

CCR MANUSCRIPT NOTIFICATION (AUGUST 2012)

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

There were no submissions reported this month.

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

Demberg T and **Robert-Guroff M**: Controlling the HIV/AIDS epidemic: current status and global challenges. *Front. Immunol.* 3: 250, 2012. (VB)

Demberg T, Brocca-Cofano E, Xiao P, Venzon D, Vargas-Inchaustegui D, Lee EM, Kalisz I, Kalyanaraman VS, DiPasquale J, McKinnon K, and **Robert-Guroff M**: Dynamics of memory B-cell populations in blood, lymph node and bone marrow during antiretroviral therapy and envelope boosting in SIVmac251-infected rhesus macaques. *J. Virol.* In press. (VB)

CCR Nanobiology Program - Robert Blumenthal, Ph.D.

Ying T, Chen W, Gong R, Feng Y, and **Dimitrov DS**: Soluble monomeric IgG1 Fc. *J. Biol. Chem.* 287(23): 19399-19408, 2012. (CCRNP)

Afonin K, Kireeva M, Grabow W, **Kashlev M**, Jaeger L, and **Shapiro BA**: Co-transcriptional assembly of chemically modified RNA nanoparticles functionalized with siRNA. *Nano Letters.* In press. (CCRNP)

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

There were no submissions reported this month.

Radiation Oncology Branch - Kevin Camphausen, M.D.

There were no submissions reported this month.

Molecular Imaging Program - Peter Choyke, M.D.

Turkbey B, Mani H, Aras O, Rastinehad AR, Shah V, Bernardo M, Pohida T, Daar D, Benjamin C, McKinney YL, **Linehan WM**, Wood BJ, **Merino MJ**, **Choyke PL**, and **Pinto PA**: Correlation of Magnetic Resonance Imaging Tumor Volume with Histopathology. *J Urol.* In press. (MIP)

Mitsunaga M, Nakajima T, Sano K, Kramer-Marek G, **Choyke PL**, and Kobayashi H: Immediate in vivo target-specific cancer cell death after near infrared photoimmunotherapy. *BMC Cancer*. 12(1): 345, 2012. (MIP)

Kramer-Marek G, Longmire MR, **Choyke PL**, and Kobayashi H: Recent advances in optical cancer imaging of EGF receptors. *Curr Med Chem*. In press. (MIP)

Shah V, Turkbey B, Mani H, Pang Y, Pohida T, **Merino MJ, Pinto PA, Choyke PL**, and Bernardo M: Decision support system for localizing prostate cancer based on multiparametric magnetic resonance imaging. *Med Phys*. 39(7): 4093-4103, 2012. (MIP)

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

There were no submissions reported this month.

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

There were no submissions reported this month.

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

Bates SE: Pancreatic cancer: steps in the right direction. *Clin Cancer Res*. 18(16): 4248, 2012. (MOB)

Komiya T, Thomas A, Khozin S, Rajan A, Wang Y, and **Giaccone G:** Response to Crizotinib in ROS1-Rearranged Non-Small-Cell Lung Cancer. *J Clin Oncol*. In press. (MOB)

Kelly RJ, Carter CA, and **Giaccone G:** HER2 Mutations in Non-Small-Cell Lung Cancer Can Be Continually Targeted. *J Clin Oncol*. In press. (MOB)

Duffy A, Rahma O, and **Greten T:** Letter re: "Prognostic value of cetuximab-related skin toxicity in metastatic colorectal cancer patients and its correlation with parameters of the epidermal growth factor receptor signal transduction pathway: Results from a randomized trial of the GERMAN AIO CRC Study Group.". *Int J Cancer*. In press. (MOB)

Tamburrino A, Molinolo AA, Salerno P, Chernock RD, Raffeld M, Xi L, Gutkind JS, Moley JF, Wells Jr SA, and Santoro M: Activation of the mTOR pathway in primary medullary thyroid carcinoma and lymph node metastases. *Clin Cancer Res*. 18(13): 3532-3540, 2012. (MOB; PI: **Giaccone G**)

Laboratory of Metabolism - Frank Gonzalez, Ph.D.

