

## **CCR MANUSCRIPT NOTIFICATION (SEPTEMBER/OCTOBER 2011)**

### **Laboratory of Immune Cell Biology - Jonathan Ashwell, M.D.**

There were no submissions reported this month.

### **Vaccine Branch - Jay Berzofsky, M.D., Ph.D.**

Vaccari M, Boasso A, Fenizia C, Fuchs D, Hryniwicz A, Morgan T, Weiss D, Doster MN, Heraud JM, Shearer GM, and **Franchini G**: Fatal pancreatitis in SIVmac251 infected macaques treated with 2' ,3' -dideoxyinosine (ddI) and 2' didehydro-3' deoxythymidine(d4T) following CTLA-4 and IDO blockade. *J Virol.* In press. (VB)

Pallikkuth S, Rogers K, Villinger F, Dosterii M, Vaccari M, **Franchini G**, Pahwa R, and Pahwa S: Interleukin-21 administration to rhesus macaques chronically infected with simian immunodeficiency virus increases cytotoxic effector molecules in T cells and NK cells and enhances B cell function without increasing immune activation or viral replication. *Vaccine.* In press. (VB)

Fenizia C, Keele BF, Nichols D, Cornara S, Binello N, Vaccari M, Pegu P, **Robert-Guroff M**, Ma ZM, Miller CJ, Venzon D, Hirsch V, and **Franchini G**: TRIM5{alpha} does not affect SIVmac251replication in vaccinated or unvaccinated Indian Rhesus Macaques following intrarectal challenge exposure. *J Virol.* In press. (VB)

Edwards D, Fenizia C, Gold H, de Castro-Amarante MF, Buchmann C, Pise-Masison CA, and **Franchini G**: Orf-I and Orf-II-Encoded Proteins in HTLV-1 Infection and Persistence. *Viruses.* 3(6): 861-885, 2011. (VB)

Andresen V, Pise-Masison CA, Sinha-Datta U, Bellon M, Valeri V, Washington Parks R, Cecchinato V, Fukumoto R, Nicot C, and **Franchini G**: Suppression of HTLV-1 replication by Tax-mediated rerouting of the p13 viral protein to nuclear speckles. *Blood.* 118(6): 1549-1559, 2011. (VB)

Gordon SN, Cecchinato V, Andresen V, Heraud JM, Hryniwicz A, Parks RW, Venzon D, Chung HK, Karpova T, McNally J, Silvera P, Reimann KA, Matsui H, Kanehara T, Shinmura Y, Yokote H, and **Franchini G**: Smallpox vaccine safety is dependent on T cells and not B cells. *J Infect Dis.* 203(8): 1043-1053, 2011. (VB)

Strbo N, Vaccari M, Pahwa S, Kolber MA, Fisher E, Gonzalez L, Doster MN, Hryniwicz A, **Felber BK**, **Pavlakis GN**, **Franchini G**, and Podack ER: Gp96 SIV Ig immunization induces potent polyepitope specific, multifunctional memory responses in rectal and vaginal mucosa. *Vaccine.* 29(14): 2619-2625, 2011. (VB)

### **CCR Nanobiology Program - Robert Blumenthal, Ph.D.**

Afonin KA, Grabow WW, Walker FM, Bindewald E, Dobrovolskaia MA, **Shapiro BA**, and Jaeger L: Design and self-assembly of siRNA functionalized RNA nanoparticles for use in automated nanomedicine. *Nat Protoc.* In press. (CCRNP)

Colantonio S, Simpson JT, Fisher RJ, Yavlovich A, Belanger JM, Puri A, and **Blumenthal R**: Quantitative analysis of phospholipids using nanostructured laser desorption ionization targets. *Lipids.* 46(5): 469-477, 2011. (CCRNP)

Mercer N, Ramakrishnan B, Boeggeman E, and **Qasba PK**: Applications of site-specific labelling to study HAMLET, a tumorcidal complex of  $\alpha$ -lactalbumin and oleic acid. *PLoS One.* In press. (CCRNP)

Revilla-López G, Torras J, **Nussinov R**, Alemán C, and Zanuy D: Exploring the energy landscape of a molecular engineered analog of a tumor-homing peptide. *Phys. Chem. Chem. Phys.* 13(21): 9986-9994, 2011. (CCRNP)

Bossart KN, Geisbert TW, Feldmann H, Zhu Z, Feldmann F, Geisbert JB, Yan L, Feng Y-R, Brining D, Scott D, Wang Y, Dimitrov AS, Callison J, Chan Y-P, Hickey AC, **Dimitrov DS**, Broder CC, and Rockx B: A Neutralizing Human Monoclonal Antibody Protects African Green Monkeys from Hendra Virus Challenge. *Sci Transl Med.* 3(105): 105-103, 2011. (CCNRP)

### **Laboratory of Population Genetics - Kenneth Buetow, Ph.D.**

There were no submissions reported this month.

### **Molecular Discovery Program - R. Andrew Byrd, Ph.D.**

### **Structural Biophysics Laboratory - R. Andrew Byrd, Ph.D.**

There were no submissions reported this month.

### **Molecular Targets Laboratory - James McMahon, Ph.D.**

There were no submissions reported this month.

### **Chemical Biology Laboratory - Joel Schneider, Ph.D.**

Altunbas A, Lee SJ, Rajasekaran SA, **Schneider JP**, and Pochan DJ: Encapsulation of curcumin in self-assembling peptide hydrogels as injectable drug delivery vehicles. *Biomaterials.* 32: 5906-5914, 2011. (CBL)

Thomas JD and **Burke Jr TR**: Application of a water-soluble pyridyl disulfide amine linker for use in Cu-free click bioconjugation. *Tetrahedron Lett.* 52: 4316-4319, 2011. (CBL)

Nagy KJ, Giano MC, Jin A, Pochan DJ, and **Schneider JP**: Enhanced mechanical rigidity of hydrogels formed from enantiomeric peptide assemblies. *J Am Chem Soc.* 133: 14975-14977, 2011. (CBL)

Saio T, Ogura K, Shimizu K, Yokochi M, **Burke Jr TR**, and Inagaki F: An NMR strategy for fragment-based ligand screening utilizing a paramagnetic lanthanide probe. *J Biomol NMR.* 51: 395-408, 2011. (CBL)

Zhao XZ and **Burke Jr TR**: Application of protein covalent modification to studying structure and functions of HIV-1 integrase and its inhibitors. In: *HIV-1 Integrase: Mechanism and Inhibitor Design*. Neamati N (ed.). 1<sup>st</sup> Edition, John Wiley & Sons, Inc., pp. 415-427, 2011. (CBL)

### **Radiation Oncology Branch - Kevin Camphausen, M.D.**

Nwe K, Milenic DE, Ray GL, Kim YS, and **Brechbiel MW**: Preparation of Cystamine Core Dendrimer and Antibody-Dendrimer Conjugates for MRI Angiography. *Mol Pharm.* In press. (ROB)

Qian Y, Hua E, Bisht K, Woditschka S, Skordos KW, Liewehr DJ, Steinberg SM, Brogi E, Akram MM, Killian JK, Edelman DC, Pineda M, Scurci S, Degenhardt YY, Laquerre S, Lampkin TA, **Meltzer PS, Camphausen K, Steeg PS**, and Palmieri D: Inhibition of Polo-like kinase 1 prevents the growth of metastatic breast cancer cells in the brain. *Clin Exp Metastasis.* In press. (ROB)

