

2012 Publications

Anti-ADRB3 Ab

Salisbury, E., Z. Lazard, E. Ubogu, A. Davis and E. Olmsted-Davis. 2012. Transient Brown Adipocyte-Like Cells Derive from Peripheral Nerve Progenitors in Response to Bone Morphogenetic Protein 2. *Stem Cells Transl Med*, 1:874-885.

Anti-CCR7 Ab

Tous, E., H. Weber, M. Lee, K. Koomalsingh, T. Shuto, N. Kondo, J. Gorman, D. Lee, R. Gorman, and J. Burdick. 2012. Tunable hydrogel-microsphere composites that modulate local inflammation and collagen bulking. *Acta Biomateriala*, 8:3218-3227.

Anti-CD31 Ab

Ramírez-Sánchez, I., P. Mendoza-Lorenzob, A. Zentella-Dehesac, E. Méndez-Bolainad, E. Lara-Padillaa, G. Ceballos-Reyesa, P. Cantoe, C. Palma-Flores and R. Coral-Vázquez. 2012. Caveolae and non-caveolae lipid raft microdomains of human umbilical vein endothelial cells contain utrophin-associated protein complexes. *Biochimie*, 94:1884-1890.

Ramirez-Sanchez, I., L. Nogueira, A. Moreno, A. Murphy, P. Taub, G. Perkins, G. Ceballos, M. Hogan, M. Malek, and F. Villarreal. 2012. Stimulatory effects of the flavanol (-)-epicatechin on cardiac angiogenesis: Additive effects with exercise. *J Cardiovasc Pharmacol*, 60:429-438.

Anti-CD54 Ab

Trauger, R. 2012. Methods of Treating Retroviral Infections in Felines. Patent Application US 20140140997 A1.

Anti-K_{Ca}3.1 Ab (Anti-KCNN4)

Kroigaard, C., T. Dalsgaard, G. Neilsen, B. Laursen, H. Pilegaard, R. Köhler and U. Simonsen. 2012. Activation of endothelial and epithelial K_{Ca}2.3 calcium-activated potassium channels by NS309 relaxes human small pulmonary arteries and bronchioles. *British J Pharmacol*, 167:37-47.

Anti-MLC2 Ab

Hamdani, N., K. Bishu, M. Frieling-Salewsky, M. Redfield, and W. Linke. 2012. Deranged Myofilament Phosphorylation and Function in Experimental Heart Failure with Preserved Ejection Fraction. *Cardiovascular Research*, Supplementary Data.

Anti-p-EphA2/Tyr594

Jehle, J., I. Staudacher, F. Wiedmann, P. Schweizer, R. Becker, H. Katus and D. Thomas. 2012. Regulation of apoptosis in HL-1 cardiomyocytes by phosphorylation of the receptor tyrosine kinase EphA2 and protection by lithocholic acid. *167:1563-1572*.

Anti-p-IR β Tyr960

Jiang, Youde, Q. Zhang, C. Soderland and J. Steinle. 2012. TNF α and SOCS3 regulate IRS-1 to increase retinal endothelial cell apoptosis. *Cellular Signalling*, 24:1086-1092.

Anti-p-VEGFR-3

Kashima, K., M. Watanabe, Y. Satoh, J. Hata, N. Ishii and Y. Aoki. 2012. Inhibition of lymphatic metastasis in neuroblastoma by a novel neutralizing antibody to vascular endothelial growth factor-D. *Cancer Science*, 103:2144-2152.

Anti-RAGE Ab

Chen, P., J. Zhao, and H. Gregersen. 2012. Distribution of advanced glycation end products and their receptor in the gastrointestinal tract. *World Journal of Gastroenterology*. 20:3638-3643.

Anti-Timp-1 Ab

Stilley, J., and K. Sharpe-Timms. 2012. TIMP1 Contributes to Ovarian Anomalies in Both an MMP-Dependent and -Independent Manner in a Rat Model. *Biol Reprod*, 86: doi: 10.1095/biolreprod.111.094680.

