

2012 Abstracts, posters and presentations

*****patent Abstract***

Blum-Johnston C, Blood Q, Wee C, Wilson R, Blood AB, Longo LD, Wilson SM. Bradykinin-induced pulmonary vasorelaxation is modified by long term hypoxia and postnatal maturation in sheep. Basic Sciences Research symposium. Loma Linda University, Loma Linda, CA. 2012

Crofton A, Schrag M, Mueller C, Zabel M, Vinters H, Kirsch W. Disruption of Copper Transport in Alzheimer's Disease. LLU APC Meeting. Loma Linda University, Loma Linda, CA. 2012

Dobyns AE, Beck HL, Kurtzman JT, Garfield RE, Yellon SM. Progesterone Receptor Antagonism and Preterm Cervix Remodeling. The Loma Linda Basic Science Symposium. Loma Linda University, Loma Linda, CA. 2012

Hough S, Rubalcava M, Manjunath C, Blood Q, Longo LD, Wilson SM. Long term hypoxia impairs ryanodine receptor function and regulation by cyclic nucleotides in immature and mature pulmonary arterial myocytes. Basic Sciences Research symposium. Loma Linda University, Loma Linda, CA. 2012

Kwon SR. Maximizing Esthetic Success with Tooth Whitening. 12th AAAD/23rd JAED 12th Biennial Meeting of Asian Academy of Aesthetic Dentistry. Sapporo, Japan. 2012

Kim JH, Longo LD, Wilson SM, "Attenuated Beta Adrenergic Receptor mediated Pulmonary vasodilation in High Altitude Term-Fetal Sheep." Journal of Investigative Medicine. 2012

Lumbard, B, Waskel E, Paez R, Blood Q, Rubalcava M, Longo LD, Wilson SM, "Myoendothelial Junction Formation is Restricted in Pulmonary Arteries of Fetal Sheep." The FASEB Journal. Experimental Biology. 2012

Lumbard, B, Waskel E, Paez R, Blood Q, Rubalcava M, Longo LD, Wilson SM, "Myoendothelial Junction Formation is Restricted in Pulmonary Arteries of Fetal Sheep." CGNI symposium, UC Riverside, 2012

Mata-Greenwood E, Broad JA, Yellon SA, Longo LD, "Vitamin D deficiency in a rat model of placental insufficiency." Society of Gynecologic Investigation Annual Meeting, San Diego, CA. 2012

Meharry MR, "Generations of Dental Bonding – New Findings and Clinical Implications," LLUSD ASC event. Loma Linda University, Loma Linda, CA. 2012

Paez R, Rubalcava M, Blood Q, Hong S, Francis M, Taylor MS, Longo LD, Wilson SM. Postnatal-related changes in c-AMP-mediated pulmonary arterial relaxation and Ca²⁺ signals are independent of long term hypoxia in sheep. Summer Research Symposium. Loma Linda University, Loma Linda, CA. 2012

Rubalcava M and Wilson SM (2012). Fluorescence Imaging of Lily Pollen Tubules. Plants in the Garden Exhibit at the San Bernardino County Museum. San Bernardino, CA. 2012

Rubalcava M, Blood Q, Buchholz JN, Wilson SM, "Measuring Calcium Signals from Tissues on the Zeiss 710 NLO at the Loma Linda University Advanced Imaging and Microscopy Facility." CGNI symposium, UC Riverside. 2012

Rubalcava M, Osman NJ, Longo LD, Wilson SM, "Cyclic Nucleotides Cause Divergent Ryanodine Receptor Modulation in Pulmonary Arterial Myocytes from Immature Chronic Hypoxic Sheep." Experimental Biology: The FASEB Journal. San Diego. 2012

Siagian E. Prefrontal Cortex (PFC) Viral Vector Injections: Preliminary Imaging and Optogenetic

Electrophysiology. LLU lab presentation. Loma Linda University, Loma Linda, CA. 2012

Tanaka H, Kaushal K, Wilson S, Myers D, Ducsay C, "Long-term hypoxia does not alter co-localization of heat shock protein 90 or CAVEOLIN-1 with eNOS in the ovine fetal." Society for Gynecological Investigation, San Diego, CA. 2012

