

in association with

UNITED EUROPEAN
GASTROENTEROLOGY

ueg

UEG TRAINING PROGRAM

Translational interactive hands-on-training
on epithelial ion transport in the GI tract

27-28 June 2017
Basic Medical Science Building
of the Semmelweis University
Budapest, Hungary
www.epc2017.hu/ueg_training_course.php

DAY 1

Tuesday

26 June 2017

07:30–18:30 **REGISTRATION**
Registration Desk

08:20-10:30 **LECTURE SESSION 1**
Hevesy Room **Ion transport and its regulation**

- 08:20-08:30 **Welcome**
Gábor Varga, Hungary
- 08:30-09:00 **Molecular physiology of ion transport in the pancreas**
Zoltán Rakonczay, Hungary
- 09:00-09:30 **Purinergic signaling in epithelial transport**
Ivana Novak, Denmark
- 09:30-10:00 **Calcium signaling in epithelial transport**
Alexei Tepikin, United Kingdom
- 10:00-10:30 **Intracellular signaling in epithelial transport – beyond calcium**
Shmuel Muallem, USA

10:30-10:45 **COFFEE BREAK**
Foyer

10:45-12:45 **LECTURE SESSION 2**
Hevesy Room **Bicarbonate transport in health and disease**

- 10:45-11:15 **Intestinal bicarbonate transport**
Ursula Seidler, Germany
- 11:15-11:45 **Intestinal ion transport processes related to bile production**
Peter Jansen, The Netherlands
- 11:45-12:15 **Bicarbonate transport in amelogenesis**
Gábor Varga, Hungary
- 12:15-12:45 **Bicarbonate transport in the airways**
Paul Quinton, USA

12:45-13:45 **LUNCH BREAK**
Foyer

13:45-15:45 **HANDS-ON-TRAINING – SESSION 1**
Rooms TBA

Each participant selects one Group from Groups 1-8 and then attends in that course. This way each attendant may participate in four different hands-on-training session during the two days. In each Group the limit is 9 attendants per session, except where otherwise indicated.

Group 1 **Isolation and culturing of human colonic crypts and gastric epithelial cells**
Room TBA **from biopsy samples**

Orsolya Galamb and Béla Molnár, Hungary

Group 2 **Culturing of GI epithelial cell lines (i.e. gastric and colorectal cells,**
Room TBA **pancreatic acinar and ductal cells, hepatocytes and cholangiocytes)**

Anna Földes and Petra Pallagi, Hungary

Group 3 **Co-culturing of GI and airway epithelial cells with commensal and**
Room TBA **pathogenic bacteria**

Orsolya Dobay and Ákos Zsembery, Hungary

Group 4* **Patch clamping in single channel and whole cell configurations of GI**
Room TBA **epithelial cells**

Viktória Venglovecz, Hungary and Mike Gray, United Kingdom

Group 4a* **Patch clamping in single channel and whole cell configurations of different**
Room TBA **type of epithelial cells**

László Köles and coworker, Hungary

Group 5* **Measurements of intracellular Ca²⁺ concentration and membrane potential**
Room TBA **using fluorescence dyes in GI epithelial cells**

József Maléth, Hungary and Shmuel Muallem, USA and a contributor in Basic Science Building

Group 5a* **Measurements of intracellular Ca²⁺ concentration and membrane potential**
Room TBA **using fluorescence dyes in airway cells**

Tibor Zelles and coworker, Hungary

Group 6 **Measurements of intracellular pH using fluorescence dyes in GI epithelial**
Room TBA **cells**

Róbert Rácz, Hungary and Ivana Novak, Denmark

Group 7* **Detection of calcium signaling using energy transfer techniques in live GI**
Room TBA **epithelial cells**

Eszter Soltész-Katona, József Maléth and Péter Várnai, Hungary

Group 8 ***In silico* modeling of epithelial ion transport using MATLAB**
Room TBA

Martin Steward, United Kingdom and Orsolya Hegedűs, Hungary

*maximum 5 participant per session

15:45-16:15 **COFFEE BREAK AND EXCHANGE**
Foyer

16:15-18:15 **HANDS-ON-TRAINING – SESSION 2**
Rooms TBA

Each participant selects one Group from Groups 1-8 and then attends in that course. Group 1 – Group 8 exactly as described above under Hands-on-training – Session 1.

19:30 **JOINT DINNER IN A BUDAPEST RESTAURANT**
Foyer Attendance included in the registration fee.

DAY 2

Wednesday

27 June 2017

08:00–19:00 **REGISTRATION**
Registration Desk

08:35-10:35 **LECTURE SESSION 3**
Hevesy Room **Ion transport related disorders and their targeting**

08:35-09:05 **Intestinal disorders and transport processes**
Stephen Keely, Ireland

09:05-09:35 **Liver disorders and transport processes**
Michael Trauner, Austria

09:35-10:05 **Biliary disorders and transport processes**
Mario Strazzabosco, Italy

10:05-10:35 **Impaired bicarbonate secretion and bacterial infections in the airways**
Ákos Zsembery, Hungary

10:35-11:00 **COFFEE BREAK**
Foyer

11:00-13:00 **HANDS-ON-TRAINING – SESSION 3**
Rooms TBA

Each participant selects one Group from Groups 1-8 and then attends in that course. Group 1 – Group 8 exactly as described above under Hands-on-training – Session 1.

13:00-13:40 **LUNCH BREAK**
Foyer

13:40-15:40 **HANDS-ON-TRAINING – SESSION 4**
Rooms TBA

Each participant selects one Group from Groups 1-8 and then attends in that course. Group 1 – Group 8 exactly as described above under Hands-on-training – Session 1.

15:40-16:00 **COFFEE BREAK**
Foyer

16:00-18:30 Szent-Györgyi Room	LECTURE SESSION 4 JOINT SESSION WITH THE 49TH EPC MEETING Pancreatic disease in relation to transport disorders and their targeting
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| 16:00-16:30 | Molecular genetics in pancreatitis
<i>Miklós Sahin-Tóth, USA</i> |
| 16:30-17:00 | Cell biology and genetics of pancreatic ductal adenocarcinoma
<i>Paco Real, Spain</i> |
| 17:00-17:30 | Potential transport process targets in pancreatitis and pancreatic cancer
<i>Julia Mayerle, Germany</i> |
| 17:30-18:00 | CFTR, as a target prototype in pancreatic translational research
<i>Peter Hegyi, Hungary</i> |
| 18:00-18:20 | Final discussion and conclusion of the course
(involving a panel of faculty members) |
| 18:20-18:30 | Participants fill out a questioner to evaluate each presentation and the quality of the whole meeting. |