

CCR MANUSCRIPT NOTIFICATION (AUGUST 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.

There were no submissions reported this month.

CCR Nanobiology Program - Robert Blumenthal, Ph.D.

Chen W and **Dimitrov DS**: Monoclonal antibody-based candidate therapeutics against HIV-1. AIDS Res. Hum. Retroviruses. In press. (CCRNP)

Pasek M, Ramakrishnan B, Boeggeman E, Mercer N, Dulcey AE, Griffiths GL, and **Qasba PK**: The N-acetyl group binding pocket in the N-acetylglucosaminyltransferases also accommodate a sugar analog with chemical handle at C2. Glycobiology. In press. (CCRNP)

Puri A and **Blumenthal R**: Polymeric lipid assemblies as novel theranostic tools. Acc. Chem. Res. In press. (CCRNP)

Yuan T, Li J, Zhang Y, Wang Y, Streaker E, **Dimitrov DS**, and Zhang M: Putative rhesus macaque germline predecessors of human broadly HIV-neutralizing antibodies: Differences from the human counterparts and implications HIV-1 vaccine development. Vaccine. 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.

Bahta M and **Burke Jr TR**: Oxime-based click chemistry in the development of 3-isoxazolecarboxylic acid containing inhibitors of *Yersinia pestis* protein tyrosine phosphatase, YopH. *Chem Med Chem.* 6: 1363-1370, 2011. (CBL)

Liu F, Park J-E, Qian W-J, Lim D, Graber M, Berg T, Yaffe MB, Lee KS, and **Burke Jr TR**: Serendipitous alkylation of a Plk1 ligand uncovers a new binding channel. *Nat. Chem Biol.* 7: 595-601, 2011. (CBL)

Radiation Oncology Branch - Kevin Camphausen, M.D.

Gulley JL, Madan RA, Tsang KY, Arlen PM, Camphausen K, Mohebtash M, Kamrava M, Schlom J, and Citrin D: A pilot safety trial investigating a vector-based vaccine targeting carcinoembryonic antigen in combination with radiotherapy in patients with gastrointestinal malignancies metastatic to the liver. *Expert Opin Biol Ther.* In press. (ROB)

Gordon IK and **Camphausen K**. Research highlights. *Biomark Med.* 5(4): 423-425, 2011. (ROB)

Urick ME, Chung EJ, Shield III WP, Gerber N, White A, Sowers A, Thetford A, **Camphausen K, Mitchell J, and Citrin DE**: Enhancement of 5-Fluorouracil-induced In Vitro and In Vivo Radiosensitization with MEK Inhibition. *Clin Cancer Res.* 17(15): 5038-5047, 2011. (ROB)

Zielinski R, Lyakhov I, Hassan M, Kuban M, Shafer-Weaver K, Gandjbakhche A, and **Capala J**: HER2-Affitoxin: A Potent Therapeutic Agent for the Treatment of HER2-Overexpressing Tumors. *Clin Cancer Res.* 17(15): 5071-5081, 2011. (ROB)

Seo DW, Saxinger WC, Guedez L, Cantelmo AR, Albini A, and **Stetler-Stevenson WG**: An integrin-binding N-terminal peptide region of TIMP-2 retains potent angio-inhibitory and anti-tumorigenic activity in vivo. *Peptides.* In press. (ROB)

Molecular Imaging Program - Peter Choyke, M.D.

There were no submissions reported this month.

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

Malinouski M, Kehr S, Finney L, Vogt S, Carlson BA, Seravalli J, Jin R, Handy DE, Park TJ, Loscalzo J, **Hatfield DL**, and Gladyshev VN: High-Resolution Imaging of Selenium in Kidneys: a Localized Selenium Pool Associated with Glutathione Peroxidase 3. *Antioxid Redox Signal.* In press. (LCP)

Lee KH, Shim MS, Kim JY, Jung HK, Lee E, Carlson BA, Xu XM, Park JM, **Hatfield DL**, Park T, and Lee BJ: Drosophila selenophosphate synthetase 1 regulates vitamin B6 metabolism: Prediction and confirmation. *BMC Genomics*. 12(1): 426, 2011. (LCP)

Popplewell WL, Ratnayake R, Wilson JA, **Beutler JA**, **Colburn NH**, Henrich CJ, **McMahon JB**, and McKee TC: Grassypeptolides F and G, Cyanobacterial Peptides from *Lyngbya majuscula*. *J Nat Prod*. In press. (LCP)

Carlson BA, Yoo MH, Conrad M, Gladyshev VN, **Hatfield DL**, and Park JM: Protein regulation expression and immune function of thioredoxin reductase 1 in mouse macrophages. *Mol. Immunol*. In press. (LCP)

Zhao LX, Huang SX, Tang SK, Jiang CL, Duan Y, **Beutler JA**, Henrich CJ, **McMahon JB**, Schmid T, Brees JS, **Colburn NH**, Rajsiki SR, and Shen B: Actinopolysporins A-C and Tubercidin as a Pcd4 Stabilizer from the Halophilic Actinomycete *Actinopolyspora erythraea* YIM 90600. *J Natl Prod*. In press. (LCP)

Yongguang T, Shuang L, Briones V, Geiman T, and **Muegge K**: Treatment of breast cancer cells with demethylating agents leads to a release of Pol II stalling at genes with hypermethylated regions upstream of TSS. *Nuc Acids Res*. 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.

