

CCR MANUSCRIPT NOTIFICATION (SEPTEMBER 2009)

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

There were no submissions reported this month.

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

Rosati M, Bergamaschi C, Valentin A, Kulkarni V, Jalah R, Alicea C, Patel V, von Gegerfelt AS, Montefiori DC, Venzon DJ, Khan AS, Draghia-Akli R, Van Rompay KK, **Felber BK**, and **Pavlakis GN**: DNA vaccination in rhesus macaques induces potent immune responses and decreases acute and chronic viremia after SIVmac251 challenge. Proc. Natl. Acad. Sci. U.S.A. In press. (VB)

Uranishi H, Zolotukhin AS, Lindtner S, Warming S, Zhang GM, Bear J, Copeland NG, Jenkins NA, **Pavlakis GN**, and **Felber BK**: The RNA binding motif protein 15B (RBM15B/OTT3) acts as co-factor of the nuclear export receptor NXF1. J. Biol. Chem. In press. (VB)

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

Bergamaschi C, Jalah R, Kulkarni V, Rosati M, Zhang GM, Alicea C, Zolotukhin AS, **Felber BK**, and **Pavlakis GN**: Secretion and biological activity of short signal peptide IL-15 is chaperoned by IL-15 receptor alpha in vivo. J. Immunol. 183: 3064-3072, 2009. (VB)

Petrovas C, Chaon B, Ambrozak DR, Price DA, Melenhorst JJ, Hill BJ, Geldmacher C, Casazza JP, Chattopadhyay PK, Roederer M, Douek DC, Mueller YM, Jacobson JM, Kulkarni V, **Felber BK**, **Pavlakis GN**, Katsikis PD, and Koup RA: Differential association of programmed death-1 and CD57 with ex vivo survival of CD8+ T cells in HIV infection. J. Immunol. 183: 1120-1132, 2009. (VB)

Valentin A, Chikhlikar P, Patel V, Rosati M, Maciel M, Chang KH, Silvera P, **Felber BK**, **Pavlakis GN**, August JT, and Marques ET: Comparison of DNA vaccines producing HIV-1 Gag and LAMP/Gag chimera in rhesus macaques reveals antigen-specific T-cell responses with distinct phenotypes. Vaccine. 27: 4840-4849, 2009. (VB)

Salcedo R, Hixon JA, Stauffer JK, Jalah R, Brooks AD, Khan T, Dai RM, Scheetz L, Lincoln E, Back TC, Powell D, **Hurwitz AA**, **Sayers TJ**, Kastelein R, **Pavlakis GN**, **Felber BK**, **Trinchieri G**, and Wigginton JM: Immunologic and therapeutic synergy of IL-27 and IL-2: enhancement of T cell sensitization, tumor-specific CTL reactivity and complete regression of disseminated neuroblastoma metastases in the liver and bone marrow. J. Immunol. 182: 4328-4338, 2009. (VB)

CCR Nanobiology Program - Robert Blumenthal, Ph.D.

Xiao X, Chen W, Feng Y, Zhu Z, Prabakaran P, Wang Y, Zhang M-Y, Longo NS, and **Dimitrov DS**: Germline-like predecessors of broadly neutralizing antibodies lack measurable binding to HIV-1 envelope glycoproteins: Implications for evasion of immune responses and design of vaccine immunogens. *Biochem. Biophys. Res. Commun.* In press. (CCRNP)

Zhang M-Y, Feng Y, Wang Y, and **Dimitrov DS**: Characterization of a chimeric monoclonal antibody against the insulin-like growth factor-I receptor. *mAbs.* In press. (CCRNP)

Santhanam AN, Bindewald E, Rajasekhar VK, Larsson O, Sonenberg N, **Colburn NH**, and **Shapiro BA**: Role of 3'UTRs in the translation of mRNAs regulated by oncogenic eIF4E--a computational inference. *PLoS One.* 4(3): e4868, 2009. (LCP)

Laboratory of Population Genetics - Kenneth Buetow, Ph.D.

