

CCR MANUSCRIPT NOTIFICATION (MARCH 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.

Witko SE, Johnson JE, Kalyan NK, **Felber BK**, **Pavlakis GN**, Sidhu MK, Hendry RM, Udem SA, and Parks CL: Refined methods for propagating vesicular stomatitis virus vectors that are defective for G protein expression. *J. Virol. Methods.* 164: 43-50, 2010. (VB)

Minang JT, Trivett MT, Bolton DL, Trubey CM, Estes JD, Li Y, Smedley J, Pung R, Rosati M, Jalah R, **Pavlakis GN**, **Felber BK**, Piatak Jr M, Roederer M, Lifson JD, Ott DE, and Ohlen C: Distribution, persistence, and efficacy of adoptively transferred central and effector memory-derived autologous Simian Immunodeficiency Virus-specific CD8(+) T cell clones in rhesus macaques during acute infection. *J. Immunol.* 184: 315-326, 2010. (VB)

Valentin A, Morrow M, Poirier RH, Aleman K, Little R, **Yarchoan R**, and **Pavlakis GN**: Identification of a potential pharmacological sanctuary for HIV-1 in a fraction of CD4+ primary cells. *AIDS Res. Hum. Retroviruses.* 26: 79-88, 2010. (VB)

Valentin A, von Gegerfelt A, Rosati M, Miteloudis G, Alicea C, Bergamaschi C, Jalah R, Patel V, Khan AS, Draghia-Akli R, **Pavlakis GN**, and **Felber BK**: Repeated DNA therapeutic vaccination of chronically SIV-infected macaques provides additional virological benefit. *Vaccine.* 28: 1962-1974, 2010. (VB)

Santra S, Liao HX, Zhang R, Muldoon M, Watson S, Fischer W, Theiler J, Szinger J, Balachandran H, Buzby A, Quinn D, Parks RJ, Tsao CY, Carville A, Mansfield KG, **Pavlakis GN**, **Felber BK**, Haynes BF, Korber, BT, and Letvin NL: Mosaic vaccines elicit CD8+ T lymphocyte responses that confer enhanced immune coverage of diverse HIV strains in monkeys. *Nat. Med.* 16: 268-270, 2010. (VB)

Patel V, Valentin A, Kulkarni V, Rosati M, Bergamaschi C, Jalah R, Alicea C, Minang JT, Trivett MT, Ohlen C, Zhao J, **Robert-Guroff M**, Khan AS, Draghia-Akli R, **Felber BK**, and **Pavlakis GN**: Long-lasting humoral and cellular immune response and mucosal dissemination after intramuscular DNA immunization. *Vaccine.* 28: 4827-4836, 2010. (VB)

von Gegerfelt A, Valentin A, Alicea C, Van Rompay KKA, Marthas ML, Montefiori DC, **Pavlakis GN**, and **Felber BK**: Emergence of simian immunodeficiency virus-specific cytotoxic CD4+ T cells and increased humoral responses correlate with control of rebounding viremia in CD8-depleted macaques infected with Rev-independent live-attenuated simian immunodeficiency virus. *J. Immunol.* 185: 3348-3358, 2010. (VB)

Niu L, Termini JM, Kanagavelu SK, Gupta S, Rolland MM, Kulkarni V, **Pavlakis GN, Felber BK**, Mullins JI, Fischl MA, and Stone GW: Preclinical evaluation of HIV-1 therapeutic ex vivo dendritic cell vaccines expressing consensus Gag antigens and conserved Gag epitopes. *Vaccine*. 29: 2110-2119, 2011. (VB)

Strbo N, Vaccari M, Pahwa S, Kolber MA, Fisher E, Gonzalez L, Doster MN, Hryniewicz 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: 2619-2625, 2011. (VB)

Vercruyse T, Pawar S, De Borggraeve W, Pardon E, **Pavlakis GN**, Pannecouque C, Steyaert J, Balzarini J, and Daelemans D: Measuring cooperative Rev protein-protein interactions on Rev responsive RNA by fluorescence resonance energy transfer. *RNA Biol*. In press. (VB)

Kulkarni V, Jalah R, Ganneru B, Bergamaschi C, Alicea C, von Gegerfelt A, Patel V, Zhang GM, Chowdhury B, Broderick KE, Sardesai NY, Valentin A, Rosati M, **Felber BK, and Pavlakis GN**: Comparison of immune responses generated by optimized DNA vaccination against SIV antigens in mice and macaques. *Vaccine*. In press. (VB)

CCR Nanobiology Program - Robert Blumenthal, Ph.D.