There were no submissions reported this month.

Laboratory of Metabolism - Frank Gonzalez, Ph.D.

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*. 140: 2044-2055, 2011. (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)

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)

Baghdasaryan A, Claudel T, Gumhold J, Silbert D, Halsegger S, Adorini L, Roda A, **Gonzalez FJ**, Auwerx J, Fickert P, and Trauner M: FXR-mediated increase in HCO₃⁻ rich choleresis reduces liver injury in mouse model of chronic cholangiopathy. *Hepatology*. In press. (LM)

Zhang Y, Bonzo JA, **Gonzalez FJ** and Wang L: Diurnal regulation of Egr-1 expression by HNF4 α and SHP crosstalk in liver fibrosis. *J. Biol. Chem.* In press. (LM)

Li Y, Ramdhan DH, Naito H, Yamagishi N, Ito Y, Hayashi Y, Yanagiba Y, Okamura A, Tamada H, **Gonzalez FJ**, and Nakajima T: Ammonium perfluorooctanoate (APFO) may cause testosterone reduction by adversely affecting testis in relation to PPAR α . *Toxicol. Lett.* In press. (LM)

Jiang C, Qu A, Matsubara T, Chanturiya T, Jou W, Gavriloova O, Shah YM, and **Gonzalez FJ**: Disruption of hypoxia-inducible factor 1 in adipocytes improves insulin sensitivity and decreases adiposity in high-fat diet-fed mice. *Diabetes*. In press. (LM)

Borland MG, Khozoie C, Albrecht PP, Zhu B, Lee C, Lahoti TS, **Gonzalez FJ**, and Peters JM: Stable over-expression of PPAR β/δ and PPAR γ to examine receptor signaling in human HaCaT keratinocytes. *Cell. Signal.* In press. (LM)

Manna SK, Patterson AD, Yang Q, Krausz KW, Li H, Idle JR, Fornace Jr AJ, and **Gonzalez FJ**: Urine metabolomics reveals indole-3-lactic acid and phenyllactic acid as conserved biomarkers for alcohol-induced liver disease in the *Ppara*-null mouse model. *J. Proteom. Res.* In press. (LM)

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

Hearing VJ: Melanin synthetic pathways. *J. Invest Dermatol.* In press. (LCB)

Shen D-W and **Gottesman MM**: RAB8 Enhances TMEM205-Mediated Cisplatin Resistance. *Pharm Res.* 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.

Wiench M, John S, Baek S, Johnson TA, Sung MH, Escobar T, Simmons CA, Pearce KH, Biddie SC, Sabo PJ, Thurman RE, Stamatoyannopoulos JA, and **Hager GL**: DNA methylation status predicts cell-type-specific enhancer activity. *EMBO J.* 30: 3028-3039, 2011. (LRBGE)

Wiench M, Miranda T, and **Hager GL**: Control of nuclear receptor function by local chromatin structure. *FASEB J.* 278: 2211–2230, 2011. (LRBGE)

Biddie SC, John S, Sabo PJ, Thurman RE, Johnson TA, Schiltz RL, Miranda TB, Sung MH, Trump S, Lightman SL, **Vinson C**, Stamatoyannopoulos JA, and **Hager GL**: Transcription factor AP1 potentiates chromatin accessibility and glucocorticoid receptor binding. *Molecular Cell.* 43: 145-155, 2011. (LRBGE)

Scaffidi P and **Misteli T**: In vitro generation of human cells with cancer stem cell properties. *Nat Cell Biol.* In press. (LRBGE)

Kubben N, Voncken JW, Konings G, van Weeghel M, van den Hoogenhof MM, Gijbels M, van Erk A, Schoonderwoerd K, van den Bosch B, Dahlmans V, Calis C, Houten SM, **Misteli T**, and Pinto YM: Post-natal myogenic and adipogenic developmental: Defects and metabolic impairment upon loss of A-type lamins. *Nucleus.* 2(3): 195-207, 2011. (LRBGE)

Dittmer TA and **Misteli T**: The lamin protein family. *Genome Biol.* 12(5): 222, 2011. (LRBGE)

Luco RF and **Misteli T**: More than a splicing code: integrating the role of RNA, chromatin and non-coding RNA in alternative splicing regulation. *Curr Opin Genet Dev.* 21(4): 366-372, 2011. (LRBGE)