Buchanan IM, Scott T, Tandle AT, Burgan WE, Burgess TL, Tofilon PJ, and **Camphausen K**: Radiosensitization of glioma cells by modulation of Met signalling with the hepatocyte growth factor neutralizing antibody, AMG102. *J Cell Mol Med.* 15(9): 1999-2006, 2011. (ROB)

Simone II CB, Lonser RR, Ondos J, Oldfield EH, **Camphausen K**, and Simone NL: Infratentorial craniospinal irradiation for von Hippel-Lindau: a retrospective study supporting a new treatment for patients with CNS hemangioblastomas. *Neuro Oncol.* 13(9): 1030-1036, 2011. (ROB)

Hatchett R, **Coleman CN**, and Lurie N: Health risks of accidents at nuclear power plants. *N Engl J Med.* 365(10): 963-964, 2011. (ROB)

Shay JW, Cucinotta FA, Sulzman FM, **Coleman CN**, and Minna JD: From Mice and Men to Earth and Space: Joint NASA-NCI Workshop on Lung Cancer Risk Resulting from Space and Terrestrial Radiation. *Cancer Res.* In press. (ROB)

Grace MB, Cliffer KD, Moyer BR, **Coleman CN**, Prasher JM, Hatchett R, Mercier J, Manning RG, Bader JL, Disbrow GL, and Kovacs GR: The U.S. government's medical countermeasure portfolio management for nuclear and radiological emergencies: synergy from interagency cooperation. *Health Phys.* 101(3): 238-247, 2011. (ROB)

Ryan JL, Krishnan S, Movsas B, **Coleman CN**, Vikram B, and Yoo SS: Decreasing the Adverse Effects of Cancer Therapy: An NCI Workshop on the Preclinical Development of Radiation Injury Mitigators/Protectors. *Radiation Res.* In press. (ROB)

Dainiak N, Gent RN, Carr Z, Schneider R, Bader J, Buglova E, Chao N, **Coleman CN**, Ganser A, Gorin C, Hauer-Jensen M, Huff LA, Lillis-Hearne P, Maekawa K, Nemhauser J, Powles R, Schünemann H, Shapiro A, Stenke L, Valverde N, Weinstock D, White D, Albanese J, and Meineke V: First Global Consensus for Evidence-Based Management of the Hematopoietic Syndrome Resulting From Exposure to Ionizing Radiation. *Disaster Med Public Health Prep.* 5(3): 202-212, 2011. (ROB)

Dainiak N, Gent RN, Carr Z, Schneider R, Bader J, Buglova E, Chao N, **Coleman CN**, Ganser A, Gorin C, Hauer-Jensen M, Huff LA, Lillis-Hearne P, Maekawa K, Nemhauser J, Powles R, Schünemann H, Shapiro A, Stenke L, Valverde N, Weinstock D, White D, Albanese J, and Meineke V: Literature Review and Global Consensus on Management of Acute Radiation Syndrome Affecting Nonhematopoietic Organ Systems. *Disaster Med Public Health Prep.* 5(3): 183-201, 2011. (ROB)

Gonçalves AN, Meschiari CA, **Stetler-Stevenson WG**, Nonato MC, Alves CP, Espreafico EM, and Gerlach RF: Expression of soluble and functional full-length human matrix metalloproteinase-2 in Escherichia coli. *J Biotechnol.* In press. (ROB)

### **Molecular Imaging Program - Peter Choyke, M.D.**

Turkbey B, Aras O, Karabulut N, Turgut AT, Akpinar E, Alibek S, Pang Y, Erturk SM, El Khouli RH, Bluemke DA, and **Choyke PL**: Diffusion-weighted MRI for detecting and monitoring cancer: a review of current applications in body imaging. *Diagn Interv Radiol.* In press. (MIP)

Turkbey B, Bernardo M, **Merino MJ**, Wood BJ, Pinto PA, and **Choyke PL**: MRI of localized prostate cancer: coming of age in the PSA era. *Diagn Interv Radiol.* In press. (MIP)

Kurdziel KA, Kalen JD, Hirsch JI, Wilson JD, Bear HD, Logan J, McCumisky J, Moorman-Sykes K, Adler S, and **Choyke PL**: Human Dosimetry and Preliminary Tumor Distribution of 18F-Fluoropacitaxel in Healthy Volunteers and Newly Diagnosed Breast Cancer Patients Using PET/CT. *J Nucl Med.* 52(9): 1339-1345, 2011. (MIP)

Pinto PA, Chung PH, Rastinehad AR, Baccala Jr AA, Kruecker J, Benjamin CJ, Xu S, Yan P, Kadoury S, Chua C, Locklin JK, Turkbey B, Shih JH, Gates SP, Buckner C, Bratslavsky G, **Linehan WM**, Glossop ND, **Choyke PL**, and Wood BJ: Magnetic resonance imaging/ultrasound fusion guided prostate biopsy improves cancer detection following transrectal ultrasound biopsy and correlates with multiparametric magnetic resonance imaging. *J Urol.* 186(4): 1281-1285, 2011. (MIP)

McCann TE, Kosaka N, Turkbey B, Mitsunaga M, **Choyke PL**, and **Kobayashi H**: Molecular imaging of tumor invasion and metastases: the role of MRI. *NMR Biomed.* 24(6): 561-568, 2011. (MIP)

Kratochwil C, López-Benítez R, Mier W, Haufe S, Isermann B, Kauczor HU, **Choyke PL**, Haberkorn U, and Giesel FL: Hepatic arterial infusion enhances DOTATOC radiopeptide therapy in patients with neuroendocrine liver metastases. *Endocr Relat Cancer.* 18(5): 595-602, 2011. (MIP)

Chen L, Chan TH, **Choyke PL**, Hillman EM, Chi CY, Bhujwalla ZM, Wang G, Wang SS, Szabo Z, and Wang Y: CAM-CM: a signal deconvolution tool for in vivo dynamic contrast-enhanced imaging of complex tissues. *Bioinformatics.* 27(18): 2607-2609, 2011. (MIP)

Cao Y, Yuan Y, Li X, Turkbey B, **Choyke PL**, and Yan P: Segmenting images by combining selected atlases on manifold. *Med Image Comput Comput Assist Interv.* 14(Pt 3): 272-279, 2011. (MIP)

Gril B, Palmieri D, Qian Y, Anwar T, Ileva L, Bernardo M, **Choyke P**, Liewehr DJ, Steinberg SM, and **Steeg PS**: The B-raf status of tumor cells may be a significant determinant of both antitumor and anti-angiogenic effects of pazopanib in xenograft tumor models. *PLoS One.* 6(10): e25625, 2011. (MIP)

Gunay-Aygun M, Turkbey BI, Bryant J, Daryanani KT, Gerstein MT, Piwnica-Worms K, **Choyke P**, Heller T, and Gahl WA: Hepatorenal findings in obligate heterozygotes for autosomal recessive polycystic kidney disease. *Mol Genet Metab.* In press. (MIP)

Turkbey B, Mani H, Shah V, Rastinehad AR, Bernardo M, Pohida T, Pang Y, Daar D, Benjamin C, McKinney YL, Trivedi H, Chua C, Bratslavsky G, Shih JH, **Linehan WM**, **Merino MJ**, **Choyke PL**, and Pinto PA: Multiparametric 3T Prostate Magnetic Resonance Imaging to Detect Cancer: Histopathological Correlation Using Prostatectomy Specimens Processed in Customized Magnetic Resonance Imaging Based Molds. *J Urol.* 186(5): 1818-1824, 2011. (MIP)