2012 Publications

Attachment / Matrix Solutions

DeCoster, M., J. McNamara, K. Cotton, D. Green, C. Jeyasankar, R. Idowu, K. Evans, Z. Xing, and Y. Lvov. Bionanocomposites for multidimensional Brain Cell signaling. Ch. 8. In Thomas, S., N. Ninan, S. Mohan, and E. Francis. 2012. Natural Polymers, Biopolymers, Biomaterials, Composites, Blends, and IPNS. Advances in Materials Science, Volume 2.

Liu, B. 2012. The role of GRK2 in hypertension and regulation of GPR30. MS Thesis, University of Western Ontario.

Naughton, G., J. Mansbridge, R. Pinney, and J. Zeltinger. 2012. Methods for using a three-dimensional stromal tissue to promote angiogenesis. Patent US 8128924 B2.

Uzer, G. 2012. Role of Fluid Shear Modulation on Bone Cell Metabolism during High-Frequency Oscillatory Vibrations. PhD Dissertation, Stony Brook U.

BAOEC: Bovine Aortic Endothelial Cells

Chandra, S., M. Romero, A. Shatanawi, A. Alkilany, R. Caldwell and R. Caldwell. 2012. Oxidative species increase arginase activity in endothelial cells through the RhoA/Rho kinase pathway. British J Pharmacol, 165:506-519.

Ching, L., C. Chen, K. Su, H. Hou, S. Shyue, Y. Kou and T. Lee. 2012. Implication of AMP-Activated Protein Kinase in Transient Receptor Potential Vanilloid Type 1-Mediated Activation of Endothelial Nitric Oxide Synthase. Molec Med, 18:805-815

Hogg, P. and P. Dilda. 2012. Organo-arsenoxide compounds and use thereof. Patent US 8268883 B2.

Hou, H.-H., B.D. Hammock, K.-H. Su, C. Morisseau, Y.R. Kou, S. Imaoka, A. Oguro, S.-K. Shyue, J.-F. Zhao, and T.-S. Lee. 2012. N-terminal domain of soluble epoxide hydrolase negatively regulates the VEGF-mediated activation of endothelial nitric oxide synthase. Cardiovascular Research. 93:120-129.

Jiang, B., L. Du, R. Flynn, N. Dronadula, J. Zhang, F. Kim, and D. Dichek. 2012. Overexpression of Endothelial Nitric Oxide Synthase Improves Endothelium-Dependent Vasodilation in Arteries Infused with Helper-Dependent Adenovirus. Human Gene Therapy. 23:1166-1175.

Kim, J.-a., H.-J. Jang, L.A. Martinez-Lemus, and J.R. Sowers. 2012. Activation of mTOR/p70S6 kinase by ANG II inhibits insulin-stimulated endothelial nitric oxide synthase and vasodilation. American Journal of Physiology - Endocrinology and Metabolism. 302:E201-E208.

Kim, Y.-R., C.-S. Kim, A. Naqvi, A. Kumar, S. Kumar, T.A. Hoffman, and K. Irani. 2012. Epigenetic upregulation of p66shc mediates low-density lipoprotein cholesterol-induced endothelial cell dysfunction. American Journal of Physiology - Heart and Circulatory Physiology. 303:H189-H196.

Kitagawa, T., H. Kosuge, M. Uchida, M. Dua, Y. Iida, R. Dalman, T. Douglas, and M. McConnell. 2012. RGD-Conjugated Human Ferritin Nanoparticles for Imaging Vascular Inflammation and Angiogenesis in Experimental Carotid and Aortic Disease. Mol Imaging Biol. 14:315-324.

Kou, R., T. Shiroto, J.L. Sartoretto, and T. Michel. 2012. Suppression of Gas synthesis by simvastatin treatment of vascular endothelial cells. The Journal of biological chemistry. 287:2643-2651.

