

CCR MANUSCRIPT NOTIFICATION (JUNE 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.

Brocca-Cofano E, Xiao P, and **Robert-Guroff M**: Envelope specific antibodies and HIV vaccine efficacy. In: AIDS, Book 1, Intech Open Access Publisher. In press. (VB)

Lakhashe SK, Velu V, Sciaranghella G, Siddappa NB, DiPasquale JM, Hemashettar G, Yoon JK, Rasmussen RA, Yang F, Lee SJ, Montefiori DC, Novembre FJ, Villinger F, Amara RR, Kahn M, Hu S-L, Li S, Li Z, Frankel FR, **Robert-Guroff M**, Johnson WE, Lieberman J, and Ruprecht RM: Prime-boost vaccination with heterologous live vectors encoding SIV Gag and multimeric HIV-1 gp160 protein: efficacy against repeated mucosal R5 clade C SHIV challenges. Vaccine. In press. (VB)

Demberg T, Ettinger AC, Aladi S, McKinnon K, Kuddo T, Venzon D, Patterson LJ, Phillips TM, and **Robert-Guroff M**: Strong viremia control in vaccinated macaques does not prevent gradual Th17 cell loss from central memory. Vaccine. In press. (VB)

CCR Nanobiology Program - Robert Blumenthal, Ph.D.

Belanger J, Raviv Y, Viard M, de la Cruz MJ, Nagashima K, and **Blumenthal R**: Effects of UVA irradiation, aryl azides, and reactive oxygen species on the orthogonal inactivation of the human immunodeficiency virus (HIV-1). Virology. In press. (CCRNP)

Chen W, Feng Y, Gong R, Zhu Z, Wang Y, Zhao Q, and **Dimitrov DS**: Engineered single human CD4 domains as potent HIV-1 inhibitors and components of vaccine immunogens. J. Virol. In press. (CCRNP)

Pan Y and **Nussinov R**: The role of response elements organization in transcription factor selectivity: The IFN- β enhanceosome example. PLoS Comput. Biol. 7(6): e1002077, 2011. (CCRNP)

Parthasarathy S, Long F, Miller Y, Xiao Y, McElheny D, Thurber K, Ma B, **Nussinov R**, and Ishii Y: Molecular-level examination of Cu²⁺ binding structure for amyloid fibrils of 40-residue Alzheimer's β by solid-state NMR spectroscopy. J. Am. Chem. Soc. 133(10): 3390-3400, 2011. (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.

Kim SE, Liu F, Im YJ, Stephen AG, Fivash MJ, Waheed AA, **Freed EO**, Fisher RJ, Hurley JH, and **Burke TR**: Elucidation of new binding interactions with the human Tsg101 protein using modified HIV-1 Gag-p6 derived peptide ligands. *ACS Med Chem Lett.* 2: 337-341, 2011. (CBL)

Branco MC, Sigano DM, and **Schneider JP**: Materials from peptide assembly: towards the treatment of cancer and transmittable disease. *Curr. Opin. Chem. Biol.* 15: 427-434, 2011. (CBL)

Radiation Oncology Branch - Kevin Camphausen, M.D.

There were no submissions reported this month.

Molecular Imaging Program - Peter Choyke, M.D.

Kummar S, Raffeld M, Juwara L, Horneffer YR, Strassberger A, Allen D, Steinberg SM, Rapisarda A, Spencer SD, **Figg WD**, Chen X, Turkbey B, **Choyke PL**, Murgu AJ, **Doroshov JH**, and Melillo G: Multihistology, Target-Driven Pilot Trial of Oral Topotecan as an Inhibitor of Hypoxia-Inducible Factor-1{alpha} (HIF-1{alpha}) in Advanced Solid Tumors. *Clin Cancer Res.* In press. (MIP)

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.* In press. (MIP)

Schwartzentruber DJ, Lawson DH, Richards JM, Conry RM, Miller DM, Treisman J, Gailani F, Riley L, Conlon K, Pockaj B, Kendra KL, White RL, Gonzalez R, Kuzel TM, Curti B, Leming PD, Whitman ED, Balkissoon J, Reintgen DS, Kaufman H, Marincola FM, **Merino MJ**, **Rosenberg SA**, **Choyke P**, Vena D, and Hwu P: gp100 peptide vaccine and interleukin-2 in patients with advanced melanoma. *N Engl J Med.* 364(22): 2119-2127, 2011. (MIP)

