic effects of 4'-hydroxychalcone on human neuroblastoma cells (SH-SY5Y). *Toxicology in Vitro*, 61, 1-11. [More Information]

Lim, Y., Foo, T., Yeung, A., Tu, X., Ma, Y., Hawkins, C., Witting, P., Jameson, G., Terentis, A., Thomas, S. (2019). Human Indoleamine 2,3-Dioxygenase 1 Is an Efficient Mammalian Nitrite Reductase. *Biochemistry*, 58(7), 974-986. [More Information]

Alghamdi, O., King, N., Andronicos, N., Jones, G., Chami, B., Witting, P., Moens, P. (2019). Molecular changes to the rat renal cotransporters PEPT1 and PEPT2 due to ageing. *Molecular and Cellular Biochemistry*, 452, 71-82. [More Information]

Vallejo, A., Chami, B., Dennis, J., Simone, M., Ahmad, G., Abdo, A., Sharma, A., Shihata, W., Martin, N., Chin-Dusting, J., Witting, P., et al (2019). NFκB Inhibition Mitigates Serum Amyloid A-Induced Pro-Atherogenic Responses in Endothelial Cells and Leukocyte Adhesion and Adverse Changes to Endothelium Function in Isolated Aorta. *International Journal of Molecular Sciences*, 20(1), 1-18. [More Information]

Chami, B., Hossain, F., Hambly, T., Cai, X., Aran, R., Fong, G., Vellajo, A., Martin, N., Wang, X., Dennis, J., Sharland, A., Freedman, B., Witting, P., et al (2019). Serum Amyloid A Stimulates Vascular and Renal Dysfunction in Apolipoprotein E-Deficient Mice Fed a Normal Chow Diet. *Frontiers in Immunology*, 10, 1-19. [More Information]

Black, H., Xu, W., Hortle, E., Britton, W., Kaur, A., New, E., Witting, P., Chami, B., Oehlers, S. (2019). The cyclic nitroxide antioxidant 4-methoxy-TEMPO decreases mycobacterial burden in vivo through host and bacterial targets. *Free Radical Biology and Medicine*, 135, 157-166. [More Information]

2018

Cheong, J., Keshava, A., Witting, P., Young, C. (2018). Effects of Intraoperative Insufflation With Warmed, Humidified CO₂ during Abdominal Surgery: A Review. *Annals of Coloproctology*, 34(3), 125-137. [More Information]

Youssef, P., Chami, B., Lim, J., Middleton, T., Sutherland, G., Witting, P. (2018). Evidence supporting oxidative stress in a moderately affected area of the brain in Alzheimer's disease. *Scientific Reports*, 8(1), 11553. [More Information]

Chami, B., Martin, N., Dennis, J., Witting, P. (2018). Myeloperoxidase in the inflamed colon: A novel target for treating inflammatory bowel disease. *Archives of Biochemistry and Biophysics*, 645, 61-71. [More Information]

O'Rourke, M., Padula, M., Smith, C., Youssef, P., Cordwell, S., Witting, P., Sutherland, G., Crossett, B. (2018). Optimal Preparation of Formalin Fixed Samples for Peptide Based Matrix Assisted Laser Desorption/Ionization Mass Spectrometry Imaging Workflows. *Journal of Visualized Experiments*, 131(131), e56778. [More Information]

2017

Gotsbacher, M., Telfer, T., Witting, P., Double, K., Finkelstein, D., Codd, R. (2017). Analogues of desferrioxamine B designed to attenuate iron-mediated neurodegeneration: synthesis, characterisation and activity in the MPTP-mouse model of Parkinson's disease. *Metallomics*, 9(7), 852-864. [More Information]

Ashish Kumar, T., Simone, M., Ibugo, A., Witting, P., Manefield, M., Manos, J. (2017). Glutathione Enhances Antibiotic Efficiency and Effectiveness of DNase I in Disrupting *Pseudomonas aeruginosa* Biofilms While Also Inhibiting Pyocyanin Activity, Thus Facilitating Restoration of Cell Enzymatic Activity, Confluence and Viability. *Frontiers in Microbiology*, 8, 1-18. [More Information]

Dennis, J., Witting, P. (2017). Protective Role for Antioxidants in Acute Kidney Disease. *Nutrients*, 9(7), 1-25. [More Information]

Chami, B., Jeong, G., Varda, A., Maw, A., Kim, H., Fong, G., Simone, M., Rayner, B., Wang, X., Dennis, J., Witting, P. (2017). The nitroxide 4-methoxy TEMPO inhibits neutrophil-stimulated kinase activation in H9c2 cardiomyocytes. *Archives of Biochemistry and Biophysics*, 629, 19-35. [More Information]