Boutz DR, Collins P, Suresh U, Lu M, Ramirez CM, Fernandez-Hernando C, Huang Y, de Sousa Abreu R, Le S-Y, **Shapiro BA**, Liu AM, Luk JM, Aldred SF, Trinklein N, Marcotte EM, and Penalva LO: A two-tiered approach identifies a network of cancer and liver diseases related genes regulated by miR-122. *J. Biol. Chem*. In press. (CCRNP)

Feng Y, Gong R, and **Dimitrov DS**: Design, expression and characterization of a soluble single-chain functional human neonatal Fc receptor. *Protein Expr. Purif*. In press. (CCRNP)

Gift SK, McFadden K, Zentner IJ, Rajagopal S, Zhang MY, **Dimitrov DS**, and Chaiken IM: Monoclonal antibody m18 paratope leading to dual receptor antagonism of HIV-1 gp120. *Biochemistry*. In press. (CCRNP)

Shai Y, Ashkenazi A, Viard M, Wexler-Cohen Y, and **Blumenthal R**: Viral envelope protein folding and membrane hemifusion are enhanced by the conserved loop region of HIV-1 gp41. *FASEB J*. In press. (CCRNP)

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.

Micklitsch CM, Knerr PJ, Branco MC, Nagarkar R, Pochan DJ, and **Schneider JP**: Zinc-Triggered hydrogelation of a self-assembling β -hairpin peptide. *Angew Chem Int Ed.* 50: 1577-1579, 2011. (CBL)

Kim T, **Barchi Jr JJ**, **Marquez VE**, and **Shapiro BA**: Understanding the effects of carbocyclic sugars constrained to north and south conformations on RNA nanodesign. *J Mol Graph and Model.* 29: 624-234, 2011. (CBL)

Radiation Oncology Branch - Kevin Camphausen, M.D.

Yong K and **Brechbiel MW**: Towards translation of (212) Pb as a clinical therapeutic; getting the lead in! *Dalton Trans.* In press. (ROB)

Park D, Don AS, Massamiri T, Karwa A, Warner B, Macdonald J, Hemenway C, Naik A, Kuan KT, Dilda PJ, Wong JW, **Camphausen K**, Chinen L, Dyszlewski M, and Hogg PJ: Noninvasive imaging of cell death using an hsp90 ligand. *J Am Chem Soc.* 133(9): 2832-2835, 2011. (ROB)

Shabason JE, Tofilon PJ, and **Camphausen K**: Grand Rounds at the National Institutes of Health: HDAC Inhibitors as Radiation Modifiers, from Bench to Clinic. *J Cell Mol Med.* In press. (ROB)

Molecular Imaging Program - Peter Choyke, M.D.

Mitsunaga M, Kosaka N, Kines RC, Roberts JN, **Lowy DR**, **Schiller J**, Ishihara Y, Hasegawa A, **Choyke PL**, and **Kobayashi H**: In vivo longitudinal imaging of experimental human papilloma virus infection in mice with a multi-color fluorescence mini-endoscopy system. *Cancer Prev Res (Phila).* In press. (MIP)

Kosaka N, Mitsunaga M, Bhattacharyya S, Miller SC, **Choyke PL**, and **Kobayashi H**: Self-illuminating in vivo lymphatic imaging using a bioluminescence resonance energy transfer quantum dot nano-particle. *Contrast Media Mol Imaging.* 6(1): 55-59, 2011. (MIP)

Liu W, Turkbey B, S negas J, Remmele S, Xu S, Kruecker J, Bernardo M, Wood BJ, **Pinto PA**, and **Choyke PL**: Accelerated T(2) mapping for characterization of prostate cancer. Magn Reson Med. In press. (MIP)

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

Kasaikina MV, Lobanov AV, Malinouski MY, Lee BC, Seravalli J, Fomenko DE, Turanov AA, Finney L, Vogt S, Park TJ, Miller RA, **Hatfield DL**, and Gladyshev VN: Reduced utilization of selenium by naked mole rats due to a specific defect in GPx1 expression. J. Biol. Chem. In press. (LCP)

Lee BC, Lobanov AV, Marino SM, Kaya A, Seravalli J, **Hatfield DL**, and Gladyshev VN: A four selenocysteine, two SECIS element methionine sulfoxide reductase from Metridium senile reveals a non-catalytic function of selenocysteines. J. Biol. Chem. 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.

