CCR MANUSCRIPT NOTIFICATION (MAY 2010)

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.

Bindewald E, Kluth T, and **Shapiro BA**: CyloFold: Secondary structure prediction including pseudoknots. Nucleic Acids Res. 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.

Hobaika Z, Zargarian L, Maroun RG, Mauffret O, **Burke Jr TR**, and Fermandjian S: HIV-1 Integrase and virus and cell DNAs: Complex formation and perturbation by inhibitors of integration. Neurochem Res. 35: 888-893, 2010. (CBL)

Campbell CT, Zhang Y, and **Gildersleeve JC**: Construction and Use of glycan microarrays. Curr Protocols Chem Biol. 2: 37-53, 2010. (CBL)

Li Q, Anver MR, Li Z, Butcher DO, and **Gildersleeve JC**: GalNAca1-3Gal, a new prognostic marker for cervical cancer. Int J Cancer. 126: 459-468, 2010. (CBL)

Radiation Oncology Branch - Kevin Camphausen, M.D.

Bouchelouche K, Turkbey B, **Choyke PL**, and **Capala J**: Imaging prostate cancer: an update on positron emission tomography and magnetic resonance imaging. Curr Urol Rep. 11(3): 180-190, 2010. (ROB)

Molecular Imaging Program - Peter Choyke, M.D.

Gunay-Aygun M, Font-Montgomery E, Lukose L, Tuchman M, Graf J, Bryant JC, Kleta R, Garcia A, Edwards H, Piwnica-Worms K, Adams D, Bernardini I, Fischer RE, Krasnewich D, Oden N, Ling A, Quezado Z, Zak C, Daryanani KT, Turkbey B, **Choyke PL**, Guay-Woodford LM, and Gahl WA: Correlation of Kidney Function, Volume and Imaging Findings, and PKHD1 Mutations in 73 Patients with Autosomal Recessive Polycystic Kidney Disease. Clin J Am Soc Nephrol. In press. (MIP)

Rosenblum LT, Kosaka N, Mitsunaga M, **Choyke PL**, and **Kobayashi H**: In vivo molecular imaging using nanomaterials: General in vivo characteristics of nano-sized reagents and applications for cancer diagnosis (Review). Mol Membr Biol. In press. (MIP)

Verma S, Rajesh A, Fütterer JJ, Turkbey B, Scheenen TW, Pang Y, **Choyke PL**, and Kurhanewicz J: Prostate MRI and 3D MR Spectroscopy: How We Do It. AJR Am J Roentgenol. 194(6): 1414-1426, 2010. (MIP)

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

Santhanam AN, Baker AR, Hegamyer G, Kirschmann DA, and **Colburn NH:** Pdcd4 repression of lysyl oxidase inhibits hypoxia-induced breast cancer cell invasion. Oncogene. In press. (LCP)

Bobe G, Albert PS, Sansbury LB, Lanza E, Schatzkin A, **Colburn NH**, and Cross AJ: Interleukin-6 as a Potential Indicator for Prevention of High-Risk Adenoma Recurrence by Dietary Flavonols in the Polyp Prevention Trial. Cancer Prev. Res. (Phila Pa). In press. (LCP)

Duhagon MA, Hurte EM, Sotelo-Silveira JR, Zhang X, and **Farrar WL**: Genomic profiling of tumor initiating prostatospheres. BMC Genomics. 11(1): 324, 2010. (LCP)

Kim JY, Lee KH, Shim MS, Shin H, Xu XM, Carlson BA, **Hatfield DL**, and Lee BJ: Human selenophosphate synthetase 1 has five splice variants with unique interactions, subcellular localizations and expression patterns. Biochem. Biophys. Res. Commun. In press. (LCP)

Lee S, Miller M, Shuman JD, and **Johnson PF**: CCAAT/enhancer binding protein {beta} DNA binding is auto-inhibited by multiple elements that also mediate association with p300/CBP. J. Biol. Chem. In press. (LCP)

