

Publications supported by the Cell Imaging Facility-Nikon Imaging Center (accumulated and filtered to the best of our ability)

- Angeloni, N.L., C.W. Bond, Y. Tang, D.A. Harrington, S. Zhang, S.I. Stupp, K.E. McKenna, and C.A. Podlasek. 2011. Regeneration of the cavernous nerve by Sonic hedgehog using aligned peptide amphiphile nanofibers. *Biomaterials*. 32:1091-1101.
- Antonone, S.E., S.V. Zaichick, and G.A. Smith. 2010. Resolving the assembly state of herpes simplex virus during axon transport by live-cell imaging. *J Virol*. 84:13019-13030.
- Atherton, J.F., K. Kitano, J. Baufreton, K. Fan, D. Wokosin, T. Tkatch, R. Shigemoto, D.J. Surmeier, and M.D. Bevan. 2010. Selective participation of somatodendritic HCN channels in inhibitory but not excitatory synaptic integration in neurons of the subthalamic nucleus. *J Neurosci*. 30:16025-16040.
- Aurora, A.B., D. Biyashev, Y. Mirochnik, T.A. Zaichuk, C. Sanchez-Martinez, M.A. Renault, D. Losordo, and O.V. Volpert. 2010. NF-kappaB balances vascular regression and angiogenesis via chromatin remodeling and NFAT displacement. *Blood*. 116:475-484.
- Aviles, M.O., C.H. Lin, M. Zelyvanskaya, J.G. Graham, R.M. Boehler, P.B. Messersmith, and L.D. Shea. 2010. The contribution of plasmid design and release to in vivo gene expression following delivery from cationic polymer modified scaffolds. *Biomaterials*. 31:1140-1147.
- Barlan, K., and V.I. Gelfand. 2010. Intracellular transport: ER and mitochondria meet and greet along designated tracks. *Curr Biol*. 20:R845-847.
- Battle, D., M. Jose Soler, and M. Ye. 2010. ACE2 and diabetes: ACE of ACEs? *Diabetes*. 59:2994-2996.
- Bayeva, M., and H. Ardehali. 2010. Mitochondrial dysfunction and oxidative damage to sarcomeric proteins. *Curr Hypertens Rep*. 12:426-432.
- Bensenor, L.B., K. Barlan, S.E. Rice, R.G. Fehon, and V.I. Gelfand. 2010. Microtubule-mediated transport of the tumor-suppressor protein Merlin and its mutants. *Proc Natl Acad Sci U S A*. 107:7311-7316.
- Bhattacharyya, S., K.L. Warfield, G. Ruthel, S. Bavari, M.J. Aman, and T.J. Hope. 2010. Ebola virus uses clathrin-mediated endocytosis as an entry pathway. *Virology*. 401:18-28.
- Biegging, K.T., M. Swanson-Mungerson, A.C. Amick, and R. Longnecker. 2010. Epstein-Barr virus in Burkitt's lymphoma: a role for latent membrane protein 2A. *Cell Cycle*. 9:901-908.
- Biyashev, D., D. Veliceasa, A. Kwiatek, M.M. Sutanto, R.N. Cohen, and O.V. Volpert. 2010. Natural angiogenesis inhibitor signals through Erk5 activation of peroxisome proliferator-activated receptor gamma (PPARgamma). *J Biol Chem*. 285:13517-13524.
- Bizhanova, A., and P. Kopp. 2010. Genetics and phenomics of Pendred syndrome. *Mol Cell Endocrinol*. 322:83-90.
- Blatner, N.R., A. Bonertz, P. Beckhove, E.C. Cheon, S.B. Krantz, M. Strouch, J. Weitz, M. Koch, A.L. Halverson, D.J. Bentrem, and K. Khazaie. 2010. In colorectal cancer mast cells contribute to systemic regulatory T-cell dysfunction. *Proc Natl Acad Sci U S A*. 107:6430-6435.
- Bosman, J.D., F. Yehiely, J.R. Evans, and V.L. Cryns. 2010. Regulation of alphaB-crystallin gene expression by the transcription factor Ets1 in breast cancer. *Breast Cancer Res Treat*. 119:63-70.