O'Brien K, Font-Montgomery E, Lukose L, Bryant J, Piwnica-Worms K, Edwards H, Riney L, Garcia A, Daryanani K, **Choyke P**, Mohan P, Heller T, Gahl WA, and Gunay-Aygun M: Congenital Hepatic Fibrosis And Portal Hypertension In Autosomal Dominant Polycystic Kidney Disease. *J Pediatr Gastroenterol Nutr*. In press. (MIP)

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

Basu SK, Malik R, Huggins CJ, Lee S, Sebastian T, Sakchaisri K, Quinones OA, Alvord WG, and **Johnson PF**: 3'UTR elements inhibit Ras-induced C/EBP β post-translational activation and senescence in tumor cells. *EMBO J*. In press. (LCP)

Gaur AB, Holbeck SL, **Colburn NH**, and Israel MA: Downregulation of Pcd4 by mir-21 facilitates glioblastoma proliferation in vivo. *Neuro Oncology*. 13(6): 580-590, 2011. (LCP)

Kim JY, Carlson BA, Xu XM, Yeng Y, Chen S, Gladyshev VN, Lee BJ, and **Hatfield DL**: Inhibition of selenosystem (tRNA(Ser) Aminoacylation provides evidence that aminoacylation is required for regulatory methylation of this tRNA. *Biochem Biophys Res Commun*. 409(4): 814-819, 2011. (LCP)

Mathews LA, Cabarcas SM, Hurt EM, Zhang X, Jaffee EM, and **Farrar WL**: Increased Expression of DNA Repair Genes in Invasive Human Pancreatic Cancer Cells. *Pancreas*. 40(5): 730-739, 2011. (LCP)

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

There were no submissions reported this month.

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

Kim G, Davidson B, Henning R, Wang J, Yu M, **Annunziata C**, Hetland T, and **Kohn EC**: Adhesion molecule protein signature in ovarian cancer effusions is prognostic of patient outcome. *Cancer*. In press. (MOB)

Bates SE: Prostate cancer: score one for validated targets. *Clin Cancer Res*. 17(12): 3866, 2011. (MOB)

Piekarz RL, Frye R, Prince HM, Kirschbaum MH, Zain J, Allen SL, **Jaffe ES**, Ling A, Turner M, Peer CJ, **Figg WD**, Steinberg SM, Smith S, Joske D, Lewis I, Hutchins L, Craig M, **Fojo AT**, Wright JJ, and **Bates SE**: Phase 2 trial of romidepsin in patients with peripheral T-cell lymphoma. *Blood*. 117(22): 5827-5834, 2011. (MOB)

Madan RA, Pal SK, Sartor O, and **Dahut WL**: Overcoming chemotherapy resistance in prostate cancer. *Clin Cancer Res.* 17(12): 3892-3902, 2011. (MOB)

Madan RA, Aragon-Ching JB, **Gulley JL**, and **Dahut WL**: From clinical trials to clinical practice: therapeutic cancer vaccines for the treatment of prostate cancer. *Expert Rev Vaccines.* 10(6): 743-753, 2011. (MOB)

Yang M, Xie W, Mostaghel E, Nakabayashi M, Werner L, Sun T, Pomerantz M, Freedman M, Ross R, Regan M, Sharifi N, **Figg WD**, Balk S, Brown M, Taplin ME, Oh WK, Lee GS, and Kantoff PW: SLCO2B1 and SLCO1B3 May Determine Time to Progression for Patients Receiving Androgen Deprivation Therapy for Prostate Cancer. *J Clin Oncol.* 29(18): 2565-2573, 2011. (MOB)

Yao S, Till C, Kristal AR, Goodman PJ, Hsing AW, Tangen CM, Platz EA, Stanczyk FZ, Reichardt JK, Tang L, Neuhaus ML, Santella RM, **Figg WD**, Price DK, Parnes HL, Lippman SM, Thompson IM, Ambrosone CB, and Hoque A: Serum estrogen levels and prostate cancer risk in the prostate cancer prevention trial: a nested case-control study. *Cancer Causes Control.* In press. (MOB)

Gadalla SM, Rajan A, Pfeiffer R, Kristinsson SY, Björkholm M, **Landgren O**, and **Giaccone G**: A population-based assessment of mortality and morbidity patterns among patients with thymoma. *Int J Cancer.* 128(11): 2688-2694, 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.* In press. (MOB)