Li H, Ji M, Klarmann KD, and **Keller JR**: Repression of Id2 expression by Gfi-1 is required for B cell and myeloid development. Blood. In press. (LCP)

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

Bozdag S, Li A, Wuchty S, and **Fine HA**: FastMEDUSA: A Parallelized Tool to Infer Gene Regulatory Networks. Bioinformatics. In press. (NOB)

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

Gao R, Price DK, **Dahut WL**, Steinberg SM, Reed E, and **Figg WD**: Genetic Polymorphisms in XRCC1 associated with Radiation Therapy in Prostate Cancer. Cancer Biol. Ther. In press. (MOB)

Pressler H and **Figg WD**: Androgen Synthesis and Steroid Transporters in Prostate Cancer: Rethinking the Transition to CRPC. Cancer Biol. Ther. In press. (MOB)

Laboratory of Metabolism - Frank Gonzalez, Ph.D.

There were no submissions reported this month.

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

Effantin G, Ishikawa T, De Donatis GM, **Maurizi MR**, and Steven AC: Local and global mobility in the ClpA AAA+ chaperone detected by cryo-electron microscopy: functional connotations. Structure. 18: 553-562, 2010. (LCB)

Effantin G, **Maurizi MR**, and Steven AC: Binding of the ClpA unfoldase opens the axial gate of ClpP peptidase. J. Biol. Chem. 285: 14834-14840, 2010. (LCB)

Kumar A, Shukla S, Mandal A, Shukls S, **Ambudkar SV**, and Prasad R: Divergent signature motifs of nucleotide-binding domains of ABC multidrug transporter, CaCdr1p of pathogenic Candida albicans, are functionally asymmetric and non interchangeable. Biochim. Biophys. Acta. In press. (LCB)

Shukla S, Ohnuma S, and **Ambudkar SV**: Improving cancer chemotherapy with modulators of ABC drug transporters. Curr. Drug Targets. In press. (LCB)

Tam J, Vemuri VK, Liu J, Batkai S, Mukhopadhay B, Godlewski G, Osei-Hyiaman D, Ohnuma S, **Ambudkar SV**, Pickel J, Makriyannis A, and Kunos G: Peripheral CB1 cannabinoid receptor blockade improves cadiometabolite risk in mouse models of obesity. J. Clin. Invest. 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.

Zheng Y, John S, Pesavento JJ, Schultz-Norton JR, Schiltz RL, Baek S, Nardulli AM, **Hager GL,** Kelleher NL, and Mizzen CA: Histone H1 phosphorylation is associated with transcription by RNA Polymerases I and II. J. Cell Biol. 189: 407-415, 2010. (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.

Jordan MR, **Kearney M**, Palmer S, Shao W, **Maldarelli F**, Coakley EP, Chappey C, Wanke C, and Coffin JM: Comparison of standard PCR/cloning to single genome sequencing for analysis of HIV-1 populations. J. Virol. Methods. In press. (HVIB)

Retroviral Replication Laboratory - Stephen Hughes, Ph.D.

Galli A, **Kearney M**, Nikolaitchik OA, Yu S, Chin MPS, **Maldarelli F**, Coffin JM, **Pathak VK**, and **Hu W-S**: Patterns of human immunodeficiency virus type 1 recombination ex vivo provide evidence for coadaptation of distant sites resulting in purifying selection for intersubtype recombinants during replication. J. Virol. 84: 7651-7661, 2010. (RRL)

Ilinskaya A, Heidecker G, and **Derse D**: Opposing effects of a tyrosine-based sorting motif and a Pdz-binding motif regulate HTLV-1 envelope trafficking. J. Virol. 84: 6995-7004, 2010. (RRL; PI: **Hughes SH**)