- Brown, J.B., G. Lee, E. Managlia, G.R. Grimm, R. Dirisina, T. Goretsky, P. Chereshe, N.R. Blatner, K. Khazaie, G.Y. Yang, L. Li, and T.A. Barrett. 2010. Mesalamine inhibits epithelial beta-catenin activation in chronic ulcerative colitis. *Gastroenterology*. 138:595-605, 605 e591-593.
- Brubaker, C.E., H. Kissler, L.J. Wang, D.B. Kaufman, and P.B. Messersmith. 2010. Biological performance of mussel-inspired adhesive in extrahepatic islet transplantation. *Biomaterials*. 31:420-427.
- Bryan, N.B., A. Dorfleutner, S.J. Kramer, C. Yun, Y. Rojanasakul, and C. Stehlik. 2010. Differential splicing of the apoptosis-associated speck like protein containing a caspase recruitment domain (ASC) regulates inflammasomes. *J Inflamm (Lond)*. 7:23.
- Budinger, G.R., G.M. Mutlu, D. Urich, S. Soberanes, L.J. Buccellato, K. Hawkins, S.E. Chiarella, K.A. Radigan, J. Eisenbart, H. Agrawal, S. Berkelhamer, S. Hekimi, J. Zhang, H. Perlman, P.T. Schumacker, M. Jain, and N.S. Chandel. 2010. Epithelial Cell Death is an Important Contributor to Oxidant-Mediated Acute Lung Injury. *Am J Respir Crit Care Med*.
- Bulun, S.E., Y.H. Cheng, M.E. Pavone, Q. Xue, E. Attar, E. Trukhacheva, H. Tokunaga, H. Utsunomiya, P. Yin, X. Luo, Z. Lin, G. Imir, S. Thung, E.J. Su, and J.J. Kim. 2010. Estrogen receptor-beta, estrogen receptor-alpha, and progesterone resistance in endometriosis. *Semin Reprod Med*. 28:36-43.
- Burt, R.K., A. Testori, Y. Oyama, H.E. Rodriguez, K. Yaung, M. Villa, J.M. Bucha, F. Milanetti, J. Sheehan, N. Rajamannan, and W.H. Pearce. 2010. Autologous peripheral blood CD133+ cell implantation for limb salvage in patients with critical limb ischemia. *Bone Marrow Transplant*. 45:111-116.
- Calve, S., S.J. Odelberg, and H.G. Simon. 2010. A transitional extracellular matrix instructs cell behavior during muscle regeneration. *Dev Biol*. 344:259-271.
- Camarata, T., D. Snyder, T. Schwend, J. Klosowiak, B. Holtrup, and H.G. Simon. 2010. Pdlim7 is required for maintenance of the mesenchymal/epidermal Fgf signaling feedback loop during zebrafish pectoral fin development. *BMC Dev Biol*. 10:104.
- Camarata, T., J. Krcmery, D. Snyder, S. Park, J. Topczewski, and H.G. Simon. 2010. Pdlim7 (LMP4) regulation of Tbx5 specifies zebrafish heart atrio-ventricular boundary and valve formation. *Dev Biol*. 337:233-245.
- Carroll, R.W., M.S. Wainwright, K.Y. Kim, T. Kidambi, N.D. Gomez, T. Taylor, and K. Haldar. 2010. A rapid murine coma and behavior scale for quantitative assessment of murine cerebral malaria. *PLoS One*. 5.
- Chi, A.Y., G.B. Waypa, P.T. Mungai, and P.T. Schumacker. 2010. Prolonged hypoxia increases ROS signaling and RhoA activation in pulmonary artery smooth muscle and endothelial cells. *Antioxid Redox Signal*. 12:603-610.
- Christie, L.A., T.A. Russell, J. Xu, L. Wood, G.M. Shepherd, and A. Contractor. 2010. AMPA receptor desensitization mutation results in severe developmental phenotypes and early postnatal lethality. *Proc Natl Acad Sci U S A*. 107:9412-9417.
- Comellas, A.P., A.M. Kelly, H.E. Trejo, A. Briva, J. Lee, J.I. Sznajder, and L.A. Dada. 2010. Insulin regulates alveolar epithelial function by inducing Na⁺/K⁺-ATPase translocation to the plasma membrane in a process mediated by the action of Akt. *J Cell Sci*. 123:1343-1351.