McGrath, K., X. Li, K. Gaus, P. Williams, D. Celermajer, D. Handelsman, and A. Heather. 2012. Androgens Rapidly Activate Nuclear Factor-Kappa B via Intracellular Ca²⁺ Signalling in Human Vascular Endothelial Cells. Journal of Steroids & Hormonal Science:S2:005. doi:010.4172/2157-7536.S4172-4005.

Niiya, Y., T. Abumiya, S.-i. Yamagishi, J.-i. Takino, and M. Takeuchi. 2012. Advanced Glycation End Products Increase Permeability of Brain Microvascular Endothelial Cells through Reactive Oxygen Species-Induced Vascular Endothelial Growth Factor Expression. Journal of Stroke and Cerebrovascular Diseases. 21:293-298.

Su, K., Y. Yu, H. Hou, J. Zhao, Y. Kou, L. Cheng, S. Shyue and T. Lee. 2012. AMP-activated protein kinase mediates erythropoietin-induced activation of endothelial nitric oxide synthase. J Cell Physiol, 227:3053-3062.

BAOSMC: Bovine Aortic Smooth Muscle Cells

Kuribayashi-Shigetomi, K., H. Onoe, and S. Takeuchi. 2012. Cell origami: self-folding of three-dimensional cell-laden microstructures driven by cell traction force. PloS one. 7:e51085-e51085.

Smela, E. and P. Abshire. 2012. Cell-based sensing: biological transduction of chemical stimuli to electrical signals (nose-on-a-chip). Patent US 8152992 B2.

2012 Publications

BBAEC: Bovine Brain Artery Endothelial Cells

Niiya, Y., T. Abumiya, S.-i. Yamagishi, J.-i. Takino, and M. Takeuchi. 2012. Advanced Glycation End Products Increase Permeability of Brain Microvascular Endothelial Cells through Reactive Oxygen Species–Induced Vascular Endothelial Growth Factor Expression. *Journal of Stroke and Cerebrovascular Diseases*. 21:293-298.

BBMVEC: Bovine Brain Microvascular Endothelial Cells

Gil, E.S., L. Wu, L. Xu, and T.L. Lowe. 2012. β -Cyclodextrin-poly(β -Amino Ester) Nanoparticles for Sustained Drug Delivery across the Blood–Brain Barrier. *Biomacromolecules*. 13:3533-3541.

Niiya, Y., T. Abumiya, S. Yamagishi, J. Takino and M. Takeuchi. 2012. Advanced Glycation End Products Increase Permeability of Brain Microvascular Endothelial Cells through Reactive Oxygen Species–Induced Vascular Endothelial Growth Factor Expression. *J Stroke & Cerebrovasc Diseases*, 21:293-298.

Prades, R., S. Guerrero, E. Araya, C. Molina, E. Salas, E. Zurita, J. Selva, G. Egea, C. López-Iglesias, M. Teixidó, M.J. Kogan, and E. Giralt. 2012. Delivery of gold nanoparticles to the brain by conjugation with a peptide that recognizes the transferrin receptor. *Biomaterials*. 33:7194-7205.

Soni, V., K. Patel, D. Lakkaraju, and N. Puri. 2010. Protein-assisted drug delivery system for the targeted administration of active agents. Patent Application US 20100330158 A1.

Stie, J., and D. Fox. 2012a. Blood–brain barrier invasion by *Cryptococcus neoformans* is enhanced by functional interactions with plasmin. *Microbiology*. 158:240-258.

BDNF ELISA Kit

Hu, J., L. Shen, R. Wang, Q. Wang, C. Zhang, J. Xi, S. Ma, J. Zhou, and H. Lu. 2012. Effects of Olig2-Overexpressing Neural Stem Cells and Myelin Basic Protein-Activated T Cells on Recovery from Spinal Cord Injury. *Neurotherapeutics*, 9:422-445.