Hollander MC, Blumenthal GM, and **Dennis PA**: PTEN loss in the continuum of common cancers, rare syndromes, and mouse models. Nat. Revs Cancer. 11: 289-301, 2011. (MOB)

Hollander MC, Maier CR, Hobbs EA, Ashmore AR, Linnoila RI, and **Dennis PA**: Akt1 deletion prevents lung tumorigenesis by mutant K-ras. Oncogene. In press. (MOB)

Bates SE: Multiple myeloma. Clin Cancer Res. 17(6): 1224, 2011. (MOB)

Shi Z, Tiwari AK, Shukla S, Robey RW, Singh S, Kim IW, **Bates SE**, Peng XX, Abraham I, **Ambudkar SV**, Talele TT, Fu LW, and Chen ZS: Sildenafil reverses ABCB1- and ABCG2-mediated chemotherapeutic drug resistance. Cancer Res. In press. (MOB)

Jain L, Woo S, Gardner ER, **Dahut WL**, **Kohn EC**, Kummar S, Mould DR, **Giaccone G**, **Yarchoan R**, Venitz J, and **Figg WD**: Population Pharmacokinetic Analysis of Sorafenib in Patients with Solid Tumors. Br J Clin Pharmacol. In press. (MOB)

Bilusic M and **Dahut WL**: Cabazitaxel: a new drug for metastatic prostate cancer. Asian J Androl. 13(2): 185-186, 2011. (MOB)

Peer CJ, Sissung TM, and **Figg WD**: CHIP and gp78-mediated ubiquitination of CYP3A4: Implications for the pharmacology of anticancer agents. Cancer Biol Ther. 11(6): 549-551, 2011. (MOB)

Gao R, Reece K, Sissung T, Reed E, Price DK, and **Figg WD**: The ERCC1 N118N polymorphism does not change cellular ERCC1 protein expression or platinum sensitivity. *Mutat Res.* 708(1-2): 21-27, 2011. (MOB)

Waldmann TA, Lugli E, Roederer M, Perera LP, Smedley JV, Macallister RP, Goldman CK, Bryant BR, Decker JM, Fleisher TA, Lane HC, Sneller MC, Kurlander RJ, **Kleiner DE**, Pletcher JM, **Figg WD**, Yovandich JL, and Creekmore SP: Safety (toxicity), pharmacokinetics, immunogenicity, and impact on elements of the normal immune system of recombinant human IL-15 in rhesus macaques. *Blood*. In press. (MOB)

Breinig M, Mayer P, Harjung A, Goeppert B, Malz M, Penzel R, Neumann O, Hartmann A, Dienemann H, **Giaccone G**, Schirmacher P, Kern MA, Chiosis G, and Rieker RJ: Heat shock protein 90-sheltered overexpression of insulin-like growth factor 1 receptor contributes to malignancy of thymic epithelial tumors. *Clin Cancer Res.* In press. (MOB)

Kelly RJ, Rajan A, Force J, Lopez-Chavez A, Keen C, Cao L, Yu Y, **Choyke P**, Turkbey B, **Raffeld M**, Xi L, Steinberg SM, Wright JJ, Kummar S, Gutierrez M, and **Giaccone G**: Evaluation of KRAS Mutations, Angiogenic Biomarkers, and DCE-MRI in Patients with Advanced Non-Small-Cell Lung Cancer Receiving Sorafenib. *Clin Cancer Res.* 17(5): 1190-1199, 2011. (MOB)

Korde N, Kristinsson SY, and **Landgren O**: Monoclonal gammopathy of undetermined significance (MGUS) and smoldering multiple myeloma (SMM): novel biological insights and development of early treatment strategies. *Blood*. In press. (MOB)