Cooley, A., S. Zelivianski, and J.S. Jeruss. 2010. Impact of cyclin E overexpression on Smad3 activity in breast cancer cell lines. *Cell Cycle*. 9:4900-4907.

Dasgupta, B., T. Chew, A. deRoche, and W.A. Muller. 2010. Blocking platelet/endothelial cell adhesion molecule 1 (PECAM) inhibits disease progression and prevents joint erosion in established collagen antibody-induced arthritis. *Exp Mol Pathol*. 88:210-215.

De Laporte, L., A. Huang, M.M. Ducommun, M.L. Zelivyanska, M.O. Aviles, A.F. Adler, and L.D. Shea. 2010. Patterned transgene expression in multiple-channel bridges after spinal cord injury. *Acta Biomater*. 6:2889-2897.

Decker, R.S., A.K. Rines, S. Nakamura, T.J. Naik, J.A. Wassertsrom, and H. Ardehali. 2010. Phosphorylation of contractile proteins in response to alpha- and beta-adrenergic stimulation in neonatal cardiomyocytes. *Transl Res*. 155:27-34.

Deng, J., N. Jin, X. Yin, G.Y. Yang, Z. Zhang, R.A. Omary, and A.C. Larson. 2010. Quantitative multiparametric PROPELLER MRI of diethylnitrosamine-induced hepatocarcinogenesis in wister rat model. *J Magn Reson Imaging*. 31:1242-1251.

Desireddi, J.R., K.N. Farrow, J.D. Marks, G.B. Waypa, and P.T. Schumacker. 2010. Hypoxia increases ROS signaling and cytosolic Ca(2+) in pulmonary artery smooth muscle cells of mouse lungs slices. *Antioxid Redox Signal*. 12:595-602.

Egerer, M., and K.J. Satchell. 2010. Inositol hexakisphosphate-induced autoprocessing of large bacterial protein toxins. *PLoS Pathog*. 6:e1000942.

El Muayed, M., L.K. Billings, M.R. Raja, X. Zhang, P.J. Park, M.V. Newman, D.B. Kaufman, T.V. O'Halloran, and W.L. Lowe, Jr. 2010. Acute cytokine-mediated downregulation of the zinc transporter ZnT8 alters pancreatic beta-cell function. *J Endocrinol*. 206:159-169.

Epting, C.L., B.M. Coates, and D.M. Engman. 2010. Molecular mechanisms of host cell invasion by *Trypanosoma cruzi*. *Exp Parasitol*. 126:283-291.

Evans, J.R., J.D. Bosman, L. Brown-Endres, F. Yehiely, and V.L. Cryns. 2010. Induction of the small heat shock protein alphaB-crystallin by genotoxic stress is mediated by p53 and p73. *Breast Cancer Res Treat*. 122:159-168.

Fahrbach, K.M., S.M. Barry, M.R. Anderson, and T.J. Hope. 2010. Enhanced cellular responses and environmental sampling within inner foreskin explants: implications for the foreskin's role in HIV transmission. *Mucosal Immunol*. 3:410-418.

Fan, Q., and R. Longnecker. 2010. The Ig-like v-type domain of paired Ig-like type 2 receptor alpha is critical for herpes simplex virus type 1-mediated membrane fusion. *J Virol*. 84:8664-8672.

Fang, F., J. Zheng, T.L. Galbaugh, A.A. Fiorillo, E.E. Hjort, X. Zeng, and C.V. Clevenger. 2010. Cyclophilin B as a co-regulator of prolactin-induced gene expression and function in breast cancer cells. *J Mol Endocrinol*. 44:319-329.

Fang, R.C., Z.B. Kryger, D.W. Buck, 2nd, M. De la Garza, R.D. Galiano, and T.A. Mustoe. 2010. Limitations of the db/db mouse in translational wound healing research: Is the NONcNZO10 polygenic mouse model superior? *Wound Repair Regen*. 18:605-613.

Fields, I.C., S.M. King, E. Shteyn, R.S. Kang, and H. Folsch. 2010. Phosphatidylinositol 3,4,5-trisphosphate localization in recycling endosomes is necessary for AP-1B-dependent sorting in polarized epithelial cells. *Mol Biol Cell*. 21:95-105.

Flozak, A.S., A.P. Lam, S. Russell, M. Jain, O.N. Peled, K.A. Sheppard, R. Beri, G.M. Mutlu, G.R. Budinger, and C.J. Gottardi. 2010. Beta-catenin/T-cell factor signaling is activated during lung injury and promotes the survival and migration of alveolar epithelial cells. *J Biol Chem*. 285:3157-3167.

