

# David Derse Memorial Conference

**June 17, 2010**

**National Cancer Institute at Frederick  
Conference Center (Building 549)  
Frederick, Maryland**



**Co-Sponsored by the HIV Drug Resistance Program and  
Center of Excellence in HIV/AIDS and Cancer  
Virology, National Cancer Institute**



**NATIONAL  
CANCER  
INSTITUTE**

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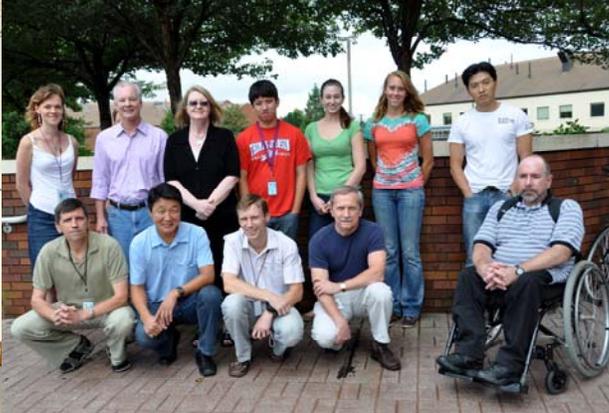
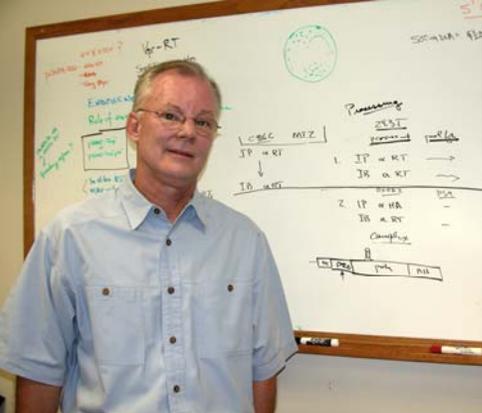
### Morning Session — Chair: John Coffin

- 9:00 am      **Stephen Hughes**, HIV Drug Resistance Program, National Cancer Institute, Frederick, MD  
*Welcoming Remarks*
- 9:10 am      **Susan Marriott**, Baylor College of Medicine, Houston, TX  
*Disruption of the Cellular Response to DNA Damage by the HTLV-1 Tax Oncoprotein*
- 9:40 am      **Chou-Zen Giam**, Uniformed Services University of the Health Sciences, Bethesda, MD  
*HTLV-1 Tax: Unchecked NF-kappaB Activation, Cell Cycle Perturbation, and Cellular Senescence*
- 10:10 am     **Robert Gorelick**, AIDS and Cancer Virus Program, National Cancer Institute, Frederick, MD  
*The Mysterious Properties of the HTLV-1 Nucleocapsid Protein*
- 10:40 am     Break
- 11:10 am     **Batsukh Dorjbal**, Derse Lab, HIV Drug Resistance Program, National Cancer Institute, Frederick, MD  
*The Role of E3 Ubiquitin Ligases in HTLV-1 Release*
- 11:25 am     **Cynthia Pise-Masison**, Laboratory of Cellular Oncology, National Cancer Institute, Bethesda, MD  
*Suppression of HTLV-1 Replication by Re-routing the Viral p13 Protein*
- 11:55 am     **Charles Bangham**, Wright-Fleming Institute, Imperial College, London, UK  
*HTLV-1 Persistence: Cell-Cell Spread and Clonal Proliferation*
- 12:25 pm     Lunch

