

## Conference Program

### Monday 3rd October 2011

11:00 – 12:00 Conference Registration

12:00 – 12:55 Buffet Lunch

12:55 Conference Welcome  
*Ben Berkhout, University of Amsterdam, Netherlands*

#### 13:00 – 15:00 **Session 1: Molecular basis** **Chairperson: Frank Kirchhoff**

13:00 – 13:30 Applications of RNA structure analysis to understanding retroviral packaging and anti-retroviral therapeutics  
*Kevin M. Weeks, University of North Carolina, Chapel Hill, USA*

13:30 – 14:00 Shaping retroviral RNA genomes  
*Andrew M. Lever, University of Cambridge, UK*

14:00 – 14:30 Transportin HIV-1 by tRNA<sup>in</sup> and Car  
*Ariberto Fassati, University College London, UK*

#### Selected talks

14:30 – 14:45 HIV-1 integrase SUMOylation and viral replication  
*Alessia Zamborlini, Université Paris Diderot, France*

14:45 – 15:00 Reactivation of HIV-1 gene expression by DNA methylation or histone methyltransferase inhibitors.  
*Carine Van Lint, Université Libre de Bruxelles, Belgium*

15:00 – 15:30 Coffee Break

#### 15:30 – 17:30 **Session 2: Restriction factors** **Chairperson: Ariberto Fassati**

15:30 – 16:00 Exploiting replication deficiencies to illuminate HIV:host interactions  
*Michael H. Malim, Kings College London, UK*

16:00 – 16:30 HIV, cyclophilins and nuclear entry: going under the radar  
*Greg J. Towers, University College London, UK*

16:30 – 17:00 Tetherin antagonism by HIV-1 and its SIV precursors  
*Frank Kirchhoff, University Hospital Ulm, Germany*

#### Selected talks

17:00 – 17:15 *In vivo*-expression profile and regulation of the antiviral restriction factor CD317/tetherin in humans  
*Oliver T. Keppler, University of Heidelberg, Germany*

17:15 – 17:30 Feline tetherin (BST-2) restricts feline immunodeficiency virus release but not spreading infection  
*Brian J. Willett, University of Glasgow, UK*

17:45 – 18:30 **Keynote speech**  
From XMRV to HIV-1 and back  
*John M. Coffin, Tufts University, Boston, USA*

18:30 – 20:30 **Poster Session 1 and Drinks Reception**

## Tuesday 4th October 2011

### 08:30 – 10:30 Session 3: Virus-host interaction

*Chairperson: William Paxton*

08:30 – 09:00 HIV and innate immunity

*Monsef Benkirane, Institut de Génétique Humaine CNRS, Montpellier, France*

09:00 – 09:30 Novel insights into Innate sensing of HIV-infected cells

*Olivier Schwartz, Institut Pasteur, Paris, France*

09:30 – 10:00 Interactions of different drug mutations in HIV reverse transcriptase in defining patterns of drug resistance

*Mark A. Wainberg, McGill University, Montreal, Quebec*

#### Selected talks

10:00 – 10:15 Assessing the impact of lentiviral vector integration on splicing of cellular genes at the genome-wide level

*Eugenio Montini, San Raffaele Telethon Institute for Gene Therapy, Milan, Italy*

10:15 – 10:30 Bookmarking the epigenome by retrovirus integration

*Jiri Hejnar, Academy of Sciences of the Czech Republic, Prague, Czechia*

10:30 – 11:00 Coffee Break

### 11:00 – 12:30 Session 4: Endogenous retroviruses and XMRV

*Chairperson: Kuan-Teh Jeang*

11:00 – 11:30 Mouse and human “xenotropic” gammaretroviruses and their XPR1 receptor

*Christine Kozak, NIAID, Bethesda, USA*

11:30 – 12:00 Mechanism for XMRV neurotoxicity

*Dusty Miller, Fred Hutchinson Cancer Research Centre, Seattle, USA*

12:00 – 12:30 Immunity to human endogenous retroviruses

*Douglas Nixon, University of California, San Francisco, USA*

12:30 – 13:30 Lunch

### 13:30 – 15:30 Session 5: Pathogenesis

*Chairperson: Guido Vanham*

13:30 – 14:00 Murine leukemia virus glycosylated gag and viral budding

*Hung Fan, University of California, Irvine, USA*

14:00 – 14:30 Role of cellular factors in the replication of human retroviruses: recent insights

*Kuan-Teh Jeang, NIAID, Bethesda, USA*

14:30 – 15:00 Distinct activities of HTLV-1 Tax1 from HTLV-2 Tax2 play key roles in pathogenesis