There were no submissions reported this month.

Molecular Discovery Program - R. Andrew Byrd, Ph.D.

Laboratory of Medicinal Chemistry - Joel Schneider, Ph.D.

There were no submissions reported this month.

Molecular Targets Laboratory - James McMahon, Ph.D.

There were no submissions reported this month.

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.

There were no submissions reported this month.

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

Yin Y, Wang S, Sun Y, Matt Y, **Colburn NH**, Shu Y, and Han X: JNK/AP-1 pathway is involved in tumor necrosis factor-alpha induced expression of vascular endothelial growth factor in MCF7 cells. *Biomed Pharmacother.* 63(6): 429-435, 2009. (LCP)

Zhao C, Ivanov I, Dougherty ER, Hartman TJ, Lanza E, Bobe G, **Colburn NH**, Lupton JR, Davidson LA, and Chapkin RS: Noninvasive detection of candidate molecular biomarkers in subjects with a history of insulin resistance and colorectal adenomas. *Cancer Prev Res.* 2(6): 590-597, 2009. (LCP)

Yasuda M, Nishizawa T, Ohigashi H, Tanaka T, Hou DX, **Colburn NH**, and Murakami A: Linoleic acid metabolite suppresses skin inflammation and tumor promotion in mice: possible roles of programmed cell death 4 induction. *Carcinogenesis.* 30(7): 1209-1216, 2009. (LCP)

Kim YS, Young MR, Bobe G, **Colburn NH**, and Milner JA: Bioactive food components, inflammatory targets, and cancer prevention. *Cancer Prev Res.* 2(3): 200-208, 2009. (LCP)

Kang MI, Henrich CJ, Bokesch HR, **Gustafson KR**, **McMahon JB**, Baker AR, Young MR, and **Colburn NH**: A selective small-molecule nuclear factor-kappaB inhibitor from a high-throughput cell-based assay for "activator protein-1 hits". *Mol Cancer Ther.* 8(3): 571-581, 2009. (LCP)

Gladyshev VN and **Hatfield DL**: Selenocysteine biosynthesis, selenoproteins and selenoproteomes. Atkins JF and Gesteland RF (Eds). In: *RECODING: Violations of decoding dogma enrich gene expression.* Springer+Science Media, LLC, New York, NY 2009. In press. (LCP)

Hatfield DL, Yoo M-H, Carlson BA and Gladyshev VN: Selenoproteins that function in cancer promotion and prevention. *Biochim. Biophys. Acta.* In press. (LCP)

Lobanov AV, **Hatfield DL** and Gladyshev VN: Eukaryotic selenoproteins and selenoproteomes. *Biochim. Biophys. Acta.* In press. (LCP)

Kehr S, Malinouski M, Finney L, Vogt S, Labunskyy V, Kasaikina M, Carlson BA, **Hatfield DL** and Gladyshev V: X-ray fluorescence microscopy reveals the role of selenium in spermatogenesis. *J. Mol. Biol.* 389(5): 808-818, 2009. (LCP)

Shchedrina VA, Zhang Y, Labunskyy VM, **Hatfield DL** and Gladyshev VN: Structure-function relationships, physiological roles and evolution of mammalian ER-resident selenoproteins. *Antioxidants and Redox Signaling.* In press. (LCP)

Xu X-M, Yoo M-H, Carlson BA, Gladyshev VN and **Hatfield DL**: Simultaneous inhibition and subsequent re-expression of multiple genes. *Nature Protocols.* 4(9): 1338-1348, 2009. (LCP)

Sengupta A, Carlson BA, Labunskyy VM, Gladyshev VN, and **Hatfield DL**: Selenoprotein T deficiency alters cell adhesion and elevates Selenoprotein W expression in murine fibroblast cells. *Biochem. Cell Biol.* In press. (LCP)

