

Scientific Activities of the  
California Pacific Medical Center Research Institute

2006 Compendium of Peer-Reviewed Publications

Scientists at the California Pacific Medical Center Research Institute are involved in a variety of laboratory and clinical research projects. This report includes manuscripts published in the peer-reviewed literature in 2006, listed in alphabetical order by Principal Investigator (PI). We appreciate the contributions of many other scientists (including post-doctoral fellows and technicians) in the Research Institute.

### **Mary Abood, PhD (aboodm@cpmcri.org)**

Dr. Abood's laboratory studies cannabinoid receptors on the surface of neurons and other cells, including their possible role in amyotrophic lateral sclerosis (ALS).

Hough LB, de Esch IJ, Janssen E, Phillips J, Svokos K, Kern B, Trachler J, **Abood ME**, et al. Antinociceptive activity of chemical congeners of impropgan: optimization of side chain length leads to the discovery of a new, potent, non-opioid analgesic. *Neuropharmacology*. 2006;51:447-56.

Kim K, **Moore DH**, Makriyannis A, **Abood ME**. AM1241, a cannabinoid CB2 receptor selective compound, delays disease progression in a mouse model of amyotrophic lateral sclerosis. *Eur J Pharmacol*. 2006;542:100-5.

See also Sean McAllister.

### **John Astin, PhD (astinja@cpmcri.org)**

Dr. Astin's work involves an examination of barriers to the integration of psychosocial medicine with standard medical care.

**Astin JA**, Reilly C, Perkins C, Child WL. Breast cancer patients' perspectives on and use of complementary and alternative medicine: a study by the Susan G. Komen Breast Cancer Foundation. *J Soc Integr Oncol*. 2006;4:157-69.

**Astin JA**, Soeken K, Sierpina VS, Clarridge BR. Barriers to the integration of psychosocial factors in medicine: results of a national survey of physicians. *J Am Board Fam Med*. 2006;19:557-65.

**Astin JA**, Stone J, Abrams DI, **Moore DH**, Couey P, **Buscemi R**, et al. The efficacy of distant healing for human immunodeficiency virus--results of a randomized trial. *Altern Ther Health Med*. 2006;12:36-41.

Shapiro SL, Carlson LE, **Astin JA**, Freedman B. Mechanisms of mindfulness. *J Clin Psychol*. 2006;62:373-86.

### **Ari Baron, MD (abaron@phoamd.com)**

Dr. Baron studies new treatments for patients with cancer.

Ross HJ, Hart LL, Swanson PM, Rarick MU, Figlin RA, Jacobs AD, McCune DE, Rosenberg AH, **Baron AD**, et al. A randomized, multicenter study to determine the safety and efficacy of the immunoconjugate SGN-15 plus docetaxel for the treatment of non-small cell lung carcinoma. *Lung Cancer*. 2006;54:69-77.

**Luiz Bermudez, MD (bermudl@cpmc.org)**

Dr. Bermudez has a longstanding interest in how mycobacteria infect cells.

Danelishvili L, **Young LS, Bermudez LE**. In vivo efficacy of phage therapy for Mycobacterium avium infection as delivered by a nonvirulent mycobacterium. *Microb Drug Resist*. 2006;12:1-6.

Dam T, Danelishvili L, **Wu M, Bermudez LE**. The fadD2 gene is required for efficient Mycobacterium avium invasion of mucosal epithelial cells. *J Infect Dis*. 2006;193:1135-42.

Kent ML, Watral V, **Wu M, Bermudez LE**. In vivo and in vitro growth of Mycobacterium marinum at homoeothermic temperatures. *FEMS Microbiol Lett*. 2006;257:69-75.

Patel D, Danelishvili L, Yamazaki Y, Alonso M, Paustian ML, Bannantine JP, Meunier-Goddik L, **Bermudez LE**. The ability of Mycobacterium avium subsp. paratuberculosis to enter bovine epithelial cells is influenced by preexposure to a hyperosmolar environment and intracellular passage in bovine mammary epithelial cells. *Infect Immun*. 2006;74:2849-55.

Tenant R, **Bermudez LE**. Mycobacterium avium genes upregulated upon infection of Acanthamoeba castellanii demonstrate a common response to the intracellular environment. *Curr Microbiol*. 2006;52:128-33.