2016

Witting, P. (2016). Measuring redox-active species in cells and tissues. Focus on "A case of mistaken identity: are reactive oxygen species actually reactive sulfide species?". *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, 310(7), R547-R548. [More Information]

Wang, X., Kim, H., Szuchman-Sapir, A., McMahon, A., Dennis, J., Witting, P. (2016). Neutrophils recruited to the myocardium after acute experimental myocardial infarct generate hypochlorous acid that oxidizes cardiac myoglobin. *Archives of Biochemistry and Biophysics*, 612, 103-114. [More Information]

2015

Sivam, S., Witting, P., Hoyos, C., Maw, A., Yee, B., Grunstein, R., Phillips, C. (2015). Effects of 8 weeks of CPAP on lipid-based oxidative markers in obstructive sleep apnea: a

randomized trial. *Journal of Sleep Research*, 24(3), 339-345. [More Information]

Fong, G., Antao, S., Varda, A., Dennis, J., Witting, P. (2015). Neuroprotection with the red pepper capsaicin. *Current Trends in Neurology*, 9, 97-109.

Kleinbongard, P., Witting, P., Gedik, N., Freedman, B., Klocker, N., Heusch, G. (2015). Pleiotropic, heart rate-independent cardioprotection by ivabradine. *British Journal of Pharmacology*, 172(17), 4380-4390. [More Information]

Chami, B., Barrie, N., Cai, X., Wang, X., Paul, M., Morton-Chandra, R., Sharland, A., Dennis, J., Freedman, B., Witting, P. (2015). Serum amyloid a receptor blockade and incorporation into high-density lipoprotein modulates its pro-inflammatory and pro-thrombotic activities on vascular endothelial cells. *International Journal of Molecular Sciences*, 16(5), 11101-11124. [More Information]

Yao, M., Xie, C., Kiang, M., Teng, Y., Harman, D., Tiffen, J., Wang, K., Sved, P., Bao, B., Witting, P., Holst, J., Dong, Q. (2015). Targeting of cytosolic phospholipase A2a impedes cell cycle re-entry of quiescent prostate cancer cells. *Oncotarget*, 6(33), 34458-34474. [More Information]

2014

Alrabadi, N., Chami, B., Kim, H., Maw, A., Dennis, J., Witting, P. (2014). 2014 - Nasr Alrabadi, Belal Chami, Hyun Bo Kim, Aung Min Maw, Joanne M. Dennis, Paul K. Witting (2014). ?Hypochlorous acid generated in the heart following acute ischaemic injury promotes myocardial damage: a new target for therapeutic development? Trends in Cell & Molecular Biology. Volume 9; pages 1-17. *Trends in Cell Biology*, 9, 1-17.

Duong, T., Chami, B., McMahon, A., Fong, G., Dennis, J., Freedman, B., Witting, P. (2014). Pre-treatment with the synthetic antioxidant T-butyl bisphenol protects cerebral tissues from experimental ischemia reperfusion injury. *Journal of Neurochemistry*, 130(6), 733-747. [More Information]

Weekley, C., Jeong, G., Tierney, M., Hossain, F., Maw, A., Shanu, A., Harris, H., Witting, P. (2014). Selenite-mediated production of superoxide radical anions in A549 cancer cells is accompanied by a selective increase in SOD1 concentration, enhanced apoptosis and Se-Cu bonding. *Journal of Biological Inorganic Chemistry*, 19(6), 813-828. [More Information]

Talib, J., Kwan, J., Suryo Rahmanto, A., Witting, P., Davies, M. (2014). The smoking-associated oxidant hypothiocyanous acid induces endothelial nitric oxide synthase dysfunction. *Biochemical Journal*, 457(1), 89-97. [More Information]

Getts, D., Terry, R., Getts, M., Deffrasnes, C., MÃ¼ller, M., Van Vreden, C., Ashhurst, T., Chami, B., McCarthy, D., Wu, H., Ma, J., Witting, P., Campbell, I., Reilly, D., White, M., Cordwell, S., Chadban, S., Bao, B., King, N., et al (2014). Therapeutic inflammatory monocyte modulation using immune-modifying microparticles. *Science Translational Medicine*, 6(219), 1-14. [More

Information]

Weekley, C., Shanu, A., Aitken, J., Vogt, S., Witting, P., Harris, H. (2014). XAS and XFM studies of selenium and copper speciation and distribution in the kidneys of selenite-supplemented rats. *Metallomics*, 6(9), 1602-1615. [More Information]

Weekley, C., Aitken, J., Witting, P., Harris, H. (2014). XAS studies of Se speciation in selenite-fed rats. *Metallomics*, 6(12), 2193-2203. [More Information]