Li F, Patterson AD, Krausz KW, Dick B, Frey FJ, **Gonzalez FJ**, and Ilde JR: Metabolomics reveals the metabolic map of procainamide in humans and mice. *Biochem. Pharmacol.* 83: 1435-1444, 2012. (LM)

Xue X, Taylor M, Anderson E, Hao C, Qu A, Greenson JK, Zimmermann E, **Gonzalez FJ**, and Shah YM: Hypoxia-inducible factor-2 α activation promotes colorectal cancer progression through dysregulation of tumor iron homeostasis. *Cancer Res.* 72: 2285-2293, 2012. (LM)

Kimura T, Nakajima T, Kamijo Y, Tanaka N, Wang L, Hara A, Sugiyama E, Tanaka E, **Gonzalez FJ**, and Aoyama T: Hepatic cerebroside sulfotransferase is induced by PPAR α activation in mice. *PPAR Res.* 174932, 2012. (LM)

Zhu B, Khozoie C, Bility MT, Blazanin N, Glick AB, **Gonzalez FJ**, and Peters JM: PPAR β/δ inhibits *Hras*-induced neoplastic transformation by crosstalk with E2F and attenuation of mitosis. *Molec. Cell. Biol.* 32: 2065-2082, 2012. (LM)

Safdar H, Cheung KL, Vos HL, **Gonzalez FJ**, Reitsma PH, Inoue Y, and van Vlijmen BJM: Modulation of mouse coagulation gene transcription following acute *in vivo* delivery of synthetic small interfering RNAs targeting HNF4 α and C/EBP α . *PLoS One.* 7(6): e38104, 2012. (LM)

Ito Y, Nakamura T, Yanagiba Y, Ramdhan DH, Yamagishi N, Naito H, Kamijima M, **Gonzalez FJ**, and Nakajima T: Plasticizers may activate human peroxisome proliferator-activated receptor α less than that of a mouse but may activate constitutive androstane receptor. *PPAR Res.* 201284, 2012. (LM)

Stokes RA, Cheng K, Deters N, Lau SM, Hawthorne WJ, O'Connell PJ, Stolp J, Grey S, Loudovaris T, Kay TW, Thomas HE, **Gonzalez FJ**, and Gunton JE: Hypoxia-inducible factor (HIF)-1 α potentiates β -cell survival after islet transplantation of human and mouse islets. *Cell Transpl.* In press. (LM)

D fer M, Hörth K, Wagner R, Schittenhelm B, Prowald S, Wagner J, Oberwinkler J, Lukowski R, **Gonzalez FJ**, Krippeit-Drews P, and Drews G: Bile acids acutely stimulate insulin secretion of mouse Beta-cells via farnesoid X receptor activation and ATP-sensitive potassium channel inhibition. *Diabetes.* In press. (LM)

Skelhorne-Gross G, Reid AL, Apostoli AJ, Di Lena MA, Rubino RE, Peterson NT, Schneider M, Sengupta SK, **Gonzalez FJ**, and Nicol CJ: Stromal adipocyte PPAR γ protects against breast tumorigenesis. *Carcinogenesis.* 33: 1412-1420, 2012. (LM)

Sarkar K, Cai Z, Gupta R, Parajuli N, Fox-Talbot K, Darshan MS, **Gonzalez FJ**, and Semenza GL: HIF-1 transcriptional activity in endothelial cells is required for acute phase cardioprotection induced by ischemic Preconditioning. *Proc. Natl. Acad. Sci. USA.* 109: 10504-10509, 2012. (LM)

Sato Y, Hatta M, Karim MF, Sawa T, Wei FY, Sato S, Magnuson MA, **Gonzalez FJ**, Tomizawa K, Akaike T, Yoshizawa T, and Yamagata K: Anks4b, a novel target of HNF4alpha interacts with GRP78 and regulates endoplasmic reticulum stress-induced apoptosis in MIN6 beta-cells. *J. Biol. Chem.* 287: 23236-23245, 2012. (LM)