Downey CM, Horton CR, Carlson BA, Parsons TE, **Hatfield DL**, Hallgrimsson B, and Jirik F: Osteo-chondroprogenitor-specific deletion of the selenocysteine tRNA gene, Trsp, leads to chondronecrosis and abnormal skeletal development: a putative model for Kashin-Beck disease. *PLoS Genetics*. 5(8): e1000616, 2009. (LCP)

Shim SS, Kim JY, Jung HK, Lee KH, Xu X-M, Carlson BA, Kim KW, Kim IY, **Hatfield DL** and Lee BJ: Elevation of glutamine level by selenophosphate synthetase 1 knockdown induces megamitochondria formation in *Drosophila* cells. *J. Biol. Chem.* In press. (LCP)

Labunskyy VM, Yoo M-H, **Hatfield DL** and Gladyshev VN: Sep15, a thioredoxin-like selenoprotein, is involved in the unfolded protein response and differentially regulated by adaptive and acute ER stresses. *Biochemistry*. 48(35): 8458-8465, 2009. (LCP)

Carlson BA, Yoo M-H, Tsuji PA, Gladyshev VN and **Hatfield DL**: Mouse models targeting selenocysteine tRNA expression for elucidating the role of selenoproteins in health and development. *Molecules*. 14: 3509-3527, 2009. (LCP)

Carlson BA, Yoo M-H, Sano Y, Sengupta A, Kim J-Y, Irons R, Gladyshev VN, **Hatfield DL** and Park JM: Selenoproteins regulate macrophage invasiveness and extracellular matrix-related gene expression. *BMC Immunol.* In press. (LCP)

Novoselov SV, Kim H-Y, Hua D, Lee BC, Astle CM, Harrison D, Friguet B, Moustafa ME, Carlson BA, **Hatfield DL** and Gladyshev VN: Regulation of selenoproteins and methionine sulfoxide reductases A and B1 by age, calorie restriction and dietary selenium in mice. *Antioxidants and Redox Signaling.* In press. (LCP)

Yoo M-H, Gu X, Xu X-M, Kim J-Y, Carlson BA, Patterson AD, Cai H, Gladyshev VN and **Hatfield DL**: Delineating the role of glutathione peroxidase 4 in protecting cells against lipid hydroperoxide damage and in Alzheimer's disease. *Antioxidants and Redox Signaling.* In press. (LCP)

Mathews LA, Crea F, and **Farrar WL**: Epigenetic gene regulation in stem cells and correlation to cancer. *Differentiation*. 78(1): 1-17, 2009. (LCP)

Klarmann GJ, Hurt EM, Mathews LA, Zhang X, Duhagon MA, Mistree T, Thomas SB, and **Farrar WL**: Invasive prostate cancer cells are tumor initiating cells that have a stem cell-like genomic signature. *Clin Exp Metastasis*. 26(5): 433-446, 2009. (LCP)

Kawasaki BT, Hurt EM, Kalathur M, Duhagon MA, Milner JA, Kim YS, and **Farrar WL**: Effects of the sesquiterpene lactone parthenolide on prostate tumor-initiating cells: An integrated molecular profiling approach. *Prostate*. 69(8): 827-837, 2009. (LCP)

Suh HC, Ji M, Gooya J, Lee M, Klarmann KD, and **Keller JR**: Cell-nonautonomous function of Id1 in the hematopoietic progenitor cell niche. *Blood*. 114(6): 1186-1195, 2009. (LCP)

Xi S, Geiman TM, Briones V, Tao YG, Xu H, and **Muegge K**: Lsh Participates in DNA Methylation and Silencing of Stem Cell Genes. *Stem Cells*. In press. (LCP)

Li X, Hanson C, Cmarik JL, and **Ruscetti S**: Neurodegeneration induced by PVC-211 murine leukemia virus is associated with increased levels of vascular endothelial growth factor and macrophage inflammatory protein 1 alpha and is inhibited by blocking activation of microglia. *J Virol*. 83(10): 4912-4922, 2009. (LCP)

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

There were no submissions reported this month.