Galbaugh, T., Y.B. Feeney, and C.V. Clevenger. 2010. Prolactin receptor-integrin cross-talk mediated by SIRPalpha in breast cancer cells. *Mol Cancer Res*. 8:1413-1424.

Gallant-Behm, C.L., and T.A. Mustoe. 2010. Occlusion regulates epidermal cytokine production and inhibits scar formation. *Wound Repair Regen*. 18:235-244.

Geissler, B., R. Tungekar, and K.J. Satchell. 2010. Identification of a conserved membrane localization domain within numerous large bacterial protein toxins. *Proc Natl Acad Sci U S A*. 107:5581-5586.

Ghosh, S., J. Koblinski, J. Johnson, Y. Liu, A. Ericsson, J.W. Davis, Z. Shi, M.J. Ravosa, S. Crawford, S. Frazier, and M.S. Stack. 2010. Urinary-type plasminogen activator receptor/alpha 3 beta 1 integrin signaling, altered gene expression, and oral tumor progression. *Mol Cancer Res*. 8:145-158.

Gill, M.B., S. Frausto, M. Ikoma, M. Sasaki, M. Oikawa, R. Sakai, and G.T. Swanson. 2010. A series of structurally novel heterotricyclic alpha-amino-3-hydroxyl-5-methyl-4-isoxazole-propionate receptor-selective antagonists. *Br J Pharmacol*. 160:1417-1429.

Godsel, L.M., A.D. Dubash, A.E. Bass-Zubek, E.V. Amargo, J.L. Klessner, R.P. Hobbs, X. Chen, and K.J. Green. 2010. Plakophilin 2 couples actomyosin remodeling to desmosomal plaque assembly via RhoA. *Mol Biol Cell*. 21:2844-2859.

Gonzalez, A.M., R. Bhattacharya, G.W. deHart, and J.C. Jones. 2010. Transdominant regulation of integrin function: mechanisms of crosstalk. *Cell Signal*. 22:578-583.

Guo, Y., Y. Zhang, G.M. Nijm, A.V. Sahakian, G.Y. Yang, R.A. Omary, and A.C. Larson. 2011. Irreversible electroporation in the liver: contrast-enhanced inversion-recovery MR imaging approaches to differentiate reversibly electroporated penumbra from irreversibly electroporated ablation zones. *Radiology*. 258:461-468.

Guzman, J.N., J. Sanchez-Padilla, D. Wokosin, J. Kondapalli, E. Ilijic, P.T. Schumacker, and D.J. Surmeier. 2010. Oxidant stress evoked by pacemaking in dopaminergic neurons is attenuated by DJ-1. *Nature*. 468:696-700.

Hamill, K.J., A.S. Paller, and J.C. Jones. 2010. Adhesion and migration, the diverse functions of the laminin alpha3 subunit. *Dermatol Clin*. 28:79-87.

Hayashida, T., J.C. Jones, C.K. Lee, and H.W. Schnaper. 2010. Loss of beta1-integrin enhances TGF-beta1-induced collagen expression in epithelial cells via increased alphavbeta3-integrin and Rac1 activity. *J Biol Chem*. 285:30741-30751.

Helenius, I.T., L.A. Dada, and J.I. Sznajder. 2010. Role of ubiquitination in Na,K-ATPase regulation during lung injury. *Proc Am Thorac Soc*. 7:65-70.

Hitt, B.D., T.C. Jaramillo, D.M. Chetkovich, and R. Vassar. 2010. BACE1-/- mice exhibit seizure activity that does not correlate with sodium channel level or axonal localization. *Mol Neurodegener*. 5:31.