BEnEpC: Bovine Endometrial Epithelial Cells

Madej, M., M. Norrby, M.T. Madsen, A. Johannisson, C. Hansen, and A. Madej. 2012. The Effect of Boar Seminal Plasma on the Release of Prostaglandins and Interleukin-6 by Porcine Endometrial and Cervical Cells and Bovine Endometrial Cells. *Reproduction in Domestic Animals*. 47:113-124.

Bovine Endometrial Cell Medium

Kitagawa, T., H. Kosuge, M. Uchida, M. Dua, Y. Iida, R. Dalman, T. Douglas, and M. McConnell. 2012. RGD-Conjugated Human Ferritin Nanoparticles for Imaging Vascular Inflammation and Angiogenesis in Experimental Carotid and Aortic Disease. *Mol Imaging Biol*. 14:315-324.

Madej, M., M. Norrby, M.T. Madsen, A. Johannisson, C. Hansen, and A. Madej. 2012. The Effect of Boar Seminal Plasma on the Release of Prostaglandins and Interleukin-6 by Porcine Endometrial and Cervical Cells and Bovine Endometrial Cells. *Reproduction in Domestic Animals*. 47:113-124.

Stie, J., and D. Fox. 2012b. Induction of Brain Microvascular Endothelial Cell Urokinase Expression by *Cryptococcus neoformans* Facilitates Blood-Brain Barrier Invasion. *PLoS one*. 7:e49402.

Bovine Endothelial Cell Media

Chandra, S., M. Romero, A. Shatanawi, A. Alkilany, R. Caldwell and R. Caldwell. 2012. Oxidative species increase arginase activity in endothelial cells through the RhoA/Rho kinase pathway. *British J Pharmacol*, 165:506-519.

Wang, R., S. Cong, M. Cang, Y. Ma, J. Wen and D. Liu. 2012. Factors Affecting the Derivation and Expansion of Bovine Embryonic Stem Cell-Like Cells. *J Animal & Vet Adv*, 11:2865-2872.

BPASMC: Bovine Pulmonary Artery Smooth Muscle Cells

Dey, K., S. Roy, B. Ghosh and S. Chakraborti. 2012. Role of protein kinase C in phospholemman mediated regulation of $\alpha_2\beta_1$ isozyme of Na^+/K^+ -ATPase in caveolae of pulmonary artery smooth muscle cells. *Biochimie*, 94:991-1000.

2012 Publications

CADMEC/HMVEC: Human Dermal Microvascular Endothelial Cells

Abe, H. and S. Tajima. 2012. UVB irradiation down-regulates type XVI collagen expression in mouse and human skin. *J Cosmetic Dermatol*, 11:169-178.

Sato, Y., X. Ren, K. Harada, M. Sasaki, H. Morikawa, S. Shiomi, M. Honda, S. Kaneko, and Y. Nakanuma. 2012. Induction of elastin expression in vascular endothelial cells relates to hepatoportal sclerosis in idiopathic portal hypertension: possible link to serum anti-endothelial cell antibodies. *Clinical & Experimental Immunology*. 167:532-542.

Wang, J., H. Liu, B. Chen, Q. Li, X. Huang, L. Wang, X. Guo, and Q. Huang. 2012. RhoA/ROCK-dependent moesin phosphorylation regulates AGE-induced endothelial cellular response. *Cardiovascular Diabetology*. 11:7.

Canine Adipocyte Medium

Takemitsu, H., D. Zhao, I. Yamamoto, Y. Harada, M. Michishita and T. Arai. 2012. Comparison of bone marrow and adipose tissue-derived canine mesenchymal stem cells. *BMC Vet Res*, 8:150.

Canine Endothelial Cell Medium

Baumgartner-Parzer, S.M., F.R. Waldenberger, A. Freudenthaler, A. Ginouvès-Guerdoux, D. McGahie, and H. Gatto. 2012. The Natural Antioxidants, Pomegranate Extract and Soy Isoflavones, Favourably Modulate Canine Endothelial Cell Function. *ISRN veterinary science*. 2012: doi:590310.595402/592012/590328.