## **Laboratory of Cancer Prevention - Nancy Colburn, Ph.D.**

Crea F, Fornaro L, Paolicchi E, Masi G, Frumento P, Loupakis F, Salvatore L, Cremolini C, Schirripa M, Graziano F, Ronzoni M, Ricci V, **Farrar WL**, Falcone A, and Danesi R: An EZH2 polymorphism is associated with clinical outcome in metastatic colorectal cancer patients. Ann Oncol. In press. (LCP)

Macpherson GR, Hanson CA, Thompson DM, Perella CM, Cmarik JL, and **Ruscetti SK**: Retrovirus-transformed erythroleukemia cells induce central nervous system failure in a new syngeneric mouse model of meningeal leukemia. Leuk Res. In press. (LCP)

Ande S, Klarmann K, Gavrilova O, and **Keller J**: Ablation of the Transcriptional Regulator *Id1* Enhances Energy Expenditure, Increases Insulin Sensitivity and protects against age and diet induced Insulin Resistance and Hepatosteatosis. FASEB. In press. (LCP)

Dong S, Cahill KJ, Kang MI, **Colburn NH**, Henrich CJ, Wilson JA, **Beutler JA**, Johnson RP, and Porco JA: Microwave-Based Reaction Screening: Tandem Retro-Diels-Alder Cycloadditions of ortho-Quinol Dimers. J Org Chem. In press. (LCP)

Tsuji P, Naranjo-Suarez S, **Carlson BA**, Tobe R, Yoo M, and Davis C: Deficiency in the 15 kDa Selenoprotein Inhibits Human Colon Cancer Cell Growth. Nutrients. In press. (LCP)

Shchedrina VA, Everley RA, Zhang Y, Gygi SP, **Hatfield DL**, and Gladyshev VN: Selenoprotein K binds multi-protein complexes and is involved in the regulation of ER homeostasis. J Biol Chem. In press. (LCP)

Uluisik I, Kaya A, Fomenko D, Karakaya H, **Carlson BA**, Gladyshev V, and Koc A: Boron Stress Activates the General Amino Acid Control Mechanism and Inhibits Protein Synthesis. PloS One. In press. (LCP)

## **Neuro-Oncology Branch - Howard Fine, M.D.**

There were no submissions reported this month.

## **Medical Oncology Branch - Giuseppe Giaccone, M.D., Ph.D.**

Luchenko VL, Salcido CD, Zhang Y, Agama K, Komlodi-Pasztor E, Murphy RF, **Giaccone G**, **Pommier Y**, **Bates SE**, and **Varticovski L**: Schedule-dependent synergy of histone deacetylase inhibitors with DNA damaging agents in small cell lung cancer. Cell Cycle. 10(18): 3119-3128, 2011. (MOB)

Robey RW, Chakraborty AR, Basseville A, Luchenko V, Bahr J, Zhan Z, **Bates SE**: Histone deacetylase inhibitors: emerging mechanisms of resistance. Mol Pharm. In press. (MOB)

Kelly RJ and **Giaccone G**: Lung cancer vaccines. Cancer J. 17(5): 302-308, 2011. (MOB)

van Cruijsen H, Oosterhoff D, Lindenberg JJ, Lougheed SM, Fehres C, Weijers K, van Boerdonk R, **Giaccone G**, Scheper RJ, Hoekman K, and de Gruijl TD: Glioblastoma-induced inhibition of Langerhans cell differentiation from CD34(+) precursors is mediated by IL-6 but unaffected by JAK2/STAT3 inhibition. Immunotherapy. 3(9): 1051-1061, 2011. (MOB)

von Hahn T, Ciesek S, Wegener G, Plentz RR, Weismüller TJ, Wedemeyer H, Manns MP, **Greten TF**, and Malek NP: Epidemiological trends in incidence and mortality of hepatobiliary cancers in Germany. Scand J Gastroenterol. 46(9): 1092-1098, 2011. (MOB)

Hou Q, Barr T, Gee L, Vickers J, Wymer J, Borsani E, Rodella L, Getsios S, Burdo T, Eisenberg E, **Guha U**, Lavker R, Kessler J, Chittur S, Fiorino D, Rice F, and Albrecht P: Keratinocyte expression of calcitonin gene-related peptide  $\beta$ : Implications for neuropathic and inflammatory pain mechanisms. Pain. 152(9): 2036-2051, 2011. (MOB)

Hoskins E, Rodriguez-Canales J, Hewitt SM, Elmasri W, Han J, Han S, Davidson B, and **Kohn EC**: Paracrine SLPI secretion upregulates MMP-9 transcription and secretion in ovarian cancer cells. Gynecol Oncol. 122(3): 656-662, 2011. (MOB)

Tembhare P, Yuan C, Korde N, Maric I, and **Landgren O**: Antigenic drift in relapsed extramedullary multiple myeloma: plasma cells without CD38 expression. Leuk Lymphoma. In press. (MOB)

Törner A, Dickman P, Duberg AS, Kristinsson S, **Landgren O**, Björkholm M, and Svensson A: A Method to Visualize and Adjust for Selection Bias in Prevalent Cohort Studies. Am J Epidemiol. In press. (MOB)

Tan E, Weiss BM, Mena E, Korde N, **Choyke PL**, and **Landgren O**: Current and future imaging modalities for multiple myeloma and its precursor states. Leuk Lymphoma. 52(9): 1630-1640, 2011. (MOB)

**Bates SE**: Antibody conjugates: the future is now. Clin Cancer Res. 17(20): 6388, 2011. (MOB)

Maier CR, Hollander MC, Hobbs EA, Dogan I, Linnoila RI, and **Dennis PA**: Nicotine Does Not Enhance Tumorigenesis in Mutant K-Ras-Driven Mouse Models of Lung Cancer. Cancer Prev Res (Phila). In press. (MOB)

Rajan A, Kelly RJ, **Trepel JB**, Kim YS, Alarcon SV, Kummar S, Gutierrez M, Crandon S, Zein WM, Jain L, Mannargudi B, **Figg WD**, Houk BE, Shnайдман M, Brega N, and **Giaccone G**: A Phase 1 study of PF-04929113 (SNX-5422), an orally bioavailable heat shock protein 90 inhibitor in patients with refractory solid tumor malignancies and lymphomas. *Clin Cancer Res.* In press. (MOB)

**Giaccone G** and Wang Y: Strategies for overcoming resistance to EGFR family tyrosine kinase inhibitors. *Cancer Treat Rev.* 37(6): 456-464, 2011. (MOB)

Azzoli CG, Temin S, Aliff T, Baker S Jr, Brahmer J, Johnson DH, Laskin JL, Masters G, Milton D, Nordquist L, Pao W, Pfister DG, Piantadosi S, Schiller JH, Smith R, Smith TJ, Strawn JR, Trent D, and **Giaccone G**: 2011 Focused Update of 2009 American Society of Clinical Oncology Clinical Practice Guideline Update on Chemotherapy for Stage IV Non-Small-Cell Lung Cancer. *J Clin Oncol.* In press. (MOB)

**Wells Jr SA**, Robinson BG, Gagel RF, Dralle H, Fagin JA, Santoro M, Baudin E, Elisei R, Jarzab B, Vasselli JR, Read J, Langmuir P, Ryan AJ, and Schlumberger MJ: Vandetanib in Patients With Locally Advanced or Metastatic Medullary Thyroid Cancer: A Randomized, Double-Blind Phase III Trial. *J Clin Oncol.* In press. (MOB)

