

**PSTP/VSTP RETREAT SCHEDULE OF EVENTS
SIERRA HEALTH FOUNDATION
AUGUST 26, 2002**

8:00 – 8:30

Continental Breakfast

8:30 – 8:50

Welcome

Michael F. Seldin M.D., Ph.D. Director PSTP
Jacqueline Segersten, Sierra Health Foundation

8:50 – 9:05

**" Northern Elephant Seal Platelets Are Protected From
Platelet Activation Associated With Rapid
Decompression"**

Cara Field, VSTP Student

9:10 – 9:25

**"Human Fetal Pancreas-Derived Nestin Positive Stem
Cells From Long Term Cultures Correct Hyperglycemia
When Implanted In Diabetic Mice"**

Fred Wu, PSTP Student

9:30 – 9:50

"Morphogenesis and Regenerative Medicine"

A. Hari Reddi, Ph.D., Ellison Chair of Orthopedic Research,
Professor of Orthopedics

10:00 – 10:30

Morning Break

- 10:30 – 10:45** **“Sodium/Hydrogen Exchange Inhibition And Cell Death In Malignant Gliomas”**
Manu Hegde, PSTP Student
- 10:50 – 11:05** **“The Pharmacokinetics And Tolerance Of Intravenous And Transdermal Fentanyl In Horses”**
Sara Thomasy, VSTP Student
- 11:10 - 11:30** **“Comparative Genetics and Cats”**
Leslie Lyons, Ph.D., Assistant Professor in Genetics, UC Davis School of Veterinary Medicine
- 11:40 - 11:55** **“The Role of ATP in the Exercise Pressor Reflex”**
Ramy Hanna, PSTP Student
- 12:00 – 12:55** **Lunch**
- 1:00 – 1:15** **“Markers Distinguishing Ancestry Demonstrate Strong Extended Linkage Disequilibrium in African Americans”**
Heather Schramm, PSTP Student
- 1:20 – 1:35** **“Regulation of Proinflammatory Cytokine Receptor Signaling By Phosphorylation and Ubiquitination”**
Ingrid Wertz, PSTP Student
- 1:40 – 2:40** **Key-Note: “Cortical Patterning” John Rubenstein, M.D., Ph.D., Nina Ireland Endowed Chair in Child Psychiatry , Professor of Child Psychiatry at UC San Francisco**
- 2:45 – 3:50** **Poster Session** (refreshments will be served)

“Comparative Analysis of Microarray Transcript Data of IL-6 Stimulated LNCaP and CWR22RV1 Prostate Cancer Cell Lines”

Yu-Ming Chang, PSTP Student

“Characterization of IL-4 and Macrophage Derived Chemokine expression in airways of house dust mite sensitized Rhesus monkeys”

Debbie Chou, VSTP Student

“Microvascular complications in type 2 diabetes mellitus (T2DM)”

Patricia Duong, PSTP Student

“Compact Compton Scattering X-Ray Source for Cancer Diagnostics and Treatment”

William Frederick, PSTP Student

“Overexpression of hXBP-1 in Thymic B Cells of Autoimmune Mice”

Tom Hsu, PSTP Student

“Biomechanical Analysis of Three Surgical Approaches for Lumbar Corpectomy Using Allograft and Synthetic Devices”

Philbert Huang, PSTP Student

"Slowed Deactivation Of The Light Response In Rods Lacking The Protein Gb 5-L"

Claudia Krispel, PSTP Student

“Processing Of Dietary Casein Decreases Bioavailability Of Methionine In Growing Kittens”

Jennifer Larsen, VSTP Student

“Oxidative Folding of Bovine Pancreatic Ribonuclease A: Insight Into the Overall Catalysis of the Refolding Pathway by Phosphate ”

Lawrence Low, PSTP Student

“Circulating C-Reactive Protein (CRP), Interleukin-6 (IL-6) and Soluble Tumor Necrosis Factor Receptor Type-II (sTNF-RII) Decrease with Weight Loss in Moderately Overweight Women”

Edward Medina, PSTP Student

**“Acute Inflammatory Response to Lipopolysaccharide
Induces Transient Hyperhomocysteinemia in Mice”**

Maria Medina, PSTP Student

**“Markers That Discriminate Between European And African Ancestry Show
Limited African Diversity”**

Heather Schramm, PSTP Student

4:00 – 4:15

“Differential Effects of MAP Kinase signaling on Co-repressor Proteins”

Brian Jonas, PSTP Student

4:20 – 4:40

“Application of encoded small molecule combinatorial libraries in proteomics”

Kit Lam M.D., Ph.D., Chief of Division of Hematology/Oncology, Professor of Internal Medicine

4:45 – 5:00

"Analysis of MHC region genetics in Finnish patients with Juvenile Idiopathic Arthritis: Evidence for different locus specific effects in polyarticular vs. pauciarticular subsets and a shared DRB1 epitope"

Jon Runstadler, VSTP Student

5:05 – 5:20

“Face Expression Processing Tested with Expression-Morphed Images”

Noah Merrin, PSTP Student

6:00

Dinner at Fat City Bar and Café for guests who responded to the request for an RSVP. Fat City Bar and Café is located at 1001 Front Street in Old Sacramento.