Wagner D, Maser J, Moric I, Vogt S, Kern WV, **Bermudez LE**. Elemental analysis of the Mycobacterium avium phagosome in Balb/c mouse macrophages. *Biochem Biophys Res Commun*. 2006;344:1346-51.

Yamazaki Y, Danelishvili L, **Wu M**, Hidaka E, Katsuyama T, Stang B, **Petrofsky M**, Bildfell R, **Bermudez LE**, et al. The ability to form biofilm influences Mycobacterium avium invasion and translocation of bronchial epithelial cells. *Cell Microbiol*. 2006;8:806-14.

Yamazaki Y, Danelishvili L, **Wu M**, Macnab M, **Bermudez LE**. Mycobacterium avium genes associated with the ability to form a biofilm. *Appl Environ Microbiol*. 2006;72:819-25.

**Kenneth Binmoeller, MD (binmoek@sutterhealth.org)**

Dr. Binmoeller studies new diagnostic and therapeutic procedures in gastroenterology.

Bosworth HB, Rockey DC, Paulson EK, Niedzwiecki D, Davis W, Sanders LL, . . . **Binmoeller K**, et al. Prospective comparison of patient experience with colon imaging tests. *Am J Med*. 2006;119:791-9.

de Weerth A, Seitz U, Zhong Y, Groth S, Omar S, Papageorgiou C, Bohnacker S, Seewald S, Seifert H, **Binmoeller KF**, et al. Primary precutting versus conventional over-the-wire sphincterotomy for bile duct access: a prospective randomized study. *Endoscopy*. 2006;38:1235-40.

Mehdizadeh S, Ross A, Gerson L, Leighton J, Chen A, Schembre D, Chen G, Semrad C, Kamal A, Harrison EM, **Binmoeller K**, et al. What is the learning curve associated with double-balloon enteroscopy? Technical details and early experience in 6 U.S. tertiary care centers. *Gastrointest Endosc*. 2006;64:740-50.

**Maurizio Bonacini, MD (bonacim@sutterhealth.org)**

Dr. Bonacini studies the treatment of liver disease.

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Assi M, McKinsey DS, Driks MR, O'Connor MC, **Bonacini M**, Graham B, et al. Gastrointestinal histoplasmosis in the acquired immunodeficiency syndrome: report of 18 cases and literature review. *Diagn Microbiol Infect Dis*. 2006;55:195-201.

Kohla M, **Bonacini M**. Pathogenesis of hepatitis C virus infection. *Minerva Gastroenterol Dietol*. 2006;52:107-23.

Verma S, **Bonacini M**, Govindarajan S, Kanel G, Lindsay KL, Redeker A. More advanced hepatic fibrosis in hispanics with chronic hepatitis C infection: role of patient demographics, hepatic necroinflammation, and steatosis. *Am J Gastroenterol*. 2006;101:1817-23.

Verma S, Wang CH, Govindarajan S, Kanel G, Squires K, **Bonacini M**. Do type and duration of antiretroviral therapy attenuate liver fibrosis in HIV-hepatitis C virus-coinfected patients? *Clin Infect Dis*. 2006;42:262-70.

## **Bruce Brent, MD**

Dr. Brent is an interventional cardiologist.

Yoon EJ, **Hausslein E, Brent B**. Long-term follow up after coronary sirolimus drug-eluting stent implantation for cardiac transplant arteriopathy. *J Invasive Cardiol*. 2006;1:184-5.

## **Warren Browner, MD, MPH (warren@cpmcri.org)**

Dr. Browner studies the epidemiology of aging, including cardiovascular disease.

Brophy VH, Ro SK, Rhees BK, **Lui LY**, Lee JM, Umblas N, Bently LG, Li J, Cheng S, **Browner WS**, et al. Association of phosphodiesterase 4D polymorphisms with ischemic stroke in a US population stratified by hypertension status. *Stroke*. 2006;3:1385-90.

See also Tom Nuckton.

## **Steve Cummings, MD (scummings@sfcc-cpmc.net)**

Dr. Cummings does research in women's health, especially breast cancer and osteoporosis.