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

Kristal AR, Price DK, Till C, Schenk JM, Neuhaus ML, Ockers S, Lin DW, Thompson IM, and **Figg WD**: Androgen Receptor CAG Repeat Length is Not Associated with the Risk of Incident Symptomatic Benign Prostatic Hyperplasia: Results from the Prostate Cancer Prevention Trial. *Prostate*. In press. (MOB)

Bates SE, Zhan Z, Steadman K, Obrutz T, Luchenko V, Frye R, Robey RW, Turner M, Gardner E, **Figg WD**, Steinberg SM, **Fojo T**, To KW, and Piekarz RL: Laboratory Correlates for a Phase II Trial of Romidepsin of Cutaneous and Peripheral T Cell Lymphoma. *Br. J. Hematol*. In press. (MOB)

Ning YM, **Gulley JL**, Arlen PM, Woo S, Steinberg SM, Wright JJ, Parnes H, Trepel J, Lee MJ, Kim YS, Sun H, Latham L, Jones E, Chen CC, **Figg WD**, and **Dahut WL**: Phase II Trial of Bevacizumab, Thalidomide, Docetaxel, and Prednisone in Patients with Metastatic Castration-Resistant Prostate Cancer. *J. Clin. Oncol*. In press. (MOB)

Jonsson JG, Sissung TM, and **Figg WD**: A Genomic Strategy for Predicting Androgen Receptor Activity in Prostate Tumors. *Cancer Bio. Ther*. In press. (MOB)

Kummar S, Martin G, Gardner E, **Figg WD**, Giovanni M, Dancey J, Sausville E, Conley B, Murgo A, **Doroshov J**, and Uhlenbrauck G: A Phase I Trial of UCN-01 and Prednisone in Patients with Refractory Solid Tumors and Lymphomas. *Cancer Chemother. Pharmacol*. 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.

There were no submissions reported this month.

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.

Stavreva DA, Wiench M, John S, Conway-Campbell BL, McKenna MA, Pooley JR, Johnson TA, Voss TC, Lightman SL, and **Hager GL**: Ultradian hormone stimulation induces glucocorticoid receptor-mediated pulses of gene transcription. *Nature Cell Biol.* 11: 1093-1102, 2009. (LRBGE)

Hager GL, McNally JG and Misteli T: Transcription Dynamics. *Mol. Cell.* 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.

Retroviral Replication Laboratory - Stephen Hughes, Ph.D.

There were no submissions reported this month.

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

Tokar EJ, Diwan BA, and **Waalkes MP** Arsenic exposure transforms human epithelial stem/progenitor cells into a cancer stem-like phenotype. *Environ. Health Pers.* In press. (LCC)

Bohle DS, **Keefer LK**, and Saavedra JE: Primary amine diazeniumdiolate ions of structure {RNN(O)NOR'}⁻ as ambient nucleophiles. *Tetrahedron Lett.* 50: 5917-5919, 2009. (LCC)

Raj G, Sayed AA, Lea WA, Luecke H, Chakrapani H, Prast-Nielsen S, Jadhav A, Leister W, Shen M, Inglese J, Austin CP, **Keefer L**, Arner ESJ, Simeonov A, Maloney DJ, Williams DL, and Thomas CJ: structure-mechanism insights and the role of nitric oxide donation guide the

development of oxadiazole-2-oxides as therapeutic agents against schistosomiasis. *J. Med. Chem.* 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.