2013

McMahon, A., Parry, S., Benson, V., Witting, P., Le Couteur, D. (2013). Beneficial effects of the synthetic antioxidant tert-butyl bisphenol on the hepatic microcirculation in a rat model of diabetes mellitus. *Acta Diabetologica*, 50(4), 645-649. [More Information]

Hua, S., Yao, M., Vignarajan, S., Witting, P., Hejazi, L., Gong, Z., Teng, Y., Niknami, M., Assinder, S., Richardson, D., Dong, Q. (2013). Cytosolic phospholipase A2alpha sustains pAKT, pERK and AR levels in PTEN-null/mutated prostate cancer cells. *Biochimica et Biophysica Acta - Molecular and Cell Biology of Lipids*, 1831 (6), 1146-1157. [More Information]

Freewan, M., Rees, M., Sempertegui Plaza, T., Glaros, E., Lim, Y., Wang, X., Yeung, A., Witting, P., Terentis, A., Thomas, S. (2013). Human Indoleamine 2,3-Dioxygenase Is a Catalyst of Physiological Heme Peroxidase Reactions. *Journal of Biological Chemistry*, 288(3), 1548-1567. [More Information]

Sutherland, G., Chami, B., Youssef, P., Witting, P. (2013). Oxidative stress in Alzheimer's disease: Primary villain or physiological by-product? *Redox Report*, 18(4), 134-141. [More Information]

Wang, X., Cai, X., Freedman, B., Witting, P. (2013). Role of SAA in Promoting Endothelial Activation: Inhibition by High-Density Lipoprotein. In Sabina Janciauskiene (Eds.), *Acute Phase Proteins*, (pp. 77-101). Rijeka, Croatia: InTech Publishers. [More Information]

Rayner, B., Figtree, G., Sabaretnam, T., Shang, P., Mazhar, J., Weaver, J., Lay, W., Witting, P., Hunyor, S., Grieve, S., Bhindi, R., et al (2013). Selective Inhibition of the Master Regulator Transcription Factor Egr-1 With Catalytic Oligonucleotides Reduces Myocardial Injury and Improves Left Ventricular Systolic Function in a Preclinical Model of Myocardial Infarction. *Journal of the American Heart Association*, 2(4), 1-9. [More Information]

Shanu, A., Groebler, L., Kim, H., Wood, S., Weekley, C., Aitken, J., Harris, H., Witting, P. (2013). Selenium Inhibits Renal Oxidation and Inflammation But Not Acute Kidney Injury in an Animal Model of Rhabdomyolysis. *Antioxidants & Redox Signaling*, 18(7), 756-769. [More Information]

Weekley, C., Aitken, J., Finney, L., Vogt, S., Witting, P., Harris, H. (2013). Selenium metabolism in cancer cells: The

combined application of XAS and XFM techniques to the problem of selenium speciation in biological systems. *Nutrients*, 5(5), 1734-1756. [More Information]

Cai, X., Freedman, B., Witting, P. (2013). Serum amyloid A stimulates cultured endothelial cells to migrate and proliferate: Inhibition by the multi-kinase inhibitor BIBF112. *Clinical and Experimental Pharmacology and Physiology*, 40(9), 662-670. [More Information]

2012

Ding, A., Kalaignanasundaram, P., Ricardo, S., Abdelkader, A., Witting, P., Broughton, B., Kim, H., Wyse, B., Phillips, J., Evans, R. (2012). Chronic treatment with tempol does not significantly ameliorate renal tissue hypoxia or disease progression in a rodent model of polycystic kidney disease. *Clinical and Experimental Pharmacology and Physiology*, 39(11), 917-929. [More Information]

Groebler, L., Wang, X., Kim, H., Shanu, A., Hossain, F., McMahon, A., Witting, P. (2012). Cosupplementation with a synthetic, lipid-soluble polyphenol and vitamin C inhibits oxidative damage and improves vascular function yet does not inhibit acute renal injury in an animal model of rhabdomyolysis. *Free Radical Biology and Medicine*, 52(9), 1918-1928. [More Information]

Aitken, J., Lay, P., Duong, T., Aran, R., Witting, P., Harris, H., Lai, B., Vogt, S., Giles, G. (2012). Synchrotron radiation induced X-ray emission studies of the antioxidant mechanism of the organoselenium drug ebselen. *Journal of Biological Inorganic Chemistry*, 17(4), 589-598. [More Information]

2011

Groebler, L., Liu, J., Shanu, A., Codd, R., Witting, P. (2011). Comparing the potential renal protective activity of desferrioxamine B and the novel chelator desferrioxamine B-N-(3-hydroxyadamant-1-yl) carboxamide in a cell model of myoglobinuria. *Biochemical Journal*, 435(3), 669-677. [More Information]