Rosenthal AS, Tanega C, Shen M, Mott BT, Bougie JM, Nguyen DT, **Misteli T**, Auld DS, Maloney DJ, and Thomas CJ: Potent and selective small molecule inhibitors of specific isoforms of Cdc2-like kinases (Clk) and dual specificity tyrosine-phosphorylation-regulated kinases (Dyrk). *Bioorg Med Chem Lett.* 21(10): 3152-3158, 2011. (LRBGE)

Stasevich TJ and **McNally JG**: Assembly of the transcription machinery: ordered and stable, random and dynamic, or both? *Chromosoma.* In press. (LRBGE)

Larson DR: What do expression dynamics tell us about the mechanism of transcription? *Curr. Opin Genet Dev.* In press. (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.

Dlamini JN, Hu Z, Ledwaba J, Morris L, **Maldarelli F**, Dewar RL, Highbarger HC, Somaroo H, Sangweni P, Follmann DA, and Pau AK: Genotypic resistance at viral rebound among patients who received lopinavir/ritonavir- or efavirenz-based first antiretroviral therapy in South Africa. *J. Acquir. Immune Defic. Syndr.* In press. (HVIB)

Josefsson L, King MS, Makitalo B, Brannstrom J, Shao W, **Maldarelli F**, Kearney M, **Hu W-S**, Chen J, Gaines H, Mellors JW, Albert J, Coffin JM, and Palmer SE: Majority of CD4+ T cells from peripheral blood of HIV-1-infected individuals contain only one HIV DNA molecule. *Proc. Natl. Acad. Sci. USA.* 108: 11199-11204, 2011. (HVIB)

Kearney M, Lee K, Bagni R, Wiegand A, Spindler J, **Maldarelli F**, **Pinto PA**, **Linehan WM**, Vocke CD, Delviks-Frankenberry K, deVere White R, Del Prete G, Mellors JW, Lifson JD, **KewalRamani V**, **Pathak V**, Coffin J, and **Le Grice SFJ**: Nucleic acid antibody, and virus culture methods to detect xenotropic MLV-related virus (XMRV) in macaque and human blood samples. *Adv. Virol.* In press. (HVIB)

Mens H, Kearney M, Wiegand A, Spindler J, **Maldarelli F**, and Mellors JM: Quantifying HIV-1 plasma RNA and sequencing single genomes in HIV infected individuals with viral loads below the limit of detection by standard clinical assays. *J. Visual Exp.* In press. (HVIB)

Palmer S, Boltz VF, Chow JY, Martinson NA, McIntyre JA, Gray GE, Hopley MJ, Mayers D, Robinson P, Hall DB, **Maldarelli F**, Coffin JM, and Mellors JW, for the 1100.1413 Trial Investigators: Short-course combivir after single dose nevirapine reduces but does not eliminate the emergence of nevirapine resistance in women. *Antiviral Ther.* In press. (HVIB)

Spindler J, Hackett Jr J, Qui X, Wiegand A, Rinaldo CR, Wolinsky SM, Coffin J, Kearney M, and Mellors JW: Prevalence of XMRV nucleic acid and antibody in HIV-1 infected men and in men at risk for HIV-1 infection. *Adv. Virol.* In press. (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* (A. Kozlov, Ed.), St. Petersburg, Russia. In press. (RRL)

Das K, Arnold E, and **Hughes SH**: HIV-1 reverse transcriptase structures. Lennarz WJ, and Lane MD (Eds.), In: *Encyclopedia of Biological Chemistry*, 2nd Edition, Elsevier. In press. (RRL)

Davis CA, Parniak MA, and **Hughes SH**: The effects of RNase H inhibitors and nevirapine on the susceptibility of HIV-1 to AZT and 3TC. *Virology.* 419: 64-71, 2011. (RRL)

Delviks-Frankenberry KA, Chaipan C, Bagni R, Wyvill K, **Yarchoan R**, and **Pathak VK**: Lack of detection of xenotropic murine leukemia virus-related virus in HIV-1 lymphoma patients. *Adv. Virology*. In press. (RRL)

Delviks-Frankenberry KA, Galli A, Nikolaitchik O, Mens H, **Pathak V**, and **Hu W-S**: Mechanisms and factors that influence high frequency retroviral recombination. *Viruses*. 3: 1650-1680, 2011. (RRL)

Dilley KA, Na N, Nikolaitchik OA, Chen J, Galli A, and **Hu W-S**: Determining the frequency and mechanisms of HIV-1 and HIV-2 RNA copackaging by single virion analysis. *J. Virol.* 85: 1650-1680, 2011. (RRL)

