Institute of Molecular Genetics, Prague, Czech Republic April 29 - May 4, 2010

Final Scientific Programme

Day 1 - Thursday, April 29

Arrival of conferees, registration, get-together party

Session 1

06:00 pm

Welcoming and Opening Remarks

Chairman: Jan Svoboda

04:30 - 05:00 pm Jan Svoboda, Institute of Molecular Genetics, Prague

Background and perspectives

05:00 - 06:00 pm David Baltimore, California Institute of Technology, Pasadena

Keynote lecture
Welcome reception

Day 2 - Friday, April 30

Session 2

10:00 - 10:30 am

Action at the Cell Surface

Chairmen: John A.T. Young, Benjamin K. Chen

Coffee break

08:30 - 09:00 am	John A.T. Young, Salk Institute, La Jolla Cellular factor involvement in retroviral replication
09:00 - 09:30 am	Benjamin K. Chen, Mount Sinai School of Medicine, New York Spread of HIV through T cell virological synapses
09:30 - 09:45 am	Paul Jolicoeur, Clinical Research Institute of Montreal Pathogenesis of HIV-1 Nef in thymocytes
09:45 - 10:00 am	Michaela Rumlová, Institute of Organic Chemistry and Biochemistry, Prague Analysis of N-terminus of NC protein of M-PMV: its role in the particle assembly

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Session 3

Identification of Essential Host Cell Factors

Chairmen: Stephen P. Goff, Alan N. Engelmam

10:30 - 11:00 am	Stephen P. Goff, Columbia University, New York HIV-1 Interactions with host proteins
11:00 - 11:30 am	Alan N. Engelmam, Dana-Farber Cancer Institute, Boston HIV-1 preintegration complex function and host cell factors
11:30 - 11:45 am	Peter Cherepanov, Imperial College London Structural basis for retroviral pre-integration complex assembly and strand transfer inhibitor action
11:45 - 12:00 am	C. Martin Stoltzfus, University of Iowa, Iowa City Defective HIV-1 Gag localization and assembly under conditions of excessive viral RNA splicing
12:00 - 02:00 pm	Lunch and poster viewing

Session 4

Insights from Studies of Intracellular Trafficking

Chairmen: Thomas J. Hope, Paul Bieniasz

02:00 - 02:30 pm	Thomas J. Hope, Northwestern University, Chicago Cell biology of intracellular HIV
02:30 - 03:00 pm	Paul Bieniasz, Aaron Diamond AIDS Research Center, Rockefeller University, New York Visualizing HIV-1 virion genesis
03:00 - 03:15 pm	Eric Hunter, Emory University School of Medicine, Atlanta The role of microtubule and actin cytoskeletal networks in the intracellular transport of the Mason-Pfizer monkey virus capsids
03:15 - 03:30 pm	Paul Spearman, Emory University School of Medicine, Atlanta Tetherin endocytosis and HIV replication in human macrophages
03:30 - 04:00 pm	Coffee break

Session 5

Retroviruses and Retroelements as Agents of Genome Rearrangement

Chairmen: Suzanne B. Sandmeyer, Haig H. Kazazian

07:00 - 21:30 pm	Cocktail party for invited speakers and guests, Villa Lanna
05:15 - 07:00 pm	Poster session
05:00 - 05:15 pm	René Daniel, Thomas Jefferson University, Philadelphia HIV-1 integration site preferences in pluripotent stem cells
04:30 - 05:00 pm	Haig H. Kazazian, Jr, University of Pennsylvania, Philadelphia High-throughput sequencing reveals extensive variation in human-specific L1 content in individual human genomes
04:00 - 04:30 pm	Suzanne B. Sandmeyer, University of California Irvine Adaptive targeting by retrotransposons as a force for genomic remodeling

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Day 3 - Saturday, May 1

Session 6

Retrovirus Evolution

Chairmen: John Coffin, Paul M. Sharp

10:00 - 10:30 am	Coffee break
09:45 - 10:00 am	K. Hanke, Robert Koch Institute, Berlin Staufen-1 interacts with the HERV-K Rec protein affecting viral RNA transport and assembly processes
09:30 - 09:45 am	Naomi Rosenberg, Tufts University, Boston v-onc gene containing retroviruses and target cell specificity: insights revealed by Abelson virus
09:00 - 09:30 am	Paul M. Sharp, University of Edinburgh The evolution of HIV-1 and the origin of AIDS
08:30 - 09:00 am	John Coffin, Tufts University, Boston Evolution of the Alpharetrovirus-receptor interaction

Session 7

Retroviral Vectors and Retrovirus Persistence

Chairmen: Stephen H. Hughes, Ashley T. Haase

11:45 - 02:00 pm	Lunch and poster viewing
11:30 - 11:45 am	Mikulas Popovic, Institute of Human Virology, Baltimore Host cells for human retroviruses: lessons from infection of mammalian cells with avian sarcoma virus
11:00 - 11:30 am	Ashley T. Haase, University of Minnesota, Minneapolis Retrovirus and lentivirus persistence and reservoirs from visna virus to HIV-1
10:30 - 11:00 am	Stephen H. Hughes, National Cancer Institute, Frederick Lens epithelium derived growth factor (LEDGF) fusion proteins that redirect HIV-1 DNA integration