- Hobbs, R.P., E.V. Amargo, A. Somasundaram, C.L. Simpson, M. Prakriya, M.F. Denning, and K.J. Green. 2011. The calcium ATPase SERCA2 regulates desmoplakin dynamics and intercellular adhesive strength through modulation of PKC α signaling. *FASEB J.* 25:990-1001.
- Jackson, J.O., and R. Longnecker. 2010. Reevaluating herpes simplex virus hemifusion. *J Virol.* 84:11814-11821.
- Jin N, Deng J, Chadashvili T, Zhang Y, Guo Y, Zhang Z, Yang GY, Omary RA, Larson AC. 2010. Carbogen gas-challenge BOLD MR imaging in a rat model of diethylnitrosamine-induced liver fibrosis. *Radiology.* 254(1):129-37.
- Jolly, A.L., and V.I. Gelfand. 2010. Cytoplasmic microtubule sliding: An unconventional function of conventional kinesin. *Commun Integr Biol.* 3:589-591.
- Jolly, A.L., H. Kim, D. Srinivasan, M. Lakonishok, A.G. Larson, and V.I. Gelfand. 2010. Kinesin-1 heavy chain mediates microtubule sliding to drive changes in cell shape. *Proc Natl Acad Sci U S A.* 107:12151-12156.
- Keerthivasan, G., S. Small, H. Liu, A. Wickrema, and J.D. Crispino. 2010. Vesicle trafficking plays a novel role in erythroblast enucleation. *Blood.* 116:3331-3340. (Cover!)
- Khare, S., N. Luc, A. Dorfleutner, and C. Stehlik. 2010. Inflammasomes and their activation. *Crit Rev Immunol.* 30:463-487.
- Khuon, S., L. Liang, R.W. Dettman, P.H. Sporn, R.B. Wysolmerski, and T.L. Chew. 2010. Myosin light chain kinase mediates transcellular intravasation of breast cancer cells through the underlying endothelial cells: a three-dimensional FRET study. *J Cell Sci.* 123:431-440.
- Kissler, H.J., J.C. Niland, B. Olack, C. Ricordi, B.J. Hering, A. Naji, F. Kandeel, J. Oberholzer, L. Fernandez, J. Contreras, T. Stiller, J. Sowinski, and D.B. Kaufman. 2010. Validation of methodologies for quantifying isolated human islets: an Islet Cell Resources study. *Clin Transplant.* 24:236-242.
- Krcmery, J., T. Camarata, A. Kulisz, and H.G. Simon. 2010. Nucleocytoplasmic functions of the PDZ-LIM protein family: new insights into organ development. *Bioessays.* 32:100-108.
- Krishnamurthy, P., E. Lambers, S. Verma, T. Thorne, G. Qin, D.W. Losordo, and R. Kishore. 2010. Myocardial knockdown of mRNA-stabilizing protein HuR attenuates post-MI inflammatory response and left ventricular dysfunction in IL-10-null mice. *FASEB J.* 24:2484-2494.
- Kume, T. 2010. Specification of arterial, venous, and lymphatic endothelial cells during embryonic development. *Histol Histopathol.* 25:637-646.
- Lakshman, M., X. Huang, V. Ananthanarayanan, B. Jovanovic, Y. Liu, C.S. Craft, D. Romero, C.P. Vary, and R.C. Bergan. 2011. Endoglin suppresses human prostate cancer metastasis. *Clin Exp Metastasis.* 28:39-53.
- Lam, C.K., T. Yoo, B. Hiner, Z. Liu, and J. Grutzendler. 2010. Embolus extravasation is an alternative mechanism for cerebral microvascular recanalization. *Nature.* 465:478-482.
- Laster, K., and S.T. Kosak. 2010. Genomic Pangea: coordinate gene regulation and cell-specific chromosomal topologies. *Curr Opin Cell Biol.* 22:314-319.
- Lee, S.M., R.W. Ahn, F. Chen, A.J. Fought, T.V. O'Halloran, V.L. Cryns, and S.T. Nguyen. 2010. Biological evaluation of pH-responsive polymer-caged nanobins for breast cancer therapy. *ACS Nano.* 4:4971-4978.
- Light, W.H., D.G. Brickner, V.R. Brand, and J.H. Brickner. 2010. Interaction of a DNA zip code with the nuclear pore complex promotes H2A.Z incorporation and INO1 transcriptional memory. *Mol Cell.* 40:112-125.
- Liu, Z., C. Condello, A. Schain, R. Harb, and J. Grutzendler. 2010. CX3CR1 in microglia regulates brain amyloid deposition through selective protofibrillar amyloid-beta phagocytosis. *J Neurosci.* 30:17091-17101.
- Luthi, A.J., P.C. Patel, C.H. Ko, R.K. Mutharasan, C.A. Mirkin, and C.S. Thaxton. 2010. Nanotechnology for synthetic high-density lipoproteins. *Trends Mol Med.* 16:553-560.
- Maher, M.T., R. Mo, A.S. Flozak, O.N. Peled, and C.J. Gottardi. 2010. Beta-catenin phosphorylated at serine 45 is spatially uncoupled from beta-catenin phosphorylated in the GSK3 domain: implications for signaling. *PLoS One.* 5:e10184.
- Melstrom, L.G., M.R. Salabat, X.Z. Ding, M.J. Strouch, P.J. Grippo, S. Mirzoeva, J.C. Pelling, and D.J. Bentrem. 2010. Apigenin Down-Regulates the Hypoxia Response Genes: HIF-1 α , GLUT-1, and VEGF in Human Pancreatic Cancer Cells. *J Surg Res.*
- Mendez, M.G., S. Kojima, and R.D. Goldman. 2010. Vimentin induces changes in cell shape, motility, and adhesion during the epithelial to mesenchymal transition. *FASEB J.* 24:1838-1851.
- Mouli, S.K., L.C. Zhao, R.A. Omary, and C.S. Thaxton. 2010. Lymphotropic nanoparticle enhanced MRI for the staging of genitourinary tumors. *Nat Rev Urol.* 7:84-93.
- Mugnaini, E., G. Sekerkova, and M. Martina. 2011. The unipolar brush cell: a remarkable neuron finally receiving deserved attention. *Brain Res Rev.* 66:220-245.
- Mutch, C.A., J.D. Schulte, E. Olson, and A. Chenn. 2010. Beta-catenin signaling negatively regulates intermediate progenitor population numbers in the developing cortex. *PLoS One.* 5:e12376.
- Mutlu, G.M., G.R. Budinger, A.A. Green, D. Ulrich, S. Soberanes, S.E. Chiarella, G.F. Alheid, D.R. McCrimmon, I. Szleifer, and M.C. Hersam. 2010. Biocompatible nanoscale dispersion of single-walled carbon nanotubes minimizes in vivo pulmonary toxicity. *Nano Lett.* 10:1664-1670.
- Na, N., N.S. Chandel, J. Litvan, and K.M. Ridge. 2010. Mitochondrial reactive oxygen species are required for hypoxia-induced degradation of keratin intermediate filaments. *FASEB J.* 24:799-809.
- Oh, M.M., F.A. Oliveira, and J.F. Disterhoft. 2010. Learning and aging related changes in intrinsic neuronal excitability. *Front Aging Neurosci.* 2:2.
- Oshita, S.E., F. Chen, T. Kwan, F. Yehiely, and V.L. Cryns. 2010. The small heat shock protein HspB2 is a novel anti-apoptotic protein that inhibits apical caspase activation in the extrinsic apoptotic pathway. *Breast Cancer Res Treat.* 124:307-315.
- Pavese, J.M., R.L. Farmer, and R.C. Bergan. 2010. Inhibition of cancer cell invasion and metastasis by genistein. *Cancer Metastasis Rev.* 29:465-482.