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

Aimola P, Carmignani M, Di Benedetto M, Claudio L, Waalkes MP, van Bokhoven A, Tokar EJ, and Claudio PP: Cadmium induces p53-dependent apoptosis in human prostate epithelial cell lines. Cell Death Differ. In press. (LCC; PI: **Keefer LK**)

Biswas D, Citro ML, Deschamps JR, **Keefer LK**, and Hrabie JA: Nitrogen-bound diazeniumdiolated amidines. Chem Comm. In press. (LCC)

Liu W, Zabirnyk O, Wang H, Shiao Y-H, Nickerson ML, **Anderson LM**, **Perantoni AO**, and **Phang JM**: MicroRNA-23b* targets proline oxidase, a mitochondrial tumor suppressor protein in renal cancer. Oncogene. In press. (LCC)

Tokar EJ, Qu W, Liu J, Liu W, Webber MM, **Phang JM**, and Waalkes MP: Arsenic-specific stem cell selection during malignant transformation. J. Natl. Cancer Inst. 102: 638-649, 2010. (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

There were no submissions reported this month.

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.

Lodish M, Adams K, Huynh T, Prodanov T, Ling A, Chen C, Shusterman S, Jimenez C, **Merino MJ**, Hughes M, Cradic K, Singh R, Milosevic D, Stratakis C, and Pacak K: Succinate dehydrogenase gene mutations are strongly associated with paraganglioma of the organ of Zuckerkandl. Endocr. Relat. Cancer. In press. (LP)

Lodish MB, Gartner LA, Albni P, Sabnis G, Brodie A, Meck JM, Meloni-Ehrig AM, Hill S, Tsilou E, Valera VA, Walter BA, **Merino MJ**, and Stratakis CA: Intrauterine growth retardation associated with precocious puberty and Sertoli cell hyperplasia. Horm. Metabl. Res. In press. (LP)

Mani H, Climent F, Colomo L, **Pittaluga S**, **Raffeld M**, and **Jaffe ES**: Gall bladder and extrahepatic bile duct lymphomas: clinicopathological observations and biological implications. Am. J. Surg. Pathol. In press. (LP)

Wang L, Abbasi F, Jasper GA, **Kreitman RJ**, Liewehr D, Marti GE, and **Stetler-Stevenson M**: Variables in the quantification of CD4 in normals and hairy cell leukemia patients. Clin. Cytomet. In press. (LP)

Wayne AS, **Kreitman RJ**, Findley HW, Lew G, Delbrook C, Steinberg SM, **Stetler-Stevenson M**, **FitzGerald DJ**, and **Pastan I**: Anti-CD22 immunotoxin RFB4(dsFv)-PE38 (BL22) for CD22-positive hematologic malignancies of childhood: Preclinical studies and phase I clinical trial. Clin. Cancer Res. 16: 1894-1903, 2010. (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.

Ramamurthi KS and Huang KC: Macromolecules that prefer their membranes curvy. Mol. Microbiol. 76: 822-832, 2010. (LMB)

Cancer & Developmental Biology Lab. - Alan Perantoni, Ph.D.

There were no submissions reported this month.

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

Tang J, Maddali K, **Pommier Y**, Sham YY, and Wang Z: Scaffold rearrangement of dihydroxypyrimidine inhibitors of HIV integrase: docking model revisited. Bioorg. Med. Chem. Lett. 20: 3275-3279, 2010. (LMP)

Liu H, D'Andrade P, Fulmer-Smentek S, Lorenzi P, **Kohn KW**, Weinstein JN, **Pommier Y**, and Reinhold WC: mRNA and microRNA expression profiles of the NCI-60 integrated with drug activities. Mol. Cancer Ther. 9: 1080-1091, 2010. (LMP)

Irving-Rodgers HF, Hummitzsch K, Murdiyarso LS, **Bonner WM**, Sado Y, Ninomiya Y, Couchman JR, Sorokin LM, and Rodgers RJ: Dynamics of extracellular matrix in ovarian follicles and corpora lutea of mice. Cell Tissue Res. 339: 613-624, 2010. (LMP)