Weekley, C., Aitken, J., Vogt, S., Finney, L., Paterson, D., De Jonge, M., Howard, D., Witting, P., Musgrave, I., Harris, H. (2011). Metabolism of selenite in human lung cancer cells: X-ray absorption and fluorescence studies. *Journal of the American Chemical Society*, 133(45), 18272-18279. [More Information]

Dong, L., Jameson, V., Tilly, D., Prochazka, L., Rohlena, J., Valis, K., Truksa, J., Zabalova, R., Mahdavian, E., Kluckova, K., Witting, P., et al (2011). Mitochondrial targeting of alpha-tocopheryl succinate enhances its pro-apoptotic efficacy: A new paradigm for effective cancer therapy. *Free Radical Biology and Medicine*, 50(11), 1546-1555. [More Information]

Dong, L., Jameson, V., Tilly, D., Cerny, J., Mahdavian, E., MarÃ¡n-Hernandez, A., HernÃ¡ndez-Esquivel, L., Rodriguez-Enriquez, S., Stursa, J., Witting, P., et al (2011). Mitochondrial Targeting of Vitamin E Succinate Enhances Its Pro-apoptotic and Anti-cancer Activity via Mitochondrial Complex II.

Journal of Biological Chemistry, 286(5), 3717-3728. [More Information]

Kim, H., Shanu, A., Wood, S., Parry, S., McGee-Collett, M., McMahon, A., Witting, P. (2011). Phenolic antioxidants tert-butyl-bisphenol and vitamin E decrease oxidative stress and enhance vascular function in an animal model of rhabdomyolysis yet do not improve acute renal dysfunction. *Free Radical Research*, 45(9), 1000-1012. [More Information]

Witting, P., Song, C., Hsu, K., Hua, S., Parry, S., Aran, R., Geczy, C., Freedman, B. (2011). The acute-phase protein serum amyloid A induces endothelial dysfunction that is inhibited by high-density lipoprotein. *Free Radical Biology and Medicine*, 51(7), 1390-1398. [More Information]

Cho, J., Witting, P., Verma, M., Wu, B., Shanu, A., Kairaitis, K., Amis, T., Wheatley, J. (2011). Tissue Vibration Induces Carotid Artery Endothelial Dysfunction: A Mechanism Linking Snoring and Carotid Atherosclerosis? *Sleep*, 34(6), 751-757C. [More Information]

2010

Morrison, D., Issa, F., Bhadbhade, M., Groebler, L., Witting, P., Kassiou, M., Rutledge, P., Rendina, L. (2010). Boronated phosphonium salts containing arylboronic acid, closo-carborane, or nido-carborane: synthesis, X-ray diffraction, in vitro cytotoxicity, and cellular uptake. *Journal of Biological Inorganic Chemistry*, 15(8), 1305-1318. [More Information]

Liu, J., Obando Gutierrez, D., Schipanski, L., Groebler, L., Witting, P., Kalinowski, D., Richardson, D., Codd, R. (2010). Conjugates of Desferrioxamine B (DFOB) with Derivatives of Adamantane or with Orally Available Chelators as Potential Agents for Treating Iron Overload. *Journal of Medicinal Chemistry*, 53(3), 1370-1382. [More Information]

Niknami, M., Vignarajan, S., Yao, M., Hua, S., Witting, P., Kita, Y., Shimizu, T., Sved, P., Patel, M., Dong, Q. (2010). Decrease in expression or activity of cytosolic phospholipase A(2)alpha increases cyclooxygenase-1 action: A cross-talk between key enzymes in arachidonic acid pathway in prostate cancer cells. *Biochimica et Biophysica Acta - Molecular and Cell Biology of Lipids*, 1801 (7), 731-737. [More Information]

Wu, B., Yan, L., Charlton, F., Witting, P., Barter, P., Rye, K. (2010). Evidence that niacin inhibits acute vascular inflammation and improves endothelial dysfunction independent of changes in plasma lipids. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 30(5), 968-975. [More Information]

Wang, Y., Liu, H., McKenzie, G., Witting, P., Stasch, J., Hahn, M., Changsirivathanathamrong, D., Wu, B., Ball, H., Thomas, S., Celermajer, D., Hunt, N., Stocker, R., et al (2010). Kynurenine is an endothelium-derived relaxing factor produced during inflammation. *Nature Medicine*, 16(3), 279-285. [More Information]

Antao, S., Duong, T., Aran, R., Witting, P. (2010). Neuroglobin

Overexpression in Cultured Human Neuronal Cells Protects Against Hydrogen Peroxide Insult via Activating Phosphoinositide-3 Kinase and Opening the Mitochondrial KATP Channel. *Antioxidants & Redox Signaling*, 13(6), 769-781. [More Information]