Zhang Y, Li F, Patterson AD, Wang Y, Krausz KR, Neale G, Thomas S, Nachagari D, Vogel P, Vore M, **Gonzalez FJ**, and Schuetz JD: Abcb11 deficiency induces cholestasis coupled to impaired β -fatty acid oxidation in mice. *J. Biol. Chem.* 287: 24784-24794, 2012. (LM)

Abdelmegeed MA, Banerjee A, Yoo SH, Jang S, **Gonzalez FJ**, and Song BJ: CYP2E1 potentiates high fat-induced nonalcoholic hepatosteatosis. *J. Hepatology.* In press. (LM)

Fang Z, Krausz KW, Li F, Cheng J, Tanaka N, and **Gonzalez FJ**: Metabolic map and bioactivation of the anti-tumor drug noscipine. *Brit. J. Pharmacol.* In press. (LM)

Li F, Patterson AD, Krausz KW, Tanaka N, and **Gonzalez FJ**: Metabolomics reveals a critical role for peroxisome proliferator-activated receptor α (PPAR α) in bile acid homeostasis. *J. Lipid Res.* In press. (LM)

Cheng J, Krausz KW, Tanaka N, and **Gonzalez FJ**: Chronic exposure to rifaximin causes hepatic steatosis in pregnane X receptor-humanized mice. *Toxicol. Sci.* In press. (LM)

Johnson CH, Slanař O, Krausz KW, Kang DW, Patterson AD, Kim JH, Luecke H, **Gonzalez FJ**, and Idle JR: Novel metabolites and roles for alpha-tocopherol in humans and mice discovered by mass spectrometry-based metabolomics. *Amer. J. Clin. Nutr.* In press. (LM)

Mejía-García A, Sánchez-Ocampo EM, Galindo-Gómez S, Shibayama M, Reyes-Hernández OD, Guzmán-León S, **Gonzalez FJ**, and Elizondo G: 2,3,7,8-Tetrachlorodibenzo-p-dioxin enhances CCl₄-induced hepatotoxicity in an aryl hydrocarbon receptor -dependent manner. *Xenobiotica.* In press. (LM)

Jana M, Mondal S, **Gonzalez FJ**, and Pahan K: Gemfibrozil, a lipid-lowering drug, increases myelin genes in human oligodendrocytes via PPARbeta. *J. Biol. Chem.* In press. (LM)

Cheng J, Shah YM, and **Gonzalez FJ**: Pregnane X receptor as a target for treatment of inflammatory bowel disorders. *Trends Pharmacol. Sci.* 33: 323-330, 2012. (LM)

Johnson CH and **Gonzalez FJ**: Challenges and opportunities of metabolomics. *J. Cell. Physiol.* 227: 2975-2981, 2012. (LM)

Li F, **Gonzalez FJ**, and Ma X: LC–MS-based metabolomics in profiling of drug metabolism and bioactivation. *Acta Pharmaceut. Sinica B.* 2: 118-125, 2012. (LM)

Matsubara T, Li F, and **Gonzalez FJ**: FXR signaling in the enterohepatic system. *Molec. Cell. Endocrinol.* In press. (LM)

Gonzalez FJ: Nuclear receptor control of enterohepatic circulation. *Comp. Physiol.* In press. (LM)

Masaoka A, Gassman NR, Kedar PS, Prasad R, Hou EW, Horton JK, **Bustin M**, and Wilson SH: HMG1N1 regulates PARP-1 self-PARYlation in mouse fibroblasts. *J. Biol. Chem.* 287: 27648-27658, 2012. (LM)

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

Macvanin M, Edgar R, Cui F, Trostel A, **Zhurkin V**, and **Adhya S**: Non-coding RNAs binding to the nucleoid protein HU in *Escherichia coli*. *J. Bacteriol.* In press. (LCB)

Pouliot LM, Chen Y-C, Bai J, Guha R, Martin SE, **Gottesman MM**, and Hall MD: Cisplatin sensitivity mediated by WEE1 and CHK1 is mediated by miR-155 and the miR-15 family. *Cancer Res.* In press. (LCB)

Yoo TS, Bliss D, Lowekamp BC, Chen DT, Muphy GE, Narayan K, Hartnell LM, Do T, and **Subramaniam S**: Visualizing cells and humans in 3D: Biomedical image analysis at nanometer and meter scales. *IEEE Comput Graph.* In press. (LCB)

Experimental Transplantation and Immunology Branch - Ronald Gress, M.D.