Lau EMC, Leung PC, Kwok T, Woo J, Orwoll E, **Cummings SR**, Cauley J. The Determinants of Bone Mineral Density in Chinese Men – Results From Mr. OS (Hong Kong), the First Cohort Study on Osteoporosis in Asian Men. *Osteoporos Int*. 2006; 17:297-303.

Beattie M, Costantino J, **Cummings SR**, Wickerham D, Vogel V, Dowsett M, Folkert E, Willett W, Wolmark N, Hankinson S. Endogenous sex hormones, risk of breast cancer, and response to tamoxifen: an ancillary study in the NSABP Breast Cancer Prevention Trial (P-1). *J Natl Canc Instit*. 2006;98:110-5.

Shlipak MG, Wassel Fyr CL, Chertow GM, Harris TB, Kritchevsky SB, Tylavsky FA, Satterfield S, **Cummings SR**, Newman AB, Fried LF. Cystatin C and mortality risk in the elderly: the health, aging, and body composition study. *J Am Soc Nephrol*. 2006;17:254-61.

Hsu Y, Venners SA, Terwedow HA, Feng Y, Niu T, Li Z, Laird N, Brain JD, **Cumming SR**, Boussein ML, Rosen CJ, Xu X. Relation of body composition, fat mass, and serum lipids to osteoporotic fractures and bone mineral density in Chinese men and women. *Am J Clin Nutr*. 2006;83:146-54.

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Kanaya AM, Wassel Fyr C, Vittinghoff E, Harris TB, Park SW, Goodpaster BH, Tylavsky F, **Cummings SR**. Adipocytokines and incident diabetes mellitus in older adults: the independent effect of plasminogen activator inhibitor 1. *Arch Intern Med*. 2006;166:350-6.

Kado DM, Christianson L, Palermo L, Smith-Bindman R, **Cummings SR**, Greendale GA. Comparing a supine radiologic versus standing clinical measurement of kyphosis in older women: the Fracture Intervention Trial. *Spine*. 2006;31:463-7.

Jackson RD, LaCroix AZ, Gass M, Wallace RB, Robbins J, Lewis CE, Bassford T, Beresford SA, Black HR, Blanchette P, Bonds DE, Brunner RL, Brzyski RG, Caan B, Cauley JA, Chlebowski RT, **Cummings SR**, et al Calcium plus vitamin D supplementation and the risk of fractures. *N Engl J Med*. 2006;354:669-83.

Orwoll E, Lambert LC, Marshall LM, Phipps K, Blank J, Barrett-Connor E, Cauley J, Ensrud K, **Cummings S**. Testosterone and estradiol among older men. *J Clin Endocrinol Metab*. 2006;91:1336-44.

Thomas T, Feron JM, Delmas PD, Kaufman J, Tosi L, **Cummings S**, Lane J, Johnell O, Bouxsein ML. [Optimal management of patients with stress fractures and the role of the orthopedic surgeon in reducing the risk of new fractures] *Rev Chir Orthop Reparatrice Appar Mot*. 2006;92:165-74.

McClung MR, Siris E, **Cummings S**, Bolognese M, Ettinger M, Moffett A, Emkey R, Day W, Somayaji V, Lee A. Prevention of bone loss in postmenopausal women treated with lasofoxifene compared with raloxifene. *Menopause*. 2006;13:377-86.

Jamal SA, Hamilton CJ, Black D, **Cummings SR**. The effects of organic nitrates on osteoporosis: a randomized controlled trial. *Trials*. 2006;26:10.

Shepherd JA, Herve L, Landau J, Fan B, Kerlikowske K, **Cummings SR**. Clinical comparison of a novel breast DXA technique to mammographic density. *Med Phys*. 2006;33:1490-8.

Bibbins-Domingo K, Chertow GM, Fried LF, Odden MC, Newman AB, Kritchevsky SB, Harris TB, Satterfield S, **Cummings SR**, Shlipak MG. Renal function and heart failure risk in older black and white individuals: the Health, Aging, and Body Composition Study. *Arch Intern Med*. 2006;166:1396-402.