Hoechst B, Gamrekelashvili J, Manns MP, **Greten TF**, and Korangy F: Plasticity of human Th17 cells and iTregs is orchestrated by different subsets of myeloid cells. *Blood.* 117(24): 6532-6541, 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 β : Implications for neuropathic and inflammatory pain mechanisms. *Pain.* In press. (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.* In press. (MOB)

Maxwell GL, Hood BL, Day R, Chandran U, Kirchner D, Kolli VS, Bateman NW, Allard J, Miller C, Sun M, Flint MS, Zahn C, Oliver J, Banerjee S, Litzl T, Parwani A, Sandburg G, Rose S, Becich MJ, Berchuck A, **Kohn E**, Risinger JI, and Conrads TP: Proteomic analysis of stage I endometrial cancer tissue: Identification of proteins associated with oxidative processes and inflammation. *Gynecol Oncol.* 121(3): 586-594, 2011. (MOB)

Weiss BM, Minter A, Abadie J, Howard R, Ascencao J, Schechter GP, **Kuehl M**, and **Landgren O**: Patterns of monoclonal immunoglobulins and serum free light chains are significantly different in black compared to white monoclonal gammopathy of undetermined significance (MGUS) patients. *Am J Hematol.* 86(6): 475-478, 2011. (MOB)

Laboratory of Metabolism - Frank Gonzalez, Ph.D.

Patterson AD, Li F, Bonzo JA, Krausz KW, Eichler JS, Aslam S, Tigno X, Weinstein JN, Hansen BC, Idle JR, and **Gonzalez FJ**: Functional changes in the SLC6A20 kidney transporter in non-human primate and mouse models of type 2 diabetes mellitus. *J. Biol. Chem.* 286: 19511-19522, 2011. (LM)

Prawitt J, Abdelkarim M, Stroeve JHM, Popescu JR, Duez H, Velagapudi VR, Dumont J, Bouchaert E, van Dijk TH, Lucas A, Dorchie E, Daoudi M, Lestavel S, **Gonzalez FJ**, Oresic M, Cariou B, Kuipers F, Caron S, and Staels B: Farnesoid X receptor deficiency improves glucose homeostasis in mouse models of obesity. *Diabetes.* In press. (LM)

Qu A, Taylor M, Xue X, Matsubara T, Metzger D, Chambon P, **Gonzalez FJ**, and Shah YM: Hypoxia-inducible transcription factor 2alpha promotes steatohepatitis through augmenting lipid accumulation, inflammation and fibrosis. *Hepatology.* In press. (LM)

Chennamsetty I, Claudel T, Kostner KM, Baghdasaryan A, Kratky D, Levak-Frank S, Frank S, **Gonzalez FJ**, Trauner M, and Kostner GM: Farnesoid X receptor represses hepatic apolipoprotein(a) gene expression, a potential target for lipoprotein(a) lowering drugs. *J. Clin. Invest.* In press. (LM)

Zhang H, Zhang G, **Gonzalez FJ**, Li J, and Cai D: Hypoxia-inducible factor: a general nutrient sensor in the hypothalamus. *Plos Biol.* In press. (LM)

Boverhof DR, Chamberlain MP, Elcombe CR, **Gonzalez FJ**, Heflich RH, Hernández LG, Jacobs AC, Jacobson-Kram D, Luijten M, Maggi A, Manjanatha MG, Benthem J, and Gollapudi BB: Transgenic animal models in toxicology: historical perspectives and future outlook. *Toxicol. Sci.* 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)

Oh K-S, **Bustin M**, Mazur SJ, **Appella E**, and **Kraemer KH**: UV-induced histone H2AX phosphorylation and DNA damage related proteins accumulate and persist in nucleotide excision repair-deficient XP-B cells. *DNA Repair*. 10: 5-15, 2011. (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.* 39: 4076-4087, 2011. (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)

Kato H, van Ingen H, Zhou BR, Feng H, **Bustin M**, Kay LE, and **Bai Y**: Architecture of the high mobility group nucleosomal protein 2-nucleosome complex as revealed by methyl-based NMR. *Proc Natl Acad Sci USA.* 108(30): 12283-12288, 2011. (LM)

Malicet C, Rochman M, Postnikov Y, and **Bustin M**: Distinct Properties of Human HMGN5 Reveal A Rapidly Evolving But Functionally Conserved Nucleosome Binding Protein. *Mol. Cell. Biol.* 31: 2742, 2011. (LM)

