Scientific Activities of the
California Pacific Medical Center Research Institute

2004 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 lists manuscripts published in the peer-reviewed literature in 2004 that describe their activities. For convenience, we have listed them 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@sutterhealth.org)

Dr. Abood’s laboratory studies cannabinoid receptors on the surface of neurons and other cells. Recently she has found evidence that cannabinoids may be useful in the treatment of ALS, as described below. Dr. Raman was a post-doctoral candidate in her laboratory.


See also Sean McAllister

Saleh Adi, MD (adis@sutterhealth.org)

Dr. Adi is a pediatric endocrinologist who studies the differentiation and development of muscle cells. A recent report discloses some of the biological pathways that are involved in this process.


John Astin, PhD (astinja@sutterhealth.org)

Dr. Astin’s work involves an examination of barriers to the integration of psychosocial factors in medical training and practice. The first paper reviews some of the evidence that links psychosocial factors with health outcomes. Kelly Forys is a research associated working with Dr. Astin.


Ari Baron, MD

Dr. Baron recently participated in a multi-site trial of a new treatment involving monoclonal antibodies for colon cancer.

**James L. Bennington, MD** (benninj@sutterhealth.org)

See Ling-Chun Chen and Pierre Desprez

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

Dr. Bermudez has a longstanding interest in how mycobacteria infect cells. Peter Kolonoski, Mary Petrofsky and Martin Wu were research associates in the laboratory; Dr. Lowell Young is a colleague. The first paper describes new treatments for resistant mycobacteria.


Kenneth Binmoeller, MD (binmoek@sutterhealth.org)

Dr. Binmoeller reported the preliminary results of using “superglue” to treat bleeding in patients with cirrhosis. Dr. Rengstorff was a fellow in gastroenterology at CPMC.


Warren Browner, MD, MPH (brownew@sutterhealth.org)

Dr. Browner studies the epidemiology of aging, including cardiovascular disease and osteoporosis. In collaboration with other members of the Genetics of Longevity Consortium, he reviewed recent studies in this area, as described in the first paper below.


Harry J. Buncke, MD (bunckehj@sutterhealth.org)

These papers describe some recent advances in microsurgery.


Ling-Chun Chen, PhD (chenlc@sutterhealth.org)

Dr. Chen studies early genetic changes in two diseases: colon cancer and ALS. The first paper reports several early changes in the development of colon polyps. The other authors are scientists and physicians at CPMC.


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

Dr. Cummings does research in women’s health, especially breast cancer and osteoporosis, and in longevity. In a report in Obstetrics and Gynecology, Dr. Cummings and his colleagues reported some of the important side effects of raloxifene.


See also Warren Browner

Shanaz Dairkee, PhD (dairkees@sutterhealth.org)

Dr. Dairkee and her colleagues study the characteristics of breast cancer cells. The first paper describes some of the findings from the model systems that her lab uses to study breast cancer. Drs. Meng and Ben were members of her lab.


Robert Debs, MD (debsrj@sutterhealth.org)

Dr. Debs studies the delivery of genes to specific cells and tissues. The first paper shows how nuclear delivery of extracellular DNA by nonviral vectors is inhibited by a series of cell membrane and compartmental barriers. Dr. Sylvia Fong is a post-doc in his laboratory; Paul Fong is a research technician.

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See also Pierre Desprez

Pierre Desprez, PhD (desprepy@sutterhealth.org)

The Desprez laboratory studies the early changes that occur in cancer cells, especially breast and prostate cancer. In a paper published in Cancer Research, they reported how progesterone affects breast cancer cells. Dr. Sumida was a post-doc in the lab; Yoko Itahana and J. P. Coppe were graduate students.


Joanna Fanos, PhD (fanosj@sutterhealth.org)

Dr. Fanos studies the effects of genetic testing on patients’ psychological health; a recent paper discusses the attitudes of members of families that have a hereditary form of ALS.


Andrew Freinkel, MD (freinkaj@sutterhealth.org)

See Garret Yount
Gantt Galloway, PharmD (gallowg@sutterhealth.org)

Dr. Galloway studies why people get addicted to drugs and what we can do about it. In the first paper he discusses studies of Motivational Enhancement Therapy in improving motivation for change and decreasing substance use. Michelle Salinardi is a research associate in the Addiction Pharmacology Research Laboratory (APRL).


Deborah Gelines, MD (gelinad@sutterhealth.org)

Dr. Gelines studies the causes and effects of ALS. This paper suggests that N-acetylaspartate (NAA) may not be a useful surrogate marker for treatment trials of ALS.


See also Joanna Fanos and Robert Miller.

Robert Gish, MD (gishr@sutterhealth.org)

Dr. Gish does clinical research in patients with hepatitis and other forms of liver disease. The first article reports the effects of interferon alpha and ribavirin combination therapy on blood counts. Dr. Wakil is a colleague at CPMC.