There were no submissions reported this month.

Laboratory of Biochemistry and Molecular Biology – Shiv Grewal, Ph.D.

There were no submissions reported this month.

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

Burgess RC, **Misteli T**, and **Oberdoerffer P**: Chromatin, DNA Repair and Transcription: The trinity of aging. *Curr. Opin. Cell Biol.* In press. (LRBGE)

Kubben N, Adriaens M, Meuleman W, Voncken JV, van Steensel B, and **Misteli T**: Mapping of lamin A and progerin-interacting genome regions. *Chromosoma.* In press. (LRBGE)

Nandy K, Gudla PR, Amundsen R, Meaburn KJ, **Misteli T**, and Lockett SJ: Automatic segmentation and supervised learning-based selection of nuclei in cancer tissue images. *Cytometry A*. 81(9): 743-754, 2012. (LRBGE)

Hurley A, Smith M, Karpova T, Hasley RB, Belkina N, **Shaw S**, Balenga N, Druey KM, Nickel E, Packard B, Imamichi H, Hu Z, Follmann D, **McNally J**, Higgins J, Sneller M, Lane HC, and Catalfamo M: Enhanced effector function of CD8 T cells from healthy controls and HIV infected patients occurs through thrombin activation of the Protease-activated receptor-1. *J. Infectious Diseases*. 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.

Deeks SG, Autran B, Berkhout B, Benkirane M, Cairns S, Chomont N, Chun TW, Churchill M, Mascio MD, Katlama C, Lefeuille A, Landay A, Lederman M, Lewin SR, **Maldarelli F**, Margolis D, Markowitz M, Martinez-Picado J, Mullins JI, Mellors J, Moreno S, O'Doherty U, Palmer S, Penicaud MC, Peterlin M, Poli G, Routy JP, Rouzioux C, Silvestri G, Stevenson M, Telenti A, Lint CV, Verdin E, Woolfrey A, Zaia J, and Barré-Sinoussi F for the International AIDS Society Scientific Working Group on HIV Cure: Towards an HIV cure: A global scientific strategy. *Nat. Rev. Immunol.* 12: 607-614, 2012. (HVIB)

Retroviral Replication Laboratory - Stephen Hughes, Ph.D.

Lusvarghi S, Sztuba-Solinska J, Purzycka K, Rausch J, and **Le Grice SFJ**: RNA secondary structure prediction using high-throughput SHAPE. *Journal of Video Education*. In press. (RRL)

Miller J and **Le Grice SFJ**: Reverse transcriptase-catalyzed HIV-1 DNA synthesis. In: *Encyclopedia of AIDS*, Springer Publishing, in press. (RRL)

Endocrine Oncology Branch – Electron Kebebew, M.D.

Hodin R, Angelos P, Carty S, Chen H, Clark O, Doherty G, Duh QY, Evans DB, Heller K, Inabnet W, **Kebebew E**, Pasiaka J, Perrier N, and Sturgeon C: No need to abandon unilateral parathyroid surgery. *J Am Coll Surg*. 215(2): 297, 2012. (EOB)

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.

Molecular Targets Laboratory - James McMahon, Ph.D.

There were no submissions reported this month.