Grubb RL, Deng J, **Pinto PA**, Mohler JL, Chinnaiyan A, Rubin M, **Linehan WM**, Liotta LA, Petricoin EF, and Wulfkühle JD: Pathway Biomarker Profiling of Localized and Metastatic Human Prostate Cancer Reveal Metastatic and Prognostic Signatures. *J Proteome Res.* 8(6): 3044-3054, 2009. (UOB)

Linguraru MG, Yao J, Gautam R, Peterson J, Li Z, **Linehan WM**, and Summers RM: Renal Tumor Quantification and Classification in Contrast-Enhanced Abdominal CT. *Pattern Recognit.* 42(6): 1149-1161, 2009. (UOB)

Neckers L, Mollapour M, and Tsutsumi S: The Complex Dance of the Molecular Chaperone Hsp90. *Trends Biochem Sci.* 34(5): 223-226, 2009. (UOB)

Hasumi Y, Baba M, Ajima R, Hasumi H, Valera VR, Klein ME, Haines DC, **Merino MJ**, Hong SB, **Yamaguchi TP**, Schmidt LS, and **Linehan WM**: Homozygous Loss of BHD Causes Early Embryonic Lethality and Kidney Tumor Development With Activation of MTORC1 and MTORC2. *Proc Natl Acad Sci USA.* 106: 18722-18727, 2009. (UOB)

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 & 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.

Palmieri D, Fitzgerald D, Shreeve SM, Hua E, Bronder JL, Weil RJ, Davis S, Stark AM, **Merino MJ**, Kurek R, Mehdorn HM, David G, Steinberg SM, **Meltzer PS**, Aldape K, and **Steeg PS**: Analyses of resected human brain metastases of breast cancer reveal the association between up-regulation of hexokinase 2 and poor prognosis. *Mol. Cancer Res.* 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. & Susan Gottesman, Ph.D.

Hassan R, Schweizer C, Lu KF, Schuler B, Remaley AT, Weil SC, and **Pastan I**: Inhibition of mesothelin-CA-125 interaction in patients with mesothelioma by anti-mesothelin monoclonal antibody MORAb-009; implications for cancer therapy. *Lung Cancer.* In press. (LMB)

Arons E, Suntum T, **Stetler-Stevenson M**, and **Kreitman RJ**: VH4-34+ hairy cell leukemia, a new variant with poor prognosis despite Standard therapy. *Blood.* In press. (LMB)

Mandin P and **Gottesman S**: Regulating the Regulator: An RNA Decoy acts as an OFF switch for the regulation of an sRNA. *Genes & Develop.* 23: 1981-1985, 2009. (LMB)

Cancer & Developmental Biology Lab. - Alan Perantoni, Ph.D. (Acting Chief)

Lewandoski MP and **Mackem S**: Limb development: the rise and fall of retinoic acid. *Curr. Biol.* 19: R558-561, 2009. (CDBL)

Andersson ER, Bryjova L, Biris KK, **Yamaguchi TP**, Arenas E and Brayja V: Genetic interaction between Lrp6 and Wnt5a during mouse development. *Developmental Dynamics.* In press. (CDBL)

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

Le Novere N, Hucka M, Mi H, Moodie S, Schreiber F, Sorokin A, Demir E, Wegner K, **Aladjem MI**, Wimalaratne SM, Bergman FT, Gauges R, Ghazal P, Kawaji H, Li L, Matsuoka Y, Villeger A, Boyd SE, Calzone L, Courtot M, Dogrusoz U, Freeman TC, Funahashi A, Ghosh S, Jouraku A, Kim S, Kolpakov F, Luna A, Sahle S, Schmidt E, Watterson S, Wu G, Goryanin I, Kell DB,

Sander C, Sauro H, Snoep JL, **Kohn K**, and Kitano H: The systems biology graphical notation. *Nat. Biotechnol.* 27: 735-741, 2009. (LMP)

Redon CE, Nakamura AJ, Sordet O, Dickey JS, Gouliava K, Tabb B, Lawrence S, Kinders RJ, **Bonner WM** and Sedelnikova OA: Gamma-H2AX detection in peripheral blood lymphocytes, splenocytes, bone marrow, xenografts and skin. *Methods Mol. Biol.* In press. (LMP)

