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, Germany

18:40 – 19:20 Keynote lecture 2: Stem cells in the liver
Stuart Forbes, United Kingdom

19:20 – 20:00 Keynote lecture 3: Regenerative Medicine in 2019: Are we there yet?
Ludovic Vallier, United Kingdom

20:00 Dinner and socializing
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; Karl Lang, Germany; Ulrich Beuers, The Netherlands

15:00 - 15:30  Closing remarks and coffee