Session 8

Cellular Defenses

Chairmen: Michael Malim, Jonathan Stoye

03:30 - 04:00 pm	Coffee break
03:15 - 03:30 pm	M. Blissenbach, Ruhr University Bochum Nuclear RNA export and packaging functions of HIV-1 Rev revisit
03:00 - 03:15 pm	Jeremy Luban, University of Geneva TRIM5 is a retroviral capsid-specific receptor that contributes to the antiviral state
02:30 - 03:00 pm	Jonathan Stoye, National Institute for Medical Research, London Capsid binding restriction factors
02:00 - 02:30 pm	Michael Malim, King's College London Cellular APOBEC3 proteins and HIV-1 Vif

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Session 9

Epigenetic Effects on Retroviral Gene Expression

Chairmen: Richard A. Katz, David M. Margolis

Identification of host factors that initiate and maintain retroviral epigenetic silen 04:30 - 05:00 pm David M. Margolis, University of Northern Carolina, Chapel Hill Epigenetic regulation of the HIV promoter and approaches to persistent retrovi Jiri Hejnar, Institute of Molecular Genetics, Prague CpG methylation and transcriptional suppression of endogenous retroviruses a	
04:30 - 05:00 pm David M. Margolis, University of Northern Carolina, Chapel Hill	
Identification of host factors that initiate and maintain retroviral epigenetic silen	, ·
04:00 - 04:30 pm Richard A. Katz, Fox Chase Cancer Center, Philadelphia	

Day 4 – Sunday, May 2

Session 10

Mechanisms of Disease

Chairmen: Peter K. Vogt, Robin A. Weiss

10:15 - 10:45 am	Coffee break
10:00 - 10:15 am	Karen Beemon, Johns Hopkins University, Baltimore Avian leukosis virus oncogenesis involves integrations that activate oncogenes, microRNA-155, and TERT
09:30 - 10:00 am	Robin A. Weiss, University College London Transmissible cancer cells
09:00 - 09:30 am	Peter K. Vogt, Scripps Research Institute, La Jolla Oncogenic mutations in Pl3K: genetic and mechanistic considerations

Session 11

Roles of Innate and Adapted Defenses in Infections by Retroviruses

Chairmen: Francis W. Ruscetti, Malcolm A. Martin

10:45 - 11:15 am	Francis W. Ruscetti, National Institutes of Health, Bethesda Cell-free HTLV-1-Infection of PLASMAcytoid AND mYELOID Dendritic cells IN VITRO: Pathogenic Considerations of in vivo infection of Dendritic Cells
11:15 - 11:45 am	Malcolm A. Martin, National Institutes of Health, NIAID, Bethesda HIV 1 acquisition: SIV and SHIV models of acute primate lentivirus infections in macaque monkeys
11:45 - 12:00 pm	Kim J. Hasenkrug, National Institutes of Health, Rocky Mountain Laboratories, Hamilton Adaptive immune responses to Friend virus infection in mice
12:00 - 12:15 pm	Paula Pitha-Rowe, Johns Hopkins University, Baltimore The role of innate antiviral response in HIV-1 infection
12:15 - 12:45 pm	Sandwich lunch
12:45 - 05:00 pm	Tour of Prague/Free Afternoon

Meeting department:

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Day 5 - Monday, May 3

Session 12

Anti-viral Strategies: Drugs and Vaccines

Chairman: Eric De Clercq

09:00 - 09:30 am Gary J. Nabel, National Institutes of Health, Bethesda

Rational Design of Envelope Surface Identifies Broadly Neutralizing Human Monoclonal Antibodies to HIV-1

09:30 - 10:00 am Ronald C. Desroisiers, New England Primate Center, Southborough

Overcoming, or Circumventing, the Barriers to an AIDS Vaccine

10:00 - 10:30 am Coffee break

Session 13

Trends in Retroviral Therapy

Chairman: Ronald C. Desroisiers

12:15 - 02:00 pm	Lunch and poster viewing
12:00 - 12:15 pm	Duane Grandgenett, Saint Louis University HIV-1 integrase: Concerted DNA integration and identification of a new major integrase-raltegravir-single DNA complex
11:45 - 12:00 pm	M. Katzman, Penn State College of Medicine, HersheyA novel antiviral strategy of stimulating integrase's nonspecific nuclease activity to damage retroviral DNA
11:30 - 11:45 am	Karin Moelling, University of Zurich HIV suicide through viral RNase H
11:00 - 11:30 am	Leonid Margolis, National Institutes of Health, NICHHD, Bethesda Exploiting coinfecting microbes to suppress HIV-1 infection
10:30 - 11:00 am	Erik De Clercq, Rega Institute for Medical Research, Leuven Prospects of anti-HIV therapy

Session 14

Meeting Wind-up

Chairman: Anna M. Skalka

05:00 - 09:00 pm	Farewell dinner at the Grand Monastery Restaurant
03:00 - 03:30 pm	Anna M. Skalka, Fox Chase Cancer Center, Philadelphia Closing remarks
02:30 - 03:00 pm	Stephen P. Goff, Columbia University, New York Summary observations
02:00 - 02:30 pm	Françoise Barré-Sinoussi, Institute Pasteur, Paris History and future of basic science in human retroviruses

Day 6 - Tuesday, May 4

Departure

Meeting department: