in association with



# EPC TRAINING COURSE IN ASSOCIATION WITH UEG

## **PROGRAM**

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

June 27-28, 2017
Basic Medical Science Building
Semmelweis University
Budapest, Hungary
www.epc2017.hu

#### **Detailed program**

### DAY 1

Tuesday June 27, 2017

07:30–18:30	REGISTRATION	
Registration Desk		

08:20-10:30 Hevesy Room	LECTURE SESSION 1 Ion transport and its regulation
08:20-08:30	Welcome László Hunyady dean of the Faculty of Medicine, Semmelweis University, Hungary 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
10:30-11:00	COFFEE BREAK AND TRANSFER

11:00-13:00	HANDS-ON-TRAINING - SESSION 1	

Each participant selects one Group from Groups 1-9 and then attends 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 1a	Isolation and culturing of human colonic crypts and gastric epithelial cells from biopsy samples		
L	Orsolya Galamb, Alexandra Kalmár and Béla Molnár, Hungary only morning, INTERCONNECTED TO GROUP 1b		
Group 1b	Primary culture of GI epithelial cells – gastric and colorectal cells		
	Anna Földes, Zoltán Zádori, Orsolya Galamb, Alexandra Kalmár, Hungary only afternoon, INTERCONNECTED TO GROUP 1a		
Group 2	Isolation and culturing of pancreatic acinar cells and intra/interlobular ducts		
	Petra Pallagi and Viktória Venglovecz, Hungary		
Group 3	Interkingdom signalling between bacteria and epithelial cells		
	Orsolya Dobay and Ákos Zsembery, Hungary		
Group 4	Patch clamping of cells in tissue slices		
	László Köles and Erzsébet Kató, Hungary		
Group 5	Measurements of intracellular Ca <sup>2+</sup> concentration and membrane potential using fluorescence dyes in HAT-7 epithelial cells		
	Kristóf Kádár, József Maléth, Hungary and Shmuel Muallem, USA		
Group 6	Measurements of intracellular pH using fluorescence dyes in HAT-7 epithelial cells		
	Róbert Rácz, Zoltán Rakonczay, Hungary and Ivana Novak, Denmark		
Group 7	Measurement of inositol lipids using BRET-based biosensors in mammalian cell lines		
	Péter Várnai and Rita Matuska, Hungary		
Group 8	In silico modeling of epithelial ion transport using MATLAB		
	Martin Steward, United Kingdom and Beáta Kerémi, Hungary		
Group 9	Studying ion channels using the patch-clamp technique		
	László Csanády and Csaba Mihályi, Hungary		
13:00-13:45	SANDWICH LUNCH AND TRANSFER		

13:45-15:45	HANDS-ON-TRAINING – SESSION 2
Rooms TBA	

Each participant selects one Group from Groups 1-9 and then attends that course. Group 1 – Group 9 exactly as described above under Hands-on-training – Session 1.

15:45-16:15	COFFEE BREAK AND TRANSFER

16:15-18:15 Hevesy Room	LECTURE SESSION 2 Bicarbonate transport in health and disease
16:15-16:45	Intestinal bicarbonate transport Ursula Seidler, Germany
16:45-17:15	Bile ductular ion transport processes related to bile production and cholestasis  Peter Jansen, The Netherlands
17:15-17:45	Bicarbonate transport in amelogenesis  Gábor Varga, Hungary
17:45-18:15	Bicarbonate transport in the airways Paul Quinton, USA
20.00	IOINT DINNER AT TRÓFFA GRILL RESTAURANT

20:00	JOINT DINNER AT TRÓFEA GRILL RESTAURANT
	Attendance included in the registration fee.

Date: 20:00 on Tuesday, June 27, 2017

Location: Trófea Grill Restaurant

Address: Király utca 30-32, Budapest, H-1061

Access: Take the M3 blue underground at the conference venue at 'Klinikák' station

in the direction of 'Újpest-Központ 'and get off at 'Deák Ferenc tér'. The restaurant is in 500 meters walking distance from the underground station.

Please arrive to the restaurant by 20:00.

#### DAY 2

Wednesday June 28, 2017

08:00-19:00	REGISTRATION
Registration Desk	

08:25-10:25 Hevesy Room	LECTURE SESSION 3 Ion transport related disorders and their targeting
08:25-08:55	Intestinal disorders and transport processes Stephen Keely, Ireland
08:55-09:25	Role of transporters in liver disease Peter Jansen, The Netherlands
09:25-09:55	CFTR as a key transporter in epithelial health and its targeting in disorders  Michael Gray, United Kingdom
09:55-10:25	Impaired bicarbonate secretion and bacterial infections in the airways Ákos Zsembery, Hungary
10:25-10:50	COFFEE BREAK AND TRANSFER

10:25-10:50	COFFEE BREAK AND TRANSFER

10:50-12:50	HANDS-ON-TRAINING – SESSION 3	
Rooms TBA		

Each participant selects one Group from Groups 1-9 and then attends that course. Group 1 – Group 9 exactly as described above under Hands-on-training – Session 1.

12:50-13:30	SANDWICH LUNCH AND TRANSFER	

13:30-15:30	HANDS-ON-TRAINING - SESSION 4	
Rooms TBA		

Each participant selects one Group from Groups 1-9 and then attends that course. Group 1 – Group 9 exactly as described above under Hands-on-training – Session 1.

15:30-16:00	COFFEE BREAK AND TRANSFER	

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