Osterbur, K. 2012. The mechanism of C-type natriuretic peptide production in dogs and its use as a prognostic indicator in critically ill dogs. University of Missouri, MSc dissertation.

Canine Osteoblast Medium

Couto, J.I., M.D. Bear, J. Lin, M. Pennel, S.K. Kulp, W.C. Kisseberth, and C.A. London. 2012. Biologic activity of the novel small molecule STAT3 inhibitor LLL12 against canine osteosarcoma cell lines. *BMC veterinary research*. 8:244.

Takemitsu, H., D. Zhao, I. Yamamoto, Y. Harada, M. Michishita and T. Arai. 2012. Comparison of bone marrow and adipose tissue-derived canine mesenchymal stem cells. *BMC Vet Res*, 8:150.

Cell RNA

Heruth, D., M. Gibson, D. Grigoryev, L. Zhang, and S. Ye. 2012. RNA-seq analysis of synovial fibroblasts brings new insights into rheumatoid arthritis. *Cell & BioScience*, 2:43.

Ishii, R., D. Kami, M. Toyoda, H. Makino, S. Gojo, T. Ishii, and A. Umezawa. 2012. Placenta to cartilage: direct conversion of human placenta to chondrocytes with transformation by defined factors. *Mol. Biol. of the Cell*. 23:3511-3521.

Kaur, H., S. Mao, Q. Li, M. Sameni, S. Krawetz, B. Sloane and R. Mattingly. 2012. RNA-Seq of Human Breast Ductal Carcinoma In Situ Models Reveals Aldehyde Dehydrogenase Isoform 5A1 as a Novel Potential Target. *PLoS ONE* 7(12): e50249.

Sohni, A., F. Mulas, F. Ferrazzi, A. Luttun, R. Bellazzi, D. Huylebroeck, S. Ekker and C. Verfaillie. 2012. TGFβ1-Induced Baf60c Regulates both Smooth Muscle Cell Commitment and Quiescence. *PLoS ONE*, dx.doi.org/10.1371/journal.pone.0047629.

Wakamatsu, A., J. Yamamoto, and T. Isogai. 2012. Biomarker specific to brain/nerve or specific to neuronal differentiation. Patent US 8153764 B2.

Wakamatsu, A., J. Yamamoto, and T. Isogai. 2012. Biomarker specific for cancer. Patent US 8309687 B2.

CnAOEC: Canine Aortic Endothelial Cells

Baumgartner-Parzer, S.M., F.R. Waldenberger, A. Freudenthaler, A. Ginouvès-Guerdoux, D. McGahie, and H. Gatto. 2012. The Natural Antioxidants, Pomegranate Extract and Soy Isoflavones, Favourably Modulate Canine Endothelial Cell Function. *ISRN veterinary science*. 2012: doi:590310.595402/592012/590328.

Monginoux, P. H. Gatto, C. Karst, and F. Waldenberger. 2012. Products for oral administration comprising extracts of punica granatum (pomegranate), intended for a pet, and applications of same. Patent Application US 20140335180 A1.

2012 Publications

Murai, A., S. Asa, A. Kodama, A. Hirata, T. Yanai, and H. Sakai. 2012. Constitutive phosphorylation of the mTORC2/Akt/4E-BP1 pathway in newly derived canine hemangiosarcoma cell lines. *BMC Veterinary Research*. 8:128.

Osterbur, K. 2012. The mechanism of C-type natriuretic peptide production in dogs and its use as a prognostic indicator in critically ill dogs. University of Missouri, MSc dissertation.

Classical Cell Media

Meng, E., B. Long, P. Sullivan, S. McClellan, M. Finan, E. Reed, L. Shevde, and R. Rocconi. 2012. CD44+/CD24- ovarian cancer cells demonstrate cancer stem cell properties and correlate to survival. *Clin & Exp Met*, 29:939-948.