**Dieter Gruenert, PhD ([gruenedc@sutterhealth.org](mailto:gruenedc@sutterhealth.org))**

Dr. Gruenert studies how to correct genetic errors in diseases such as cystic fibrosis using small fragments of DNA. The first article discusses the benefits of the development of immortalized cell lines.


**Kenneth Laxer, MD ([laxerkd@sutterhealth.org](mailto:laxerkd@sutterhealth.org))**

Dr. Laxer studies the use of modern technologies like magnetic resonance imaging (MRI) in the diagnosis and treatment of epilepsy. The first paper investigated the role of magnetoencephalography (MEG) in localizing the seizure focus in predicting outcomes.


**Nancy M. Lee, PhD ([leenm@sutterhealth.org](mailto:leenm@sutterhealth.org))**

Dr. Lee and her colleagues study how opioid receptors work. This paper concludes that a high degree of tolerance to certain chemicals develops in the spinal cord but not the brain, and cannot be accounted for by changes in expression of opioid receptors or opioid peptides in these tissues. Dr. Ben was a postdoctoral candidate in Dr. Lee’s lab. Andy Smith is a research associate.

See also Ling-Chun Chen

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

Dr. Lingappa studies how protein folding can lead to disease. This paper reveals previously unappreciated relationship between signal sequences and transmembrane integration.


**Jian Liu, PhD** (liuj@sutterhealth.org)

Dr. Liu studies the process of neurodegeneration in ALS. This paper discusses the mechanism of toxicity to motor neurons in ALS.


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

Dr. Main studies how to improve the outcomes of pregnant women. The first paper listed below reflects the results of a study of the consistency of maternal and neonatal measures in various Sutter Health medical centers.


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

Dr. McAllister does research on the cannabinoid receptor. This paper reports a detailed functional analysis of certain mutant receptors in stable cell lines in which the mutant proteins were expressed transiently.


See also Mary Abood
John Mendelson, MD (mendelje@sutterhealth.org)

Dr. Mendelson studies the pharmacokinetics of substance abuse. The first paper below discusses how plasma buprenorphine concentrations are related to its pharmacodynamic effects. Dr. Mendelson is the Director of the Addiction Pharmacology Research Laboratory (APRL).


Robert Miller, MD (millerrx@sutterhealth.org)

Dr. Miller studies treatments for ALS. The first paper below reports the results of two double-blind, randomized, placebo-controlled feasibility trials.


See also Joanna Fanos, Deborah Gelinas and Dan Moore.

Dan Moore, PhD (mooredx@sutterhealth.org)

Dr. Moore is a biostatistician who works with many CPMCRI investigators and physicians. For example, he worked with Dr. Miller to describe designs for clinical trials in ALS including two that are more efficient than the standard two-arm, parallel design.


See also Mary Abood, Ling-Chun Chen, Shanaz Dairkee, Pierre Desprez, Robert Miller, and Garret Yount

John Muschler, PhD (muschldl@sutterhealth.org)

Dr. Muschler conducts research on how cells interact with their surroundings. The first paper below suggests how alterations in a particular protein (dystroglycan) occur in cancer cells. Dr. Singh was a post-doc in Dr. Muschler’s lab; Yoko Itahana was a graduate student.


Tom Musci, MD (muscit@sutterhealth.org)

Dr. Musci studies neonatal genetics and other perinatal issues. This paper studies rates of pregnancy complications.


Tom Nuckton, MD (nucktot@sutterhealth.org)

Dr. Nuckton does clinical research in patients with lung disease. This paper reports results of a study on patients with acute lung injury who received mechanical ventilation.

Marilyn Schlitz, PhD (schlitz@noetic.org)

See Garret Yount

Cassandra Vieten, PhD (vietenc@sutterhealth.org)

Dr. Vieten studies how the mind influences the body. This paper reports on a study designed to identify genetic influences on alcohol dependence and related phenotypes.


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

Dr. Yang is investigating the effects of novel chemotherapeutic agents to enhance the effects of radiotherapy for the treatment of cancer. The first paper below discusses how antitumor activity was evaluated on cancer cells in vitro. Dr. Wang works in Dr. Yang’s laboratory.


Lowell Young, MD (younglx@sutterhealth.org)

Dr. Young studies treatments for mycobacterial infection. This paper describes the effects of different antibiotics on blood cells.

Young LS. Hematologic effects of linezolid versus vancomycin. Clin Infect Dis. 38;1065-6, 2004

See also Luiz Bermudez.

Garret Yount, PhD (yountg@sutterhealth.org)

Dr. Yount is exploring how promising complementary and alternative medical therapies might be integrated with conventional medicine in the treatment of patients with cancer. The
first paper below reports the results of studies on human brain cells. Ryan Taft and Jeremy West worked in Dr. Yount’s laboratory.