Waskel E. Ryanodine Receptors in the pulmonary Vasculature. 67th Annual ASA Meeting Science, Faith, & the Media: communicating beyond books Point Loma Nazarene University. San Diego. 2012

Wee CL, Blum-Johnston C, Blood Q, Wilson RH, Blood AB, Longo LD, Wilson SM. Underdeveloped bradykinin-dependent vasorelaxation in immature pulmonary arteries from long term hypoxic sheep is not due to loss of cGMP signaling. Basic Sciences Research symposium. Loma Linda University, Loma Linda, CA. 2012

Wilson SM, Hadley S, Blood Q, Le P, Papamatheakis DG, Longo LD, and Buchholz JN. Evidence for impaired RyR-dependent vasodilation in chronic prenatal hypoxia. American Physiological Society Smooth Muscle Summer Research Conference. Loma Linda University, Loma Linda, CA. 2012

Wilson SM. Organ Culture for the New Millennium. Delivered to Cell Culture Technique class, University of California at Davis. 2012

Wilson SM. Imaging and Microscopy at Loma Linda University. Delivered to DaVinci Science Club at Redlands East Valley High School. Redlands CA. 2012

Wilson SM, Yellon SM, Rubalcava M, Longo LD, "The Advanced Imaging and Microscopy Core Facility at Loma Linda University." CGNI symposium, UC Riverside. 2012

Yellon SM, Stutz KN, Cooperrider J, Kirby MA, "A progesterone receptor-mediated mechanism delays preterm remodeling of the cervix and premature birth in mice." Society for Gynecological Investigation, San Diego, CA. 2012

**Yellon SM. Macrophage recruitment and activation in the final common mechanism that remodels the prepartum cervix. Seminar talks at The University of Edinburgh MRC Center for Inflammation Research. University of Edinburgh. 2012

**Yellon SM. Neuroimmune contribution to the final common mechanism for remodeling of the cervix. MRC Center for Reproductive Health. Loma Linda University, Loma Linda, CA. 2012

**Yellon SM. Progesterone receptor-mediated actions and remodeling of the prepartum cervix. MRC Center for Reproductive Health. Loma Linda University, Loma Linda, CA. 2012

**Young II KL, Goyal R, Blood Q, Wilson SM, Longo LD. Development and long term hypoxia: Changes in ryanodine receptor expression in Ovine pulmonary arteries. Summer Research Symposium. Loma Linda University, Loma Linda, CA. 2012

**Zhang X. The Extreme Makeover of Blood: Turning Blood into Bone. Loma Linda University Integrated Biomedical Science Seminar Series. Loma Linda University, Loma Linda, CA. 2012

2012 Publications

Ajao DO, Pop V, Kamper JE, Adami A, Rudobeck E, Huang L, Vlkolinsky R, Hartman RE, Ashwal S, Obenaus A, Badaut J. "Traumatic brain injury in young rats leads to progressive behavioral deficits coincident with altered tissue properties in adulthood," J Neurotrauma. 2012

Fukuda AM, Pop V, Spagnoli D, Ashwal S, Obenaus A, Badaut J. "Delayed increase of astrocytic aquaporin 4 after juvenile traumatic brain injury: possible role in edema resolution?" Neuroscience. 222:366-78. 2012. PMID: 22728101; PMCID: PMC3482829.

Ghosh N, Yuan X, Turenius C1, Tone B, Ambadipudi K, Snyder EY, Obenaus A, Ashwal S. Automated core–penumbra quantification in neonatal ischemic brain injury. *Journal of Cerebral Blood Flow & Metabolism*. 32:2161-70. 2012

Goyal, R; Henderson, DA; Chu, NN; Longo, LD, "Ovine middle cerebral artery characterization and quantification of ultrastructure and other features: changes with development", *American Journal of Physiology-Regulatory Integrative and Comparative Phusiology* 302:R433. 2012

