

Provisional Program (2019-07-29)

HERVs & Disease

Third International Workshop on Human Endogenous
Retroviruses and Diseases

Provisional program

5-6, November 2019- Lyon - France

TUESDAY 5th November 2019

Opening and Introduction

Person(s) to be confirmed

Session I

New concepts in human genetics

Learnings from HERVs

Chairperson(s): Cedric Feschotte

8:30-10:00

Cedric Feschotte - Department of molecular biology and genetics, Cornell University, NY, USA
Fighting fire with fire: endogenous retroviruses coopted for host immunity

Gkikas Magiorkinis - Medical School, National and Kapodistrian University of Athens, Greece
Lessons learned from unfixed HERV integrations: does HERV-K proliferate in modern human populations?

Jainy Thomas - Department of human genetics, UTAH University, USA
Diverse HERV proviruses generate structural variation among human genomes

Break 10:00-10:30

Provisional Program (2019-07-29)

Session II

Neurological Diseases and HERVs

Chairpersons: Avindra Nath and Patrick Küry

10:30-12:30

HERV-K and ALS

Avindra Nath - NINDS-NIH, USA

HERV-K Envelope pathogenic involvement in Amyotrophic Lateral Sclerosis, an update on pathogenic mechanisms and on therapeutic perspectives

Antonina Dolei - Dept. of virology, University of Sassari, Italy

HERV-Kenv profiling in blood of Sardinian patients with amyotrophic lateral sclerosis: a possible biomarker which interacts with “ALS-causative” TDP-43

Adele McCormick, University of Westminster, London

provisional title: Results from UK RT-PCR study on Brain samples from ALS

Julian Gold - The Albion Centre, Sydney, Australia

Repurposing HIV therapies to treat Endogenous Retroviral Diseases

12:30-14:00 Buffet Lunch and Poster viewing

14:00-16:00

HERV-W and MS

Patrick Küry - Dept. of Neurology, Heinrich-Heine-University of Düsseldorf, Germany

Glial cell responses upon exposure to human endogenous retroviruses type W envelope protein: Functional implications in neurodegeneration and repair in multiple sclerosis

David Kremer - Dept. of Neurology, Heinrich-Heine-University of Düsseldorf, Germany

Results and perspectives from a 2-years clinical multicenter study in multiple sclerosis with temelimab, a therapeutic IgG4 antibody targeting pHERV-W Envelope

Benjamin Charvet - GeNeuro-Innovation, Lyon, France

Biochemical characterization of oligomeric antigens from HERV glycoproteins

Samia Khoury - American University of Beirut, Lebanon and Harvard medical school, Cambridge, USA

pHERV-W antigens detection in MS serum and correlation with clinical data

Break 16:00-16:15

Provisional Program (2019-07-29)

16:15-17:30

Ranjan Ramasamy - IDFISH Technology, CA, USA

HLA DR2b-binding peptides from human endogenous retrovirus envelope, Epstein-Barr virus and brain proteins in the context of molecular mimicry in multiple sclerosis.

Camila M Romano - Virology Lab, LIMHC and Tropical Medicine Institute, São Paulo, Brazil

Cross-reactivity between myelin oligodendrocyte glycoprotein and human endogenous retrovirus W protein: nanotechnological evidence for the potential trigger of multiple sclerosis

Nicole Grandi - University of Cagliari, Italy

Contribution of individual HERV loci to the human transcription and their differential expression in multiple sclerosis samples

17:30-18:00

General discussion

Discussion Leading Panel: To be determined

18:00-18:15

Conclusions of the day

Patrick Küry, Avindra Nath

Provisional Program (2019-07-29)

WEDNESDAY 6th November 2019

9:00-9:45

Session III

Environmental factors involved in HERV activation or upregulation:
Connecting viral epidemiology and pathogenesis in various diseases

Chairperson: Antonina Dolei

Branka Horvat - International center for research in infectiology (CIRI), Lyon University, France
Human herpesvirus-6A induces HERV-W envelope protein following CD46 receptor engagement

Antoine Bertin & Didier Hober - University of Lille, Faculty of Medicine, CHU Lille, Virology Lab EA3610, Lille, France
Coxsackievirus B4-mediated upregulation of HERV-W Env transcription in human macrophages and pancreatic cells

Break 9:45 – 10:15

10:15-12:15

Session IV

Neuropsychiatric Diseases and HERVs

Chairperson: Marion Leboyer

Timokratis Karamitros - Unit of Bioinformatics and Applied Genomics, Hellenic Pasteur Institute, Athens, Greece.

Human Endogenous Retrovirus-K HML-2 integration within RASGRF2 is associated with intravenous drug abuse and modulates transcription in a cell-line model.

Laurent Groc - University of Bordeaux, France

HERV-W Envelope protein triggers synaptic and psychotic-like behavioral dysfunctions: from neuroreceptors to preclinical animal model. *(Title to be confirmed)*

Provisional Program (2019-07-29)

Emanuela Balestrieri - University of Rome Tor Vergata, Italy
Children with Autism Spectrum Disorder and their mothers share common expression profiles of endogenous retroviruses and cytokines

Marion Leboyer - FondaMental Foundation and University Creteil, France
HERV-W Envelope in Psychosis: diagnostic and therapeutic perspectives

12:15-13:45 Buffet Lunch and Poster viewing

13:45-15:45

Session V Cancer and HERVs Chairperson: François Mallet

Peter Johannes Holst - InProTher ApS Copenhagen Denmark
Highly immunogenic vaccines using VLP forming structural proteins of HERV-K/HML-2 in cancer.

Sharon Glynn - Lambe Institute for Translational Research, School of Medicine, Galway, Ireland.
Human Endogenous Retrovirus-K: associated marker in early detection of Prostate Cancer

Reiner Strick - University-Hospital Erlangen, Germany
Interrelation of HERVs and inflammation during tumorigenesis

Claudia Matteucci - University of Rome Tor Vergata, Italy
Endogenous retroviruses are involved in the maintenance of cancer cell stemness and aggressiveness: new insight for intervention with antiretroviral drugs

Serena Delbue - University of Milan, Italy
Human endogenous retroviruses (HERV) methylation and expression in colorectal cancer patients

Break 15:45-16:00

Provisional Program (2019-07-29)

16:00-17:00

Session VI

Immune dysfunction, autoimmune diseases and HERVs

Chairperson: Patrice Marche

Jean Pierre Molès - INSERM U1058 Pathogenesis and control of chronic infections, Montpellier, France
HERVs/LINEs involvement in the pathogenesis of Psoriasis: therapeutic perspectives
(*Title to be confirmed*)

Lisa Wieland - University Clinic, Martin Luther University Halle-Wittenberg, Halle (Saale), Germany
Expression of HERV-K in muscle tissue in patients with inflammatory myopathies

Sandrine Levet - GeNeuro-Innovation, Lyon, France
Preclinical study of HERV-W involvement in Type 1 diabetes

François Mallet - Joint Research Unit Hospices Civils de Lyon – BioMérieux, Lyon, France
HERVs & Sepsis (*Title and abstract to be confirmed*)

17:00-17:30

General discussion

Discussion Leading Panel: To be determined

17:30-18:00

Conclusions of the Meeting

Scientific and Organizing committees