DePamphilis ML and **Aladjem MI**: Eukaryotic replication origins and initiation of DNA replication. John Wiley & Sons Ltd. (Ed.). In: Encyclopedia of Life Sciences (ELS). In press. (LMP)

Conti C, Leo E, Eichler GS, Sordet O, Martin MM, Fan A, **Aladjem MI**, and **Pommier Y**: Inhibition of histone deacetylase in cancer cells slows down replication forks, activates dormant origins and induces DNA damage. Cancer Res. In press. (LMP)

Ehler M, Rajapakse V, Zeeberg B, Brooks B, Brown J, Czaja W, and Bonner R: Analysis of temporal-spatial co-variation within gene expression microarray data in an organogenesis model. ISBRA. In press. (LMP; PI: **Pommier Y**)

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)

Visvader J and **Smith GH**: Murine Mammary Epithelial Stem Cells: Discovery, Function, and Current Status. Cold Spring Harbor Perspect Biol. In press. (MBTL)

Watanabe K, Meyer M, Strizzi L, Gonzales M, Bianco C, Nagaoka T, Farid SS, Margaryan N, Hendrix MJ, **Vonderhaar BK**, and **Salomon DS**: Cripto-1 is a cell-surface marker for a tumorigenic, undifferentiated population in human embryonal carcinoma cells. Stem Cells. In press. (MBTL)

Bianco C, Rangel MC, Castro NP, Nagaoka T, Rollman K, Gonzales M and **Salomon DS**: Role of Cripto-1 in stem cell maintenance and malignant progression. American Journal of Pathology. In press. (MBTL)

Castro NP, Rangel MC, Nagaoka T, **Salomon DS**, and Bianco C: Cripto-1: an embryonic gene that promotes tumorigenesis. Future Medicine. In press. (MBTL)

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

Barda-Saad M, Shirasu N, Pauker MH, Hasan N, Perl O, Balbo A, Yamaguchi H, Houtman JCD, **Appella E**, Schuck P, and **Samelson LE**: Cooperative interactions at the SLP-76 complex are critical for actin polymerization. EMBO J. In press. (LCMB)

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.

There were no submissions reported this month.

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.

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.

There were no submissions reported this month.

Basic Research Laboratory

There were no submissions reported this month.

Emeritus Scientists

Barbara Vonderhaar

Meyer MJ, Fleming JM, Ali MA, Pesesky M, Ginsburg E, and **Vonderhaar BK**: Dynamic regulation of CD24 and the invasive, CD44posCD24neg phenotype in breast cancer cell lines. Breast Cancer Res. 11: R82, 2009. (MBTL)

Faupel-Badger JM, Ginsburg E, Fleming JM, Susser L, Doucet T, and **Vonderhaar BK**: 16 kDa prolactin reduces angiogenesis, but not growth of human breast cancer tumors in vivo. Hormones and Cancer. In press. (MBTL)

Meyer MJ, Fleming JM, Lin AF, Hussnain SA, Ginsburg E and **Vonderhaar BK**: CD44posCD49fhiCD133/2hi defines xenograft-initiating cells in estrogen receptor negative breast cancer. Cancer Res. In press. (MBTL)

Fleming J, Miller T, Meyer MJ, Ginsburg E and **Vonderhaar BK**: Local microenvironmental regulation of human breast xenograft models. J. Cell. Phys. In press. (MTBL)

Fleming JM, Miller TC, Quinones M, Xiao Z, Xu X, Meyer MJ, Ginsburg E, Veenstra TD and **Vonderhaar BK**: The normal breast microenvironment of pre-menopausal women differentially influences the behavior of breast cancer cells in vitro and in vivo. BMC Medicine. In press. (MBTL)

SAIC Frederick

AIDS and Cancer Virus Program - Jeffrey Lifson, M.D.

There were no submissions reported this month.