Schwartz AV, Sellmeyer DE, Vittinghoff E, Palermo L, Lecka-Czernik B, Feingold KR, Strotmeyer ES, Resnick HE, Carbone L, Beamer BA, Park SW, Lane NE, Harris TB, **Cummings SR**. Thiazolidinedione use and bone loss in older diabetic adults. *J Clin Endocrinol Metab*. 2006;9:3349-54.

Lippman ME, **Cummings SR**, Disch DP, Mershon JL, Dowsett SA, Cauley JA, Martino S. Effect of raloxifene on the incidence of invasive breast cancer in postmenopausal women with osteoporosis categorized by breast cancer risk. *Clin Cancer Res*. 2006;12:5242-7

Lee JS, Ettinger B, Stanczyk FZ, Vittinghoff E, Hanes V, Cauley JA, Chandler W, Settlege J, Beattie MS, Folkerd E, Dowsett M, Grady D, **Cummings SR**. Comparison of methods to measure low serum estradiol levels in postmenopausal women. *J Clin Endocrinol Metab*. 2006;91:3791-7.

**Cummings SR**, Cawthon PM, Ensrud KE, Cauley JA, Fink HA, Orwoll ES; Osteoporotic Fractures in Men (MrOS) Research Groups; Study of Osteoporotic Fractures Research Groups. BMD and risk of hip and nonvertebral fractures in older men: a prospective study and comparison with older women. *J Bone Miner Res*. 2006;21:1550-6.

Orwoll E, Lambert LC, Marshall LM, Blank J, Barrett-Connor E, Cauley J, Ensrud K, **Cummings SR**; Osteoporotic Fractures in Men Study Group. Endogenous testosterone levels, physical performance, and fall risk in older men. *Arch Intern Med*. 2006;166:2124-31.

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Cawthon PM, Harrison SL, Barrett-Connor E, Fink HA, Cauley JA, Lewis CE, Orwoll ES, **Cummings SR**. Alcohol intake and its relationship with bone mineral density, falls, and fracture risk in older men. *J Am Geriatr Soc*. 2006;54:1649-57.

**Cummings, SR**, Cawthon PM, Ensrud KE, Cauley JA, Fink HA, Orwoll E; BMD and risk for hip and nonvertebral fractures in older men: a prospective study and comparison with older women. *J Bone Min Re*. 2006;21:1550-1555.

Kanaya AM, Wassel Fyr C, Vittinghoff E, Havel PJ, Cesari M, Nicklas B, Harris T, Newman AB, Satterfield S, **Cummings SR**; Health ABC Study. Serum adiponectin and coronary heart disease risk in older Black and White Americans. *J Clin Endocrinol Metab*. 2006;91:5044-50.

**Cummings SR**. A 55-year-old woman with osteopenia. *JAMA*. 2006;296:2601-10.

Black DM, Schwartz AV, Ensrud KE, Cauley JA, Levis S, Quandt SA, Satterfield S, Wallace RB, Bauer DC, Palermo L, Wehren LE, Lombardi A, Santora AC, **Cummings SR**; FLEX Research Group. Effects of continuing or stopping alendronate after 5 years of treatment: the Fracture Intervention Trial Long-term Extension (FLEX): a randomized trial. *JAMA*. 2006;296:2927-38.

See also Katie Stone.

### **Shanaz Dairkee, PhD (dairkees@cpmcricri.org)**

Dr. Dairkee studies the cell biology of breast cancer.

Chin K, DeVries S, Fridlyand J, Spellman PT, Roydasgupta R, Kuo WL, Lapuk A, Neve RM, Qian Z, Ryder T, Chen F, Feiler H, Tokuyasu T, Kingsley C, **Dairkee S**, et al. Genomic and transcriptional aberrations linked to breast cancer pathophysiologies. *Cancer Cell*. 2006;10:529-41.

Fridlyand J, Snijders AM, Ylstra B, Li H, Olshen A, Segraves R, **Dairkee S**, et al. Breast tumor copy number aberration phenotypes and genomic instability. *BMC Cancer*. 2006;6:96.

### **Robert Debs, MD (debs@cpmcricri.org)**

Dr. Debs studies methods to improve gene delivery mechanisms.

