



- 1:00 – 1:10**                    **“The Genetic Contribution of the MHC Region to Juvenile Idiopathic Arthritis”** Jon Runstadler, VSTP Student
- 1:15 – 1:40**                    **“Frontiers of BioMedical Engineering”** Dennis Mathews, Ph.D.
- 1:45 – 2:45**                    **Key-Note : “Coreceptors and HIV-1 Pathogenesis”** Mark A. Goldsmith, M.D., Ph.D., Associate Professor of Medicine, Gladstone Institute of Virology and Immunology Cancer Center at UCSF

**2:50 – 4:00**                    **Poster Session** (refreshments will be served)

**" Alpha,beta-Methylene ATP Elicits the Muscle Chemoreflex in Decerebrate Cats "**  
Ramy Hanna, PSTP Student

**“X Box Binding Protein: Thymic involvement in Autoimmune Lupus”**  
Tom Hsu, PSTP Student

**“In Vivo Tensile Behavior of a Four-Bundle Hamstring Graft as a Replacement for the Anterior Cruciate Ligament”**  
Phil Huang, PSTP Student

**"Slowed Deactivation Of The Light Response In Rods Lacking The Protein Gb5-L"**  
Claudia Krispel, PSTP Student

**“Effect of Processing of Dietary Casein on Lysine Bioavailability 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

**“Tumor necrosis factor-alpha-induced hyperinsulinemia prevents decreases of circulating leptin during fasting in rats”**  
Edward Medina, PSTP Student

**"Elevated Plasma Homocysteine in Adults with Sickle Cell Disease Relates to Folate Status, Even in the Absence of Overt Folate Deficiency."**  
Maria Medina, PSTP Student

**"A Study to Investigate the Effect of Bilateral Amygdalectomy On Human Social Cognition"**  
Noah Merin, PSTP Student

**“The Pharmacokinetics Of Intravenous And Transdermal Fentanyl In Horses”**

Sara Thomasy, VSTP Student

**“Abnormalities in mouse kidney fibroblast primary cell cultures established from F3 offspring with F0 paternal irradiation”**

Maude Vance, PSTP Student

**4:05 – 4:40**

**Round Table Discussion, “Human and Animal Rights: Implications for the future of Biomedical Research”**

Stephen Barthold, DVM, Ph.D.,      Fern Tablin, DVM, Ph.D.  
Hsing-Jien Kung, Ph.D.              Jerry Powell, MD, Ph.D.  
Mark Goldsmith, M.D., Ph.D. Michael F. Seldin, MD, Ph.D.

**4:45 – 4:55**

**“Identifying the Islet Stem Cell”** Fred Wu, PSTP Student

**5:00 – 5:20**

**"Characterization of IL-4 and macrophage derived chemokine expression in airways of house dust mite- sensitized Rhesus monkeys"**

Debbie Chou, VSTP Student

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**6:00**

**Dinner at Rio City Café** for guests who responded to the request for an RSVP. Rio City Café is located at 1110 Front Street.

**About our Key-Note Speaker**

**Dr Mark A Goldsmith**, our Distinguished Visiting Professor is himself a Physician Scientist. After completing his undergraduate degree at Princeton he was an M.D./Ph.D. student at UCSF. Following an Internal Medicine residency split between Brigham and Women’s Hospital and UCSF he has risen through the ranks at UCSF and the Gladstone Institute for Virology and Immunology where he is currently an Associate Investigator. He has made numerous contributions to understanding the cellular immunology of HIV using molecular biologic tools and in defining signal transduction mechanisms triggered by activation of cytokine receptors. In addition, he is also noted for identifying the role of a cellular coreceptor in the pathogenesis of the Ebola Virus. Along the way he has received recognition of his accomplishments by winning the Young Investigator Award of the Western Society for Clinical Investigation and election to the American Society for Clinical Investigator and serving as an Associate and now section editor for the Journal of Immunology. He also has a strong interest in

developing the careers of future physician scientists and is a member of the UCSF MSTP Council.

**Selected Publications:**

Atchison RE, Gosling J, Monteclaro FS, Franci C, Digilio L, Charo IF and Goldsmith MA. Multiple extracellular elements of CCR5 and HIV-1 entry: Dissociation from response to chemokines. *Science* 274:1924-1926, 1996

Speck RF, Esser U, Penn ML, Eckstein DA, Pulliam L, Chan SY and Goldsmith MA. A trans-receptor mechanism for infection of CD4-negative cells by human immunodeficiency virus type 1. *Current Biology*. 9:547-550, 1999.

Schramm B, Penn ML, Speck RF, Chan SY, De Clercq E, Schols D, Connor RI and Goldsmith MA. Viral entry through CXCR4 is a pathogenic factor and therapeutic target in human immunodeficiency virus type 1 disease. *Journal of Virology*. 74(1):184-192, 2000.

Chan SY, Speck R, Ma MC and Goldsmith MA. Distinct mechanisms of entry by envelope glycoproteins of Marburg and Ebola (Zaire) viruses. *Journal of Virology*. 74(10):4933-4937, 2000.

Grivel J-C, Penn ML, Eckstein DA, Schramm B, Speck RF, Abbey NW, Herndier B, Margolis L and Goldsmith MA. Human immunodeficiency virus type 1 coreceptor preferences determine target T-cell depletion and cellular tropism in human lymphoid tissue. *Journal of Virology*. 74(11):5347-5351, 2000.

Chan SY, Ma MC and Goldsmith MA. Differential induction of cellular detachment by envelope glycoproteins of Marburg and Ebola (Zaire) viruses. *Journal of General Virology*. 81:2155-2159, 2000.

Schramm B, Penn ML, Palacios E, Grant RM, Kirchhoff F and Goldsmith MA. Cytopathicity of human immunodeficiency virus type 2 (HIV-2) in human lymphoid tissue is coreceptor dependent and comparable to that of HIV-1. *Journal of Virology*. 74(20):9594-9600, 2000.

Keppeler OT, Yonemoto W, Welte FJ, Patton KS, Iacovides D, Atchison RE, Ngo T, Hirschberg DL, Speck RF and Goldsmith MA. Susceptibility of rat-derived cells to replication by human immunodeficiency virus type 1. *Journal of Virology*, 75(17):8063-8073, 2001.

Kreisberg JF, Kwa D, Schramm B, Trautner V, Connor R, Schuitemaker H, Mullins JI, van 't Wout AB and Goldsmith MA. Cytopathicity of human immunodeficiency virus type 1 primary isolates depends on coreceptor usage and not patient disease status. *Journal of Virology*, 75(18):8842-8847, 2001.

Chan SY, Empig CJ, Welte FJ, Speck RF, Schmaljohn A, Kreisberg JF and Goldsmith MA. Folate receptor- $\alpha$  is a cofactor for cellular entry by Marburg and Ebola viruses. *Cell* 106:117-126, 2001.

Eckstein DA, Penn ML, Korin YD, Scripture-Adams DD, Zack JA, Kreisberg JF, Roederer M, Sherman MP, Chin PS and Goldsmith MA. HIV-1 actively replicates in naïve CD4+ T-cells residing within human lymphoid tissues. *Immunity*, In press.

Snow JW, Abraham N, Ma MC, Abbey NW, Herndier B and Goldsmith MA. STAT5 promotes multilineage hematolymphoid development in vivo through effects on early hematopoietic progenitor cells. *Blood*, In press.