Carter, E., Rayner, B., McLeod, A., Wu, L., Marshall, C., Levina, A., Aitken, J., Witting, P., Lai, B., Cai, Z., Harris, H., Lay, P., et al (2010). Silicon nitride as a versatile growth substrate for microspectroscopic imaging and mapping of individual cells. *Molecular BioSystems*, 6(7), 1316-1322. [More Information]

Szuchman-Sapir, A., Pattison, D., Davies, M., Witting, P. (2010). Site-specific hypochlorous acid-induced oxidation of recombinant human myoglobin affects specific amino acid residues and the rate of cytochrome b(5)-mediated heme reduction. *Free Radical Biology and Medicine*, 48(1), 35-46. [More Information]

Shanu, A., Parry, S., Wood, S., Rodas, E., Witting, P. (2010). The synthetic polyphenol tert-butyl-bisphenol inhibits myoglobin-induced dysfunction in cultured kidney epithelial cells. *Free Radical Research*, 44(8), 843-853. [More Information]

2009

Hua, S., Song, C., Geczy, C., Freedman, B., Witting, P. (2009). A role for acute-phase serum amyloid A and high-density lipoprotein in oxidative stress, endothelial dysfunction and atherosclerosis. *Redox Report*, 14(5), 187-196. [More Information]

Whiteman, I., Gervasio, O., Cullen, K., Guillemin, G., Jeong, E., Witting, P., Antao, S., Minamide, L., Bamburg, J., Goldsbury, C. (2009). Activated actin-depolymerizing factor/cofilin sequesters phosphorylated microtubule-associated protein during the assembly of alzheimer-like neuritic cytoskeletal striations. *Journal of Neuroscience*, 29(41), 12994-13005. [More Information]

Sabaretnam, T., Harris, M., Kockx, M., Witting, P., Le Couteur, D., Kritharides, L. (2009). Effects of hydrogen peroxide and apolipoprotein e isoforms on apolipoprotein e trafficking in HepG2 cells. *Clinical and Experimental Pharmacology and Physiology*, 36(12), e96-e102. [More Information]

Reichelt, M., Shanu, A., Willems, L., Witting, P., Ellis, N., Blackburn, M., Headrick, J. (2009). Endogenous adenosine selectively modulates oxidant stress via the A1 receptor in ischemic hearts. *Antioxidants & Redox Signaling*, 11(11), 2641-2650. [More Information]

Niknami, M., Patel, M., Witting, P., Dong, Q. (2009). Molecules in focus: Cytosolic phospholipase A(2)-{alpha}. *International Journal of Biochemistry and Cell Biology*, 41(5), 994-997. [More Information]

Duong, T., Witting, P., Antao, S., Parry, S., Kennerson, M., Lai, B., Vogt, S., Lay, P., Harris, H. (2009). Multiple protective activities of neuroglobin in cultured neuronal cells exposed to hypoxia re-oxygenation injury. *Journal of Neurochemistry*,

108(5), 1143-1154. [More Information]

Rayner, B., Hua, S., Sabaretnam, T., Witting, P. (2009). Nitric oxide stimulates myoglobin gene and protein expression in vascular smooth muscle. *Biochemical Journal*, 423(2), 169-177. [More Information]

Niknami, M., Dong, Q., Witting, P. (2009). Pitfalls in the use of arachidonic acid oxidation products to assign lipoxygenase activity in cancer cells. *Free Radical Research*, 43(10), 951-956. [More Information]

Song, C., Hsu, K., Yamen, E., Yan, W., Fock, J., Witting, P., Geczy, C., Freedman, B. (2009). Serum amyloid A induction of cytokines in monocytes/macrophages and lymphocytes. *Atherosclerosis*, 207(2), 374-383. [More Information]

Song, C., Shen, Y., Yamen, E., Hsu, K., Yan, W., Witting, P., Freedman, B., Geczy, C. (2009). Serum amyloid A may potentiate prothrombotic and proinflammatory events in acute coronary syndromes. *Atherosclerosis*, 202(2), 596-604. [More Information]

Dong, L., Freeman, R., Liu, J., Zabalova, R., Marin-Hernandez, A., Stantic, M., Rohlena, J., Valis, K., Rodriguez-Enriques, S., Butcher, B., Witting, P., et al (2009). Suppression of tumor growth in vivo by the mitocan $\hat{\pm}$ -tocopheryl succinate requires respiratory complex II. *Clinical Cancer Research*, 15(5), 1593-1600. [More Information]