Dranovsky A, Picchini AM, Moadel T, Sisti AC, Yamada A, **Kimura S**, Leonardo ED, and Hen R: Experience dictates stem cell fate in the adult hippocampus. *Neuron.* 70: 908-923, 2011. (LM)

Johmura Y, Soung N-K, Park J-E, Yu L-R, Zhou M, Bang J-K, Kim B-Y, Veenstra TD, Erikson RL, and **Lee K-S**: Regulation of microtubule-based microtubule nucleation by mammalian polo-like kinase 1. *Proc. Nat. Acad. Sci USA.* In press. (LM)

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

Chanmahasathien W, Ohnuma S, **Ambudkar SV**, and Limtrakul P: Biochemical mechanism of modulation of human P-glycoprotein by stemofoline. *Planta Med.* In press. (LCB)

Cheng-Mayer C, Huang Y, Gettie A, Tsai L, Ren W, Shakirzyanova M, Tasca, Sina S, Trunova N, Kono K, Nakayama E, Shioda T, Blanchard J, Jenkins LMM, Hayashi R, Lo Y, Schito ML, and **Appella E**: Vaccine-microbicide combination delays SHIV infection and controls viral replication. *AIDS.* In press. (LBC)

Goldsborough A, Handley M, Dulcey A, Pluchino K, Kannan P, Brimacombe K, Hall M, Griffiths G, and **Gottesman MM**: Collateral sensitivity of multidrug resistant cells to the orphan drug tiopronin. *J Med Chem*. In press. (LCB)

Harris A, Shi D, Bartesaghi A, Borgnia MJ, He H, Pejchal R, Kang K, Depetris R, Marozsan A, Sanders RW, Klasse PJ, Milne JLS, Wilson IA, Olson W, Moore JP and **Subramaniam S**: Trimeric HIV-1 gp140 immunogens and native HIV-1 envelope glycoproteins display the same closed and open quaternary molecular architectures. *Proc Natl Acad Sci USA*. In press. (LCB)

Lucia MB, Anu R, Handley M, Gillet J-P, Wu C-P, De Donatis GM, Cauda R, and **Gottesman MM**: Exposure to HIV-Protease Inhibitors Selects for Increased Expression of P-glycoprotein (ABCB1) in Kaposi's Sarcoma Cells. *Br J Cancer*. In press. (LCB)

Nikolic DS, Lehmann M, Felts RL, Garcia E, Blanchet FB, **Subramaniam S** and Piguet V: HIV-1 activates Cdc42 and induces filopodia in immature dendritic cells to facilitate cell-to-cell virus propagation. *Blood*. In press. (LCB)

Shukla S, Skoumbourdis A, Walsh M, Hartz A, Fung KL, Wu C-P, **Gottesman MM**, Bauer B, Thomas C, and **Ambudkar SV**: Synthesis and characterization of a BODIPY conjugate of the BCR-ABL kinase inhibitor Tassigna® (Nilotinib): Evidence for transport of Tassigna® and its fluorescent derivative by ABC drug transporters. *Mol Pharmaceutics*. In press. (LCB)

Tarasov SG, Gaponenko V, **Howard OM**, Chen Y, **Oppenheim JJ**, Dyba MA, **Subramaniam S**, Leeb Y, Michejda CJ, and Tarasova NI: Structural plasticity of a transmembrane peptide allows self-assembly into biologically active nanoparticles. *Proc Natl Acad Sci USA*. 108: 9798-9803, 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.

Conway-Campbell BL, George CL, Pooley JR, Knight DM, Norman MR, **Hager GL**, and Lightman SL: The HSP90 molecular chaperone cycle regulates cyclical transcriptional dynamics of the glucocorticoid receptor and its co-regulatory molecules CBP/P300 during ultradian ligand treatment. *Mol. Endocrinol*. 25: 944-954, 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.

There were no submissions reported this month.

Retroviral Replication Laboratory - Stephen Hughes, Ph.D.

There were no submissions reported this month.

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

Weyerbrock A, Osterberg N, Psarras N, Baumer B, Kogias E, Werres A, Bette S, Saavedra JE, and **Keefer LK**: JS-K, a glutathione S-transferase activated nitric oxide donor with antineoplastic activity in malignant gliomas. Neurosurgery. 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.

