

# EASL Basic School of Hepatology

## Precision Cut Liver Slices and Liver Organoids – versatile ex-vivo models of liver disease

15 - 17 September 2022

The Roger Williams Institute of Hepatology, London, UK

### DIRECTORS

Dr Shilpa Chokshi, Dr Elena Palma, Dr Luca Urbani

### PROGRAMME OVERVIEW

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#### Day 1, Thu 15 Sep

12:00 – 13:00	<b>Hotel Check-In</b> (20min walk/15min by bus)
13:30 – 14:00	<b>Registration &amp; Welcome Coffee</b>
14:00 – 14:30	<b>Welcome</b> Introduction/Learning Objectives/Health & Safety
14:30 – 16:00	<b>Icebreaker introduction</b>
16:00 – 17:45	<b>State-of-the-art: Experimental models of liver diseases</b>
16:00 – 16:30	Keynote lecture 1 (30 mins) <i>Precision Cut Liver Tissue Slices – applications, advantages and limitations</i> Prof. Peter Olinga, Netherlands (confirmed)
16:30 – 17:00	Keynote lecture 2 (30 mins) <i>Liver Organoids – the good, the bad and the ugly</i> Prof. Hans Clevers (confirmed)
17:00 – 17:15	<b>Coffee Break</b>
17:15 – 17:45	Keynote lecture 3 (30 mins) <i>Organo-on-a-chip and ex-vivo perfusion models of liver disease</i> Dr Evita Van Steeg, Netherlands
18:00 – 19:30	<b>Welcome drinks and Pub style quiz</b>
19:30 – 20:00	<b>Travel to restaurant</b>
20:00 – 21:30	<b>Dinner</b>

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## Day 2, Fri 16 Sep

### 08:30 – 11:00 1<sup>st</sup> Practical session with a Coffee Break (2h30')

Participants will be divided into 4 teams for small group hands-on experience in the lab:

1. Preparation of PCLS from liver explants  
*Elena Palma, Una Rastovic, Ravi Jagatia*
2. Tissue dissociation and organoid derivation  
*Sara Campinoti, Lai Wei*
3. Culture, induction of liver injury and drug treatment of PCLS  
*Elena Palma, Nicola Harris, Ravi Jagatia*
4. 3D culture of organoids and expansion  
*Sara Campinoti, Sandra Phillips*
5. Histological and immunofluorescence characterisation of PCLS and organoids  
*Bruna Almeida, Luca Urbani, Una Rastovic, Sara Campinoti, Nicola Harris*
6. Analysis of intra-hepatic immune response and isolation of immune cells in PCLS  
*Elena Palma, Antonio Riva, Una Rastovic*

### 11:15 – 12:15 Talks and breakout sessions:

- Precision cut liver slices versus Organoids as models of liver disease (10min) – *Luca Urbani*
- How to monitor disease processes in ex-vivo models (10 min) – *Shilpa Chokshi*
- Tumour slices and Tumoroids (10 min) – *Elena Palma*
- Histological evaluations in PCLS and organoids: which stains, how and why (30 min) – *Prof Robert D Goldin*

**12:15 – 13:15 Lunch**

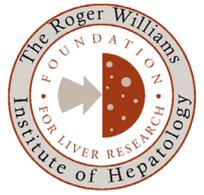
**13:15 – 15:45 2<sup>nd</sup> Practical session with a Coffee break (2h30')**

**15:45 – 16:00 Coffee Break**

**16:00 – 19:30 Project applications of the models**

5' pitches from participants + 3' specific feedback and advice from the Faculty

**20:30 – 22:00 Dinner with 'Speed' networking with the Faculty at the venue**



## Day 3, Sat 17 Sep

**09:00 – 09:15**      **Summary of day before & questions**

**9:15– 9:45**    **Talk and breakout sessions:**

- Addressing patient heterogeneity in PCLS and Organoids – Advantage or Curse? (15 min) – *Gautam Mehta*
- Collecting surgical waste for discard – regulatory pathways and ethics (15 min) – *Vish Patel*

**9:45– 12:45**    **3<sup>rd</sup> Practical session with a coffee break (3h)**

**12:45 – 13:00**      **Closing remarks**

**13:00**            **Lunch bag**

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