

EASL BASIC SCHOOL OF HEPATOLOGY  
LIVER CELL ISOLATION AND CHARACTERISATION  
16 – 18 JANUARY 2019  
DÜSSELDORF, GERMANY

DIRECTORS

Prof. Dr Dieter Häussinger, *Germany*

Prof. Dr Verena Keitel, *Germany*

PROGRAMME OVERVIEW

DAY 1 – 16 January 2019

17:00 – 17:45	Welcome coffee
17:45 – 18:00	Welcome address / Learning objectives
18:00 - 20:00	State-of-the-art: Liver biology and regeneration
18:00 - 18:40	Keynote lecture 1: liver biology and liver regeneration: from past to present Dieter Häussinger, <i>Germany</i>
18:40 - 19:20	Keynote lecture 2: Stem cells in the liver Stuart Forbes, <i>United Kingdom</i>
19:20 – 20:00	Keynote lecture 3: Regenerative Medicine in 2019: Are we there yet? Ludovic Vallier, <i>United Kingdom</i>
20:00	<i>Dinner and socializing</i>

## DAY 2 – 17 January 2019

- 09:00 - 11:30 Techniques for studying different cells types in the liver
- 09:00 - 09:30 Characterization of cell types by immunostaining, FACS sorting, function  
Verena Keitel, *Germany*
- 09:40 - 10:10 Liver pathology: difference between mouse models and humans  
Irene Esposito, *Germany*
- 10:20 - 10:50 CRISPR/Cas9 animal models and gene editing  
Roland Rad, *Germany*
- 11:00 - 11:30 iPSC techniques and organoid techniques: perspectives and challenges in liver research  
Jay Gopalakrishnan, *Germany*
- 11:40 - 12:30 *Lunch break*
- 12:30 - 15:30 Small group hands-on experience in the laboratory:
1. Isolation of hepatic stellate cells  
Claus Kordes, Friederike Rohn, Claudia Rupprecht
  2. Isolation of biliary epithelial cells (using a stereomicroscope)
    - a. by microdissection using a stereomicroscope
    - b. by fluorescent activated cell sorting (FACS)Verena Keitel, Maria Reich, Marianne Wammers
  3. Isolation of liver sinusoidal endothelial cells  
Eckhard Lammert, Tobias Buschmann, Caroline Klindt, Stephanie Wolf
  4. Generation and differentiation of iPSC and organoids  
Kathleen Deutschmann, Jan Philipp Köhler
  5. Isolation, characterization and differentiation of MSC  
Claus Kordes, Doreen Reichert
  6. Gene editing techniques using CRISPR/Cas9 in cell culture and animals  
Philipp Lang, Haifeng C. Xu
- 15:30 - 16:00 *Coffee break*
- 16:00 - 19:00 Small group hands-on experience in the laboratory  
Topics as above (participants choose a different group)
- 20:00 *Dinner and socializing*

## DAY 3 – 18 January 2019

- 08:30 - 11:30 Small group hands-on experience in the laboratory  
Topics as above (participants choose a different group)
- 11:30 - 12:30 Lunch break*
- 12:30 - 15:00 Soft skills in science: presentation of your results (in seminar rooms)  
12:30 - 13:45 Tips and tricks in oral presentation and presentation of prepared short talks by participants (3 groups of participants and faculty)
- Philipp Lang, Verena Keitel, Boris Görg
- 13:45 – 15:00 **From the editor's desk: Preparing your data** for publication and how to perform a peer review (3 groups of participants and faculty)
- Dieter Häussinger, Germany; Michael Trauner, Austria; Ulrich Beuers, The Netherlands
- 15:00 - 15:30 Closing remarks and coffee*