2008

Niknami, M., Patel, M., Witting, P., Dong, Q. (2008). Aberrant Activation of Arachidonic Acid and Eicosanoid Pathways-Targets for Treating Prostate Cancer. *Recent Patents on Endocrine, Metabolic and Immune Drug Discovery*, 2(1), 9-15. [More Information]

Dong, L., Low, P., Dyason, J., Wang, X., Prochazka, L., Witting, P., Freeman, R., Swettenham, E., Valis, K., Lu, J., et al (2008). Alpha-tocopheryl succinate induces apoptosis by targeting ubiquinone-binding sites in mitochondrial respiratory complex II. *Oncogene*, 27(31), 4324-4335. [More Information]

Szuchman-Sapir, A., Pattison, D., Ellis, N., Hawkins, C., Davies, M., Witting, P. (2008). Hypochlorous acid oxidizes methionine and tryptophan residues in myoglobin. *Free Radical Biology and Medicine*, 45(6), 789-798. [More Information]

Parry, S., Hamilton (Ellis), N., Li, Z., Maitz, P., Witting, P. (2008). Myoglobin induces oxidative stress and decreases endocytosis and monolayer permissiveness in cultured kidney epithelial cells without affecting viability. *Kidney and Blood Pressure Research*, 31(1), 16-28. [More Information]

Witting, P., Zeng, B., Wong, M., McMahon, A., Rayner, B., Sapir, A., Lowe, H., Freedman, B., Brieger, D. (2008). Polymorphonuclear leukocyte phagocytic function increases in plasminogen knockout mice. *Thrombosis Research*, 122(5), 674-

682. [More Information]

Thomas, S., Witting, P., Drummond, G. (2008). Redox control of endothelial function and dysfunction: molecular mechanisms and therapeutic opportunities. *Antioxidants & Redox Signaling*, 10(10), 1713-1765. [More Information]

Duong, T., Antao, S., Hamilton (Ellis), N., Myers, S., Witting, P. (2008). Supplementation with a synthetic polyphenol limits oxidative stress and enhances neuronal cell viability in response to hypoxia-re-oxygenation injury. *Brain Research*, 1219, 8-18. [More Information]

2007

Witting, P., Rayner, B., Wu, B., Ellis, N., Stocker, R. (2007). Hydrogen peroxide promotes endothelial dysfunction by stimulating multiple sources of superoxide anion radical production and decreasing nitric oxide bioavailability. *Cellular Physiology and Biochemistry*, 20(5), 255-268. [More Information]

Neuzil, J., Widen, C., Gellert, N., Swettenham, E., Zabalova, R., Dong, L., Wang, X., Lidebjer, C., Dalen, H., Headrick, J., Witting, P. (2007). Mitochondria transmit apoptosis signalling in cardiomyocyte-like cells and isolated hearts exposed to experimental ischemia-reperfusion injury. *Redox Report*, 12(3), 148-162. [More Information]

Neuzil, J., Witting, P., Kontush, A., Headrick, J. (2007). Role of vitamins E and C in nuclear factor-kB and nitric oxide signaling. In Victor R. Preedy, Ronald Ross Watson (Eds.), *The Encyclopedia of Vitamin E*. United Kingdom: CABI Publishing.

Dong, L., Swettenham, E., Eliasson, J., Wang, X., Gold, M., Medunic, Y., Stantic, M., Low, P., Prochazka, L., Witting, P., et al (2007). Vitamin E Analogues Inhibit Angiogenesis by Selective Induction of Apoptosis in Proliferating Endothelial Cells: The Role of Oxidative Stress. *Cancer Research*, 67(24), 11906-11919. [More Information]

2006

Wu, B., Kathir, K., Witting, P., Beck, K., Choy, K., Li, C., Croft, K., Mori, T., Tanous, D., Adams, M., Lau, A., Stocker, R. (2006). Antioxidants protect from atherosclerosis by a heme oxygenase-1 pathway that is independent of free radical scavenging. *The Journal of Experimental Medicine*, 203(4), 1117-1127. [More Information]

Wu, B., Kathir, K., Witting, P., Beck, K., Choy, K., Li, C., Croft, K., Mori, T., Tanous, D., Adams, M., et al (2006). Antioxidants protect from atherosclerosis by a heme oxygenase-1 pathway that is independent of free radical scavenging. *The Journal of Experimental Medicine*, 203(4), 1117-1127. [More Information]

Hamilton (Ellis), N., Raftery, M., Rayner, B., Witting, P. (2006). Characterizing a novel biomarker of myocardial inflammation. *Society of Free Radical Research*, Australia: Society of Free Radical Research.