Landgren AM, **Landgren O**, Gridley G, Dores GM, Linet MS, and Morton LM: Autoimmune disease and subsequent risk of developing alimentary tract cancers among 4.5 million US male veterans. *Cancer.* 117(6): 1163-1171, 2011. (MOB)

Landgren O, Kyle RA, and Rajkumar SV: From myeloma precursor disease to multiple myeloma: new diagnostic concepts and opportunities for early intervention. *Clin Cancer Res.* 17(6): 1243-1252, 2011. (MOB)

Laboratory of Metabolism - Frank Gonzalez, Ph.D.

Johnson CH, Patterson AD, Krausz KW, Lanz C, Kang DW, Luecke H, **Gonzalez FJ**, and Idle JR: Radiation Metabolomics. 4. UPLC-ESI-QTOFMS-based metabolomics for urinary biomarker discovery in gamma-irradiated rats. *Radiation Res.* In press. (LM)

Hondares E, Iglesias R, Giralt A, **Gonzalez FJ**, Giralt M, Mampel T, and Villarroya F: Thermogenic activation induced FGF21 expression and release in brown adipose tissue. *J. Biol. Chem.* In press. (LM)

Chamouton J, Hansmannel F, Bonzo JA, Clémencet M-C, Chevillard G, Battle M, Martin P, Pineau T, Duncan S, **Gonzalez FJ**, Latruffe N, Mandard S, and Nicolas-Francès V: The peroxisomal 3-keto-acyl-coA thiolase B gene expression is under the dual control of PPAR α and HNF4 α . *PPAR Res.* In press. (LM)

Santangelo L, Marchetti A, Cicchini C, Conigliaro A, Conti B, Mancone C, Bonzo JA, **Gonzalez FJ**, Alonzi T, Amicone L, and Tripodi M: Hepatocyte identity implies stable repression of the mesenchymal program: a novel role for hepatocyte nuclear factor 4a. *Hepatology.* In press. (LM)

Lindemer BJ, Bongard RD, Hoffmann R, Baumgardt S, **Gonzalez FJ**, and Merker MP: Genetic evidence that NAD(P)H:Quinone oxidoreductase 1 carries out quinone reduction during passage through the mouse pulmonary circulation. *Amer. J. of Physiol. - Lung Cell. Molec. Physiol.* In press. (LM)

Takahashi K, Kamijo Y, Hora K, Hashimoto K, Higuchi M, Nakajima T, Ehara T, Shigematsu H, **Gonzalez FJ**, and Aoyama T: Pretreatment by low-dose fibrates protects against acute fatty acid induced renal tubule toxicity by counteracting PPAR α deterioration. *Toxicol. Appl. Pharmacol.* In press. (LM)

Huerta-Yepes S, Baay-Guzman G, Bebenek IG, Hernandez-Pando R, Vega M, Riedl M, Diaz-Sanchez D, Kleerup E, Tashkin DP, **Gonzalez FJ**, Bonavida B, Zeidler M, and Hankinson O: Hypoxia inducible factor promotes development of allergic airway inflammation. *Allergy.* In press. (LM)

Foreman JE, Chang WC, Palkar PS, Zhu B, Borland MG, Williams JL, Kramer LR, Clapper ML, **Gonzalez FJ**, and Peters JM: Functional characterization of peroxisome proliferator-activated receptor- α expression in colon cancer. *Mol. Carcinog.* In press. (LM)

Taylor M, Qu A, Anderson ER, Matsubara T, Martin A, **Gonzalez FJ**, and Shah YM: Hypoxia-inducible factor-2 α regulates intestinal ferroportin expression in vivo. *Gastroenterology.* In press. (LM)

Matsubara T, Tanaka N, Patterson AD, Cho J, Krausz KW, and **Gonzalez FJ**: Lithocholic acid disrupts phospholipid and sphingolipid homeostasis leading to cholestasis. *Hepatology.* In press. (LM)

Gerlitz G and **Bustin M**: The Role of Chromatin Structure in Cell Migration. *Trends in Cell Biol.* 21: 6-11, 2011. (LM)