Pavone, M.E., S. Reierstad, H. Sun, M. Milad, S.E. Bulun, and Y.H. Cheng. 2010. Altered retinoid uptake and action contributes to cell survival in endometriosis. *J Clin Endocrinol Metab.* 95:E300-309.

Raha, S., T. Paunesku, and G. Woloschak. 2011. Peptide-mediated cancer targeting of nanoconjugates. *Wiley Interdiscip Rev Nanomed Nanobiotechnol.* 3:269-281.

Ray, P., X. Luo, E.J. Rao, A. Basha, E.A. Woodruff, 3rd, and J.Y. Wu. 2010. The splicing factor Prp31 is essential for photoreceptor development in *Drosophila*. *Protein Cell.* 1:267-274.

Rogel, M.R., A. Jaitovich, and K.M. Ridge. 2010. The role of the ubiquitin proteasome pathway in keratin intermediate filament protein degradation. *Proc Am Thorac Soc.* 7:71-76.

Sahni, V., A. Mukhopadhyay, V. Tysseling, A. Hebert, D. Birch, T.L. McGuire, S.I. Stupp, and J.A. Kessler. 2010. BMPR1a and BMPR1b signaling exert opposing effects on gliosis after spinal cord injury. *J Neurosci.* 30:1839-1855.

Sametsky, E.A., J.F. Disterhoft, Y. Geinisman, and D.A. Nicholson. 2010. Synaptic strength and postsynaptically silent synapses through advanced aging in rat hippocampal CA1 pyramidal neurons. *Neurobiol Aging.* 31:813-825.

Schiano, C.A., L.E. Bellows, and W.W. Lathem. 2010. The small RNA chaperone Hfq is required for the virulence of *Yersinia pseudotuberculosis*. *Infect Immun.* 78:2034-2044.