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

Novak RL, Harper DP, Caudell D, Slape C, Beachy SH, and **Aplan PD**: Gene expression profiling and candidate gene re-sequencing identifies pathways and mutations important for malignant transformation caused by leukemogenic fusion genes. *Exp Hematol*. In press. (GB)

Slape CI, Saw J, Jowett JB, **Aplan PD**, Strasser A, Jane SM, and Curtis DJ: Inhibition of apoptosis by BCL2 prevents leukemic transformation of a murine myelodysplastic syndrome. *Blood*. In press. (GB)

Beachy SH, Onozawa M, Chung YJ, Slape C, Bilke S, Francis P, Pineda M, Walker RL, **Meltzer P**, and **Aplan PD**: Enforced expression of Lin28b leads to impaired T-cell development, release of inflammatory cytokines, and peripheral T-cell lymphoma. *Blood*. 120(5): 1048-1059, 2012. (GB)

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

Yang L and **Merlino G**: Well MET: Exosomes promote metastasis through transfer of MET from melanomas to bone marrow progenitors. *Pigment Cell & Melanoma Res*. In press. (LCBG)

Faraji F, Pang Y, Walker RC, Borges RN, Li Y, and **Hunter KW**: Cadm1 is a metastasis susceptibility gene that suppresses metastasis by modifying tumor interaction with the cell-mediated immunity. *PLoS Genetics*. In press. (LCBG)

Lao H-C, Akunda JK, Chun K-S, **Yuspa SH**, and Langenbach R: Cyclooxygenase-2 deficiency in v-H-ras transformed keratinocytes reduces tumor development. *Carcinogenesis*. 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 Genomic Integrity – Andre Nussenzweig, Ph.D.

There were no submissions reported this month.

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

Rogers NM, Yao M, Novelli EM, Thomson A, **Roberts DD**, and Isenberg JS: Activated CD47 regulates multiple vascular and stress responses: implications for acute kidney injury. *Am. J. Physiol. Renal Physiol.* In press. (LP)

Soto-Pantoja DR, Miller TW, Frazie WA, and **Roberts DD**: Inhibitory signaling through signal regulatory protein-? is not sufficient to explain the anti-tumor activities of CD47 antibodies. *Proc. Natl. Acad. Sci. USA.* In press. (LP)

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

Basker S, Wiestner A, **Wilson WH**, **Pastan I**, and Rader C: Targeting malignant B cells with an immunotoxin against ROR1. *MAbs.* 4: 349-361, 2012. (LMB)

Battesti A, Tsegayem YM, Packer DG, Majdalani N, and **Gottesman S**: H-NS regulation of IraD and IraM antiadaptors for control of RpoS degradation. *J. Bacteriol.* 194: 2470-2478, 2012. (LMB)

Liu W, Onda M, **Lee B**, **Kreitman RJ**, **Hassan R**, Xiang L, and **Pastan I**: Recombinant immunotoxin engineered for low immunogenicity and antigenicity by identifying and silencing human B-cell epitopes. *Proc. Natl. Acad. Sci. USA.* 109: 11782-11787, 2012. (LMB)

Ma J, Tang WK, Esser L, **Pastan I**, and **Xia D**: Characterization of crystals of an antibody-recognition fragment of the cancer differentiation antigen mesothelin in complex with the therapeutic antibody MORAb-009. *Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun.* 68: 950-953, 2012. (LMB)

Wang S, Shin IS, Hancock H, Jang BS, Kim HS, Zderic V, Frendel V, **Pastan I**, Paik CH, and Dreher MR: Pulsed high intensity focused ultrasound increases penetration and therapeutic efficacy of monoclonal antibodies in murine xenograft tumors. *J. Control. Release.* 162: 218-224, 2012. (LMB)

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

Murphy AJ, Pierce J, de Caestecker C, Taylor C, Anderson JR, **Perantoni AO**, de Caester MP, and Lovvorn III HN: Six2 and cited markers of nephronic progenitor self-renewal, remain active in primitive elements of Wilms' tumor. *J. Pediatric Surgery.* 47: 1239-1249, 2012. (CDBL)

Hall M and **Perantoni AO**: Wilms tumor/nephroblastoma: a metanephric caricature. *Stem Cell Handbook.* In press. (CDBL)

Bowers M, Eng L, Lao Z, Turnbull RK, Bao X, Riedel E, **Mackem S**, and Joyner AL: Limb anterior-posterior polarity integrates activator and repressor functions of GL12 as well as GL13. *Developmental Biol.* In press. (CDBL)