Dorjbal B, Derse D, Lloyd P, Soheilian F, Nagashima K, and Heidecker G: The role of ITCH in human T-cell leukemia virus type 1 release. *J. Biol. Chem.* 286: 31092-31104, 2011. (RRL; PI: **Hughes SH**)

Hare S, Smith SJ, Metifiot M, Jaxa-Chamiec A, **Pommier Y**, **Hughes SH**, and Cherepanov P: Structural and functional analyses of the second-generation integrase strand transfer inhibitor Dolutegravir (S/GSK1349572). *Mol. Pharmacol.* 80: 565-572, 2011. (RRL)

Joshi A, Garg H, Ablan SD, and **Freed EO**: Evidence of a role for soluble N-ethylmaleimide-sensitive factor attachment protein receptor (SNARE) machinery in HIV-1 assembly and release. *J. Biol. Chem.* 286: 29861-29871, 2011. (RRL)

Kim JA, Yang SY, Ramiro A, **McMahon JB**, **Le Grice SFJ**, **Beutler JA**, and Kim YH: New monoterpene glycosides and phenolic compounds from *Distylium racemosum* and their inhibitory activity against ribonuclease H. *Bioorg. Med. Chem. Lett.* 21: 2840-2844, 2011. (RRL)

Li Y, Ferris A, Lewis BC, Orsulic S, Williams BO, Holland EC, and **Hughes SH**: Genetically engineered mice for cancer research. In: *The RCAS/TVA Somatic Gene Transfer Method in Modeling Human Cancer*. Springer Publishing, New York, NY. In press. (RRL)

Metifiot M, Johnson B, Smith S, Zhao X, Marchand C, **Burke T**, **Hughes S**, and **Pommier Y**: MK-0536 inhibits HIV-1 integrases resistant to raltegravir. *Antimicrob. Agents Chemother.* In press. (RRL)

Ndongwe T, Adedeji A, Michailidis E, Ong Y-T, Hachiya A, Marchand B, Ryan E, Rai DK, Kirby KA, Liu S-L, Whatley A, Burke DH, Johnson M, Kodama E, Delviks-Frankenberry KA, **Pathak VK**, **Mitsuya H**, Parniak MA, Singh K, and Sarafianos SG: Biochemical, inhibition, and resistance studies of xenotropic murine leukemia virus-related virus reverse transcriptase. *Nucleic Acids Res.* In press. (RRL)

Ni N, Nikolaitchik OA, Dilley KA, Chen J, Galli A, Fu W, Prasad VVSP, Ptak RG, **Pathak VK**, and **Hu W-S**: Mechanisms of human immunodeficiency virus type 2 RNA packaging: Efficient trans packaging and selection of RNA copackaging partners. *J. Virol.* In press. (RRL)

Pak V, Heidecker G, **Pathak VK**, and Derse D: The role of amino-terminal sequences in cellular localization and anti-viral activity of APOBEC3B. *J. Virol.* 85: 8538-8547, 2011. (RRL)

Paprotka T, Delviks-Frankenberry KA, Cingöz O, Martinez A, Kung H-J., Tepper CG, **Hu W-S**, Fivash Jr MJ, Coffin JM, and **Pathak VK**: Recombinant origin of the retrovirus XMRV. *Science.* 333: 97-101, 2011. (RRL)

Rein A: Murine leukemia viruses: Objects and organisms. *Adv. Virol.* In press. (RRL)

Waheed AA and **Freed EO**: HIV-1 Gag as a target for antiviral therapy. *AIDS Res. Hum. Retrov.* In press. (RRL)

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

There were no submissions reported this month.

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

There were no submissions reported this month.

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

Asher KP, Gupta GN, Boris R, Pinto PA, **Linehan WM**, and Bratslavsky G: Robot-Assisted Laparoscopic Partial Adrenalectomy for Pheochromocytoma: The National Cancer Institute Technique. *Eur Urol.* In press. (UOB)

Barrisford GW, Singer EA, Rosner IL, **Linehan WM**, and Bratslavsky G: Familial Renal Cancer: Molecular Genetics and Surgical Management. *Int J Surg Oncol.* 658767: 1-11, 2011. (UOB)

Beck A, Venkatesan M, Wood B, and Bratslavsky G: Ablation of Small Renal Masses. In: *Comprehensive Textbook of Genitourinary Oncology.* (PT Scardino et al, Eds.). (Philadelphia: Lippincott Williams & Wilkins). Vol. 44F: 762-768, 2011. (UOB; PI: **Linehan WM**)

Benhammou JN, Vocke CD, Santani A, Schmidt LS, Baba M, Seyama K, Wu X, Korolevich S, Nathanson KL, Stolle CA, and **Linehan WM**: Identification of Intragenic Deletions and Duplication in the FLCN Gene in Birt-Hogg-Dube Syndrome. *Genes Chromosomes Cancer.* 50(6): 466-477, 2011. (UOB)