Schnaper, H.W., S.C. Hubchak, C.E. Runyan, J.A. Browne, G. Finer, X. Liu, and T. Hayashida. 2010. A conceptual framework for the molecular pathogenesis of progressive kidney disease. *Pediatr Nephrol.* 25:2223-2230.

Simpson, C.L., S. Kojima, V. Cooper-Whitehair, S. Getsios, and K.J. Green. 2010. Plakoglobin rescues adhesive defects induced by ectodomain truncation of the desmosomal cadherin desmoglein 1: implications for exfoliative toxin-mediated skin blistering. *Am J Pathol.* 177:2921-2937.

Standley, S.M., D.J. Toft, H. Cheng, S. Soukasene, J. Chen, S.M. Raja, V. Band, H. Band, V.L. Cryns, and S.I. Stupp. 2010. Induction of cancer cell death by self-assembling nanostructures incorporating a cytotoxic peptide. *Cancer Res.* 70:3020-3026.

Takawira, D., G.R. Budinger, S.B. Hopkinson, and J.C. Jones. 2011. A dystroglycan/plectin scaffold mediates mechanical pathway bifurcation in lung epithelial cells. *J Biol Chem.* 286:6301-6310.

Tang, Y., D.R. Clayburgh, N. Mittal, T. Goretsky, R. Dirisina, Z. Zhang, M. Kron, D. Ivancic, R.B. Katzman, G. Grimm, G. Lee, J. Fryer, A. Nusrat, J.R. Turner, and T.A. Barrett. 2010. Epithelial NF-kappaB enhances transmucosal fluid movement by altering tight junction protein composition after T cell activation. *Am J Pathol.* 176:158-167.

Thurn, K.T., H. Arora, T. Paunesku, A. Wu, E.M. Brown, C. Doty, J. Kremer, and G. Woloschak. 2011. Endocytosis of titanium dioxide nanoparticles in prostate cancer PC-3M cells. *Nanomedicine.* 7:123-130.

Todorovic, V., B.V. Desai, M.J. Patterson, E.V. Amargo, A.D. Dubash, T. Yin, J.C. Jones, and K.J. Green. 2010. Plakoglobin regulates cell motility through Rho- and fibronectin-dependent Src signaling. *J Cell Sci.* 123:3576-3586.

Trejo, H.E., E. Lecuona, D. Grillo, I. Szeleifer, O.E. Nekrasova, V.I. Gelfand, and J.I. Sznajder. 2010. Role of kinesin light chain-2 of kinesin-1 in the traffic of Na,K-ATPase-containing vesicles in alveolar epithelial cells. *FASEB J.* 24:374-382.

Waypa, G.B., J.D. Marks, R. Guzy, P.T. Mungai, J. Schriewer, D. Dokic, and P.T. Schumacker. 2010. Hypoxia triggers subcellular compartmental redox signaling in vascular smooth muscle cells. *Circ Res.* 106:526-535.

Welch, L.C., E. Lecuona, A. Briva, H.E. Trejo, L.A. Dada, and J.I. Sznajder. 2010. Extracellular signal-regulated kinase (ERK) participates in the hypercapnia-induced Na,K-ATPase downregulation. *FEBS Lett.* 584:3985-3989.

Wengerhoff, S.M., A.R. Weiss, K.L. Dwyer, and R.W. Dettman. 2010. A migratory role for EphrinB ligands in avian epicardial mesothelial cells. *Dev Dyn.* 239:598-609.

Wu, R., K.M. Smeele, E. Wyatt, Y. Ichikawa, O. Eerbeek, L. Sun, K. Chawla, M.W. Hollmann, V. Nagpal, S. Heikkinen, M. Laakso, K. Jujo, J.A. Wasserstrom, C.J. Zuurbier, and H. Ardehali. 2011. Reduction in hexokinase II levels results in decreased cardiac function and altered remodeling after ischemia/reperfusion injury. *Circ Res.* 108:60-69.

Wyatt, E., R. Wu, W. Rabeh, H.W. Park, M. Ghanefar, and H. Ardehali. 2010. Regulation and cytoprotective role of hexokinase III. *PLoS One.* 5:e13823.

Xia, L., J.S.t. Coon, E. Su, E.K. Pearson, Y. Ping, H. Ishikawa, and S.E. Bulun. 2010. LAT1 regulates growth of uterine leiomyoma smooth muscle cells. *Reprod Sci.* 17:791-797.