### Afternoon Session — Chair: Stuart Le Grice

- 1:25 pm      **Genoveffa Franchini**, Vaccine Branch, National Cancer Institute, Bethesda, MD  
*Safe T-cell Liasons Orchestrated by HTLV-1 p8 Favor Virus Transmission*
- 1:55 pm      **Gisela Heidecker**, Derse Lab, HIV Drug Resistance Program, National Cancer Institute, Frederick, MD  
*Retroviral Vectors with Reverse Introns Allow Rapid Quantitation of Cell-to-Cell and Cell-Free Infection*
- 2:10 pm      **Anna Ilinskaya**, Derse Lab, HIV Drug Resistance Program, National Cancer Institute, Frederick, MD  
*Cell-Cell Transmission Allows HTLV-1 to Circumvent Tetherin Restriction*
- 2:25 pm      **Walther Mothes**, Yale University School of Medicine, New Haven, CT  
*Mechanism of MLV Cell-to-Cell Transmission*
- 2:55 pm      Break
- 3:25 pm      **William Switzer**, Centers for Disease Control and Prevention, Atlanta, GA  
*Doubling the Diversity of HTLV: Discovery and Characterization of the Novel Deltaretroviruses HTLV-3 and HTLV-4*
- 3:55 pm      **Reuben Harris**, University of Minnesota, Minneapolis, MN  
*Lessons from Inter-specific APOBEC3 Comparative Biology*
- 4:25 pm      **Vladimir Pak**, Derse Lab, HIV Drug Resistance Program, National Cancer Institute, Frederick, MD  
*Mutational Analysis of the Determinants for Cytoplasmic Localization and Anti-retroviral Activity of APOBEC3B*
- 4:40 pm      **Kathryn Jones**, Laboratory of Experimental Immunology, National Cancer Institute, Frederick, MD  
*XMRV Infection and Persistence in Leukocytes*

*Immediately following the conference, the HIV Drug Resistance Program will host an informal barbecue at the Nallin Pond recreation area of Fort Detrick. All conference participants are welcome to attend.*



## David Derse, Ph.D. 1949–2009

Dr. David Derse, head of the Retrovirus Gene Expression Section in the HIV Drug Resistance Program, died October 9, 2009, of liver cancer. Born in Los Angeles, California, on December 22, 1949, Dr. Derse earned his Ph.D. in 1982 from the State University of New York at Buffalo, studying inhibitors of herpesvirus and cellular DNA polymerases in the laboratory of Dr. Yung-Chi Cheng. He conducted postdoctoral research on bovine leukemia virus gene regulation with Dr. James Casey at the Louisiana State University Medical Center.

After joining the National Cancer Institute in 1986 as a senior staff fellow, Dr. Derse continued research on the Tax and Rex proteins encoded by deltaretroviruses. In 1991, he became a tenured senior investigator and extended his research into comparative biochemical analyses of lentivirus Tat and Rev proteins. Dr. Derse joined the HIV Drug Resistance Program in 2004 as head of the Retrovirus Gene Expression Section. He was also an adjunct professor in the Graduate Program in Genetics at George Washington University in Washington, D.C., and served on the Editorial Boards of *Virology* and *Retrovirology*, and on the Executive Committee of the Center of Excellence in HIV/AIDS and Cancer Virology, Center for Cancer Research.

During his 25 years at the National Cancer Institute, he investigated the molecular mechanisms of retrovirus infection and replication, concentrating most recently on the human viruses HIV-1 and HTLV-1. In 2007, Dr. Derse and his research team discovered how HTLV-1 evades the body's natural defenses to fight off infection, a finding that may eventually lead to improved antiviral therapies and new strategies for preventing some types of cancer.

Dr. Derse's scientific intelligence was grounded in a great love of the natural world and a kindhearted spirit. Soft-spoken and reserved by nature, he also enjoyed a whimsical sense of humor. At the heart of his character was his admiration for fellow scientists who were both accomplished in their work and generous, positive, and authentic in the wholeness of their lives.

He found great joy in his time with his grandsons, and he enjoyed running, hiking, fly-fishing, reading, and travel. He was proud to be a native Californian, and that showed in his appreciation for California artists, scenic places, and iconic images.

A longtime resident of Frederick, Dr. Derse is survived by his wife, Hye-Kyung (Kate) Chung; his son and daughter-in-law, James and Carrie Derse, and their two sons, Lucas and Gideon; his sister, Kathleen Ruccione, and her son, Daniel; his brother, Leonard Derse; and members of the extended Derse, Chung, and Lucas families.

For more about Dr. Derse, including his research interests, publications, and staff, please visit his home page on the HIV Drug Resistance Program website (<http://home.ncicrf.gov/hivdrp/Derse.html>).