### **Laboratory of Metabolism - Frank Gonzalez, Ph.D.**

Peters JM and **Gonzalez FJ**: Why toxic equivalency factors are not suitable for perfluoroalkyl chemicals. *Chem. Res. Toxicol.* 24: 1601-1609, 2011. (LM)

Patterson AD, Maurhofer O, Beyoğlu D, Lanz C, Krausz KW, Pabst T, **Gonzalez FJ**, Dufour JF, and Idle JR: Aberrant lipid metabolism in hepatocellular carcinoma revealed by plasma metabolomics and lipid profiling. *Cancer Res.* In press. (LM)

Qu A, Shah YM, Manna SK, and **Gonzalez FJ**: Disruption of endothelial peroxisome proliferator-activated receptor  $\gamma$  accelerates diet-induced atherogenesis in low-density lipoprotein receptor-null mice. *Arterioscler. Thromb. Vasc. Biol.* In press. (LM)

Sarkar K, Rey S, Zhang X, Sebastian R, Marti GP, Fox-Talbot K, Cardona AV, Du J, Tan YS, Liu L, Lay F, **Gonzalez FJ**, Harmon JW, and Semenza GL: Tie2-dependent knockout of HIF-1 impairs burn wound vascularization and homing of bone marrow-derived angiogenic cells. *Circ. Res.* In press. (LM)

Johnson CH, Patterson AD, Idle JR, and **Gonzalez FJ**: Xenobiotic metabolomics: major impact on the metabolome. *Ann. Rev. Pharmacol. Toxicol.* In press. (LM)

Johnson CH and **Gonzalez FJ**: Challenges and opportunities of metabolomics. *J. Cell. Physiol.* In press. (LM)

### **Laboratory of Cell Biology - Michael Gottesman, M.D.**

Denton PW, Othieno F, Martinez-Torres F, Zou W, Krisko JF, Fleming E, Zein S, Powell DA, Wahl A, Tae Kwak Y, Welch BD, Kay MS, Payne DA, Gallay P, **Appella E**, Estes JD, Lu M, and Garcia JV: One Percent Tenofovir Applied Topically to Humanized BLT Mice and Used According to the CAPRISA 004 Experimental Design Demonstrates Partial Protection from Vaginal HIV Infection, Validating the BLT Model for Evaluation of New Microbicide Candidates. *J Virol.* 85: 7582-7593, 2011. (LCB)

Murphy GE, Narayan K, Lowekamp BC, Hartnell LM, Heymann JAW, Fu J and **Subramaniam S**: Correlative 3D imaging of Whole Mammalian Cells with Light and Electron Microscopy. *J Struct Biol.* In press. (LCB)

White TA, Bartesaghi A, Borgnia MJ, de la Cruz MJ, Nandwani R, Hoxi JA, Bess JW, Lifson JD, Milne JLS and **Subramaniam S**: 3D structures of sCD4-bound states of trimeric SIV envelope glycoproteins determined using cryo-electron tomography. *J Virol.* In press. (LCB)

Gillet JP, Calcagno AM, Varma S, Marino M, Green LJ, Vora M, Patel C, Orina JN, Eliseeva T, Singal V, Padmanabhan R, Davidson B, Ganapathi R, Sood AK, Rueda BR, **Ambudkar SV**, and **Gottesman MM**: Redefining the relevance of established cancer cell lines to the study of mechanisms of clinical anti-cancer drug resistance. *Proc Natl Acad Sci USA.* In press. (LCB)

Goloudina AR, Tanoue K, Hammann A, Fourmaux E, Le Gueennec X, Bulavin DV, Mazur SJ, **Appella E**, Garrido C, and Demidov ON: WIP1 promotes runx2-dependent apoptosis in p53 negative tumors and protects normal tissues during treatment with anti-cancer agents. *Proc Natl Acad Sci USA.* In press. (LCB)

Namiki T, Coelho SG, and **Hearing VJ**: NUAK2: an emerging acral melanoma oncogene. *Oncotarget.* In press. (LCB)

### **Experimental Transplantation and Immunology Branch - Ronald Gress, M.D.** There were no submissions reported this month.

### **Laboratory of Receptor Biology and Gene Expression - Gordon Hager, Ph.D.**

Scaffidi P and **Misteli T**: In vitro generation of human cells with cancer stem cell properties. *Nat Cell Biol.* 13(9): 1051-1061, 2011. (LRBGE)

Voss TC, Schiltz RL, Sung MH, Yen PM, Stamatoyannopoulos JA, Biddie SC, Johnson TA, Miranda TB, John S, and **Hager GL**: Dynamic exchange at regulatory elements during chromatin remodeling underlies assisted loading mechanism. *Cell.* 146, 544-554, 2011. (LRBGE)

Grontved L and **Hager GL**: Impact of chromatin structure on PR signaling: Transition from local to global analysis. *Mol Cell Endocrinol.* 357: 30-36, 2011. (LRBGE)

Conway-Campbell BL, Pooley JR, **Hager GL**, and Lightman SL: Molecular dynamics of ultradian glucocorticoid receptor action. *Mol Cell Endocrinol.* In press. (LRBGE)

### **Laboratory of Human Carcinogenesis - Curtis Harris, M.D.**

Mathé E, Nguyen G, Funamizu N, He P, Moake M, Croce CM, and **Hussain PS**: Inflammation Regulates microRNA Expression in Cooperation with p53 and Nitric Oxide. *Int. J. Cancer.* In press. (LHC)

### **HIV Drug Resistance Program - Stephen Hughes, Ph.D.**

#### **HIV DRP Host Virus Interaction Branch - Stephen Hughes, Ph.D.**

There were no submissions reported this month.

#### **Retroviral Replication Laboratory - Stephen Hughes, Ph.D.**

Cingöz O, Paprotka T, Delviks-Frankenberry KA, Wildt S, **Hu W-S, Pathak VK**, and Coffin JM: Characterization, mapping and distribution of the two XMRV parental proviruses. *J. Virol.* In press. (RRL)

Datta SAK, Zuo X, Clark PK, Campbell SJ, **Wang Y-X, and Rein A**: Solution properties of murine leukemia virus Gag protein: Differences from HIV-1 Gag. *J. Virol.* 85: 12733-12741, 2011. (RRL)

Jiang J, Ablan S, Derebail S, Hercik K, Soheilian F, Thomas JA, Tang S, Hewlett I, Nagashima K, Gorelick RJ, **Freed EO**, and Levin JG: The interdomain linker region of the HIV-1 capsid protein is a critical determinant of proper core assembly and stability. *Virology.* 421: 253-265, 2011. (RRL)

Kaczmarcyk SJ, Sitaraman K, **Young HA, Hughes SH**, and Chatterjee DK: Protein delivery using engineered virus-like particles. *Proc. Natl. Acad. Sci. USA.* In press. (RRL)

Johnson BC, Metifiot M, **Pommier Y**, and **Hughes SH**: Molecular dynamics approaches estimate the binding energy of HIV-1 integrase inhibitors and correlate with *in vitro* activity. *Antimicrob. Agents Chemother.* In press. (RRL)

## **Laboratory of Comparative Carcinogenesis - Larry Keefer, Ph.D.**

Hogg ME, Vavra AK, Banerjee MN, Martinez J, Jiang Q, **Keefer LK**, Chambon P, and Kibbe MR: The role of estrogen receptor alpha and beta in regulating vascular smooth muscle cell proliferation is based on sex. *J. Surg. Res.* In press. (LCC)

**Keefer LK:** Fifty years of diazeniumdiolate research. From laboratory curiosity to broad-spectrum biomedical advances. *ACS Chem. Biol.* In press. (LCC)

## **Cell and Cancer Biology Branch - Kathleen Kelly, Ph.D.**

There were no submissions reported this month.