Choy JS, Acuña R, Au WC, and **Basrai MA**: A Role for Histone H4K16 Hypoacetylation in Saccharomyces cerevisiae Kinetochore Function. Genetics. In press. (GB)

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

Kim HK, Kim J, Korolevich S, Choi IJ, Kim CH, Munroe D and **Green JE**: distinctions in gastric cancer gene expression signatures derived from laser capture microdissection versus histologic macrodissection. BMC Med Genomics. 4(1): 48, 2011. (LCBG)

Barkan D and **Green JE**: An *In Vitro* system to study tumor dormancy and to switch to metastatic growth. J Visualized Experiments. In press. (LCBG)

O'Brien J, Hansen K, Barkan D, **Green JE** and Schedin P: NSAIDs target pro-tumorigenic environment of the postpartum mammary gland. Int J Dev. Biol. 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.

Aly FZ and **Kleiner DE**: Update on fatty liver disease and steatohepatitis. Adv. Anat. Pathol. 18(4): 294-300, 2011. (LP)

Maldonado NI, Cabanillas F, **Jaffe ES**, Raffeld M, and Lozada L: Successful treatment of a patient With Epstein-Barr virus-positive B-cell lymphoproliferative disorder resembling post-transplant lymphoproliferative disorder using single-agent rituximab. J. Clin. Oncol. In press. (LP)

Schuster SJ, Neelapu SS, Gause BL, Janik JE, Muggia FM, Gockerman JP, Winter JN, Flowers CR, Nikcevich DA, Sotomayor EM, McGaughey DS, **Jaffe ES**, Chong EA, Reynolds CW, Berry DA, Santos CF, Popa MA, McCord AM, and Kwak LW: Vaccination with patient-specific tumor-derived antigen in first remission improves disease-free survival in follicular lymphoma. J. Clin. Oncol. In press. (LP)

Suzuki A, Brunt EM, **Kleiner DE**, Miquel R, Smyrk TC, Andrade RJ, Lucena MI, Castiella A, Lindor K, and Björnsson E: The use of liver biopsy evaluation in discrimination of idiopathic autoimmune hepatitis vs. drug-induced liver injury. Hepatology. 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.

FitzGerald DJ, Moskatel E, Ben-Josef G, Traini R, Tendler T, Sharma A, Antignani A, Mussai F, **Wayne A**, **Kreitman RJ**, and **Pastan I**: Enhancing immunotoxin cell-killing activity via combination therapy with ABT-737. Leuk. Lymphoma. 52(S2): 79-81, 2011. (LMB)

Kreitman RJ, Arons A, Stetler-Stevenson M, **FitzGerald DJP**, **Wilson WH**, and **Pastan I**: Recombinant immunotoxins and other therapies for relapsed/refractory hairy cell leukemia. *Leuk. Lymphoma*. 52(S2), 82-86, 2011. (LMB)

Pastan I, Onda M, Weldon J, **FitzGerald D**, and **Kreitman RJ**: Immunotoxins with decreased immunogenicity and improved activity. *Leuk. Lymphoma*. 52(S2): 87-90, 2011. (LMB)

Mossoba ME, Onda M, Taylor J, Massey PR, Treadwell S, Sharon E, **Hassan R**, **Pastan I**, and **Fowler DH**: Pentostatin plus cyclophosphamide safely and effectively prevents immunotoxin immunogenicity in murine hosts. *Clin. Cancer Res*. 17: 3697-3705, 2011. (LMB)

Kuan C-T, Wakiya K, Keir ST, Li J, Herndon II JE, **Pastan I**, and Bigner DD: Affinity-matured anti-glycoprotein NMB recombinant immunotoxins targeting malignant gliomas and melanomas. *Int. J. Cancer*. 129: 111-121, 2011. (LMB)

Xiang X, Feng M, Felder M, Connor JP, Man Y-G, Patankar MS, and **Ho M**: HN125: A novel immunoadhesin targeting MUC16 with potential for cancer therapy. *J. Cancer*. 2: 280-291, 2011. (LMB)

Fozzatti L, Lu C, Kim DW, and **Cheng SY**: Differential recruitment of nuclear coregulators directs the isoform-dependent action of mutant thyroid hormone receptors. *Mol. Endocrinol*. 25: 908-921, 2011. (LMB)

Zhu XG, Kim DW, Goodson ML, Privalsky ML, and **Cheng SY**: NCoR1 regulates thyroid hormone receptor isoform-dependent adipogenesis. *J. Mol. Endocrinol*. 46: 233-244, 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.