Boris R, Bratslavsky G, and Pinto PA: Robotic Partial Nephrectomy. In: Comprehensive Textbook of Genitourinary Oncology. (P T Scardino et al, Eds.). (Philadelphia PA: Lippincott Williams and Wilkins). Vol. 44E: 750-754, 2011. (UOB; PI: **Linehan WM**)

Boris RS, Benhammou J, **Merino M**, Pinto PA, **Linehan WM**, and Bratslavsky G: The Impact of Germline BHD Mutation on Histological Concordance and Clinical Treatment of Patients With Bilateral Renal Masses and Known Unilateral Oncocytoma. *J Urol.* 185(6): 2050-2055, 2011. (UOB)

Bratslavsky G, Sanford T, Srinivasan R, Aprelikova O, Liu J, Quezado M, **Merino M**, and **Linehan WM**: Differential Genetic Expression in Large Versus Small Clear Cell Renal Cell Carcinoma: Results From Microarray Analysis. *J Cancer.* 2: 271-279, 2011. (UOB)

Bratslavsky G, Pinto PA, and **Linehan WM**: Management of Inherited Forms of Renal Cancer. In: Comprehensive Textbook of Genitourinary Oncology. (P T Scardino et al, Eds.). (Philadelphia: Lippincott Williams & Wilkins). Vol. 44G: 762-768, 2011. (UOB)

Brooks S, **Linehan WM**, Srinivasan R, and **Kong HH**: Successful Laser Treatment of Vandetanib-Associated Cutaneous Pigmentation. *Archives Dermatol.* 147(3): 364-365, 2011. (UOB)

De Leon JT, Iwai A, Feau C, Garcia Y, Balsiger HA, Storer CL, Suro RM, Garza KM, Lee S, Kim YS, Chen Y, Ning YM, Riggs DL, Fletterick RJ, Guy RK, Trepel JB, **Neckers LM**, and Cox MB: Targeting the Regulation of Androgen Receptor Signaling by the Heat Shock 90 Cochaperone FKBP52 in Prostate Cancer Cells. *PNAS.* 6: 1-6, 2011. (UOB)

Eisenhofer G, Timmers HJ, Lenders JW, Bornstein SR, Tiebel O, Mannelli M, King KS, Vocke CD, **Linehan WM**, Bratslavsky G, and Pacak K: Age at Diagnosis of Pheochromocytoma Differs According to Catecholamine Phenotype and Tumor Location. *J Clin Endocrinol Metab.* 96(2): 375-384, 2011. (UOB)

Eisenhofer G, Pacak K, Huynh TT, Qin N, Bratslavsky G, **Linehan WM**, Mannelli M, Friberg P, Grebe SK, Timmers HJ, Bornstein SR, and Lenders JW: Catecholamine Metabolomic and Secretory Phenotypes in Pheochromocytoma. *Endocrine-related Cancer.* 18(1): 97-111, 2011. (UOB)

Fadahusi AT, Sanford T, **Linehan WM**, Pinto PA, and Bratslavsky G: Feasibility and Outcomes of Partial Nephrectomy for Resection of at Least 20 Tumors in a Single Renal Unit. *J Urol.* 185: 49-53, 2011. (UOB)

Filson CP, Miller DC, Colt JS, Ruterbusch J, **Linehan WM**, Chow WH, and Schwartz K: Surgical Approach and the Use of Lymphadenectomy and Adrenalectomy Among Patients Undergoing Radical Nephrectomy for Renal Cell Carcinoma. *Urol Oncol.* In press. (UOB)

Fonte JS, Breza J, **Linehan WM**, Bratslavsky G, and Pacak K: Diagnosis and Management of Pheochromocytoma. In: Comprehensive Textbook of Genitourinary Oncology. (P T Scardino et al, Eds.). (Philadelphia: Lippincott Williams & Wilkins). Vol. 51: 859-869, 2011. (UOB)

Grkovic T, Whitson EL, Rabe DC, Gardella RS, Bottaro DP, **Linehan WM**, **McMahon JB**, **Gustafson KR**, and McKee TC: Identification and Evaluation of Soft Coral Diterpenes As Inhibitors of HIF-2alpha Induced Gene Expression. *Bioorg Med Chem Lett.* 21(7): 2113-2115, 2011. (UOB)

Gupta GN, Boris R, Chung P, **Linehan WM**, Pinto PA, and Bratslavsky G: Robot-Assisted Laparoscopic Partial Nephrectomy for Tumors Greater Than 4 Cm and High Nephrometry Score: Feasibility, Renal Functional, and Oncological Outcomes With Minimum 1 Year Follow-Up. *Urol Oncol.* In press. (UOB)