## **Urologic Oncology Branch - W. Marston Linehan, M.D.**

Mullen AR, Wheaton WW, Jin ES, Chen PH, Sullivan B, Yang Y, **Linehan WM**, Chandel NS, and DeBerardinis RJ: Glutamine-Dependent Reductive Carboxylation Fuels Growth in Tumor Cells With Mitochondrial Defects. *Nature*. In press. (UOB)

Pinto PA: Use of a Patient-Specific MRI Based Prostate Mold for Validation of Multi-Parametric MRI in the Localization of Prostate Cancer. *Urology*. In press. (UOB; PI: **Linehan WM**)

Singer EA, Gupta GN, and Bratslavsky G: Partial Nephrectomy for the Treatment of Renal Masses: Oncologically Sound and Functionally Prudent. In: *Renal Tumors*. Vienna, Austria: Tech Publishing. In press. (UOB; PI: **Linehan WM**)

Turkbey B, Gallardo EC, Aras O, Bernardo M, Histed S, Kruecker J, Mena E, McCann T, Daar D, Rastinehad A, Agarwal H, Shih JH, **Linehan WM**, **Merino MJ**, Wood BJ, Pinto PA, and **Choyke PL**: Comparison of Endorectal Coil and Non-Endorectal Coil MRI at 3T for Localizing Prostate Cancer. *Radiology*. In press. (UOB)

Valera VA, Walter BA, **Linehan WM**, and **Merino MJ**: Regulatory Effects of MicroRNA-92 (MiR-92) on VHL Gene Expression and the Hypoxic Activation of MiR-210 in Clear Cell Renal Cell Carcinoma. *Int J Cancer*. In press. (UOB)

Liu NW, Sanford T, Srinivasan R, Liu JL, Khurana K, Aprelikova O, Valera V, Bechert C, Worrell R, Pinto PA, Yang Y, Gillespie J, **Merino M**, **Linehan WM**, and Bratslavsky G: Ischemia and Procurement Conditions Influence Molecular Profiling of RCC: Implications for Prognosis and Treatment. *Clin. Cancer Res.* In press. (UOB)

Shuch B and **Linehan WM**: Von Hippel-Lindau Syndrome. In: Clinical Genomics: Practical Applications in Adult Patient Care. D. Stewart (Ed.). McGraw Hill: American College of Physicians. In press. (UOB)

Cherkasova E, Malinzak E, Rao S, Takahashi Y, Senchenko VN, Kudryavtseva AV, Nickerson ML, **Merino M**, Hong JA, **Schrump DS**, **Srinivasan R**, **Linehan WM**, Tian X, Lerman MI, and Childs RW. Inactivation of the Von Hippel–Lindau tumor suppressor leads to selective expression of a human endogenous retrovirus in kidney cancer. *Oncogene*. 30: 4697-4706, 2011. (UOB)

### **Laboratory of Cellular Oncology - Douglas Lowy, M.D.**

There were no submissions reported this month.

### **Pediatric Oncology Branch - Crystall Mackall, M.D.**

There were no submissions reported this month.

### **Genetics Branch - Paul Meltzer, M.D., Ph.D.**

Gough SM, Slape CI, and **Aplan PD**: *NUP98* gene fusions and hematopoietic malignancies: common themes and new biological insights. *Blood*. In press. (GB)

Martin SE, Wu ZH, Gehlhaus K, Jones TL, Zhang YW, Guha R, Miyamoto S, **Pommier Y**, and **Caplen NJ**: RNAi Screening Identifies TAK1 as a Potential Target for the Enhanced Efficacy of Topoisomerase Inhibitors. *Curr Cancer Drug Targets*. In press. (GB)

### **Lab of Cancer Biology & Genetics - Glenn Merlino, PhD and Stuart Yuspa, MD**

Achyut BR and **Yang L**: Transforming Growth Factor in the Gastrointestinal and Hepatic Tumor Microenvironment. *Gastroenterology*. 141: 1167-1178, 2011. (LCBG)

Romanova LY and **Mushinski JF**: Central role of paxillin phosphorylation in regulation of LFA-1 integrins activity. *Cell Adhesions and Migration*. In press. (LCBG)

### **Radiation Biology Branch - James Mitchell, Ph.D.**

There were no submissions reported this month.

## **Laboratory of Cell and Developmental Signaling - Debbie Morrison, Ph.D.**

RoySarkar T, Sharan S, Wang J, Pawar SA, Cantwell CA, **Johnson PF, Morrison DK, Wang J-M**, and **Sterneck E**: Identification of a Src Tyrosine Kinase/SIAH2 E3 Ubiquitin 1 Ligase Pathway that Regulates C/EBP $\delta$  Expression and Contributes to Transformation of Breast Tumor Cells. *Mol Cell. Biol.* In press. (LCDS)

## **Laboratory of Pathology - J. Carl Oberholtzer, M.D., Ph.D.**

Eberle FC, Salaverria I, Steidl C, Summers Jr TA, Pittaluga S, Neriah SB, Rodriguez-Canales J, Xi L, Ylaya K, Liewehr D, Dunleavy K, **Wilson WH, Raffeld M**, Gascogne RD, Siebert R, and **Jaffe ES**: Gray zone lymphoma: chromosomal aberrations with immunophenotypic and clinical correlations. *Mod Pathol.* In press. (LP)

Herrinton LJ, Liu L, Abramson O, and **Jaffe ES**: The incidence of hepatosplenic T-cell lymphoma in a large managed care organization, with reference to anti-tumor necrosis factor therapy, Northern California, 2000-2006. *Pharmacoepidemiol Drug Saf.* In press. (LP)

Pendrak ML and **Roberts DD**: Ribosomal RNA processing in *Candida albicans*. *RNA.* In press. (LP)

Leich E, Zamo A, Horn H, Haralambieva E, Puppe B, Gascogne RD, Chan WC, Braziel RM, Rimsza LM, Weisenburger DD, Delabie J, **Jaffe ES**, Fitzgibbon J, **Staudt LM**, Mueller-Hermelink HK, Calaminici M, Campo E, Ott G, Hernandez L, and Rosenwald A: MicroRNA profiles of t(14;18)-negative follicular lymphoma support a late germinal center B-cell phenotype. *Blood.* In press. (LP)

Sohani AR, **Jaffe ES**, Harris NL, Ferry JA, Pittaluga S, and Hasserjian RP: Nodular lymphocyte-predominant Hodgkin lymphoma with atypical T cells: a morphologic variant mimicking peripheral T-cell lymphoma. *Am. J. Surg. Pathol.* 35(11): 1666-1678, 2011. (LP)

Song JY, Strom T, **Raffeld M**, Pittaluga S, and **Jaffe ES**: Peripheral T-cell lymphoma with aberrant expression of CD30, CD15, and CD20. *J. Clin. Oncol.* In press. (LP)

Soto-Pantoja DR, Isenberg JS, and **Roberts DD**: Therapeutic targeting of CD47 to modulate tissue responses to ischemia and radiation. *OMICS J. Genet. Syndr. Gene. Ther.* In press. (LP)

## **Laboratory of Genomic Diversity - Stephen O'Brien, Ph.D.**

There were no submissions reported this month.