Rochman M, Taher L, Kurahashi T, Cherukuri S, Uversky V, Landsman D, Ovcharenko I and **Bustin M**: Effects of HMGN Variants on the Cellular Transcription Profile. *Nucleic Acid Res.* In press. (LM)

Cuddapah S, Schones DE, Cui K, Roh T-Y, Barsk A, Wei G, Rochman M, **Bustin M** and Zhao K: Genomic Profiling of HMGN1 Reveals an Association with Chromatin at Regulatory Regions. *Mol. Cell. Biol.* 31: 700-709, 2011. (LM)

Kimura S: Thyroid-specific transcription factors and their roles in thyroid cancer. *J. Thyroid Res.* In press. (LM)

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

Ding PR, Tiwari AK, Ohnuma S, Lee JWKK, An X, Dai CI, Lu QS, Singh S, Yang DH, Talele TT, **Ambudkar SV**, and Chen ZS: The phosphodiesterase-5-inhibitor vardenafil is a potent inhibitor of ABCB1/P-glycoprotein transporter. *PLoS One*. In press. (LCB)

Khursigara CM, Lan G, Neumann S, Wu X, Ravindran S, Borgnia MJ, Sourjik V, Milne J, Tu Y, and **Subramaniam S**: Lateral density of receptor arrays in the membrane plane influences sensitivity of the E. coli chemotaxis response. *EMBO J.* In press. (LCB)

Namiki T, Tanemura, A, Valencia JC, Coelho SC, Passeron T, Kawaguchi M, Vieira, WD, Ishikawa M, Nishijima W, Izumo T, Kaneko Y, Katayama I, Yamaguchi Y, Yin L, Polley EP, Liu H, Kawakami Y, Eishi Y, Eishi T, Yokozeki, H, and **Hearing VJ**: The AMPK-related kinase NUA2 affects tumor growth, migration and clinical outcome of human melanoma. *Proc Natl Acad Sci. USA.* In press. (LCB)

Pitchakarn P, Ohnuma S, Pintha K, Pompimon W, **Ambudkar SV**, and Limtrakul P: Kuguacin J isolated from *Mormodica charantia* leaves inhibits P-glycoprotein (ABCB1)-mediated multidrug resistance. *J Nutri Biochem.* In press. (LCB)

Olson WK and **Zhurkin VB**: Working the kinks out of nucleosomal DNA. *Curr. Opin. Struct. Biol.* In press. (LCB)

Shi Z, Tiwari AK, Shukla S, Robey RW, Singh S, Kim IW, **Bates SE**, Peng X, Abraham I, **Ambudkar SV**, Talele TT, Fu LW, and Chen ZS: Sildenafil reverses ABCB1- and ABCG2-mediated chemotherapeutic drug resistance. *Cancer Res.* In press. (LCB)

Zhurkin VB: The first thirty years of nucleosome positioning. *Phys Life Rev.* 8: 64-66, 2011. (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.

Mai J, Trump S, Ali R, Schiltz RL, **Hager GL**, Hanke T, Lehmann I, and Attinger S: Are assumptions about the model type necessary in reaction diffusion modeling? - A FRAP application. *Biophys. J.* 100: 1178-1188, 2011. (LRBGE)

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

There were no submissions reported this month.

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

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

Batorsky R, Kearney MF, Palmer SE, **Maldarelli F**, Rouzine IM, and Coffin JM: Estimate of effective recombination rate and average selection coefficient for HIV in chronic infection. *Proc. Natl. Acad. Sci. USA.* 108: 5661-5666, 2011. (HVIB)

Boyd SD, **Maldarelli F**, Sereti I, Ouedraogo GL, Rehm CA, Boltz V, Shoemaker D, and Pau AK: Transmitted raltegravir resistance in an HIV-1 CRF_AG-infected patient. *Antiviral Ther.* 16: 257-261, 2011. (HVIB)

Anderson JA, Archun NM, Ince W, Parker D, Wiegand A, Coffin JM, Kuruci J, Eron J, Swanstrom R, and Margolis DM: Clonal sequences recovered from 1 residual HIV-1 viremia in patients on intensified antiretroviral therapy are identical to replicating viral RNAs recovered from circulating resting CD4+ T cells. *J. Virol.* 85: 5220-5223, 2011. (HVIB; PI: **Hughes SH**)

Retroviral Replication Laboratory - Stephen Hughes, Ph.D.