**Liu Y**, Liggitt D, **Fong S**, **Debs RJ**. Systemic co-administration of depsipeptide selectively targets transfection enhancement to specific tissues and cell types. *Gene Ther*. 2006;13:1724-30.

Bagheri S, Nosrati M, Li S, **Fong S**, Torabian S, Rangel J, **Moore DH**, Federman S, Laposa RR, Baehner FL, Sagebiel RW, Cleaver JE, Hagg C, **Debs RJ**, et al. Genes and pathways downstream of telomerase in melanoma metastasis. *Proc Natl Acad Sci U S A*. 2006;103:11306-11.

### **Pierre Desprez, PhD (pydesprez@cpmcricri.org)**

The Desprez laboratory studies the early changes that occur in cancer cells.

Zhao Y, Johansson C, Tran T, Bettencourt R, Itahana Y, **Desprez PY**, et al. Identification of a basic helix-loop-helix transcription factor expressed in mammary gland alveolar cells and required for maintenance of the differentiated state. *Mol Endocrinol*. 2006;20:2187-98.

**Joanna Fanos, PhD (Joanna.H.Fanos@dartmouth.edu)**

Dr. Fanos is interested in the ethical issues involved in screening for genetic disease.

**Fanos JH**, Spangner KA, **Musci TJ**. Attitudes toward prenatal screening and testing for Fragile X. *Genet Med*. 2006;8:129-33.

**Gantt Galloway, PharmD (gantt@cpmcri.org)**

Dr. Galloway studies why people get addicted to drugs and what we can do about it.

Johanson CE, Frey KA, Lundahl LH, Keenan P, Lockhart N, Roll J, **Galloway GP**, et al. Cognitive function and nigrostriatal markers in abstinent methamphetamine abusers. *Psychopharmacology (Berl)*. 2006;18:327-38.

Polcin DL, **Galloway GP**, Greenfield TK. Measuring confrontation during recovery from addiction. *Subst Use Misuse*. 2006;41:369-92.

Stalcup SA, Christian D, Stalcup J, Brown M, **Galloway GP**. A treatment model for craving identification and management. *J Psychoactive Drugs*. 2006;38:189-202.

**Claude Genain, MD (genainc@cpmcri.org)**

Dr. Genain studies the cause of multiple sclerosis.

Delarasse C, Della Gaspera B, Lu CW, Lachapelle F, Gelot A, Rodriguez D, Dautigny A, **Genain C**, et al. Complex alternative splicing of the myelin oligodendrocyte glycoprotein gene is unique to human and non-human primates. *J Neurochem*. 2006;98:1707-17.

**Gardell JL**, Dazin P, **Islar J**, Menge T, **Genain CP**, Lalive PH. Apoptotic effects of Human Herpesvirus-6A on glia and neurons as potential triggers for central nervous system autoimmunity. *J Clin Virol*. 2006;37 Suppl 1:S11-6.

Lalive PH, Menge T, Barman I, Cree BA, **Genain CP**. Identification of new serum autoantibodies in neuromyelitis optica using protein microarrays. *Neurology*. 2006;67:176-7.

Lalive PH, Menge T, Delarasse C, Della Gaspera B, Pham-Dinh D, Villoslada P, von Budingen HC, **Genain CP**. Antibodies to native myelin oligodendrocyte glycoprotein are serologic markers of early inflammation in multiple sclerosis. *Proc Natl Acad Sci U S A*. 2006;103:2280-5.

von Budingen HC, Menge T, Hauser SL, **Genain CP**. Restrictive and diversifying elements of the anti-myelin/oligodendrocyte glycoprotein antibody response in primate experimental allergic encephalomyelitis. *Immunogenetics*. 2006;58:122-8.

**Robert Gish, MD (gishr@sutterhealth.org)**

Dr. Gish does clinical research in patients with hepatitis and other forms of liver disease.