Moffett, J., L.M. Fray, and N.J. Kubat. 2012. Activation of endogenous opioid gene expression in human keratinocytes and fibroblasts by pulsed radiofrequency energy fields. *Journal of pain research*. 5:347.

CnC: Canine Chondrocytes

Wright, L.D., K.D. McKeon-Fischer, Z. Cui, L.S. Nair, and J.W. Freeman. 2012. PDLA/PLLA and PDLA/PCL nanofibers with a chitosan-based hydrogel in composite scaffolds for tissue engineered cartilage. *Journal of tissue engineering and regenerative medicine*: 10.1002/term.1591.

CnOb: Canine Osteoblasts

Book, A.P. 2012. Investigating procaspase-3 as a potential therapeutic target in canine osteosarcoma. Master of Science Thesis. University of Illinois.

Couto, J.I., M.D. Bear, J. Lin, M. Pennel, S.K. Kulp, W.C. Kisseberth, and C.A. London. 2012. Biologic activity of the novel small molecule STAT3 inhibitor LLL12 against canine osteosarcoma cell lines. *BMC veterinary research*. 8:244.

HA: Human Astrocytes

Wang, P., F. Zhu and K. Konstantopoulos. 2012. The Antagonistic Actions of Endogenous Interleukin-1 β and 15-Deoxy- $\Delta^{12,14}$ -prostaglandin J₂ Regulate the Temporal Synthesis of Matrix Metalloproteinase-9 in Sheared Chondrocytes.

HAOEC: Human Aortic Endothelial Cells

Eid, N. 2012. FSTL-1 SECRETED BY MESENCHYMAL STEM CELLS INCREASES CELL VIABILITY OF HUMAN AORTIC ENDOTHELIAL CELLS UNDER HYPOXIC STRESS. BA Thesis, Wilkes Honors College of Florida Atlantic University.

Kanie, K., Y. Narita, F. Kuwabara, M. Satake, S. Honda, H. Kaneko, H. Honda, and R. Kato. 2012. Cell-Selective Peptide Distribution in Human Collagen Proteins. *Kobunshi Ronbunshu*, 69:129-134.

Kanie, K., Y. Narita, Y. Zhao, F. Kuwabara, M. Satake, S. Honda, H. Kaneko, T. Yoshioka, M. Okochi, H. Honda, and R. Kato. 2012. Collagen type IV-specific tripeptides for selective adhesion of endothelial and smooth muscle cells. *Biotechnology and Bioengineering*. 109:1808-1816.

Sakai, S., H. Inagaki, Y. Liu, T. Matsuyama, T. Kihara, J. Miyake, K. Kawakami, and M. Taya. 2012. Rapidly serum-degradable hydrogel templating fabrication of spherical tissues and curved tubular structures. *Biotechnology and Bioengineering*. 109:2911-2919.

Wang, H.-J., H.-C. Huang, Y.-C. Chuang, P.-J. Liao, D.-M. Yang, W. Yang, and H. Huang. 2012. Modulation of tissue factor and thrombomodulin expression in human aortic endothelial cells incubated with high glucose. *Acta Diabetol*. 49:125-130.

Wang, Y., Y. Zhang, X. Wang, Y. Liu, and M. Xia. 2012. Cyanidin-3-O- β -glucoside induces oxysterol efflux from endothelial cells: Role of liver X receptor alpha. *Atherosclerosis*. 223:299-305.

HAOSMC: Human Aortic Smooth Muscle Cells

Acilan, C., M. Serhatli, O. Kacar, Z. Adiguzel, A. Tuncer, M. Hayran, and K. Baysal. 2012. Smooth Muscle Cells Isolated from Thoracic Aortic Aneurysms Exhibit Increased Genomic Damage, but Similar Tendency for Apoptosis. *DNA Cell Biol*, 31:1523-1534.

Almontashiri, N. 2012. A gain of function variant of the mitochondrial matrix protease SPG7 is associated with increased risk of coronary artery disease. Vol. MSc dissertation. University of Ottawa.