## **Lab of Molecular Biology - Ira Pastan, M.D. and Susan Gottesman, Ph.D.**

Battesti A, Majdalani N, and **Gottesman S**: The RpoS-mediated general stress response in *Escherichia coli*. *Annu. Rev. Microbiol.* 65: 189-213, 2011. (LMB)

Zhang Y, Chertov O, Zhang J, **Hassan R**, and **Pastan I**: Cytotoxic activity of immunotoxin SS1P is modulated by TACE-dependent mesothelin shedding. *Cancer Res.* 5915-5922, 2011. (LMB)

Du X, Xiang L, **Mackall C**, and **Pastan I**: Killing of resistant cancer cells with low Bak by a combination of an antimesothelin immunotoxin and a TRAIL receptor 2 agonist antibody. *Clin. Cancer Res.* 17: 5926-5934, 2011. (LMB)

Lewis D, Le P, Zurla C, Finzi L, and **Adhya S**: Multilevel autoregulation of (lambda) repressor protein C1 by DNA looping in vitro. *Proc. Natl. Acad. Sci. U.S.A.* 108: 14807-14812, 2011. (LMB)

Venkataraman G, Aguilar C, **Kreitman RJ**, Yuan CM, and **Stetler-Stevenson M**: Characteristic CD103 and CD123 expression pattern defines hairy cell leukemia usefulness of CD123 and CD103 in the diagnosis of mature B-Cell lymphoproliferative disorders. *Am. J. Clin. Pathol.* 136: 625-630, 2011. (LMB)

Blake-Haskins JA, Lechleider RJ, and **Kreitman RJ**: Thrombotic microangiopathy with targeted cancer agents. *Clin. Cancer Res.* 17: 5858-5866, 2011. (LMB)

**Kreitman RJ** and **Pastan I**: Antibody fusion proteins: anti-CD22 recombinant immunotoxins moxetumomab pasudotox. *Clin. Cancer Res.* 17: 6398-6405, 2011. (LMB)

Raciti GA, Bera TK, Gavrilova O, and **Pastan I**: Partial inactivation of *Ankrd26* causes diabetes with enhanced insulin responsiveness of adipose tissue in mice. *Diabetologia*. 54: 2911-2922, 2011. (LMB)

Kawa S, Onda M, Ho M, **Kreitman RJ**, Bera TK, and **Pastan I**: The improvement of an anti-CD22 immunotoxin: conversion to single-chain and disulfide stabilized form and affinity maturation by alanine scan. *mAbs.* 3: 479-486, 2011. (LMB)

**FitzGerald DJ, Wayne AS, Kreitman RJ, and Pastan I**: Treatment of hematologic malignancies with immunotoxins and antibody-drug conjugates. *Cancer Res.* 71: 6300-6309, 2011. (LMB)

Lechleider R and **Pastan I**: Advances in the development of anti-CD22 immunotoxins containing *Pseudomonas* exotoxin for treatment of hematologic malignancies. *J. Cancer Sci. Ther.* 3: 050-052, 2011. (LMB)

Ackerman ME, Lai JI, **Pastan I**, and Wittrup KD: Exploiting bias in a non-immune human antibody library to predict antigenicity. *Protein Eng. Des. Sel.* 24: 845-853, 2011. (LMB)

Fozzatti L, Lu C, Kim DW, Park JW, Astapova I, Gavrilova O, Willingham MC, Hollenberg AN, and **Cheng SY**: Resistance to thyroid hormone is modulated in vivo by the nuclear receptor corepressor (NCOR1). *Proc. Natl. Acad. Sci. U.S.A.* 108: 17462-17467, 2011. (LMB)

Csiszovszki Z, Krishna S, Orosz L, **Adhya S**, and Semsey S: Structure and function of the D-galactose network in enterobacteria. *MBio.* 2: e00053-11, 2011. (LMB)

Koli P, Sudan S, **FitzGerald D**, **Adhya S**, and Kar S: Conversion of commensal Escherichia coli K-12 to an invasive form via expression of a mutant histone-like protein. *MBio.* 2: e00182-11, 2011. (LMB)

### **Cancer and Developmental Biology Laboratory - Alan Perantoni, Ph.D.**

There were no submissions reported this month.

### **Laboratory of Molecular Pharmacology - Yves Pommier, M.D., Ph.D.**

Redon CE, Nakamura AJ, Gouliaeva K, Rahman A, Blakely WF, and **Bonner WM**: Q(gamma-H2AX), an analysis method for partial-body radiation exposure using gamma-H2AX in nonhuman primate lymphocytes. *Radiat. Meas.* 46: 877-881, 2011. (LMP)

Qian Y, Hua E, Bisht K, Woditschka S, Skordos KW, Liewehr DJ, Steinberg SM, Brogi E, Akram MM, Killian JK, Edelman DC, Pineda M, Scurci S, Degenhardt YY, Laquerre S, Lampkin TA, **Meltzer PS**, **Camphausen K**, **Steeg PS**, and Palmier D: Inhibition of polo-like kinase 1 prevents the growth of metastatic breast cancer cells in the brain. *Clin. Exp. Metastasis.* In press. (LMP)

Lountos GT, Jobson AG, Tropea JE, Self CR, Zhang G, **Pommier Y**, Shoemaker RH, and **Waugh DS**: X-ray structures of checkpoint kinase 2 in complex with inhibitors that target its gatekeeper-dependent hydrophobic pocket. *FEBS Lett.* In press. (LMP)

Metifiot M, Johnson B, Smith S, Zhao XZ, **Marchand C**, **Burke Jr TR**, **Hughes S**, and **Pommier Y**: MK-0536 inhibits HIV-1 integrases resistant to raltegravir. *Antimicrobial Agents and Chemo.* 55: 5127-5133, 2011. (LMP)

Drwal MN, Agama K, Wakelin LP, **Pommier Y**, and Griffith R: Exploring DNA topoisomerase I ligand space in search of novel anticancer agents. *PLoS One.* 6: e25150, 2011. (LMP)

Reinhold WC, Erliandi I, Liu H, Zoppoli G, **Pommier Y**, and **Larionov V**: Identification of a predominant co-regulation among kinetochore genes, prospective regulatory elements, and association with genomic instability. PLoS One. 6: e25991, 2011. (LMP)

Gril B, Palmieri D, Qian Y, Anwar T, Ileva L, Bernardo M, **Choyke P**, Liewehr DJ, Steinberg SM, and **Steeg PS**: The B-raf status of tumor cells may be a significant determinant of both antitumor and anti-angiogenic effects of paxopanib in xenograft tumor models. PLoS One. 6: e25625, 2001. (LMP)

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Lountos GT, Jobson AG, Tropea JE, Self CR, Zhang G, **Pommier Y**, Shoemaker RH, and **Waugh DS**: Structural characterization of inhibitor complexes with checkpoint kinase 2 (Chk2), a drug target for cancer therapy. J. Struct. Biol. In press. (LMP)

**Pommier Y** and Marchand C: Interfacial inhibitors: targeting macromolecular complexes. Nat. Rev. Drug Discov. In press. (LMP)

### **Surgery Branch - Steven Rosenberg, M.D., Ph.D.**

There were no submissions reported this month.