Linehan WM and Schmidt LS: Molecular Biology of Kidney Cancer. In: Cancer: Principles and Practice of Oncology. (V T DeVita, T S Lawrence, and **SA Rosenberg**, Eds.). 9, Vol. 92. (Baltimore: Lippincott Williams & Wilkins). In press. (UOB)

Linehan WM, Yang JC, and Rini B: Cancer of the Kidney. In: Cancer: Principles and Practice of Oncology. (V T DeVita, T S Lawrence, and **SA Rosenberg**, Eds.). 9, Vol 40. (New Haven: Lippincott Williams & Wilkins). 1161-1182, 2011. (UOB)

Matts RL, Brandt GE, Lu Y, Dixit A, Mollapour M, Wang S, Donnelly AC, **Neckers L**, Verkhivker G, and Blagg BS: A Systematic Protocol for the Characterization of Hsp90 Modulators. *Bioorg Med Chem.* 19(1): 684-692, 2011. (UOB)

Mollapour M, Tsutsumi S, Kim YS, Trepel J, and **Neckers L**: Casein Kinase 2 Phosphorylation of Hsp90 Threonine 22 Modulates Chaperone Function and Drug Sensitivity. *Oncotarget.* 2(5): 407-417, 2011. (UOB)

Mollapour M, Tsutsumi S, Truman AW, Xu W, Vaughan CK, Beebe K, Konstantinova A, Vourganti S, Panaretou B, Piper PW, Trepel JB, Prodromou C, Pearl LH, and **Neckers L**: Threonine 22 Phosphorylation Attenuates Hsp90 Interaction With Cochaperones and Affects Its Chaperone Activity. *Mol Cell.* 41(6): 672-681, 2011. (UOB)

Prince T and **Neckers L**: A Network of Its Own: The Unique Interactome of the Hsp90 Cochaperone, Sba1/P23. *Mol Cell.* 43(2): 159-160, 2011. (UOB)

Rastinehad AR, Baccala Jr AA, Chung PH, Proano JM, Kruecker J, Xu S, Locklin JK, Turkbey B, Shih J, Bratslavsky G, **Linehan WM**, Glossop ND, Yan P, Kadoury S, **Choyke PL**, Wood BJ, and Pinto PA: D'Amico Risk Stratification Correlates With Degree of Suspicion of Prostate Cancer on Multiparametric Magnetic Resonance Imaging. *J Urol.* 185(3): 815-820, 2011. (UOB)

Sanford T, Chung PH, Reinish A, Valera V, Srinivasan R, **Linehan WM**, and Bratslavsky G: Molecular Sub-Classification of Renal Epithelial Tumors Using Meta-Analysis of Gene Expression Microarrays. PLoS ONE. 6(7): e21260, 2011. (UOB)

Shuch B, Pacak K, **Linehan WM**, and Bratslavsky G: Editorial Comment. J Urol. 185(5): 1589-1590, 2011. (UOB)

Shuch B, **Linehan WM**, and Bratslavsky G: Repeat Partial Nephrectomy: Surgical, Functional and Oncological Outcomes. Curr Opin Urol. 21(5): 368-375, 2011. (UOB)

Singer EA, Gupta GN, and Srinivasan R: Update on Targeted Therapies for Clear Cell Renal Cell Carcinoma. Curr Opin Oncol. 23(3): 283-289, 2011. (UOB; PI: **Linehan WM**)

Tong WH, Sourbier C, Kovtunovych G, Jeong SY, Vira M, Ghosh M, Valera VA, Sougrat R, Vaulont S, Viollet B, Kim YS, Lee S, Trepel J, Srinivasan R, Bratslavsky G, Yang Y, **Linehan WM**, and Rouault TA: The Glycolytic Shift in Fumarate-Hydratase-Deficient Kidney Cancer Lowers AMPK Levels, Increases Metabolic Propensities and Lowers Cellular Iron Levels. Cancer Cell. In press. (UOB)

Woldemichael GM, Turbyville TJ, **Linehan WM**, and **McMahon JB**: Carminomycin I Is an Apoptosis Inducer That Targets the Golgi Complex in Clear Cell Renal Carcinoma Cells. Cancer Res.71(1): 134-142, 2011. (UOB)

Athauda G and Bottaro DP: HGF (Hepatocyte Growth Factor). In: Atlas of Genetics and Cytogenetics in Oncology and Haematology. In press. (UOB; PI: **Linehan WM**)

Bratslavsky G: Argument in Favor of Performing Partial Nephrectomy for Tumors Greater Than 7cm: The Metastatic Prescription Has Already Been Written. Urol Oncol: Seminars and Original Investigations. In press. (UOB; PI: **Linehan WM**)

Bratslavsky G: Partial Nephrectomy for Tumors Greater Than 7cm: The Metastatic Prescription Has Already Been Written. J Clin Oncol. In press. (UOB; PI: **Linehan WM**)

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Rubin JS and Bottaro DP: Hepatocyte Growth Factor. *Nature*. In press. (UOB; PI: **Linehan WM**)

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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.