Miyoshi H, Ajima R, Luo CT-Y, **Yamaguchi TP**, and Stappenbeck TS: Wnt5a potentiates TGF- β signaling to promote colonic crypt regeneration after tissue injury. *Science.* In press. (CDBL)

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

Douarre C, Sourbier C, Dalla Rosa I, Brata Das B, Redon CE, Zhang H, **Neckers L**, and **Pommier Y**: Mitochondrial topoisomerase I is critical for mitochondrial integrity and cellular energy metabolism. *PLoS One.* 7: e41094, 2012. (LMP)

Zeeberg BR, **Kohn KW**, Kahn A, **Larionov V**, Weinstein JN, Reinhold W, and **Pommier Y**: Concordance of gene expression and functional correlation patterns across the NCI-60 cell lines and the cancer genome atlas glioblastoma samples. *PLoS One.* 7: e40062, 2012. (LMP)

Nguyen TX, Morrell A, Conda-Sheridan M, Marchand C, Agama K, Bermingham A, Stephen AG, Chergui A, Naumova A, Fisher R, **O'Keefe BR**, **Pommier Y**, and Cushman M: Correction to synthesis and biological evaluation of the first dual tyrosyl-DNA phosphodiesterase I (Tdp1)-topoisomerase I (Top1) inhibitors. *J. Med. Chem.* 55: 7297, 2012. (LMP)

Frontini M, Kukalev A, Leo E, Ng YM, Cervantes M, Cheng CW, Holic R, Dormann D, Tse E, **Pommier Y**, and Yu V: The CDK subunit CKS2 counteracts CKS1 to control cyclin A/CDK2 activity in maintaining replicative fidelity and neurodevelopment. *Dev. Cell* 23: 356-370, 2012. (LMP)

Cunningham L, Finckbeiner S, Hyde RK, Southall N, Marugan J, Yedavalli VR, Dehdashti SJ, Reinhold WC, Alemu L, Zhao L, Yeh JR, Sood R, **Pommier Y**, Austin CP, Jeang KT, Zheng W, and Liu P: Identification of benzodiazepine Ro5-3335 as an inhibitor of CBF leukemia through quantitative high throughput screen against RUNX1-CBFbeta interaction. Proc. Natl. Acad. Sci. USA. In press. (LMP)

Zoppoli G, Regairaz M, Leo E, Reinhold WC, Varma S, Ballestrero A, **Doroshov JH**, and **Pommier Y**: Putative DNA/RNA helicase Schlafen-11 (SLFN11) sensitizes cancer cells to DNA-damaging agents. Proc. Natl. Acad. Sci. USA. In press. (LMP)

Balana-Fouce R, Prada CF, Requena JM, Cushman M, **Pommier Y**, Alvarez-Velilla R, Escudero-Martinez JM, Calvo-Alvarez E, Perez-Pertejo Y, and Reguera RM: Indotecan (LMP400) and AM13-55: two novel indenoisoquinolines show potential for treating visceral leishmaniasis. Antimicrob. Agents Chemother. In press. (LMP)

Marshall JC, Collins JW, Nakayama J, Horak CE, Liewehr DJ, Steinberg SM, Albaugh M, Vidal-Vanaclocha F, Palmieri D, Barbier M, Murone M, and **Steeg PS**: Effect of inhibition of the lysophosphatidic acid receptor 1 on metastasis and metastatic dormancy in breast cancer. J. Natl. Cancer Inst. In press. (LMP)

Kouprina N, Earnshaw WC, Masumoto H, and **Larionov V**: A new generation of human artificial chromosomes for functional genomics and gene therapy. Cell Mol. Life Sci. In press. (LMP)

Weyemi U, Redon CE, Parekh PR, Dupuy C, and **Bonner WM**: NADPH oxidases NOXs and DUPXs as putative targets for cancer therapy. Anticancer Agents Med. Chem. In press. (LMP)

Aladjem MI: Rif1 choreographs DNA replication timing. EMBO J. In press. (LMP)

