

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

- Abdala-Valencia, H., Berdnikovs, S., and Cook-Mills, J.M. (2011). Mechanisms for vascular cell adhesion molecule-1 activation of ERK1/2 during leukocyte transendothelial migration. *PloS one* 6, e26706.
- Allen, J.A., Peterson, A., Sufit, R., Hinchcliff, M.E., Mahoney, J.M., Wood, T.A., Miller, F.W., Whitfield, M.L., and Varga, J. (2011). Post-epidemic eosinophilia-myalgia syndrome associated with L-tryptophan. *Arthritis and rheumatism* 63, 3633-3639.
- Anderson, M.T., and Seifert, H.S. (2011a). Neisseria gonorrhoeae and humans perform an evolutionary LINE dance. *Mobile genetic elements* 1, 85-87.
- Angeloni, N.L., Bond, C.W., Tang, Y., Harrington, D.A., Zhang, S., Stupp, S.I., McKenna, K.E., and Podlasek, C.A. (2011). Regeneration of the cavernous nerve by Sonic hedgehog using aligned peptide amphiphile nanofibers. *Biomaterials* 32, 1091-1101.
- Antenos, M., Lei, L., Xu, M., Malipatil, A., Kiesewetter, S., and Woodruff, T.K. (2011). Role of PCSK5 expression in mouse ovarian follicle development: identification of the inhibin alpha- and beta-subunits as candidate substrates. *PloS one* 6, e17348.
- Arora, H.C., Jensen, M.P., Yuan, Y., Wu, A., Vogt, S., Paunesku, T., and Woloschak, G.E. (2012). Nanocarriers enhance Doxorubicin uptake in drug-resistant ovarian cancer cells. *Cancer research* 72, 769-778.
- Aviles, M.O., and Shea, L.D. (2011). Hydrogels to modulate lentivirus delivery in vivo from microporous tissue engineering scaffolds. *Drug delivery and translational research* 1, 91-101.
- Balasubramanian, R., Kenney, G.E., and Rosenzweig, A.C. (2011). Dual pathways for copper uptake by methanotrophic bacteria. *The Journal of biological chemistry* 286, 37313-37319.
- Basu, R.K., Hubchak, S., Hayashida, T., Runyan, C.E., Schumacker, P.T., and Schnaper, H.W. (2011). Interdependence of HIF-1alpha and TGF-beta/Smad3 signaling in normoxic and hypoxic renal epithelial cell collagen expression. *American journal of physiology Renal physiology* 300, F898-905.
- Bellis, A.D., Penalver-Bernabe, B., Weiss, M.S., Yarrington, M.E., Barbolina, M.V., Pannier, A.K., Jeruss, J.S., Broadbelt, L.J., and Shea, L.D. (2011). Cellular arrays for large-scale analysis of transcription factor activity. *Biotechnology and bioengineering* 108, 395-403.
- Bernhardt, M.L., Kim, A.M., O'Halloran, T.V., and Woodruff, T.K. (2011). Zinc requirement during meiosis I-meiosis II transition in mouse oocytes is independent of the MOS-MAPK pathway. *Biology of reproduction* 84, 526-536.
- Bhattacharyya, S., and Hope, T.J. (2011). Full-length Ebola glycoprotein accumulates in the endoplasmic reticulum. *Virology journal* 8, 11.
- Bizhanova, A., Chew, T. L., Khuon, S., and Kopp, P. (2011) Analysis of cellular localization and function of carboxy-terminal mutants of pendrin, *Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology* 28, 423-434.
- Bohannon, K.P., Sollars, P.J., Pickard, G.E., and Smith, G.A. (2012). Fusion of a fluorescent protein to the pUL25 minor capsid protein of pseudorabies virus allows live-cell capsid imaging with negligible impact on infection. *The Journal of general virology* 93, 124-129.
- Boyerinas, B., Park, S.M., Murmann, A.E., Gwin, K., Montag, A.G., Zillhardt, M., Hua, Y.J., Lengyel, E., and Peter, M.E. (2012). Let-7 modulates acquired resistance of ovarian cancer to Taxanes via IMP-1-mediated stabilization of multidrug resistance 1. *International journal of cancer Journal international du cancer* 130, 1787-1797.
- Brown, J.B., Cheresh, P., Goretsky, T., Managlia, E., Grimm, G.R., Ryu, H., Zadeh, M., Dirisina, R., and Barrett, T.A. (2011a). Epithelial phosphatidylinositol-3-kinase signaling is required for beta-catenin activation and host defense against Citrobacter rodentium infection. *Infection and immunity* 79, 1863-1872.
- Brown, J.B., Cheresh, P., Zhang, Z., Ryu, H., Managlia, E., and Barrett, T.A. (2011b). P-selectin glycoprotein ligand-1 is needed for sequential recruitment of T-helper 1 (Th1) and local generation of Th17 T cells in dextran sodium sulfate (DSS) colitis. *Inflammatory bowel diseases*.
- Brown, R.L., Reinke, L.M., Damerow, M.S., Perez, D., Chodosh, L.A., Yang, J., and Cheng, C. (2011c). CD44 splice isoform switching in human and mouse epithelium is essential for epithelial-mesenchymal transition and breast cancer progression. *The Journal of clinical investigation* 121, 1064-1074.
- Brubaker, C.E., and Messersmith, P.B. (2011). Enzymatically degradable mussel-inspired adhesive hydrogel. *Biomacromolecules* 12, 4326-4334.
- Chen, D., Reierstad, S., Fang, F., and Bulun, S.E. (2011). JunD and JunB integrate prostaglandin E2 activation of breast cancer-associated proximal aromatase promoters. *Mol Endocrinol* 25, 767-775.
- Chien, K.B., and Shah, R.N. (2012). Novel soy protein scaffolds for tissue regeneration: Material characterization and interaction with human mesenchymal stem cells. *Acta biomaterialia* 8, 694-703.
- Chen, Y., Shi, H.Y., Stock, S.R., Stern, P.H., and Zhang, M. (2011c). Regulation of breast cancer-induced bone lesions by beta-catenin protein signaling. *The Journal of biological chemistry* 286, 42575-42584.
- Chow, L.W., Bitton, R., Webber, M.J., Carvajal, D., Shull, K.R., Sharma, A.K., and Stupp, S.I. (2011). A bioactive self-assembled membrane to promote angiogenesis. *Biomaterials* 32, 1574-1582.
- Copits, B.A., Robbins, J.S., Frausto, S., and Swanson, G.T. (2011). Synaptic targeting and functional modulation of GluK1 kainate receptors by the auxiliary neuropilin and toll-like (NETO) proteins. *The Journal of neuroscience* 31, 7334-7340.
- Dada, L.A., and Sznajder, J.I. (2011). Mitochondrial Ca(2)+ and ROS take center stage to orchestrate TNF-alpha-mediated inflammatory responses. *The Journal of clinical investigation* 121, 1683-1685.
- Deng, H.X., Bigio, E.H., and Siddique, T. (2011). Detection of protein aggregation in neurodegenerative diseases. *Methods Mol Biol* 793, 259-272.