Mishra PK, Au WC, Choy JS, Kuich PH, Baker RE, Foltz DR, and **Basrai MA**: Misregulation of Scm3p/HJURP causes chromosome instability in *Saccharomyces cerevisiae* and human cells. *PLoS Genetics*. 7: e1002303, 2011. (GB)

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

Zhu M, Yi M, Kim CH, Deng C, Li Y, Medina D, Stephen R and **Green JE**: Integrated miRNA and mRNA expression profiling of mouse mammary tumor models identifies miRNA signatures associated with mammary tumor lineage. *Genome Biol*. 12(8): R77, 2011. (LCBG)

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Mascia F, Denning M, Kopan R and **Yuspa SH**: The Black-Box Illuminated: Signals and Signaling. *J Invest. Dermatol*. 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.

Arora M, Uzel G, Shea YR, Kleiner DE, Holland SM, and Heller T: GI involvement in disseminated Mycobacterium genavense: endoscopy and histology. *Gastrointest. Endosc.* 74: 688-690, 2011. (LP; PI: **Oberholtzer JC**)

Batchelor E and Lahav G: Suppressing variation in synthetic circuits. (News and Views). *Molec. Systems Biol.* 7: 520, 2011. (LP)

Davern TJ, Chalasani N, Fontana RJ, Hayashi PH, Protiva P, Kleiner DE, Engle RE, Nguyen H, Emerson SU, Purcell RH, Tillmann HL, Gu J, Serrano J, and Hoofnagle JH: Drug-Induced Liver Injury Network (DILIN). Acute hepatitis E infection accounts for some cases of suspected drug-induced liver injury. *Gastroenterology*. In press. (LP; PI: **Oberholtzer JC**)

Degheidy HA, Venzon DJ, Farooqui MZH, Abbasi F, Arthur DC, Wiestner A, Stetler-Stevenson M, and Marti GE: Methodological comparison of two anti-Zap-70 antibodies. *Clin. Cytometry*. In press. (LP; PI: **Oberholtzer JC**)

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Molleston JP, Fontana RJ, Lopez MJ, **Kleiner DE**, Gu J, Chalasani N; for the Drug-Induced Liver Injury Network: Characteristics of Idiosyncratic Drug-induced Liver Injury in Children: Results From the DILIN Prospective Study. *J. Pediatr. Gastroenterol. Nutr.* 53: 182-189, 2011. (LP)

Tembhare P, Yuan CM, Morris JCD, Janik JE, Filie AC, and Stetler-Stevenson M: Flow cytometric immunophenotypic assessment of T-cell clonality by V beta repertoire analysis in fine needle aspirates and cerebrospinal fluid. *Am. J. Clin. Pathol.* In press. (LP; PI: **Oberholtzer JC**)

Venkataraman G, Aguhar C, **Kreitman R**, Yuan CM, and Stetler-Stevenson M: Characteristic CD103 and CD123 expression pattern defines hairy cell leukemia: utility of CD123 and CD103 in diagnosis of mature B-cell lymphoproliferative disorders. *Am. J. Clin. Pathol.* 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.

Kelly RJ, Sharon E, and **Hassan R**: Chemotherapy and targeted therapies for unresectable malignant mesothelioma. *Lung Cancer*. 73: 256-263, 2011. (LMB)

Fei Z, Bera TK, Liu X, Xiang L, and **Pastan I**: Ankrd26 gene disruption enhances adipogenesis of mouse embryonic fibroblasts. *J. Biol. Chem.* 286: 27761-27768, 2011. (LMB)

Kreitman RJ, Arons E, Stetler-Stevenson M, **FitzGerald DJP**, **Wilson W**, and **Pastan I**: Recombinant immunotoxins and other therapies for relapsed/refractory HCL. *Leukemia and Lymphoma*. In press. (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.

Ebersole T, Kim JH, Samoshkin A, Kouprina N, Pavlicek A, White RJ, and **Larionov V**: tRNA genes protect a reporter gene from epigenetic silencing in mouse cells. *Cell Cycle*. In press. (LMP)

Huang SY, **Pommier Y**, and Marchand C: Tyrosyl-DNA phosphodiesterase I (Tdp1) inhibitors. *Expert Opin. Ther. Pat.* 21: 1285-1292, 2011. (LMP)

Kummar S, Chen A, Ji J, Zhang Y, Reid JM, Ames M, Jia L, Weil M, Speranza G, Murgo AJ, Kinders R, Wang L, Parchment RE, Carter J, Stotler H, Rubinstein L, Hollingshead M, Melillo G, **Pommier Y**, **Bonner W**, Tomaszewski JE, and **Doroshov JH**: Phase I study of PARP inhibitor ABT-888 in combination with topotecan in adults with refractory solid tumors and lymphomas. *Cancer Res.* In press. (LMP)