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

Wang A, Chandran S, Shah SA, Chiu Y, Paria BC, Aghamolla T, Alvarez-Downing MM, Lee CCR, Singh S, Li T, Dudley ME, **Restifo NP**, **Rosenberg SA**, and **Kammula US**: The Stoichiometric Production of IL-2 and IFN-gamma mRNA Defines Memory T Cells That Can Self-Renew After Adoptive Transfer in Humans. Science Translational Med. 4(149): 149ra120, 2012. (SB)

Inchauste SM, Lanier BJ, Libutti SK, Phan GQ, Nilubol N, Steinberg SM, **Kebebew E**, and Hughes MS: Rate of Clinically Significant postoperative pancreatic fistula in Pancreatic neuroendocrine tumors. World J Surg. 36(7): 1517-1526, 2012. (SB)

Gros A, Turcotte S, Ahmadzadeh M, Wunderlich JR, Dudley ME, and **Rosenberg SA**: Myeloid cells obtained from the blood but not from the tumor can suppress T cell proliferation in patients with melanoma. Clin Cancer Res. In press. (SB)

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.

Huang J, Jochems C, Talaie, T, Anderson A, Jales A, **Tsang KY, Madan RA, Gulley JL, and Schlom J**: Elevated serum soluble CD40 ligand in cancer patients may play an immunosuppressive role. Blood. In press. (LTIB)

Kwilas AR, Donahue R, Bernstein M, and **Hodge JW**: In the field: exploiting the untapped potential of immunogenic modulation by radiation in combination with immunotherapy for the treatment of cancer. [review] Front Oncol. In press. (LTIB)

Chemical Biology Laboratory - Joel Schneider, Ph.D.

Cui H, Thomas JD, **Burke Jr TR**, and Rader C: Chemically programmed biospecific antibodies that recruit and activate T cells. J Biol Chem. 287(34): 28206-28214, 2012. (CBL)

Yan C, Mackay ME, Czymbek K, Nagarkar RP, **Schneider JP**, and Pochan DJ: Injectable solid peptide hydrogel as a cell carrier: Effects of shear flow on hydrogels and cell payload. Langmuir. 28: 6076-6087, 2012. (CBL)

Zhang Y, Muthana SM, **Barchi Jr JJ**, and **Gildersleeve JC**: Divergent behavior of glycosylated threonine and serine derivatives in solid phase peptide synthesis. Organic Letts. 14(15): 3958-3961, 2012. (CBL)

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.

Wang P, Dong Q, Zhang C, Kuan PF, Liu Y, Jeck WR, Andersen JB, Jiang W, Savich GL, Tan TX, Auman JT, Hoskins JM, Misher AD, Moser CD, Yourstone SM, Kim JW, Cibulskis K, Getz G, Hunt HV, **Thorgeirsson SS**, Roberts LR, Ye D, Guan KL, Xiong Y, Qin LX, and Chiang DY: Mutations in isocitrate dehydrogenase 1 and 2 occur frequently in intrahepatic cholangiocarcinomas and share hypermethylation targets with glioblastomas. Oncogene. In press. (LEC)

Oishi N, Kumar MR, Roessler S, Ji J, Forgues M, Budhu A, Zhao X, Andersen JB, Ye QH, Jia HL, Qin LX, Yamashita T, Goo Woo H, Jun Kim Y, Kaneko S, Tang ZY, **Thorgeirsson SS**, and **Wang XW**: Transcriptomic profiling reveals hepatic stem-like gene signatures and interplay of miR-200c and epithelial-mesenchymal transition in intrahepatic cholangiocarcinoma. *Hepatology*. In press. (LEC)

Zhang J, Espinoza LA, Kinders RJ, Lawrence SM, Pfister TD, Zhou M, Veenstra TD, **Thorgeirsson SS**, and **Jessup JM**: NANOG Modulates Stemness in Human Colorectal Cancer. *Oncogene*. In press. (LEC)

Thorgeirsson SS: The central role of the c-Met pathway in rebuilding the liver. *Gut*. 61(8): 1105-1106, 2012. (LEC)