There were no submissions reported this month.

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

Rao M, Chinnasamy N, Hong JA, Zhang Y, Zhang M, Xi S, Liu F, **Marquez VE**, Morgan RA, and **Schrump DS**: Inhibition of histone lysine methylation enhances cancer-testis antigen expression in lung cancer cells: Implications for adoptive immunotherapy of cancer. *Cancer Res*. 71(12): 4192-4204, 2011. (SB)

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

Bruno RD, Boulanger CA, and **Smith GH**: Notch-induced mammary tumorigenesis does not involve the lobule-limited epithelial progenitor. *Oncogene*. In press. (MBTL)

Bussard KM and **Smith GH**: The Mammary Gland Microenvironment Directs Progenitor Cell Fate In Vivo. *Int 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.

Farsaci B, Higgins JP, and **Hodge JW**: Consequence of dose scheduling of sunitinib on host immune response elements and vaccine combination therapy. *Int J Cancer*. In press. (LTIB)

Gulley JL and Drake CG: Immunotherapy for prostate cancer: recent advances, lessons learned, and areas for further research. *Clin Cancer Res*. In press. (LTIB)

May Jr KF, **Gulley JL**, Drake CG, Dranoff G, and Kantoff PW: Molecular pathways: prostate cancer immunotherapy. *Clin Cancer Res*. In press. (LTIB)

Fernando RI, Castillo MD, Litzinger M, Hamilton DH, and Palena C: IL-8 signaling plays a critical role in the epithelial-mesenchymal transition of human carcinoma cells. *Cancer Res*. In press. (LTIB; PI: **Schlom J**)

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.

Marquardt JU, Raggi C, Andersen JB, Seo D, **Avital I**, Geller D, Lee Y-H, Kitade M, Holczbauer A, Conner EA, Factor VM, and **Thorgeirsson SS**: Human Hepatic Cancer Stem Cells are Characterized by Common Stemness Traits and Diverse Oncogenic Pathways. *Hepatology*. 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.

Trinchieri G: Inflammation in cancer: a therapeutic target? *Oncology*. 25: 418-420, 2011. (LEI)

McKay GJ, Silvestri G, Chakravarthy U, Dasari S, Fritsche LG, Weber BH, Keilhauer CN, Klein ML, Francis PJ, Klaver CC, Vingerling JR, Ho L, De Jong PT, **Dean M**, Sawitzke J, Baird PN, Guymer RH, Stambolian D, Orlin A, Seddon JM, Peter I, Wright AF, Hayward C, Lotery AJ, Ennis S, Gorin MB, Weeks DE, Kuo CL, Hingorani AD, Sofat R, Cipriani V, Swaroop A, Othman M, Kanda A, Chen W, Abecasis GR, Yates JR, Webster AR, Moore AT, Seland JH, Rahu M, Soubrane G, Tomazzoli L, Topouzis F, Vioque J, Young IS, Fletcher AE, and Patterson CC: Variations in apolipoprotein E frequency with age in a pooled analysis of a large group of older people. *Am J Epidemiol*. 173: 1357-1364, 2011. (LEI)

Leger A, Le Guiner C, Nickerson ML, Im KM, Ferry N, Moullier P, Snyder RO, and Penaud-Budloo M: Adeno-associated viral vector-mediated transgene expression is independent of DNA methylation in primate liver and skeletal muscle. *PLoS One*. 6: e20881, 2011. (LEI; PI: **Dean M**)

Dahirel V, Shekhar K, Pereyra F, Miura T, Artyomov N, Talsania S, Allen TM, Altfeld M, **Carrington M**, Irvine DJ, Walker BD, and Chakraborty AK: Coordinate linkage of HIV evolution reveals regions of immunologic vulnerability. *Proc. Natl. Acad. Sci. USA*. 108: 11530-11535, 2011. (LEI)

Sayers TJ: Targeting the extrinsic apoptosis signaling pathway for cancer therapy. *Cancer Immunol Immunother*. In press. (LEI)

Chan T, **Wiltrott RH**, and Weiss JM: Immunotherapeutic modulation of the suppressive liver and tumor microenvironments. *Int. Immunopharmacol*. 11: 879-889, 2011. (LEI)