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- Arrazola L, Moonka D, **Gish RG**, Everson GT. Model for end-stage liver disease (MELD) exception for polycystic liver disease. *Liver Transpl.* 2006;12:S110-1.
- Biggins SW, Colquhoun S, **Gish RG**, Runyon BA. Model for end-stage liver disease (MELD) exception for ascites. *Liver Transpl.* 2006;12:S88-90.
- Chang TT, **Gish RG**, de Man R, Gadano A, Sollano J, Chao YC, et al. A comparison of entecavir and lamivudine for HBeAg-positive chronic hepatitis B. *N Engl J Med.* 2006;354:1001-10.
- Fallon MB, Mulligan DC, **Gish RG**, Krowka MJ. Model for end-stage liver disease (MELD) exception for hepatopulmonary syndrome. *Liver Transpl.* 2006;12:S105-7.
- Freeman RB, Jr., **Gish RG**, Harper A, Davis GL, Vierling J, Lieblein L, et al. Model for end-stage liver disease (MELD) exception guidelines: Results and recommendations from the MELD exception study group and conference (MESSAGE) for the approval of patients who need liver transplantation with diseases not considered by the standard MELD formula. *Liver Transpl.* 2006;12:S128-36.
- Garcia-Tsao G, **Gish RG**, Punch J. Model for end-stage liver disease (MELD) exception for hereditary hemorrhagic telangiectasia. *Liver Transpl.* 2006;12:S108-9.
- Gish RG**. Hepatocellular carcinoma: overcoming challenges in disease management. *Clin Gastroenterol Hepatol.* 2006;4:252-61.
- Gish RG**. Treating HCV with ribavirin analogues and ribavirin-like molecules. *J Antimicrob Chemother.* 2006;57:8-13.
- Gish RG**, Gadano AC. Chronic hepatitis B: current epidemiology in the Americas and implications for management. *J Viral Hepat.* 2006;13:787-98.
- Gish RG**, Locarnini SA. Chronic hepatitis B: current testing strategies. *Clin Gastroenterol Hepatol.* 2006;4:666-76.
- Gish RG**, McCashland T. Hepatitis B in liver transplant recipients. *Liver Transpl.* 2006;12:S54-64.
- Gores GJ, **Gish RG**, Shrestha R, Wiesner RH. Model for end-stage liver disease (MELD) exception for bacterial cholangitis. *Liver Transpl.* 2006;12:S91-2.
- Gores GJ, **Gish RG**, Sudan D, Rosen CB. Model for end-stage liver disease (MELD) exception for cholangiocarcinoma or biliary dysplasia. *Liver Transpl.* 2006;12:S95-7.
- Ham J, **Gish RG**, Mullen K. Model for end-stage liver disease (MELD) exception for hepatic encephalopathy. *Liver Transpl.* 2006;12:S102-4.
- Horslen S, **Gish RG**, McDonald R. Model for end-stage liver disease (MELD) exception for primary hyperoxaluria. *Liver Transpl.* 2006;12:S117-8.
- Horslen S, Sweet S, **Gish RG**, Shepherd R. Model for end-stage liver disease (MELD) exception for cystic fibrosis. *Liver Transpl.* 2006;12:S98-9.
- Ito K, Tanaka Y, Orito E, Sugiyama M, Fujiwara K, Sugauchi F, . . . **Gish RG**, et al. T1653 mutation in the box alpha increases the risk of hepatocellular carcinoma in patients with chronic hepatitis B virus genotype C infection. *Clin Infect Dis.* 2006;42:1-7.
- Krowka MJ, Fallon MB, Mulligan DC, **Gish RG**. Model for end-stage liver disease (MELD) exception for portopulmonary hypertension. *Liver Transpl.* 2006;12:S114-6.

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McDiarmid S, **Gish RG**, Horslen S, Mazariegos GV. Model for end-stage liver disease (MELD) exception for unusual metabolic liver diseases. *Liver Transpl.* 2006;12:S124-7.

Morice Y, Cantaloube JF, Beaucourt S, Barbotte L, De Gendt S, Goncales FL, . . . **Gish RG**, et al. Molecular epidemiology of hepatitis C virus subtype 3a in injecting drug users. *J Med Virol.* 2006;78:1296-303.

Pawlotsky JM, **Gish RG**. Future therapies for hepatitis C. *Antivir Ther.* 2006;11:397-408.

Perrillo RP, **Gish RG**, Peters M, Keeffe EB, Alberti A, Buti M, et al. Chronic hepatitis B: a critical appraisal of current approaches to therapy. *Clin Gastroenterol Hepatol.* 2006;4:233-48.

