

RETRO-ACTIVE NEWS

Newsletter of the Center for Retrovirus Research & Comprehensive Cancer Center, RNA Oncogenic Virus Program, The Ohio State University. Volume No.17, Summer Quarter, 2002.

4TH ANNUAL DISTINGUISHED RESEARCH CAREER AWARD: Elucidation of Retrovirus Pathobiology

In April, **Dr. Hung Fan** of the University of California, Irvine was awarded the "Distinguished Research Career Award" by the Center for Retrovirus Research. This national award recognizes a retrovirologist who has made original and significant research contributions to the field. Dr. Fan has made a series of important contributions in multiple retroviral systems (MLV, HTLV, SIV, HIV, JSRV) to understanding the regulation of eukaryotic gene expression, chromatin structure, and viral pathogenesis. These include the recent groundbreaking discovery that Jaagsiekte virus envelope protein induces cellular transformation and has opened the door to new understanding of human lung cancer. During two days at The Ohio State University, Dr. Fan presented two research seminars and met with numerous faculty, postdoctoral fellows, and graduate students.

ADMINISTRATIVE NEWS

In March, **Michael D. Lairmore** was appointed Chairperson, Department of Veterinary Biosciences, The Ohio State University.

In June, six CRR members submitted a **Program Project Grant** to NIH that is entitled "Retrovirus-Host Interactions". Headed by Dr. Lairmore, the P30 application encompasses five projects that share the common goal to elucidate mechanisms of retrovirus-mediated lymphoproliferative disease.

UPCOMING MEETINGS/SEMINARS OF INTERESTS

2002 Workshop on Pathogenesis by Non-acute Retroviruses, December 5 - 8, 2002 at the Renaissance Esmeralda Hotel in Indian Wells, CA (near Palm Springs). Deadlines are October 15, 2002 for abstract submission and November 1 for registration. Details are available at http://www.cri.bio.uci.edu/pathogenesis

Eighth West Coast Retrovirus Meeting, October 4-6, 2001 at the Hyatt Regency Suites in Palm Springs, CA. July Details are available at http://www.cri.bio.uci.edu/index_retro.html

DISSERTATIONS AND NEW POSITIONS

Musaad Al-dubaib, July 2002

The role of endogenous FeLV in the infectivity and genomic stability of FeLV subgroup A, Mathes Laboratory Assistant Professor, King Faud University, Saudi Arabia

Melinda Butsch, July 2002

Control of retroviral translation and relationship to genomic RNA packaging, Boris-Lawrie Laboratory Cancer Prevention Fellow of the National Cancer Institute; MPH at Harvard School of Public Health

Wei Ding, July 2002

Studies of HTLV-1 p12(I) in calcium mediated signaling and T cell activation, Lairmore Laboratory Post-doctoral fellow, The Ohio State University College of Medicine

Jeffrey Johnston, Advisor, Jessie Au, May 2002

Combination therapy targeting telomere and telomerase, Au Laboratory Post-doctoral fellow, The Ohio State University College of Medicine

Murli Narayan, July 2002

Biochemical properties & regulation of human T-cell lymphotropic virus type 2 Rex function, Green Laboratory Post-doctoral fellow, Harvard, Brigham and Women's Hospital

Murli was also the first-place recipient of the 4th Annual Roche Molecular Biochemicals Distinguished Graduate Publication Award in May

SELECTED RECENT PUBLICATIONS

Albrecht B, D'Souza C, Ding, W, Tridandapani S, Coggeshall M, and **Lairmore M.** 2002. Activation of nuclear factor of activated T cells (NFAT) by human T-lymphotropic virus type 1 Accessory Protein p121. J. Virol. 76:3493-3501.

Au, J.L.-S., Jang, S.H., and Wientjes, M.G. 2002. Clinical aspects of drug delivery to tumors. J. Controlled Release, 78:81-95.

Butsch, M. and **Boris-Lawrie**, **K**. 2002. The destiny of retroviral unspliced RNA: ribosome or virion? <u>Journal of Virology 76</u> (7) 3089-3094.

Dangel, A., Hull, S., Roberts T. and **Boris-Lawrie**, **K.**. 2002. Nuclear interactions are necessary for translational enhancement by SNV PCE. <u>Journal of Virology</u> 76 (7) 3292-3300.

Gavrilin, M.A., **Mathes, L.E.** and **Podell, M.** 2002. Methamphetamine Enhances Cell-Associated Feline Immunodeficiency Virus Replication in Astrocytes. J. NeuroVirology 8:240-249

Wang, H., Norris, K. M. and **L. M. Mansky**. 2002. Analysis of Bovine Leukemia Virus Gag Membrane Targeting and Late Domain Function. J. Virol. 2002 76: 8485-8493

Liu Y, Dole K, Stanley J, Richard V, Rosol T, Ratner L, **Lairmore M**, and Feuer G. 2002. Engraftment and Tumorigenesis of HTLV-1 Transformed T cell lines in SCID/Bg and NOD/SCID mice. Leuk.Res. 26:561-567.

NEW FUNDING

Au, Jessie, P.I. RO1 National Cancer Institute, NIH, Chemoresistance in renal cell cancer, 2002-2007

Au, Jessie, P.I. RO1, National Cancer Institute, NIH, FGF: A mechanism of acquired multi drug resistance, 2002-2006

Green, Patrick, P.I., RO1 National Cancer Institute, NIH, Role of HTLV Rex in replication & transformation, 2002-2007

Green, Patrick, P.I., Co-PI Donna D'Agostino, University of Padova, Italy, RO3 National Cancer Institute, NIH, Structure-function analysis of HTLV Rex and HIV Rev, 2002-2005

Green, Patrick, P.I., Ohio State University Barber Fund, Role of HTLV Rex phosphorylation in viral replication transformation and viral persistence, 2002-2003

Lairmore, Michael, P.I., RO1, National Cancer Institute, NIH, Mechanisms of p12I and P30II in HTLV-1 infection, 2002-2007

Lairmore, Michael P.I., Co-PIs Patrick Green & Vincenzo Ciminale, University of Padova, Italy, RO3, Studies of p30II and p13II in HTLV-1 Infection, National Cancer Institute, NIH, 2002-2005

RECENT MEETING PRESENTATIONS

Members of the Center for Retrovirus Research presented abstracts at the annual *Cold Spring Harbor Laboratory Retroviruses Meeting* in May and the *American Society of Virology Annual Meeting* in Lexington, KY in July.

Presentations included: *Melinda Butsch and K. Boris-Lawrie* on "Translational initiation of spleen necrosis virus RNA is cap-dependent; *Murli Narayan and P.L. Green* on "Biochemical properties of human T-cell leukemia virus type 2 Rex required for function; *Bindu Michael (Lairmore Lab)* on "Studies of Human T-Lymphotropic Virus Type 1 pX ORF II, p30 in Regulation of Gene Transcription"; *Seang-Jae Kim (Lairmore Lab)* "T-lymphotropic Virus Type 1 (HTLV-1) Accessory Protein p12I Activates Nuclear Factor of Activated T cells (NFAT) in T-Cells"

NEWSLETTER INPUT: Address comments to Dr. Kathleen Boris-Lawrie at boris-lawrie.1@osu.edu. Additional information about retrovirus research at The Ohio State University can be found at the *Center for Retrovirus Research website: www.vet.ohio-state.edu/docs/retrovirus/index.html*