### **Mammary Biology & Tumorigenesis Lab – David Salomon, Ph.D. (Acting Lab Chief)**

There were no submissions reported this month.

### **Laboratory of Cellular and Molecular Biology - Larry Samelson, M.D.**

There were no submissions reported this month.

### **Laboratory of Tumor Immunology and Biology - Jeffrey Schlom, Ph.D.**

Mohebtash M, Tsang KY, Madan RA, Huen N-Y, Poole DJ, Jochems C, Jones J, Ferrara T, Heery CR, Arlen PA, Steinberg SM, Pazdur M, Rauckhorst M, Jones EC, **Dahut WL**, **Schlom J**, and **Gulley JL**: A pilot study of MUC-1/CEA/TRICOM poxviral-based vaccine in patients with metastatic breast and ovarian cancer. Clin Cancer Res. In press. (LTIB)

Kim JW, Madan RA, and **Gulley JL**: Initial PSA oscillations precede prolonged stable disease in a patient treated with therapeutic cancer vaccine. Clin Genitourin Cancer. In press. (LTIB)

### **Experimental Immunology Branch - Alfred Singer, M.D.**

There were no submissions reported this month.

### **Gene Regulation and Chromosome Biology Lab - Jeffrey Strathern, Ph.D.**

There were no submissions reported this month.

### **Laboratory of Experimental Carcinogenesis - Snorri Thorgeirsson, M.D., Ph.D.**

Viatour P, Ehmer U, Saddic LA, Dorrell C, Andersen JB, Lin C, Zmoos AF, Mazur PK, Schaffer BE, Ostermeier A, Vogel H, Sylvester KG, **Thorgeirsson SS**, Grompe M, and Sage J: Notch signaling inhibits hepatocellular carcinoma following inactivation of the RB pathway. J Exp Med. 208(10): 1963-1976, 2011. (LEC)

Hwang CI, Matoso A, Corney DC, Flesken-Nikitin A, Körner S, Wang W, Boccaccio C, **Thorgeirsson SS**, Comoglio PM, Hermeking H, and Nikitin AY: Wild-type p53 controls cell motility and invasion by dual regulation of MET expression. Proc Natl Acad Sci. USA. 108(34): 14240-14245, 2011. (LEC)

Rane NS, Sandhu AK, Zhawar VK, Kaur G, **Popescu NC**, Kandpal RP, and Athwal RS: Restoration of senescence in breast and ovarian cancer cell following the transfer of the YAC carrying SEN6A gene located at 6q16.3. Cancer Genomics and Proteomics. 8: 227-234, 2011. (LEC)

### **Cancer and Inflammation Program - Giorgio Trinchieri, M.D.**

#### **Laboratory of Molecular Immunoregulation - Joost Oppenheim, M.D.**

There were no submissions reported this month.

#### **Laboratory of Experimental Immunology - Giorgio Trinchieri, M.D.**

O'Huigin C, Kulkarni S, Xu Y, Deng Z, Kidd J, Kidd K, Gao X, and **Carrington M**: The molecular origin and consequences of escape from miRNA regulation by HLA-C alleles. Am. J. Hum. Genet. 89: 424-431, 2011. (LEI)

Fredericks WJ, McGarvey T, Wang H, Lal P, Puthiyaveettill R, Tomaszewski J, Sepulveda J, Labelle E, Weiss JS, Nickerson ML, Kruth HS, Brandt W, Wessjohann LA, and Malkowicz SB: The bladder tumor suppressor protein TERE1 (UBIAD1) modulates cell cholesterol: implications for tumor progression. DNA Cell Biol. 30: 851-864, 2011. (LEI; PI: **Dean M**)

McKay GJ, Patterson CC, Chakravarthy U, Dasari S, Klaver CC, Vingerling JR, Ho L, de Jong PT, Fletcher AE, Young IS, Seland JH, Rahu M, Soubrane G, Tomazzoli L, Topouzis F, Vioque J, Hingorani AD, Sofat R, **Dean M**, Sawitzke J, Seddon JM, Peter I, Webster AR, Moore AT, Yates JR, Cipriani V, Fritzsche LG, Weber BH, Keilhauer CN, Lotery AJ, Ennis S, Klein ML, Francis PJ, Stambolian D, Orlin A, Gorin MB, Weeks DE, Kuo CL, Swaroop A, Othman M, Kanda A, Chen W, Abecasis GR, Wright AF, Hayward C, Baird PN, Guymer RH, Attia J, Thakkinstian A, and Silvestri G: Evidence of association of *APOE* with age-related macular degeneration - a pooled analysis of 15 studies. *Hum. Mutation.* 32: 1407-1416, 2011. (LEI)

Moitra K, Silverton L, Limpert K, Im K, and **Dean M**: Moving out: from sterol transport to drug resistance - the ABCG subfamily of efflux pumps. *Drug Metabol. Drug Interact.* 26: 105-111, 2011. (LEI)

Simmons G, Glynn SA, Komaroff AL, Mikovits JA, Tobler LH, Hackett Jr J, Tang N, Switzer WM, Heneine W, Hewlett IK, Zhao J, Lo SC, Alter HJ, Linnen JM, Gao K, Coffin JM, Kearney MF, **Ruscetti FW**, Pfost MA, Bethel J, Kleinman S, Holmberg JA, and Busch MP; for the blood XMRV Scientific Research Working Group (SRWG): Failure to confirm XMRV/MLVs in the blood of patients with chronic fatigue syndrome: a multi-laboratory study. *Science.* 334: 814-817, 2011. (LEI)

Henrich CJ, Thomas CL, Brooks AD, Booth NL, Lowery EM, Pompei RJ, **McMahon JB**, and **Sayers TJ**: Effects of cucurbitacins on cell morphology are associated with sensitization of renal carcinoma cells to TRAIL-induced apoptosis. *Apoptosis.* 17: 79-89, 2012. (LEI)

Sisirak V, Vey N, Vanbervliet B, Duhen T, Puisieux I, Homey B, Bowman EP, **Trinchieri G**, Dubois B, Kaiserlian D, Lira SA, Puisieux A, Blay JY, Caux C, and Bendriss-Vermare N: CCR6/CCR10-mediated plasmacytoid dendritic cells recruitment to inflamed epithelia following instruction in lymphoid tissues. *Blood.* 118: 5130-5140, 2011. (LEI)

Barao I, Alvarez M, Redelman D, Weiss JM, Ortaldo JR, **Wiltrot RH**, and Murphy WJ: Hydrodynamic delivery of human IL-15 cDNA increases murine natural killer cell recovery after syngeneic bone marrow transplantation. *Biol. Blood Marrow Transplant.* 17: 1754-1764, 2011. (LEI)

Kaczmarczyk SJ, Sitaraman K, **Young HA**, **Hughes SH**, and Chatterjee DK: Protein delivery using engineered virus-like particles. *Proc. Natl. Acad. Sci. USA.* In press. (LEI)

Seich al Basatena NK, MacNamara A, Vina AM, Thio CL, Astemborski J, Usuku K, Osame M, Kirk GD, Donfield SM, Goedert JJ, Bangham CR, **Carrington M**, Khakoo SI, and Asquith B: KIR2DL2 enhances protective and detrimental HLA class I-mediated immunity in chronic viral infection. *PLoS Pathog.* 7: e1002270, 2011. (LEI)