Chung S, Rausch JW, and **Le Grice SFJ**: Targeting HIV reverse transcriptase-associated ribonuclease H function. *In: Proceedings of the 19th International Conference on AIDS, Cancer and Public Health* (Kozlov A, ed), St. Petersburg, Russia, In press. (RRL)

Inlora J, Chukkapalli V, Derse D, and Ono A: Gag localization and virus-like particle release mediated by the matrix domain of human T-lymphotropic virus type 1 Gag are less dependent on phosphatidylinositol-(4,5)-bisphosphate than those mediated by the matrix domain of HIV-1 Gag. *J. Virol.* 85: 3802-3810, 2011. (RRL; PI: **Hughes SH**)

Joshi A, Garg H, Ablan S, **Freed EO**, Nagashima K, Manjunath N, and Shankar P: Targeting the HIV entry, assembly and release pathway: validation of dominant negative Gag and envelope mutants for anti-HIV gene therapy. *Virology.* 415: 95-106, 2011. (RRL)

Shuh M, Morse B, Heidecker G, and Derse D: Association of Src-related kinase Lyn with the IL-2 receptor and its role in maintaining constitutive phosphorylation of JAK/STAT in HTLV-1 transformed T-cells. *J. Virol.* 85: 4623-4627, 2011. (RRL; PI: **Hughes SH**)

Zhao X-Z, Maddali K, Metifiot M, Smith SJ, Vu C, Marchand C, **Hughes SH, Pommier Y, and Burke T**: Development of tricyclic hydroxy-1H-pyrrolopyridine-trione containing HIV-1 integrase inhibitors. *Bioorg. Med. Chem. Lett.* 21: 2986-2990, 2011. (RRL)

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

Kogias E, Baumer B, Psarras N, Koentges C, Papazoglou A, Saavedra JE, **Keefer LK**, and Weyerbrock A: Growth-inhibitory and chemosensitizing effects of the glutathione-S-transferase- π activated nitric oxide donor PABA/NO in malignant gliomas. *Int. J. Cancer.* 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.

There were no submissions reported this month.

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.

There were no submissions reported this month.

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

Alsarraj J, Walker RC, Webster JD, Geiger TR, Crawford NP, Simpson RM, Ozato K and **Hunter KW**: Deletion of the Proline-Rich Region of the Murine Metastasis Susceptibility Gene Brd4 Promotes Epithelial-to-Mesenchymal Transition- and Stem Cell-Like Conversion. *Cancer Res.* In press. (LCBG)

Einem TL, **Poirier MC**, and Divi RL: 2,3',4,5'-tetramethoxystilbene delays but does not inhibit benzo[*a*] pyrene biotransformation and DNA adduct formation in MCF-7 cells. *Mutagenesis.* 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.

There were no submissions reported this month.

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

Kaur S, Kuznetsova SA, Pendrak ML, Sipes JM, Li Z, Zhang L, and **Roberts DD**: Identification of CD47 and amyloid precursor-like protein-2 as the major heparan sulfate proteoglycans on T lymphocytes and this isoform of CD47 as the signaling receptor for thrombospondin-1. *J. Biol. Chem.* In press. (LP)

Martin-Manso G, Calzada MJ, Chuman Y, Sipes JM, Xavier CP, Wolf V, Kuznetsova SA, **Rubin JS**, and **Roberts DD**: sFRP-1 binds via its netrin-related motif to the N-module of thrombospondin-1 and blocks thrombospondin-1 simulation of breast carcinoma cell adhesion and motility. *Arch. Biochem. Biophys.* In press. (LP)

Orman ES, Conjeevaram HS, Vuppalanchi R, Freston JW, Rochon J, **Kleiner DE**, Hayashi PH, and Dilin Research Group: Clinical and histopathologic features of fluoroquinolone-induced liver injury. *Clin. Gastroenterol. Hepatol.* In press. (LP)

Peterson AW, Pendrak ML, and **Roberts DD**: ATP binding to hemoglobin response gene-1 protein is necessary for regulation of the mating type locus in *Candida albicans*. *J. Biol. Chem.* 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.