LaBerge, M. 2012. Induced Elastic Matrix Synthesis within 3-Dimensional Collagen Constructs. PhD Dissertation, Clemson U.

2012 Publications

Oros, M., E. Zavaczki, C. Vadasz, V. Jeney, A. Tosaki, I. Lekli, G. Balla, L. Nagy, and J. Balla. 2012. Ethanol increases phosphate-mediated mineralization and osteoblastic transformation of vascular smooth muscle cells. *Journal of cellular and molecular medicine*. 16:2219-2226.

Santiago, F.S. 2012. Regulatory Mechanisms in Vascular Injury and Repair. University of New South Wales, PhD dissertation.

Venkataraman, L. 2012. Induced elastic matrix synthesis within 3-dimensional collagen constructs. PhD dissertation, Clemson University.

HBEPc: Human Bronchial Epithelial Cells

Abdullah, L., C. Wolber, M. Kesimer, J. Sheehan, and C.W. Davis. 2012. Studying Mucin Secretion from Human Bronchial Epithelial Cell Primary Cultures. In *Mucins*. Vol. 842. M.A. McGuckin and D.J. Thornton, editors. Humana Press. 259-277.

Narisawa-Saito, M., Y. Inagawa, Y. Yoshimatsu, K. Haga, K. Tanaka, N. Egawa, S. Ohno, H. Ichikawa, T. Yugawa, M. Fujita and T. Kiyono. 2012. A critical role of MYC for transformation of human cells by HPV16 E6E7 and oncogenic HRAS. *Carcinogenesis*, 33:910-917.

Nasreen, N., N. Khodayari, B. Sukka-Ganesh, S. Peruvemba, and K.A. Mohammed. 2012. Fluticasone propionate and Salmeterol combination induces SOCS-3 expression in airway epithelial cells. *International Immunopharmacology*. 12:217-225.

Othumpangat, S., M. Regier and G. Piedimonte. 2012. Nerve growth factor modulates human rhinovirus infection in airway epithelial cells by controlling ICAM-1 expression. *Am J. Physiol – Lung Cellular & Molec Physiol*, 302:L1057-L1066.

Othumpangat, S., C. Walton, and G. Piedimonte. 2012b. MicroRNA-221 Modulates RSV Replication in Human Bronchial Epithelium by Targeting NGF Expression. *PloS one*. 7:e30030.

HBSS

Baumgartner-Parzer, S.M., F.R. Waldenberger, A. Freudenthaler, A. Ginouvès-Guerdoux, D. McGahie, and H. Gatto. 2012. The Natural Antioxidants, Pomegranate Extract and Soy Isoflavones, Favourably Modulate Canine Endothelial Cell Function. *ISRN veterinary science*. 2012: doi:590310.595402/592012/590328.

HC: Human Chondrocytes

Ishii, R., D. Kami, M. Toyoda, H. Makino, S. Gojo, T. Ishii, and A. Umezawa. 2012. Placenta to cartilage: direct conversion of human placenta to chondrocytes with transformation by defined factors. *Mol. Biol. of the cell*. 23:3511-3521.

Malemud, C., Y. Sun, E. Pearlman, N. Ginley, and A. Awadallah. 2012. Monosodium urate and tumor necrosis factor- α increase apoptosis in human chondrocyte cultures. *Rheumatol Curr Res* 2:113.

Nakayama, G., Y. Aida, Y. Watanabe, K. Honda, S. Tanigawa, M Maeno, H. Matsumura and N. Suzuki. 2012. Influence of Compressive Force and IL-1 β on Metabolism of the Extracellular Matrix in Human Chondrocytes. *J Hard Tiss Biol*, 21:217-230.

Rapko, S., and S. Duguay. 2012. Methods of evaluating cells and cell cultures. Patent Application US 20120329051 A1.

Varnum, B., C. Vezina, A. Witte, X. Qian, F. Martin, H. Huang, and G. Elliott. 2012. Therapeutic human anti-IL-1R1 monoclonal antibody. Patent US 8236559 B2.