Martin MM, Ryan M, Kim R, Zakas AL, Fu H, Lin CM, Reinhold WC, Davis SR, Bilke S, Liu H, **Doroshov JH**, Reimers MA, Valenzuela MS, **Pommier Y**, **Meltzer PS**, and **Aladjem MI**: Genome-wide depletion of replication initiation events in highly transcribed regions. *Genome Res.* In press. (LMP)

Kiselev E, Deguire S, Morrell A, Agama K, Dexheimer TS, **Pommier Y**, and Cushman M: 7-Azaindenoisoquinolines as topoisomerase I inhibitors and potential anticancer agents. *J. Med. Chem.* In press. (LMP)

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. (LMP)

Speranza G, Gutierrez ME, Kummar S, Strong JM, Parker RJ, Collins J, Yu Y, Cao L, Murgu AJ, **Doroshov JH**, and Chen A: Phase I study of the synthetic triterpenoid, 2-cyano-3, 12-dioxolean-1, 9-dien-28-oic acid (CDDO), in advanced solid tumors. *Cancer Chemother. Pharmacol.* 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.

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.

There were no submissions reported this month.

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.

Alter G, Heckerman D, Schneidewind A, Fadda L, Kadie CM, Carlson JM, Oniangue-Ndza C, Martin M, Li B, Khakoo SI, **Carrington M**, Allen TM, and Altfeld M: HIV-1 adaptation to NK-cell-mediated immune pressure. *Nature.* 476: 96-100, 2011. (LEI)

Tarasov SG, Gaponenko V, Howard OM, Chen Y, **Oppenheim JJ**, Dyba MA, **Subramaniam S**, Lee Y, Michejda C, and Tarasova N: Structural plasticity of a transmembrane peptide allows self-assembly into biologically active nanoparticles. *PNAS*. 108: 9798-9803, 2011. (LEI)

Zhu Y, Michelle Luo T, Jobin C, and **Young HA**: Gut microbiota and probiotics in colon tumorigenesis. *Cancer Lett*. 309: 119-127, 2011. (LEI)

O'Connor GM, Yamada E, Rampersaud A, Thomas R, **Carrington M**, and **McVicar DW**: Analysis of binding of KIR3DS1*014 to HLA suggests distinct evolutionary history of KIR3DS1. *J. Immunol*. 187: 2162-2171, 2011. (LEI)

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Augusto DG, Zehnder-Alves L, Pincerati MR, Martin MP, **Carrington M**, and Petzl-Erler ML: Diversity of the KIR gene cluster in an urban Brazilian population. *Immunogenetics*. 64: 143-152, 2012. (LEI)

Kuniholm MH, Gao X, Xue X, Kovacs A, Anastos K, Marti D, Greenblatt RM, Cohen MH, Minkoff H, Gange SJ, Fazzari M, Young MA, Strickler HD, and **Carrington M**: Human leukocyte antigen (HLA) genotype and risk of HIV disease progression before and after initiation of antiretroviral therapy. *J. Virol*. 85: 10826-10833, 2011. (LEI)

Gui Y, Guo G, Huang Y, Hu X, Tang A, Gao S, Wu R, Chen C, Li X, Zhou L, He M, Li Z, Sun X, Jia W, Chen J, Yang S, Zhou F, Zhao X, Wan S, Ye R, Liang C, Liu Z, Huang P, Liu C, Jiang H, Wang Y, Zheng H, Sun L, Liu X, Jiang Z, Feng D, Chen J, Wu S, Zou J, Zhang Z, Yang R, Zhao J, Xu C, Yin W, Guan Z, Ye J, Zhang H, Li J, Kristiansen K, Nickerson ML, Theodorescu D, Li Y, Zhang X, Li S, Wang J, Yang H, Wang J, and Cai Z. Frequent mutations of chromatin remodeling genes in transitional cell carcinoma of the bladder. *Nat. Genet*. 43: 875-878, 2011. (LEI; PI: **Dean M**)

Sawitzke J, Im KM, Kostihina B, **Dean M**, and Gold B: Association assessment of copy number polymorphism and risk of age-related macular degeneration. *Ophthalmology*. 118: 2442-2446, 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.

There were no submissions reported this month.

Metabolism Branch - Thomas Waldmann, M.D.

Degheidy HA, Venzon DJ, Farooqui MZH, Abbasi F, Arthur DC, **Wilson W**, Wiestner A, Stetler-Stevenson M, and Marti GE: Improved ZAP-70 assay using two clones and multiple methods of analysis. Clin. Cytometry. In press. (MB)

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.

There were no submissions reported this month.

Basic Research Laboratory

There were no submissions reported this month.

Emeritus Scientists

There were no submissions reported this month.