Matsusaka T, Kobayashi K, Kon V, **Pastan I**, Fogo AB, and Ichikawa I: Glomerular sclerosis is prevented during urinary tract obstruction due to podocyte protection. *Am. J. Physiol. Renal Physiol.* 300: 792-800, 2011. (LMB)

Ho M, Feng M, Fisher RJ, **Rader C**, and **Pastan I**: A novel high-affinity human monoclonal antibody to mesothelin. *Int. J. Cancer.* 128: 2020-2030, 2011. (LMB)

Jasper GA, Arun I, Venzon D, **Kreitman RJ, Wayne AS**, Yuan CM, Marti GE, and **Stetler-Stevenson M**: Variables affecting the quantitation of CD22 in neoplastic B cells. *Cytometry B Clin. Cytom.* 80: 83-90, 2011. (LMB)

Xiang X, Phung Y, Feng M, Nagashima K, Zhang J, Broaddus VC, **Hassan R, FitzGerald D**, and **Ho M**: The development and characterization of a human mesothelioma in vitro 3D model to investigate immunotoxin therapy. *Plos One.* 6: e14640, 2011. (LMB)

Tai CH, Sam V, Gibrat JF, Gamier J, Munson PJ, and **Lee B**: Protein domain assignment from the recurrence of locally similar structures. *Proteins.* 79: 853-866, 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.

Grohar PJ, Griffin LB, Yeung C, Chen QR, **Pommier Y, Khanna C, Khan J**, and **Helman LJ**: Ecteinascidin 743 interferes with activity of EWS-L1 in Ewing Sarcoma cells. *Neoplasia.* 13: 145-153, 2011. (LMP)

Chen CF, He X, Arslan AD, Mo YY, Reinhold WC, **Pommier Y**, and Beck WT: Novel regulation of nuclear factor-YB by miR-485-3p affects the expression of DNA topoisomerase II {alpha} and drug responsiveness. *Mol. Pharmacol.* 79: 735-741, 2011. (LMP)

Dickey JS, Zemp FJ, Altamirano A, Sedelnikova OA, **Bonner WM**, and Kovalchuk O: H2AX phosphorylation in response to DNA double-strand break formation during bystander signalling: effect of microRNA knockdown. *Radiat. Prot. Dosimetry.* 143: 264-269, 2011. (LMP)

Kummar S and **Doroshov JH**: Phase O trials: expediting the development of chemoprevention agents. *Cancer Prev. Res.* 4: 288-292, 2011. (LMP)

Ratain MJ, Collins JM, and **Doroshov JH**: Merrill Jon Egorin, MD, 1948-2010. *Clin. Pharmacol. Ther.* 89: 163-165, 2011. (LMP)

Tang J, Maddali K, Dreis CD, Sham YY, Vince R, **Pommier Y**, and Wang Z: 6-benzoyl-3-hydroxypyrimidine-2-4-diones as dual inhibitors of HIV reverse transcriptase and integrase. *Biod. Med. Chem. Lett.* In press. (LMP)

Tang J, Maddali K, Metifiot M, Sham YY, Vince R, **and Pommier Y**: 3-hydroxypyrimidine-2-4-diones as an inhibitor scaffold of HIV integrase. *J. Med. Chem.* In press. (LMP)

Eddy J, Vallur AC, Varma S, Liu H, Reinhold WC, **Pommier Y**, and Maizels N: G4 motifs correlate with promoter-proximal transcriptional pausing in human genes. Nucl. Acids Res. In press. (LMP)

Yang S, Wang X, Contino G, Liesa M, Sahin E, Ying H, Bause A, Li Y, **Stommel JA**, Dell'antonio G, Mautner J, Tonon G, Haigis M, Shirihai OS, Doglioni C, Bardeesy N, and Kimmelman AC: Pancreatic cancers require autophagy for tumor growth. Genes Dev. In press. (LMP)

Wu Y, Antony S, Juhasz A, Lu J, Ge Y, Jiang G, Roy K, and **Doroshov JH**: Upregulation and sustained activation of STAT1 are essential for interferon-gamma (IFN-gamma)-induced dual oxidase-2 (DUOX2) and dual oxidase A2 (DUOXA2) expression in human pancreatic cancer cell lines. J. Biol. Chem. In press. (LMP)