Subleski JJ, Jiang Q, Weiss JM, and **Wiltrot RH**: The split personality of NKT cells in malignancy, autoimmune and allergic disorders. *Immunotherapy*. 3: 1167-1184, 2011. (LEI)

Silverman RH, Das Gupta J, Lombardi VC, **Ruscetti FW**, Pfost MA, Hagen KS, Peterson DL, **Ruscetti SK**, Bagni RK, Petrow-Sadowski C, Gold B, **Dean M**, and Mikovits JA: Partial retraction: detection of an infectious retrovirus, XMRV, in blood cells of patients with chronic fatigue syndrome. *Science*. 334: 176, 2011. (LEI)

Sips M, Sciaranghella G, Diefenbach T, Dugast AS, Berger CT, Liu Q, Kwon D, Ghebremichael M, Estes JD, **Carrington M**, Martin JN, Deeks SG, Hunt PW, and Alter G: Altered distribution of mucosal NK cells in HIV infection. *Mucosal Immunol*. In press. (LEI)

Zernant J, Schubert C, Im KM, Burke T, Brown CM, Fishman GA, Tsang SH, Gouras P, **Dean M**, and Allikmets R: Analysis of the ABCA4 gene by next-generation sequencing. *Invest. Ophthalmol. Vis. Sci.* 52: 8479-8487, 2011. (LEI)

### **Dermatology Branch - Mark Udey, M.D., Ph.D.**

There were no submissions reported this month.

### **Mouse Cancer Genetics Program - Terry Van Dyke, Ph.D.**

Berquam-Vrieze KE, Swing DA, **Tessarollo L**, and Dupuy AJ: Characterization of transgenic mice expressing cancer-associated variants of human NOTCH1. *Genesis*. In press. (MCGP)

Dorsey SG, Lovering RM, Renn CL, Leitch CC, Liu X, Tallon LJ, Deshong Sadzewicz L, Pratap A, Ott S, Sengamalay N, Jones KM, Barrick C, Fulgenz G, Becker J, Voelker K, Talmadge R, Harvey BK, Wyatt RM, Vernon-Pitts E, Zhang C, Shokat K, Fraser-Liggett C, Balice-Gordon RJ, **Tessarollo L**, and Ward CW: Genetic deletion of trkB.T1 increases neuromuscular function. *Am J Physiol Cell Physiol*. In press. (MCGP)

Puverel S, Barrick C, Dolci S, Coppola V, and **Tessarollo L**: RanBPM is essential for mouse spermatogenesis and oogenesis. *Development*. 138(12): 2511-2521, 2011. (MCGP)

Gürsel DB, Connell-Albert YS, Tuskan RG, Anastassiadis T, Walrath JC, Hawes JJ, Amlin-Van Schaick JC, and **Reilly KM**: Control of proliferation in astrocytoma cells by the receptor tyrosine kinase/PI3K/AKT signaling axis and the use of PI-103 and TCN as potential anti-astrocytoma therapies. *Neuro Oncol*. 13(6): 610-621, 2011. (MCGP)

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Buttermore ED, Dupree JL, Cheng J, An X, **Tessarollo L**, and Bhat MA: The cytoskeletal adaptor protein band 4.1B is required for the maintenance of paranodal axoglial septate junctions in myelinated axons. *J Neurosci.* 31(22): 8013-8024, 2011. (MCGP)

Amlin-VanSchaick J, Kim S, DiFabio C, Lee M-H, Broman KW, and **Reilly KM**: *Arlm1* is a male-specific modifier of astrocytoma resistance on mouse Chr 12. *Neuro-Oncology.* In press. (MCGP)

Chang S, Wang RH, Akagi K, Kim KA, Martin BK, Cavallone L, Kathleen Cunningham Foundation Consortium for Research into Familial Breast Cancer (kConFab), Haines DC, Basik M, Mai P, Poggi E, Isaacs C, Looi LM, Mun KS, Greene MH, Byers SW, Teo SH, Deng CX, and **Sharan SK**: Tumor suppressor BRCA1 epigenetically controls oncogenic microRNA-155. *Nat Med.* 17(10): 1275-1282, 2011. (MCGP)

Shukla S, Kavak E, Gregory M, Imashimizu M, Shutinoski B, **Kashlev M, Oberdoerffer P**, Sandberg R, and **Oberdoerffer S**: CTCF-promoted RNA polymerase II pausing links DNA methylation to splicing. *Nature.* In press. (MCGP)

Sharma S, Findlay GM, Bandukwala HS, **Oberdoerffer S**, Baust B, Li Z, Schmidt V, Hogan PG, Sacks DB, and Rao A: Dephosphorylation of the nuclear factor of activated T cells (NFAT) transcription factor is regulated by an RNA-protein scaffold complex. *Proc Natl Acad Sci USA.* 108(28): 11381-11386, 2011. (MCGP)

### **Metabolism Branch - Thomas Waldmann, M.D.**

There were no submissions reported this month.

### **Laboratory of Protein Dynamics & Signaling - Allan Weissman, M.D.**

There were no submissions reported this month.

### **Macromolecular Crystallography Laboratory - Alexander Wlodawer, Ph.D.**

There were no submissions reported this month.

### **Laboratory of Biochemistry and Molecular Biology - Carl Wu, Ph.D.**

**Lichten M** and de Massy B: The landscape of meiotic recombination: impressionism. *Cell.* 147: 267-270, 2011. (LBMB)

De Muyt A, Jessop L, Kolar E, and **Lichten M**: BLM helicase ortholog Sgs1 is a central regulator of meiotic recombination intermediate metabolism. *Cell.* In press. (LBMB)

### **HIV and AIDS Malignancy Branch - Robert Yarchoan, M.D.**

Massimelli MJ, Kang J-G, Majerciak V, Le S-Y, Liewehr DJ, Steinberg SM, and **Zheng Z-M**: Stability of a Long Noncoding Viral RNA Depends on a 9-nt Core Element at the RNA 5' End to Interact with Viral ORF57 and Cellular PABPC1. *Int. J. Biol. Sci.* 7: 1145-1160, 2011. (HAMB)

Majerciak V and **Zheng Z-M**: Detection of viral RNA splicing in diagnostic virology. In: Advanced Techniques in Diagnostic Microbiology, 2nd, edited by Tang & Stratton, Springer, New York. In press. (HAMB)

### **Basic Research Laboratory**

#### **Cheryl Winkler**

Madlala P, Gijsbers R, Christ F, Hombrouck A, Werner L, Mlisana K, An P, Abdoor Karim SS, **Winkler CA**, Debyser Z, and Ndung'u T: Association of polymorphisms in the LEDGF/p75 gene (PSIP1) with susceptibility to HIV-1 infection and disease progression. *AIDS.* 25(14): 1711-1719, 2011. (BRL)

Troyer JL, Nelson GW, Lautenberger JA, Chinn L, McIntosh C, Johnson RC, Sezgin E, Kessing B, Malasky M, Hendrickson SL, Li G, Pontius J, Tang M, An P, **Winkler CA**, Limou S, Le Clerc S, Delaneau O, Zagury JF, Schuitemaker H, van Manen D, Bream JH, Gomperts ED, Buchbinder S, Goedert JJ, Kirk GD, and **O'Brien SJ**: Genome-wide association study implicates PARD3B-based AIDS restriction. *J Infect Dis.* 203(10): 1491-1502, 2011. (BRL)

### **Emeritus Scientists**

There were no submissions reported this month.