Witting, P., Liao, W., Harris, M., Neuzil, J. (2006). Expression of human myoglobin in H9c2 cells enhances toxicity to added hydrogen peroxide. *Biochemical and Biophysical Research Communications*, 348(2), 485-493. [More Information]

McMahon, A., Hong Duong, T., Brieger, D., Witting, P. (2006). Is there potential for antioxidants to enhance thrombolysis therapy in patients with ischemic stroke? *Future Cardiology*, 2(6), 659-665. [More Information]

de Haan, J., Witting, P., Stefanovic, N., Pete, J., Daskalakis, M., Kola, I., Stocker, R., Smolich, J. (2006). Lack of the antioxidant glutathione peroxidase-1 does not increase atherosclerosis in C57BL/J6 mice fed a high-fat diet. *Journal of Lipid Research*, 47(6), 1157-1167. [More Information]

Hack, B., Witting, P., Rayner, B., Stocker, R., Headrick, J. (2006). Oxidant stress and damage in post-ischemic mouse hearts: effects of adenosine. *Molecular and Cellular Biochemistry*, 287(1-2), 165-175. [More Information]

Rayner, B., Hong Duong, T., Myers, S., Witting, P. (2006). Protective effect of a synthetic anti-oxidant on neuronal cell apoptosis resulting from experimental hypoxia re-oxygenation injury. *Journal of Neurochemistry*, 97(1), 211-221. [More Information]

Bhindi, R., Witting, P., McMahon, A., Khachigian, L., Lowe, H. (2006). Rat models of myocardial infarction. Pathogenetic insights and clinical relevance. *Thrombosis and Haemostasis*, 96(5), 602-610. [More Information]

Neuzil, J., Witting, P., Kontush, A., Headrick, J. (2006). Role of Vitamin E and Vitamin C in Nuclear Factor-kB-Dependent Nitric Oxide Signalling. In Victor R. Preedy, Ronald Ross Watson (Eds.), *The Encyclopedia of Vitamin E*, (pp. 339-352). United Kingdom: CABI Publishing.

McMahon, A., Duong, T., Brieger, D., Witting, P. (2006). Scope for antioxidants to enhance thrombolytic therapies in stroke patients. *Future Cardiology*, 2, 659-665.

Witting, P., Harris, H., Rayner, B., Aitken, J., Dillon, C., Stocker, R., Lai, B., Cai, Z., Lay, P. (2006). The Endothelium-Derived Hyperpolarizing Factor, H-2O-2, Promotes Metal-Ion Efflux in Aortic Endothelial Cells: Elemental Mapping by a Hard X-ray Microprobe. *Biochemistry*, 45(41), 12500-12509. [More Information]

Raynor, B., Harris, H., Carter, E., Vogt, S., Cai, Z., Lai, B., Chin, C., Lee, Y., Lay, P., Witting, P. (2006). The use of synchrotron radiation to measure ion flux and cellular protein and lipid changes within cardiac ischemia reperfusion injury. *XIV International Symposium on Atherosclerosis*, Ireland: Elsevier Ireland Ltd.

2005

Stapelberg, M., Gellert, N., Swettenham, E., Tomasetti, M., Witting, P., Procopio, A., Neuzil, J. (2005). Alpha-tocopheryl succinate inhibits malignant mesothelioma by disrupting the fibroblast growth factor autocrine loop: mechanism and the role of oxidative stress. *Journal of Biological Chemistry*, 280(27),

25369-25376. [More Information]

Swettenham, E., Witting, P., Salvatore, B., Neuzil, J. (2005). Alpha-tocopheryl succinate selectively induces apoptosis in neuroblastoma cells: potential therapy of malignancies of the nervous system? *Journal of Neurochemistry*, 94(5), 1448-1456. [More Information]

Hamilton (Ellis), N., Raftery, M., Rayner, B., Witting, P. (2005). Characterizing a novel biomarker of myocardial inflammation. *Society of Free Radical Research*, Australia: Society of Free Radical Research.

Rayner, B., Wu, B., Raftery, M., Stocker, R., Witting, P. (2005). Human S-nitroso oxymyoglobin is a store of vasoactive nitric oxide. *Journal of Biological Chemistry*, 280(11), 9985-9993. [More Information]

Neuzil, J., Rayner, B., Lowe, H., Witting, P. (2005). Oxidative stress in myocardial ischaemia reperfusion injury: a renewed focus on a long-standing area of heart research. *Redox Report*, 10(4), 187-197. [More Information]

Witting, P., Wu, B., Raftery, M., Southwell-Keely, P., Stocker, R. (2005). Probucol protects against hypochlorite-induced endothelial dysfunction: identification of a novel pathway of probucol oxidation to a biologically active intermediate. *Journal of Biological Chemistry*, 280(16), 15612-15608. [More Information]

Wang, X., Witting, P., Salvatore, B., Neuzil, J. (2005). Vitamin E analogs trigger apoptosis in HER2/erbB2-overexpressing breast cancer cells by signaling via the mitochondrial pathway. *Biochemical and Biophysical Research Communications*, 326(2), 282-289. [More Information]

2004

Witting, P., Stocker, R. (2004). Ascorbic Acid in Atherosclerosis. In Han Asard, James May, Nicholas Smirnoff (Eds.), *Vitamin C: Its Functions and Biochemistry in Animals and Plants*, (pp. 261-290). Oxford: Taylor and Francis.