- Dinh, M.H., Okocha, E.A., Koons, A., Veazey, R.S., and Hope, T.J. (2012). Expression of structural proteins in human female and male genital epithelia and implications for sexually transmitted infections. *Biology of reproduction* 86, 32.
- Fan, Q., Amen, M., Harden, M., Severini, A., Griffiths, A., and Longnecker, R. (2012a). Herpes B virus utilizes human nectin-1 but not HVEM nor PTLRalpha for cell-cell fusion and virus entry. *Journal of virology*.
- Figueiredo, A., and Hope, T.J. (2011). KAPs off for HIV-1 integration. *Cell host & microbe* 9, 447-448.
- Fiorillo, A.A., Medler, T.R., Feeney, Y.B., Liu, Y., Tommerdahl, K.L., and Clevenger, C.V. (2011). HMGN2 inducibly binds a novel transactivation domain in nuclear PRL to coordinate Stat5a-mediated transcription. *Mol Endocrinol* 25, 1550-1564.
- Gregory, E.K., Vavra, A.K., Moreira, E.S., Havelka, G.E., Jiang, Q., Lee, V.R., Van Lith, R., Ameer, G.A., and Kibbe, M.R. (2011). Antioxidants modulate the antiproliferative effects of nitric oxide on vascular smooth muscle cells and adventitial fibroblasts by regulating oxidative stress. *American journal of surgery* 202, 536-540.
- Grippo, P.J., Venkatasubramanian, P.N., Knop, R.H., Heiferman, D.M., Iordanescu, G., Melstrom, L.G., Adrian, K., Barron, M.R., Bentrem, D.J., and Wyrwicz, A.M. (2011). Visualization of mouse pancreas architecture using MR microscopy. *The American journal of pathology* 179, 610-618.
- Helfand, B.T., Mendez, M.G., Murthy, S.N., Shumaker, D.K., Grin, B., Mohammad, S., Aebi, U., Wedig, T., Wu, Y.I., Hahn, K.M., et al. (2011). Vimentin organization modulates the formation of lamellipodia. *Molecular biology of the cell* 22, 1274-1289.
- Hobbs, R.P., Amargo, E.V., Somasundaram, A., Simpson, C.L., Prakriya, M., Denning, M.F., and Green, K.J. (2011). The calcium ATPase SERCA2 regulates desmoplakin dynamics and intercellular adhesive strength through modulation of PKC&alpha; signaling. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology* 25, 990-1001.
- Hong, S., Troyanovsky, R.B., and Troyanovsky, S.M. (2011). Cadherin exits the junction by switching its adhesive bond. *The Journal of cell biology* 192, 1073-1083.
- Joksimovic, M., Patel, M., Taketo, M.M., Johnson, R., and Awatramani, R. (2012). Ectopic Wnt/beta-catenin signaling induces neurogenesis in the spinal cord and hindbrain floor plate. *PloS one* 7, e30266.
- Kanaan, N.M., Morfini, G.A., LaPointe, N.E., Pigino, G.F., Patterson, K.R., Song, Y., Andreadis, A., Fu, Y., Brady, S.T., and Binder, L.I. (2011). Pathogenic forms of tau inhibit kinesin-dependent axonal transport through a mechanism involving activation of axonal phosphotransferases. *The Journal of neuroscience* 31, 9858-9868.
- Kang, R.S., and Folsch, H. (2011). ARH cooperates with AP-1B in the exocytosis of LDLR in polarized epithelial cells. *The Journal of cell biology* 193, 51-60.
- Ladhani, O., Sanchez-Martinez, C., Orgaz, J.L., Jimenez, B., and Volpert, O.V. (2011). Pigment epithelium-derived factor blocks tumor extravasation by suppressing amoeboid morphology and mesenchymal proteolysis. *Neoplasia* 13, 633-642.