Marchand C, Maddali K, Metifiot M, and **Pommier Y**: HIV-1 IN inhibitors: 2010 update and perspectives. *Curr. Top. Med. Chem.* In press. (LMP)

Jobson AG, Lountos GT, Lorenzi PL, Llamas J, Connelly J, Cerna D, Tropea JE, Onda A, Zoppoli G, Kondapaka S, Zhang G, **Caplen NJ**, Cardellina JH, Yoo SS, Monks A, Self C, **Waugh DS**, Shoemaker RH, and **Pommier Y**: Cellular inhibition of Chk2 kinase and potentiation of camptothecins and radiation by the novel Chk2 inhibitor PV1019. *J. Pharmacol. Exp. Ther.* In press. (LMP)

Dalla Rosa I, Goffart S, Wurm M, Wiek C, Essmann F, Sobek S, Schroeder P, Zhang H, Krutmann J, Schulze-Osthoff K, Mielke C, **Pommier Y**, Boege F, and Christensen MO: Adaptation of topoisomerase I paralogs to nuclear and mitochondrial DNA. *Nucl. Acids Res.* In press. (LMP)

Thomas FC, Taskar K, Rudraraju V, Goda S, Thorsheim HR, Gaasch JA, Mittapalli RK, Palmieri D, **Steeg PS**, Lockman PR, and Smith QR: Uptake on ANG1005, a novel paclitaxel derivative, through the blood-brain barrier into brain and experimental brain metastases of breast cancer. *Pharm. Res.* In press. (LMP)

Das BB, Gupta S, Antony S, Dexheimer TS, Redon CE, Garfield S, Shiloh Y, and **Pommier Y**: Optimal function of the DNA repair enzyme TDP1 requires its phosphorylation by ATM and/or DNA-PK. *EMBO J.* In press. (LMP)

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

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.

Kantoff P, Schuetz TJ, Blumenstein BA, Glode LM, Bilhartz DL, Wyand M, Manson K, Panicali DL, Laus R, **Schlom J**, **Dahut W**, Arlen PM, **Gulley JL**, and Godfrey WR: Overall survival (OS) analysis of a Phase II randomized controlled trial (RCT) of a poxviral-based PSA targeted

immunotherapy in metastatic castration-resistant prostate cancer (mCRPC). J Clin Oncol. In press. (LTIB)

Madan RA, Mohebtash M, **Schlom J**, and **Gulley JL**: Therapeutic vaccines in metastatic castration-resistant prostate cancer: principles in clinical trial design. Expert Opin. Biol. Ther. In press. (LTIB)

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.

Liu J, Kaur G, Zhawar VK, Zimonjic DB, **Popescu NC**, Kaur GP, Kandpal R, and Athwal RS: Role of SV 40 integration site at chromosomal interval 1q21.1 in immortalized CRL2504 cells. Cancer Res. In press. (LEC)

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

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

There were no submissions reported this month.

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

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.

Mammary Biology & Tumorigenesis Lab - Barbara Vonderhaar, 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.

Magracheva E, Kozlov S, Stewart CL, **Wlodawer A**, and Zdanov A: Structure of the lamin A/C R482W mutant responsible for dominant familial partial lipodystrophy (FPLD). *Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun.* 65: 665-670, 2009. (MCL)

Bhaumik P, Xiao H, Parr CL, Kiso Y, Gustchina A, Yada RY, and **Wlodawer A**: Crystal structures of the histo-aspartic protease (HAP) from *Plasmodium falciparum*. *J. Mol. Biol.* 388: 520-540, 2009. (MCL)

Jaskolski M, Alexandratos JN, Bujacz G, and **Wlodawer A**: Piecing together the structure of retroviral integrase, an important target in AIDS therapy. *FEBS J.* 276: 2926-2946, 2009. (MCL)