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

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

Patel ES, Okada S, Hachey K, Yang LJ, **Durum SK**, Moreb JS, and Chang LJ: Regulation of in vitro human T cell development through interleukin-7 deprivation and anti-CD3 stimulation. *BMC Immunol*. 13: 46, 2012. (LMI)

Chan JK, Roth J, **Oppenheim JJ**, Tracey KJ, Vogl T, Feldmann M, Horwood N, and Nanchahal J: Alarmins: awaiting a clinical response. *J Clin Invest*. 122: 2711-2719, 2012. (LMI)

Bena S, Brancaleone V, **Wang JM**, Perretti M, and Flower RJ: Annexin A1 interaction with FPR2/ALX: identification of distinct domains and downstream associated signaling. *J Biol Chem*. 287: 24690-24697, 2012. (LMI)

Marton A, Vizler C, Kusz E, Temesfoi V, Szathmary Z, Nagy K, Szegletes Z, Varo G, Siklos L, Katona RL, Tubak V, Howard OM, Duda E, Minarovits J, Nagy K, and Buzas K: Melanoma cell-derived exosomes alter macrophage and dendritic cell functions in vitro. *Immunol Lett*. In press. (LMI; PI: **Oppenheim JJ**)

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

Kloverpris HN, Harndahl M, Leslie AJ, Carlson JM, Ismail N, van der Stok M, Huang KG, Chen F, Riddell L, Steyn D, Goedhals D, van Vuuren C, Frater J, Walker BD, **Carrington M**, Ndung'u T, Buus S, and Goulder P: HIV control through a single nucleotide on the HLA-B locus. *J Virol*. In press. (LEI)

Tomescu C, Duh FM, Hoh R, Viviani A, Harvill K, Martin MP, **Carrington M**, Deeks SG, and Montaner LJ: Impact of protective KIR/HLA genotypes on NK cell and T cell function in HIV-1 infected controllers. *J Clin Invest*. In press. (LEI)

Cataisson C, Salcedo R., Hakim S, Moffitt BA, Wright L, Yi M, Stephens R, Dai RM, Lyakh L, Schenten D, **Yuspa SH**, and **Trinchieri G**: IL-1R-MyD88 signaling in keratinocyte transformation and carcinogenesis. *J Exp Med.* 209: 1689-1702, 2012. (LEI)

Naik S, Bouladoux N, Wilhelm C, Molloy MJ, Salcedo R, Kastenmuller W, Deming C, Quinones M, Koo L, Conlan S, Spencer S, Hall JA, Dzutsev A, Kong H, Campbell DJ, **Trinchieri G**, Segre JA, and Belkaid Y: Compartmentalized control of skin immunity by resident commensals. *Science.* 337: 1115-1119, 2012. (LEI)

Kawayama T, Okamoto M, Imaoka H, Kato S, **Young HA**, and Hoshino T: Interleukin-18 in pulmonary inflammatory diseases. *J Interferon and Cytokine Res.* In press. (LEI)

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

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

Abend J, Ramalingam D, Kieffer-Kwon P, Uldrick T, **Yarchoan R**, and **Ziegelbauer J**: KSHV microRNAs target two components of the TLR/IL-1R signaling cascade, IRAK1 and MYD88, to reduce inflammatory cytokine expression. *J Virol.* In press. (HAMB)

Mouse Cancer Genetics Program

There were no submissions reported this month.

Basic Research Laboratory

There were no submissions reported this month.

Emeritus Scientists

Victor Marquez

Crea F, Paolicchi E, **Marquez VE**, and Danesi R: Polycomb genes and cancer: Time for clinical application? *Oncology Hematology*. 83: 184-193, 2012. (CBL)

Ketkar A, Zafar MK, Banerjee S, **Marquez VE**, Egli M, and Eoff RL: A nucleotide-analogue-induced gain of function corrects the error-prone nature of human DNA polymerase iota. *J. Am. Chem. Soc.* 134: 10698-10705, 2012. (CBL)