- Lakshman, M., Huang, X., Ananthanarayanan, V., Jovanovic, B., Liu, Y., Craft, C.S., Romero, D., Vary, C.P., and Bergan, R.C. (2011). Endoglin suppresses human prostate cancer metastasis. *Clinical & experimental metastasis* 28, 39-53.
- Nekrasova, O.E., Amargo, E.V., Smith, W.O., Chen, J., Kreitzer, G.E., and Green, K.J. (2011). Desmosomal cadherins utilize distinct kinesins for assembly into desmosomes. *The Journal of cell biology* 195, 1185-1203.
- Rajapaksha, T.W., Eimer, W.A., Bozza, T.C., and Vassar, R. (2011). The Alzheimer's beta-secretase enzyme BACE1 is required for accurate axon guidance of olfactory sensory neurons and normal glomerulus formation in the olfactory bulb. *Molecular neurodegeneration* 6, 88.
- Rogel, M.R., Soni, P.N., Troken, J.R., Sitikov, A., Trejo, H.E., and Ridge, K.M. (2011). Vimentin is sufficient and required for wound repair and remodeling in alveolar epithelial cells. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology* 25, 3873-3883.
- Rosenbaum, J.N., Duggan, A., and Garcia-Anoveros, J. (2011). Insm1 promotes the transition of olfactory progenitors from apical and proliferative to basal, terminally dividing and neuronogenic. *Neural development* 6, 6.
- Sahoo, S., Klychko, E., Thorne, T., Misener, S., Schultz, K. M., Millay, M., Ito, A., Liu, T., Kamide, C., Agrawal, H., Perlman, H., Qin, G., Kishore, R., and Losordo, D. W. (2011) Exosomes from human CD34(+) stem cells mediate their proangiogenic paracrine activity. *Circulation Research* 7, 724-8
- Schumacker, P.T. (2011). SIRT3 controls cancer metabolic reprogramming by regulating ROS and HIF. *Cancer cell* 19, 299-300.
- Sekerkova, G., Richter, C.P., and Bartles, J.R. (2011). Roles of the espin actin-bundling proteins in the morphogenesis and stabilization of hair cell stereocilia revealed in CBA/Caj congenic jerker mice. *PLoS genetics* 7, e1002032.
- Seo, S., Singh, H.P., Lacal, P.M., Sasman, A., Fatima, A., Liu, T., Schultz, K.M., Losordo, D.W., Lehman, O.J., and Kume, T (2012) 109, 2015-20.
- Shteyn, E., Pigati, L., and Folsch, H. (2011). Arf6 regulates AP-1B-dependent sorting in polarized epithelial cells. *The Journal of cell biology* 194, 873-887.
- Smith, K.A., Tong, X., Abu-Yousif, A.O., Mikulec, C.C., Gottardi, C.J., Fischer, S.M., and Pelling, J.C. (2011a). UVB radiation-induced beta-catenin signaling is enhanced by COX-2 expression in keratinocytes. *Molecular carcinogenesis*.
- Thurn, K.T., Arora, H., Paunesku, T., Wu, A., Brown, E.M., Doty, C., Kremer, J., and Woloschak, G. (2011). Endocytosis of titanium dioxide nanoparticles in prostate cancer PC-3M cells. *Nanomedicine : nanotechnology, biology, and medicine* 7, 123-130.
- Vana, L., Kanaan, N.M., Ugwu, I.C., Wu, J., Mufson, E.J., and Binder, L.I. (2011b). Progression of tau pathology in cholinergic Basal forebrain neurons in mild cognitive impairment and Alzheimer's disease. *The American journal of pathology* 179, 2533-2550.