Xu, J., B.N. Cohen, Y. Zhu, G. Dziejczapolski, S. Panda, H.A. Lester, S.F. Heinemann, and A. Contractor. 2010. Altered activity-rest patterns in mice with a human autosomal-dominant nocturnal frontal lobe epilepsy mutation in the beta2 nicotinic receptor. *Mol Psychiatry.*

Xu, M., A.T. Fazleabas, A. Shikanov, E. Jackson, S.L. Barrett, J. Hirshfeld-Cytron, S.E. Kiesewetter, L.D. Shea, and T.K. Woodruff. 2011. In vitro oocyte maturation and preantral follicle culture from the luteal-phase baboon ovary produce mature oocytes. *Biol Reprod.* 84:689-697.

Xu, Y., T. Sengupta, L. Kukreja, and A.C. Minella. 2010. MicroRNA-223 regulates cyclin E activity by modulating expression of F-box and WD-40 domain protein 7. *J Biol Chem.* 285:34439-34446.

Yin, P., Z. Lin, S. Reierstad, J. Wu, H. Ishikawa, E.E. Marsh, J. Innes, Y. Cheng, K. Pearson, J.S.t. Coon, J.J. Kim, D. Chakravarti, and S.E. Bulun. 2010. Transcription factor KLF11 integrates progesterone receptor signaling and proliferation in uterine leiomyoma cells. *Cancer Res.* 70:1722-1730.

Yip, E.S., D.M. Burnside, and N.P. Cianciotto. 2011. Cytochrome c4 is required for siderophore expression by *Legionella pneumophila*, whereas cytochromes c1 and c5 promote intracellular infection. *Microbiology.* 157:868-878.

Yun, B., A. Anderegg, D. Menichella, L. Wrabetz, M.L. Feltri, and R. Awatramani. 2010. MicroRNA-deficient Schwann cells display congenital hypomyelination. *J Neurosci.* 30:7722-7728.

- Zhang, J., G.J. Woodhead, S.K. Swaminathan, S.R. Noles, E.R. McQuinn, A.J. Pisarek, A.M. Stocker, C.A. Mutch, N. Funatsu, and A. Chenn. 2010. Cortical neural precursors inhibit their own differentiation via N-cadherin maintenance of beta-catenin signaling. *Dev Cell*. 18:472-479.
- Zhang, S., M.A. Greenfield, A. Mata, L.C. Palmer, R. Bitton, J.R. Mantei, C. Aparicio, M.O. de la Cruz, and S.I. Stupp. 2010. A self-assembly pathway to aligned monodomain gels. *Nat Mater*. 9:594-601.
- Zhang Y, Guo Y, Ragin AB, Lewandowski RJ, Yang GY, Nijm GM, Sahakian AV, Omary RA, Larson AC. 2010. MR imaging to assess immediate response to irreversible electroporation for targeted ablation of liver tissues: preclinical feasibility studies in a rodent model. *Radiology*. 256(2):424 -32.
- Zheng, L., J. Zheng, D.S. Whitton, J. Garcia-Anoveros, and J.R. Bartles. 2010. Targeting of the hair cell proteins cadherin 23, harmonin, myosin XVa, espin, and prestin in an epithelial cell model. *J Neurosci*. 30:7187-7201.

Principle investigators who submitted grants with the support of the Cell Imaging Facility

Charles Clevenger (FSM)

Olga Volpert (FSM)

Horacio Espinosa (McCormick)

Kathleen Green (FSM)

Teng-Leong Chew (FSM)

Cara Gottardi (FSM)

Hans-Georg Simon (CMRC)

Totsumo Kume (FSM)

Amy Paller (FSM)

Sergey Revskoy (FSM)

William A. Muller (FSM)

Richard Longnecker (FSM)

Mary Lamm (CMRC)

Jonathan Jones (FSM)

Paul Grippo (FSM)

Geoffrey Swanson (FSM)

Paula Stern (FSM)

Thomas Hope (FSM)

Vladimir Gelfand (FSM)

Thomas Meade (CLP, Weinberg)

Hao Zhang (McCormick)

Karen Ridge (FSM)

Robert Dettman (FSM)

Raymond Bergan (FSM)

Scott Budinger (FSM)

Sheldon Chen (FSM)