Pomfret E, **Gish RG**, Brandhagen D. Model for end-stage liver disease (MELD) exception for familial amyloidotic polyneuropathy. *Liver Transpl.* 2006;12:S100-1.

Punch J, **Gish RG**. Model for end-stage liver disease (MELD) exception for uncommon hepatic tumors. *Liver Transpl.* 2006;12:S122-3.

Sheiner P, Belghiti J, **Gish RG**, Miller C. Model for end-stage liver disease (MELD) exception small-for-size syndrome. *Liver Transpl.* 2006;12:S120-1.

Sheiner P, **Gish RG**, Sanyal A. Model for end-stage liver disease (MELD) exception for portal hypertensive gastrointestinal bleeding. *Liver Transpl.* 2006;12:S112-3.

Sugiyama M, Tanaka Y, Kato T, Orito E, Ito K, Acharya SK, . . . **Gish RG**, et al. Influence of hepatitis B virus genotypes on the intra- and extracellular expression of viral DNA and antigens. *Hepatology.* 2006;44:915-24.

Washburn WK, **Gish RG**. Model for end-stage liver disease (MELD) exception for severe pruritus. *Liver Transpl.* 2006;12:S119.

Washburn WK, **Gish RG**, Kamath PS. Model for end-stage liver disease (MELD) exception for Budd-Chiari syndrome. *Liver Transpl.* 2006;12:S93-4.

Wiesner R, Lake JR, Freeman RB, **Gish RG**. Model for end-stage liver disease (MELD) exception guidelines. *Liver Transpl.* 2006;12:S85-7.

### **William Goodson, MD (goodsow@cpmcni.org)**

Dr. Goodson studies the diagnosis of breast cancer and how to improve the clinical breast examination.

**Goodson WH, 3rd.** Closure of partial mastectomy. *Am J Surg.* 2006;191:117-20.

### **Dieter Gruenert, PhD (dieter@cpmcni.org)**

The Gruenert laboratory studies how to correct genetic errors in diseases such as cystic fibrosis.

Crawford RM, Treharne KJ, Best OG, Riemen CE, Muimo R, **Gruenert DC**, et al. NDPK-A (but not NDPK-B) and AMPK alpha1 (but not AMPK alpha2) bind the cystic fibrosis transmembrane conductance regulator in epithelial cell membranes. *Cell Signal.* 2006;18:1595-603.

Goncz KK, Prokopishyn NL, **Abdolmohammadi A, Bedayat B, Maurisse R**, Davis BR, **Gruenert DC**. Small fragment homologous replacement-mediated modification of genomic beta-globin sequences in human hematopoietic stem/progenitor cells. *Oligonucleotides.* 2006;16:213-24.

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**Maurisse R, Cheung J, Widdicombe J, Gruenert DC.** Modification of the pig CFTR gene mediated by small fragment homologous replacement. *Ann N Y Acad Sci.* 2006;1082:120-3.

**Maurisse R, Fichou Y, De Semir D, Cheung J, Ferec C, Gruenert DC.** Gel purification of genomic DNA removes contaminating small DNA fragments interfering with polymerase chain reaction analysis of small fragment homologous replacement. *Oligonucleotides.* 2006;16:375-86.

Shuto T, Furuta T, Oba M, Xu H, Li JD, **Cheung J, Gruenert DC,** et al. Promoter hypomethylation of Toll-like receptor-2 gene is associated with increased proinflammatory response toward bacterial peptidoglycan in cystic fibrosis bronchial epithelial cells. *FASEB J.* 2006;20:782-4.

**Haeusslein, Ernest, MD (haeusse@sutterhealth.org)**

Dr. Haeusslein is a cardiologist interested in heart failure and heart transplants.

See Bruce Brent.

**Giuseppi Inesi, MD (inesig@cpmcricri.org)**

Dr Inesi's group studies calcium transport across membranes.

Bartolommei G, Tadini-Buoninsegni F, Hua S, Moncelli MR, **Inesi G,** Guidelli R. Clotrimazole inhibits the Ca<sup>2+</sup>-ATPase (SERCA) by interfering with Ca<sup>2+</sup> binding and favoring the E2 conformation. *J Biol Chem.* 2006;281:9547-51.