Pletnev S, Gurskaya NG, Pletneva NV, Lukyanov KA, Chudakov DM, Martynov VI, Popov VO, Kovalchuk MV, **Wlodawer A**, **Dauter Z**, and Pletnev V: Structural basis for phototoxicity of the genetically encoded photosensitizer KillerRed. *J. Biol. Chem.* In press. (MCL)

Acchione M, Lipschultz CA, DeSantis M, Shanmuganathana A, Li M, **Wlodawer A**, Tarasov S, and **Smith-Gill SJ**: Light chain somatic mutations change thermodynamics of binding and water coordination in the HyHel-10 family of antibodies. *Mol. Immunol.* In press. (MCL)

Dauter Z, and **Wlodawer A**: Proteins do not have strong spines after all. *Structure.* In press. (MCL)

Miller M, **Dauter Z**, Cherry S, Tropea JE, and **Wlodawer A**: Crystal structure of the Taz2 domain of p300: Insights into ligand binding. *Acta Cryst. D*65. In press. (MCL)

Pletnev S, Morozova KS, Verkhusha VV, and **Dauter Z**: Rotational order-disorder structure of fluorescent protein FP480. *Acta Cryst. D.* In press. (MCL)

Nowak E, Brzuszkiewicz A, Dauter M, **Dauter Z**, and Rosenbaum G: To scavenge or not to scavenge - that is the question. *Acta Cryst. D.* In press. (MCL)

Brzuszkiewicz A, Nowak E, **Dauter Z**, Dauter M, Cieslinski H, Dlogolecka A, and Kur J: Crystal structure of EstA esterase from psychrotrophic *Pseudoalteromonas* sp. 643A covalently inhibited by monoethylphosphonate. *Acta Cryst. F*. In press. (MCL)

Tu C, Tropea JE, Austin BP, **Court DL**, **Waugh DS** and **Ji X**: Structural basis for binding of RNA and cofactor by a KsgA methyltransferase. *Structure*. 17: 374-385, 2009. (MCL)

Tu C, Zhou X, Tropea JE, Austin BP, **Waugh DS**, **Court DL**, and **Ji X**: Structure of ERA in complex with the 3' end of 16S rRNA: Implications for ribosome biogenesis. *Proc. Natl. Acad. Sci. USA*. In press. (MCL)

Lountos GT, Jobson AG, Tropea JE, Zhang D, Self C, Shoemaker RH, **Pommier Y**, and **Waugh DS**: Structure-assisted discovery of novel inhibitors of human checkpoint kinase 2 (Chk2). *Acta Biochim. Pol.* 56S: 69-70, 2009. (MCL)

Sun P, Tropea JE, and **Waugh DS**: Enhancing the solubility of recombinant proteins in *Escherichia coli* by using hexahistidine-tagged maltose-binding protein as a fusion partner. *Methods Mol. Biol.* In press. (MCL)

Lountos GT, Tropea JE, Cherry S, and **Waugh DS**: Overproduction, purification, and crystal structure determination of human dual specificity phosphatase 14. *Acta Cryst. D*, 65: 1013-1020, 2009. (MCL)

Washington AV, Gibot S, Acevedo I, Gattis J, Quigley L, Feltz R, De LaMota A, Schubert RL, Gomez-Rodriguez J, Cheng J, Dutra A, Pak E, Chertov O, Rivera L, Morales J, **Lubkowski J**, Hunter R, Schwartzberg PL, and **McVicar DW**: TREM-like transcript-1 protects against inflammation-associated hemorrhage by facilitating platelet aggregation in mice and humans. *J Clin Invest*. 119: 1489-1501, 2009. (MCL)

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.

SAIC Frederick

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

Vagenas P, Williams VG, Piatak Jr M, Bess Jr JW, **Lifson JD**, Blanchard JL, Gettie A, and Robbiani M: Tonsillar application of AT-2 SIV affords partial protection against rectal challenge with SIVmac239. *AIDS J.* In press. (ACVP)

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