Hadley SR, Blood Q, Rubalcava M, Waskel E, Lumbard B, Le P, Longo LD, Buchholz JN, Wilson SM. Maternal high altitude hypoxia and suppression of ryanodine receptor-mediated Ca²⁺ sparks in fetal sheep pulmonary arterial myocytes. *Am J Physiol – Lung Cell and Mol Physiol*. 303:L799-813. 2012

Hu XQ, Xiao D, Zhu R, Huang H, Yang S, Wilson SM, Zhang L. Chronic Hypoxia Suppresses Pregnancy-Induced Upregulation of Large-Conductance Ca²⁺-Activated K Channel Activity in Uterine Arteries. *Hypertension*. 60:214-222. 2012

Hubbell MC, Semotiuk AJ, Thorpe RB, Adeoye OO, Butler SM, Williams JM, Khorram O, Pearce WJ, "Chronic hypoxia and VEGF differentially modulate abundance and organization of myosin heavy chain isoforms in fetal and adult ovine arteries." *American Journal of Physiology, Cell Physiology*. 2012

Jaramillo DE, Aprecio R, Divito E, Angelov N. Efficacy of Er:YAG Laser on Root Canal Infected with *Enterococcus faecalis* (ATCC 4082): A Pilot Study. *Endodontic Practice*. 2012

Jutzy JMS, Khan S, Valenzuela MMA, Milford TM, Payne KJ, Wall NR, "Tumor-released survivin inhibits T cell proliferation and alters CD4+ T cell cytokine profiles to induce a pro-tumor environment." *Cancer Microenvironment*. 2012

Leoh LS, van Heertum B, de Rijck J, Filippova M, Rios-Colon L, Basu A, Martinez SR, Tungteakkhun SS, Filippov V, Christ F, De Leon M, Debyser Z, Casiano CA, "The Stress Oncoprotein LEDGF/p75 Interacts with the Methyl CpG Binding Protein MeCP2 and Influences its Transcriptional Activity." *Mol Cancer Res.* 10:378. 2012

Li Y, Xiao D, Dasgupta C, Xiong F, Tong W, Yang S, Zhang L. Perinatal Nicotine Exposure Increases Vulnerability of Hypoxic_Ischemic Brain Injury in Neonatal Rats : Role of Angiotensin II Receptors. *Stroke.* 43 (9):2483-90. 2012

Meng X, Neises A, Su RJ, Payne KJ, Ritter L, Gridley DS, Wang J, Sheng M, William Lau KH, Baylink DJ, and Zhang XB, "Efficient Reprogramming of Human Cord Blood CD34(+) Cells Into Induced Pluripotent Stem Cells With OCT4 and SOX2 Alone." *Mol Ther.* 20:408. 2012

Patterson AJ, Xiao D, Xiong F, Dixon B, Zhang LB, "Hypoxia-derived oxidative stress mediates epigenetic repression of PKC epsilon gene in foetal rat hearts." *Cardiovasc Res.* 93:302. 2012

Na CH, Jones DR, Yang Y, Wang X, Xu Y, Peng J, "Synaptic protein ubiquitination in rat brain revealed by antibody-based ubiquitome analysis." *J Proteome Res.* 2012

Papamatheakis DG, Blood AB, Kim JH, Wilson SM, "Antenatal Hypoxia and Pulmonary Vascular Function and Remodeling." *Current Vascular Pharmacology.* 2012

Payne KP, Clyde LA, Weldon AJ, Milford T, Yellon SM. Residency and activation of macrophages and neutrophils in the prepartum murine cervix. *Biol Reprod.* 87:1-7. 2012

Sheng MHC, Wergedal JE, Mohan S, Amoui M, Baylink DJ, Lau KHW, "Targeted Overexpression of Osteoactivin in Cells of Osteoclastic Lineage Promotes Osteoclastic Resorption and Bone Loss in Mice", *PLOS ONE.* vol.7. 2012

Xiao D, Dasgupta C, Xiong F, Tong W, Yang S, Zhang L, "Perinatal Nicotine Exposure Increases Vulnerability of Hypoxic-Ischemic Brain Injury in Neonatal Rats: Role of Angiotensin II Receptors." *Stroke Journal of the American Heart Association*. 2012