Veis, A., Stock, S.R., Alvares, K., and Lux, E. (2011). On the formation and functions of high and very high magnesium calcites in the continuously growing teeth of the echinoderm *Lytechinus variegatus*: development of crystallinity and protein involvement. *Cells, tissues, organs* 194, 131-137.

Yapici N. B., Mandalapu, S. R., Chew T. L., Khuon, K., and Bi, L. (2012) Determination of intracellular pH using sensitive, clickable fluorescent probes. *Bioorganic and Medicinal Chemistry Letters* 22:2440-3

Yin, P., Navarro, A., Fang, F., Xie, A., Coon, J.S., Richardson, C., and Bulun, S.E. (2011). Early growth response-2 expression in uterine leiomyoma cells: regulation and function. *Fertility and sterility* 96, 439-444.

Zhao, J., O'Connor, T., and Vassar, R. (2011). The contribution of activated astrocytes to Abeta production: implications for Alzheimer's disease pathogenesis. *Journal of neuroinflammation* 8, 150.

Zhu, J., Lin, S.J., Zou, C., Makanji, Y., Jardetzky, T.S., and Woodruff, T.K. (2012b). Inhibin alpha-Subunit N Terminus Interacts with Activin Type IB Receptor to Disrupt Activin Signaling. *The Journal of biological chemistry* 287, 8060-8070.