*Masahiro Fujii, Niigata University, Japan*

#### Selected talks

15:00 – 15:15 Pathogenesis of Multiple Sclerosis: Expression of HERV-Fc1; a human endogenous retrovirus

*Magdalena Janina Laska, Aarhus University, Denmark*

15:15 – 15:30 Contribution of captured retroviral envelope genes, the “syncytins”, to the formation of the mouse placenta

*Anne Dupressoir, Institut Gustave Roussy, Villejuif and Université Paris-Sud, Orsay, France*

15:30 – 16:00 Coffee Break

**16:00 – 17:00 Session 6: Special Open Access session**

16:00 – 16:30 Open Access in 2011: a publisher's perspective  
*Nandita Quaderi, Publisher, BioMed Central*

16:30 – 17:00 The *Retrovirology* Open Access experience  
*Kuan-Teh Jeang, Editor-in-Chief, Retrovirology*

**17:00 – 19:00 Poster Session 2**

**19:00 – 23:00 Conference dinner at the National Centre of Science and Technology (NEMO)**

**Wednesday 5th October 2011**

**08:30 – 10:15 Session 7: Virus-innate immunity**

*Chairperson: Rogier Sanders*

08:30 – 09:00 C-type lectins in HIV-1 infection  
*Teunis B.H. Geijtenbeek, University of Amsterdam, Netherlands*

09:00 – 09:30 Variant cell types and host glycoproteins influencing HIV-1 infection  
*William A. Paxton, University of Amsterdam, Netherlands*

**Selected talks**

09:30 – 09:45 Anti-retroviral innate immune responses in multiple lymphoid tissues elicited by protective live attenuated SIV vaccination  
*Neil Berry, Health Protection Agency - NIBSC, Potters Bar, UK*

09:45 – 10:00 A hole in the T-cell repertoire induced after retroviral infection of immunocompetent adult mice  
*Masaaki Miyazawa, Kinki University School of Medicine, Osaka, Japan*

10:00 – 10:15 Efficient macrophage infection by phagocytosis of dying HIV-1-infected CD4+ T cells  
*Fedde Groot, University of Oxford, UK*

10:15 – 10:45 Coffee Break

**10:45 – 13:00 Session 8: Novel therapeutic approaches (special IAP session)**

*Chairperson: Monique Nijhuis*

10:45 – 11:15 Clearing the HIV reservoir by transplanting CCR5 deficient stem cells  
*Gero Hütter, Heidelberg University, Mannheim, Germany*

11:15 – 11:45 Can immunotherapy be useful for a "functional cure" of HIV infection?  
*Guido Vanham, Institute of Tropical Medicine, Antwerp, Belgium*

11:45 – 12:15 Ways to silence HIV-1 by RNAi  
*Julia Eekels, University of Amsterdam, Netherlands*

Selected talks

12:15 – 12:30 Modest deviations from optimal adherence to antiretroviral therapy promote residual HIV-1 replication in the absence of virological rebound in plasma  
*Alexander O. Pasternak, University of Amsterdam, Netherlands*

12:30 – 12:45 Synergistic anti-HIV-1 activity of griffithsin with tenofovir, maraviroc and enfuvirtide  
*Geoffrey Férir, Catholic University Leuven, Belgium*

12:45 – 13:00 Polymorphism in HIV-1 dependency factor PDE8A affects gene expression and HIV-1 replication in primary macrophages  
*Thijs Booiman, University of Amsterdam, Netherlands*

13:00 – 14:00 Lunch

**14:00 – 16:00 Session 9: Drugs and vaccines**

***Chairperson: Ben Berkhout***

14:00 – 14:30 Targeting the glycans of the HIV envelope as a therapeutic tool  
*Jan Balzarini, Catholic University of Leuven, Belgium*

14:30 – 15:00 Improving the immunogenicity of HIV-1 envelope trimer vaccines  
*Rogier Sanders, Cornell University, New York, USA*

15:00 – 15:30 HIV Gag and Protease: partners in resistance to protease and maturation inhibitors  
*Monique Nijhuis, University Medical Centre, Netherlands*

Selected talks

15:30 – 15:45 Occult replication of a conditionally-live attenuated SIV profoundly upregulates T effector memory cell frequency  
*Martin Cranage, St George's, University of London, UK*

15:45 – 16:00 Mapping of positive selection sites in the HIV genome in the context of RNA and protein structural constraints  
*Joke Snoeck, University Hospital Center and University of Lausanne, Switzerland*

**16:00 Closing Remarks**

***Ben Berkhout, University of Amsterdam, Netherlands***

Coffee and close of conference