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

Ramkumar HL, Brooks BP, Cao X, Tamura D, DiGiovanna JJ, **Kraemer KH**, and Chan C-C: Ophthalmic manifestations and histopathology of xeroderma pigmentosum: Two clinicopathological cases and review of the literature. *Survey of Ophthalmology*. 56: 348-361, 2011. (DB)

Brooks BP, Thompson AH, Clayton JA, Chan C-C, Tamura D, Zein WM, Blain D, Hadsall C, Rowan J, Bowles KE, DiGiovanna JJ, and **Kraemer KH:** The Ocular Manifestations of

Trichothiodystrophy. Ophthalmology. In press. (DB)

Niedernhofer LJ, Bohr VA, Sander M and **Kraemer KH**: Xeroderma pigmentosum and other diseases of human premature aging and DNA repair: molecules to patients [Meeting report]. Mechanisms of Ageing and Development. In press. (DB)

Tamura D, Merideth M, DiGiovanna JJ, Zhou X, Tucker MA, Goldstein AM, Brooks BP, Khan SG, Oh K-S, Ueda T, Boyle J, Moslehi R, and **Kraemer KH**: High risk pregnancy and neonatal complications in the DNA repair and transcription disorder trichothiodystrophy: Report of 27 affected pregnancies. Prenatal Diagnosis. 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.

Zheng Z-M and Wang X: Regulation of cellular miRNA expression by human papillomaviruses. Biochimica et Biophysica Acta. In press. (HAMB)

Wang X, Meyers C, Wang H-K, Chow LT, and **Zheng Z-M**: Construction of a full transcription map of human papillomavirus type 18 in productive virus infection. J. Virol. In press. (HAMB)

Kang J-G, Majerciak V, Uldrick TS, Wang X, Kruhlak M, **Yarchoan R**, and **Zheng Z-M**: Kaposi sarcoma-associated herpesviral IL6 and human IL6 open reading frames contain miRNA binding sites and are subject to cellular miRNA regulation. J. Pathology. In press. (HAMB)

Basic Research Laboratory

Freedman BI, Langefeld CD, Lu L, Divers J, Comeau ME, Kopp JB, **Winkler CA**, Nelson GW, Johnson RC, Palmer ND, Hicks PJ, Bostrom MA, Cooke JN, McDonough CW, and Bowden DW: Differential Effects of MYH9 and APOL1 Risk Variants on FRMD3 Association with Diabetic ESRD in African Americans. *PLoS Genet.* 7(6): e1002150, 2011. (BRL)

Emeritus Scientists

Victor Marquez

Yap DB, Chu J, Berg T, Schapira M, Cheng SWG, Moradian A, Morin RD, Mungall AJ, Meissner B, Boyle M, **Marquez VE**, Marra MA, Gascoyne RD, Humphries RK, Arrowsmith CH, Morin GB, and Aparicio SAJR: Somatic mutations at EZH2 Y641 act dominantly through a mechanism of selectively altered PRC2 catalytic activity, to increase H3K27 trimethylation. *Blood.* 117: 2451-2459, 2011. (CBL)

Sasaki D, Imaizumi Y, Hasegawa H, Osaka A, Tsukasaki K, Choi YL, Mano H, **Marquez VE**, Hayashi T, Yanagihara K, Moriwaki Y, Miyazaki Y, Kamihira S, and Yamada Y: Overexpression of enhancer of zeste homolog 2 with trimethylation of lysine 27 on histone H3 in adult T-cell leukemia/lymphoma as a target for epigenetic therapy. *Haematologica.* 96(5): 712-719, 2011. (CBL)

Sandovici I, Smith NH, Nitert MK, Ackers-Johnson M, Uribe-Lewis S, Ito Y, Jones RH, **Marquez VE**, Cairns W, Tadayyon M, O'Neill LP, Murrel A, Ling C, Constancia M, and Ozanne SE: Maternal diet and aging alter the epigenetic control of a promoter-enhancer interaction at the Hnf4a gene in rat pancreatic islets. *Proc. Natl. Acad. Sci. USA.* 108(13): 5449-5454, 2011. (CBL)

Terrazas M, Avino A, Siddiqui MA, **Marquez VE**, and Eritja R: A direct, efficient method for the preparation of siRNAs containing ribo-like north bicyclo[3.1.0]hexane pseudosugars. *Org. Lett.* 13(11): 2888-2891, 2011. (CBL)