Wang, P., F. Zhu, and K. Konstantopoulos. 2012. The Antagonistic Actions of Endogenous Interleukin-1 β and 15-Deoxy- Δ 12,14-prostaglandin J2 Regulate the Temporal Synthesis of Matrix Metalloproteinase-9 in Sheared Chondrocytes. *Journal of Biological Chemistry*. 287:31877-31893.

Whitney, N.P., A.C. Lamb, T.M. Louw, and A. Subramanian. 2012. Integrin-Mediated Mechanotransduction Pathway of Low-Intensity Continuous Ultrasound in Human Chondrocytes. *Ultrasound in medicine & biology*. 38:1734-1743.

2012 Publications

HCAEC: Human Coronary Artery Endothelial Cells

Archacki, S.R., G. Angheloiu, C.S. Moravec, H. Liu, E.J. Topol, and Q.K. Wang. 2012. Comparative gene expression analysis between coronary arteries and internal mammary arteries identifies a role for the TES gene in endothelial cell functions relevant to coronary artery disease. *Human molecular genetics*. 21:1364-1373.

Bailey-Downs, L.C., M. Mitschelen, D. Sosnowska, P. Toth, J.T. Pinto, P. Ballabh, M.N. Valcarcel-Ares, J. Farley, A. Koller, J.C. Henthorn, C. Bass, W.E. Sonntag, Z. Ungvari, and A. Csiszar. 2012. Liver-Specific Knockdown of IGF-1 Decreases Vascular Oxidative Stress Resistance by Impairing the Nrf2-Dependent Antioxidant Response: A Novel Model of Vascular Aging. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*. 67A:313-329.

Crowder, S.W., M.K. Gupta, L.H. Hofmeister, A.L. Zachman, and H.-J. Sung. 2012. Modular polymer design to regulate phenotype and oxidative response of human coronary artery cells for potential stent coating applications. *Acta Biomaterialia*. 8:559-569. DeQuach, J. 2012. Decellularized biomaterials for cell culture and repair after ischemic injury. PhD Dissertation, UC San Diego.

Hankins, J. 2012. Re-branding ceramide-1-phosphate: Not just a ceramide metabolite. PhD Dissertation, Penn State U.

Jemy, J. 2012. Does Human Leukocyte Antigen-G (HLA-G) Play a Role in Immune Modulation and Vasculopathy in Heart Transplantation? Masters Thesis, U Toronto.

Kapur, N.K., C. Shenoy, A.A. Yunis, N.N. Mohammad, S. Wilson, V. Paruchuri, E.E. Mackey, X. Qiao, A. Shah, M.L. Esposito, R.H. Karas, and I.Z. Jaffe. 2012. Distinct Effects of Unfractionated Heparin versus Bivalirudin on Circulating Angiogenic Peptides. *PLoS one*. 7:e34344.

Lin, L.-Y., H.-Y. Lin, H.-W. Chen, T.-L. Su, L.-C. Huang, and K.-J. Chuang. 2012. Effects of temple particles on inflammation and endothelial cell response. *Science of The Total Environment*. 414:68-72.

Melchior, B., and J.A. Frangos. 2012. Gq/11-mediated intracellular calcium responses to retrograde flow in endothelial cells. *American Journal of Physiology-Cell Physiology*. 303:C467-C473.

Ramirez-Sanchez, I., H. Aguilar, G. Ceballos, and F. Villarreal. 2012. (-)-Epicatechin-induced calcium independent eNOS activation: roles of HSP90 and AKT. *Molecular and cellular biochemistry*. 370:141-150.

Riegel, A. 2012. Pro-inflammatory role of P2Y6 receptor signalling during vascular inflammation. PhD Dissertation, Eberhard Karls Universitat Tübingen.

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HOb: Human Osteoblasts

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HUASMC: Human Umbilical Artery Smooth Muscle Cells

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