**Inesi G, Lewis D,** Ma H, **Prasad A,** Toyoshima C. Concerted conformational effects of Ca<sup>2+</sup> and ATP are required for activation of sequential reactions in the Ca<sup>2+</sup> ATPase (SERCA) catalytic cycle. *Biochemistry.* 2006;45:13769-78.

Tadini-Buoninsegni F, Bartolommei G, Moncelli MR, Guidelli R, **Inesi G.** Pre-steady state electrogenic events of Ca<sup>2+</sup>/H<sup>+</sup> exchange and transport by the Ca<sup>2+</sup>-ATPase. *J Biol Chem.* 2006;281:37720-7.

**Kenneth Laxer, MD (laxerkd@cpmcricri.org)**

Dr. Laxer studies the use of modern technologies like magnetic resonance imaging (MRI) in patients with epilepsy.

Mueller SG, **Laxer KD,** Cashdollar N, Buckley S, Paul C, Weiner MW. Voxel-based optimized morphometry (VBM) of gray and white matter in temporal lobe epilepsy (TLE) with and without mesial temporal sclerosis. *Epilepsia.* 2006;47:900-7.

Mueller SG, **Laxer KD,** Cashdollar N, Lopez RC, Weiner MW. Spectroscopic evidence of hippocampal abnormalities in neocortical epilepsy. *Eur J Neurol.* 2006;13:256-60.

Schuff N, Meyerhoff DJ, Mueller S, Chao L, Sacrey DT, **Laxer K,** et al. N-acetylaspartate as a marker of neuronal injury in neurodegenerative disease. *Adv Exp Med Biol.* 2006;576:241-62.

**Vishwanath (Vishu) Lingappa, MD, PhD (lingapv@cpmcricri.org)**

Dr. Lingappa studies how protein folding can lead to disease.

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Marzi A, **Akhavan A**, Simmons G, Gramberg T, Hofmann H, Bates P, **Lingappa VR**, et al. The signal peptide of the ebolavirus glycoprotein influences interaction with the cellular lectins DC-SIGN and DC-SIGNR. *J Virol*. 2006;80:6305-17.

**Elliott Main, MD (maine@sutterhealth.org)**

Dr. Main studies how to improve the outcomes of pregnant women.

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**Sean McAllister, PhD (mcallis@cpmcri.org)**

Dr. McAllister conducts research on the cannabinoid receptor in cancer cells.

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**John Mendelson, MD (mendelje@cpmcri.org)**

Dr. Mendelson studies the pharmacokinetics of substance abuse.

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**Robert Miller, MD (millerrx@cpmcri.org)**

Dr. Miller and his group study treatments for ALS.

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**Dan Moore, PhD (mooredx@cpmcricri.org)**

Dr. Moore is a biostatistician who works with many CPMCRI investigators and physicians.

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See also Mary Abood, John Astin, Robert Debs, Elliott Main, Robert Miller, and Garret Yount.

**John Muschler, PhD (muschler@cpmcricri.org)**

Dr. Muschler studies the interaction of cancer cells with their local environment.

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See also Pierre Desprez.

**Tom Musci, MD (tmusci@sfperinatal.com)**

Dr. Musci studies neonatal genetics and other perinatal issues.

See Joanna Fanos.

**Thomas Nuckton, MD (nuckton@cpmcricri.org)**

Dr. Nuckton is a pulmonologist interested in sleep disorders.

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Dr. Stone studies osteoporosis and sleep disorders in the elderly.

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**David C Tong, MD (tongdc@sutterhealth.org)**

Dr. Tong studies the causes and consequences of strokes.

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**Gregory Tranah, PhD (grtranah@sfcc-cpmc.net)**

Dr. Tranah is a genetic epidemiologist who studies cancer and aging.

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**Li-Xi Yang, MD, PhD (yangl@cpmcri.org)**

Dr. Yang is investigating the effects of novel chemotherapeutic agents to enhance the effects of radiation.

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**Lowell Young, MD (younglx@cpmcri.org)**

See Luiz Bermudez.

**Garret Yount, PhD (yountg@cpmcri.org)**

Dr. Yount is exploring how promising complementary and alternative medical therapies may work.

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