About our Key-Note Speaker

Dr. John Rubenstein, our Distinguished Visiting Professor is a graduate of the Stanford Medical Scientist Training Program (Ph.D. Biophysics, 1982; M.D., 1983). Dr. Rubenstein's training included a postdoctoral fellow for two years at the Pasteur Institute in the laboratory of Francois Jacob and Jean-Francois Nicolas (1984-1986). In 1986, he returned to Stanford for his clinical training in Child Psychiatry. During the last three years of his residency (1988-1991) he also worked in Roland Ciaranello's laboratory, where he initiated a project to identify and characterize genes that regulate development of the mammalian forebrain. Notably, during this period, he devised a method for performing subtractive hybridization that was used to isolate several genes that are expressed in spatially restricted patterns in the developing forebrain. Two of these genes became the foundation for his studies over the last ten years: *Dlx2* and *Tbr1*. In 1991 Dr. Rubenstein joined the faculty at UCSF as an Assistant Professor of Psychiatry. Rising rapidly through the ranks, he rose to full Professor in 1999 and was named the Nina Ireland Endowed Chair in Child Psychiatry.

Dr Rubenstein's long-term career goal is to understand the genetic underpinnings of forebrain evolution and function and to help elucidate mechanisms underlying human neurodevelopmental and neuropsychiatric disorders. His laboratory focuses on studying the genes that regulate regional specification and differentiation of the mammalian forebrain particularly within the cerebral cortex and basal ganglia. These studies suggest that the expression of regulatory genes can define functional subdivisions of the forebrain and have led to the proposal that the vertebrate forebrain is subdivided by longitudinal and transverse boundaries. Ongoing investigations in his laboratory address the inductive mechanisms that pattern the neural plate and neural tube in a chicken embryo model and include mouse model studies examining mice with mutations in genes encoding patterning molecules (e.g. SHH and FGF8) or encoding transcription factors that transduce patterning signals (e.g. *Emx*, *Gsh*, *Nkx* and *Lef*). To study neurogenesis, differentiation and migration within the forebrain, mouse mutants for several transcription factor genes expressed in the primordia of the basal ganglia (e.g. *Dlx*, *Mash* and *Pbx*) or cerebral cortex (e.g. *Id*, *Emx* and *Tbr*) are also being examined. These studies are providing insights into the specification and differentiation of distinct types of neurons. Finally, his laboratory is beginning to study the mechanisms that regulate the formation of circuitry within the forebrain.

Awards:

1990: Caroline K. Voorsanger Award for Research in Child Psychiatry
1991 Presidential Scholar Award from the American Academy of Child and

Adolescent Psychiatry

1996 Neuroscience Award and Grass Traveling Scientist Award from the Baltimore Chapter of the Society for Neuroscience

1997 Grass Traveling Scientist Award from the Colorado Chapter of the Society for Neuroscience

Recent Publications:

Hevner, R.F., Shi, L., Justice, N., Hsueh Y-P, Sheng, M., Smiga, S., Bulfone, A., Goffinet, A.M. and Rubenstein, J.L.R. (2001) *Tbr1* regulates differentiation of the preplate and layer 6. Neuron, 29. 353-366.

Marín, O., Yarom, A., Bagri, A., Tessier-Lavigne, M., Rubenstein, JLR. (2001) Semaphorin-Neuropilin Interactions Mediate Sorting of Striatal and Cortical Interneurons during Development. Science 293, 872-875.

Stühmer, T., Anderson, S.A., Ekker, M and Rubenstein, J.L.R. (2002) Ectopic Expression of the *Dlx* genes induces Glutamic Acid Decarboxylase and *Dlx* expression. Development, 129: 245-252.

Marín O, Baker J, Puelles L and Rubenstein JLR (2002) Patterning of the basal telencephalon and hypothalamus is essential for guidance of cortical projections. Development 2002 129: 761-773.

Hevner, R.F., Miyashita, E. and Rubenstein, J.L.R. (2002) Cortical and thalamic axon pathfinding defects in *Tbr1*, *Gbx2*, and *Pax6* mutant mice: evidence that cortical and thalamic axons interact and guide each other. Journal of Comparative Neurology, in press.