



EASL School of Hepatology: Liver Immunology

Aachen, Germany

Course directors: Frank Tacke and Ralf Weiskirchen

*University Hospital Aachen
Pauwelsstr 30
D-52074 Aachen
Germany*

Thursday 16 February 2017

- 16:00 *Welcome coffee*
- 17:45 Welcome address
- 18:00 – 19:30 State-of-the-art: Basic Science and Translational Medicine back-to-back**
- 18:00 – 18:45 *Keynote lecture I: Advances in Liver immunology during the last decade and implications for clinical translation*
- David Adams, Birmingham, United Kingdom*
- 18:45 – 19:30 *Keynote lecture II: Profiling of immune cell subsets across tissues and species – what can we learn for the liver?*
- Florent Ginhoux, Singapore*
- 20:00 Dinner and socializing

Friday 17 February 2017

- 09:00 – 12:00 Studying liver immunology from homeostasis to disease**
- 09:00 – 09:20 Danger signals and inflammatory pathways
- Christian Trautwein, Aachen, Germany*
- 09:20 – 09:40 Microbiome and gut-liver axis
- Mathias Hornef, Aachen, Germany*
- 09:40 – 10:00 Macrophages
- Frank Tacke, Aachen, Germany*



- 10:00 – 10:20 Innate lymphoid cells and MAIT cells
Jacob Nattermann, Bonn, Germany
- 10:20 – 10:40 Adaptive immunity
Linda Diehl, Hamburg, Germany
- 10:40 – 11:00 *Coffee Break*
- 11:00 – 11:20 Etiology-specific differences in human liver immunopathology
Tania Roskams, Leuven, Belgium
- 11:20 – 11:40 Liver injury models: Critical reflection on their value
William Alazawi, London, United Kingdom
- 11:40 – 12:00 Ethical aspects of animal experimentation: The new EU regulations
René Tolba, Aachen, Germany

12:00 – 13:00 *Lunch break*

13:30 – 16:00 Small group hands-on experience

1. Immune cell isolation and cell sorting (mouse liver)
Carmen Tag, Ralf Weiskirchen
2. How to work with human liver: Cell isolation, analysis and in vitro assays
Daniela Kroy, Thorsten Cramer
3. Intravital multi-photon microscopy of mouse liver
Felix Heymann, Michael Vogt
4. Experimental techniques (μ CT, FMT, MRI) for whole mouse imaging
Felix Gremse, Twan Lammers
5. Liver surgery workshop: Bile duct ligation, ischemia-reperfusion, liver transplantation (rats)
René Tolba, Ulf Peter Neumann

16:00 – 16:30 *Coffee Break*

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20:00 Social event

Saturday 18 February 2017

09:00 – 11:00 Practical exercises

1. Flow cytometry of liver leukocytes (mouse)
Klaudia Warzecha, Matthias Bartneck
2. How to handle big data: Bioinformatics approach to array analysis
Oliver Krenkel, Ivan Gesteira Costa Filho
3. Liver pathology: Practical workshop
Thomas Longerich, Michaela Möhring

11:00 – 13:00 Communicating your science

11:00 – 12:30 2 groups in parallel (2 advisors)

How to design a basic science project & How to write a paper

Group 1: *Cecilia Rodrigues, Lisbon, Portugal, and Tom Lüdde, Aachen, Germany*

Group 2: *Percy Knolle, Munich, Germany, and Francesco Negro, Geneva, Switzerland*

Practical exercise: Project presentations (5' presentation, preselected participants)
& Summarizing key messages of a paper (5' presentation, preselected participants) + critical discussion

12:30 – 13:00 How to evaluate a paper: The editor's perspective

Jessica Zucman-Rossi, Paris, France

Q and A with the participants

13:00 – 14:00 Closing remarks and farewell lunch