Deng, Y., Wu, B., Witting, P., Stocker, R. (2004). Probucol protects against smooth muscle cell proliferation by up-regulating heme oxygenase-1. *Circulation*, 110(13), 1855-1860. [More Information]

Rayner, B., Stocker, R., Lay, P., Witting, P. (2004). Regio- And Stereo-Chemical Oxidation Of Linoleic Acid By Human Myoglobin And Hydrogen Peroxide: Tyr(103) Affects Rate And Product Distribution. *Biochemical Journal*, 381(2), 365-372. [More Information]

Rayner, B., Wu, B., Raftery, M., Stocker, R., Witting, P. (2004). Regulation Of Vascular Tone By S-Nitroso-Myoglobin. *Redox Report*, 9(6), 382-386. [More Information]

2003

Choy, K., Deng, Y., Hou, J., Wu, B., Lau, A., Witting, P.,

Stocker, R. (2003). Coenzyme Q10 Supplementation Inhibits Aortic Lipid Oxidation but Fails to Attenuate Intimal Thickening in Balloon-Injured New Zealand White Rabbits. *Free Radical Biology and Medicine*, 35(3), 300-309. [More Information]

Aitken, J., Thomas, S., Armstrong, R., Lay, P., Stacker, R., Witting, P., Dillon, C., Lai, B. (2003). Investigation of indoleamine 2,3-dioxygenase using synchrotron radiation techniques. *Journal of Inorganic Biochemistry*, 96, 87-87. [More Information]

Weber, T., Dalen, H., Andera, L., Negre-Salvayre, A., Auge, N., Sticha, M., Loret, A., Terman, A., Witting, P., Higuchi, M., et al (2003). Mitochondria play a central role in apoptosis induced by alpha-Tocopheryl succinate, an agent with antineoplastic activity: comparison with receptor-mediated pro-apoptotic signaling. *Biochemistry*, 42(14), 4277-4291. [More Information]

2002

Brasen, J., Koenig, K., Bach, H., Kontush, A., Heinle, H., Witting, P., Yla-Herttuala, S., Stocker, R., Beisiegel, U. (2002). Comparison of the effects of α -tocopherol, ubiquinone-10 and probucol at therapeutic doses on atherosclerosis in WHHL rabbits. *Atherosclerosis*, 163(2), 249-259.

2001

Upston, J., Witting, P., Brown, A., Stocker, R., Keaney, J. (2001). Effect of vitamin E on aortic lipid oxidation and intimal proliferation after arterial injury in cholesterol-fed rabbits. *Free Radical Biology and Medicine*, 31, 1245-1253.

Witting, P., Mauk, A., Douglas, D., Stocker, R. (2001). Reaction of human myoglobin and peroxynitrite: characterizing biomarkers for myoglobin-derived oxidative stress. *Biochemical and Biophysical Research Communications*, 286, 352-356.

2000

Witting, P., Pettersson, K., Letters, J., Stocker, R. (2000). Anti-atherogenic effect of coenzyme Q10 in apolipoprotein E gene knockout mice. *Free Radical Biology and Medicine*, 29, 295-305.

Pettersson, K., Witting, P., Stocker, R. (2000). Antioxidant intervention studies in animals. In RT Dean, D Kelly (Eds.), *Atherosclerosis: Gene Expression, Cell Interactions, and Oxidation*, (pp. 46-67). Oxford: Oxford University Press.

Raitakari, O., McCredie, R., Letters, J., Witting, P., Griffiths, K., Sullivan, D., Stocker, R., Celermajer, D. (2000). Coenzyme Q improves LDL resistance to ex vivo oxidation but does not enhance endothelial function in hypercholesterolemic young adults. *Free Radical Biology and Medicine*, 28, 1100-1105.

Lau, A., Witting, P., Chaufour, X., Celermajer, D., Pettersson, K., Stocker, R. (2000). Protective effects of probucol in two animal models of atherosclerosis. *Redox Report*, 5, 116-118.

Witting, P., Pettersson, K., Letters, J., Stocker, R. (2000). Site-specific anti-atherogenic effect of probucol in apolipoprotein E deficient mice. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 20, e26-e33.