Kummar S, Gutierrez ME, Chen A, Turkbey IB, Allen D, Horneffer YR, Juwara L, Cao L, Yu Y, Kim YS, **Trepel J**, Chen H, **Choyke P**, Melillo G, Murgo AJ, Collins J, and **Doroshov JH**: Phase I trial of vandetanib and bevacizumab evaluating the VEGF and EGF signal transduction pathways in adults with solid tumors and lymphomas. Eur. J. Cancer. In press. (LMP)

Zhang YW, Regairaz M, Seiler JA, Agama KK, **Doroshov JH**, and **Pommier Y**: Poly(ADP-ribose) polymerase and XPF-ERCC1 participate in distinct pathways for the repair of topoisomerase I-induced DNA damage in mammalian cells. Nucl. Acids Res. 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)

Bussard KM and **Smith GH**: The Mammary Gland Microenvironment Directs Progenitor Cell Fate In Vivo. Intl J Cell Biol. In press. (MBTL)

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.

There were no submissions reported this month.

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.

Lee Y-H, Judge AD, Seo D, Kitade M, Gómez-Quiroz LE, Ishikawa T, Andersen JB, Kim B-K, Marquardt JU, Raggi C, **Avital I**, Conner EA, MacLachlan I, Factor VM and **Thorgeirsson SS**: Molecular targeting of CSN5 in human hepatocellular carcinoma: a mechanism of therapeutic response. *Oncogene*. In press. (LEC)

Yang X-Y, **Popescu NC**, and Zimonjic DB: DLC1 interaction with S100A10 mediates inhibition of *in vitro* cell invasion and tumorigenicity of lung cancer cells through a RhoGAP independent mechanism. *Cancer Res*. In press. (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.

Chang J, Lindsay R, Kulkarni S, Lifson JD, **Carrington M**, and Altfeld M: Polymorphisms in interferon regulatory factor 7 reduce interferon- α responses of plasmacytoid dendritic cells to HIV-1. *AIDS*. 25: 715-717, 2011. (LEI)

Li JZ, Brumme ZL, Brumme CJ, Wang H, Spritzler J, Robertson MN, Lederman MM, **Carrington M**, Walker BD, Schooley RT, and Kuritzkes DR: Factors associated with viral rebound in HIV-1-infected individuals enrolled in a therapeutic HIV-1 *gag* vaccine trial. *J. Infect. Dis*. 203: 976-983, 2011. (LEI)

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

Fan T, Jiang S, Chung N, Alikhan A, Ni C, Lee CR, and **Hornyak TJ**: EZH2-dependent suppression of a cellular senescence phenotype in melanoma cells by inhibition of p21/*CDKN1A* expression. *Mol. Cancer Res*. In press. (DB)

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

There were no submissions reported this month.

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.

There were no submissions reported this month.

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

Uldrick TS, Polizzotto MN, Aleman K, O'Mahony D, Wyvill KM, Wang V, Marshall V, Pittaluga S, Steinberg SM, **Tosato G**, Whitby D, Little RF, and **Yarchoan R**: High-dose zidovudine in combination with valganciclovir in the treatment of symptomatic Kaposi sarcoma herpesvirus-associated multicentric Castleman disease: a pilot study of virus-activated cytotoxic therapy. Blood. In press. (HAMB)

Basic Research Laboratory

There were no submissions reported this month.

Emeritus Scientists

Victor Marquez

Smits M, Mir SE, Nilsson RJA, van der Stoop PM, Niers JM, **Marquez VE**, Cloos J, Breakefield XO, Krichevsky AM, Noske DP, Tannous BA, and Wurdinger T: Down-regulation of miR-101 in endothelial cells promotes blood vessel formation through reduced repression of EZH2. PlosOne. 6: 1-11, 2011. (CBL)

Maxine Singer

Singer M and Winocour E: SV40 Host-Substituted Variants: A New Look at the Monkey DNA Inserts and Recombinant Junctions. Virology. 412: 325-332, 2011. (LBMB)