

# T lymphocyte dynamics in acute and chronic viral infection

## Day 1 – Monday 24 January

9:00 – 9:50 *Registration and coffee*

9:50 – 10:00 *Meeting introduction (one of the organizers)*

### Session 1 – Viral dynamics under immune pressure

*Chairs: Vitaly Ganusov & José Borghans*

10:00 – 10:30 **Avidan Neumann**

Effect of immune response on viral decline during anti-viral therapy - HIV, HBV, HCV

10:30 – 11:00 **Angela McLean**

How fast do HIV immune escape mutants spread?

11:00 – 11:30 **Sebastian Bonhoeffer**

Estimating the fitness costs of CTL mutation in HIV-1

11:30 – 12:00 **Charles Bangham**

HTLV-1 infection: what determines the size of HTLV-1+ T-cell clones?

12:00 – 2:00 *Lunch and poster viewing*

### Session 2 – T-cell dynamics during infection

*Chairs: Becca Asquith & Roland Regoes*

2:00 – 2:20 **Joost Beltman**

Subtle directional migration of cytotoxic T cells within infected tissues allows efficient target localization

2:20 – 2:40 **Johannes Textor**

A unified view of T cell recirculation and stochastic search in the lymph node microenvironment

2:40 – 3:00 **Derek Macallan**

Accelerated proliferation of CD4+ T cells in HIV infection appears independent of viral chemokine co-receptor tropism

3:00 – 3:20 **Andrea Hegedus**

Human lymphocyte dynamics: How does HIV-2 differ from HIV-1 infection?

3:20 – 4:00 *Coffee and Tea*

### Session 3 – CTL priming & vaccination

*Chairs: Derek Macallan & Rustom Antia*

4:00 – 4:20 **Paul Thomas**

Memory potential is determined by priming context in influenza infection

4:20 – 4:40 **Rob de Boer**

How many CTL does a vaccine need to generate?

4:40 – 5:00 **Tomer Hertz**

HIV vaccine induced T-cell epitope immunodominance in the Step and HVTN 054 vaccine trials

5:00 – 5:30 **Ruy Ribeiro**

Modelling influenza: from petri dish to human

*7pm – conference dinner*

## **Day 2 – Tuesday 25 January**

9:00 – 9:30 *Morning coffee*

### **Session 4 – CTL efficiency and exhaustion**

*Chairs: Charles Bangham & Derek Macallan*

9:30 – 10:00 **Rustom Antia**

Modeling the dynamics of immune exhaustion: Implications for vaccination

10:00 – 10:20 **Ian Humphreys**

Functional decay of influenza-specific memory CD8 T cells compromises antiviral immunity

10:20 – 10:40 **Constantinos Petrovas**

CM9+PD-1<sup>high</sup>CD8<sup>+</sup> SIV-specific T cells are characterized by accelerated in vivo turnover

10:40 – 11:10 *Coffee and Tea*

11:10 – 11:40 **Roland Regoes**

Comparison of CTL efficacy in acute and persistent LCMV infection

11:40 – 12:00 **Marjet Elemans**

The role of CD8<sup>+</sup> T cells in HIV infection: investigating the paradox

12:00 – 2:00 *Lunch & poster viewing*

### **Session 5 – Determinants of outcome**

*Chairs: Vitaly Ganusov & José Borghans*

2:00 – 2:30 **Annette Oxenius**

T cell responses during chronic viral infections in mice

2:30 – 2:50 **Robert Busch**

Protein dynamics in immunology and immunopathology

2:50 – 3:10 **Katerina Seich al Basatena**

KIR2DL2 enhances protective and detrimental HLA class I-mediated immunity in chronic viral infection

3:10 – 3:30 *Coffee and Tea*

3:30 – 4:00 **Can Keşmir**

Impact of MHC molecules on infectious disease progression

4:00 – 4:30 **Guido Silvestri**

Target cell restriction as the main determinant of AIDS pathogenesis

4:30 – 4:40 *Concluding remarks: one of the organizers*

4:40- *Post-event drinks*