



# **4<sup>th</sup> CED-IADR Summer School**

Translational dental research from  
molecular physiology to clinical  
applications

## **PROGRAMME**



04-08 July 2022  
Faculty of Dentistry  
Semmelweis University  
Budapest, Hungary

## WELCOME NOTE

**Dear colleagues,**

On behalf of the Continental European Division of the International Association for Dental Research (CED-IADR), we would like to welcome you all to the 4<sup>th</sup> CED-IADR Summer School, where we have planned a state-of-the-art event, packed with up to date information, interesting lectures and hands on courses, with high focus on translational aspects of dental research.

With a mix of detailed, contemporary content, we believe that the summer school will be of interest to anyone in our professional field. True to our aim of facilitating and supporting networking, we have prepared the programme so that there is plenty of time for interaction with colleagues, during and after the lectures and courses.

Beside the scientific aspect of the meeting, we also hope you will enjoy the beautiful setting of Budapest, with its historical and cultural abundance and that the social programmes will be conducive to a fruitful exchange of ideas and knowledge between all of those working in the field of dental research.

We wish you a successful meeting attendance and a pleasant stay in Budapest.

Yours sincerely,

*Gábor Varga*  
head of the local organizing team

*Gábor Gerber*  
dean, Faculty of Dentistry  
Semmelweis University Budapest, Hungary

## DATE

04-08 July 2022

## VENUES

### **Plenary session on Monday, 04 July 2022**

Árkövy Room, Ground Floor

Educational Centre, Faculty of Dentistry, Semmelweis University

Address: Szentkirályi utca 47, Budapest, H-1088

### **Modules from Tuesday through Friday, 05-08 July 2022**

#### **Module 1A**

Department of Periodontology, Floor 4

Educational Centre, Faculty of Dentistry, Semmelweis University

Address: Szentkirályi utca 47, Budapest, H-1088

#### **Module 1B**

Department of Restorative Dentistry and Endodontics, Floor 7

Educational Centre, Faculty of Dentistry, Semmelweis University

Address: Szentkirályi utca 47, Budapest, H-1088

#### **Module 2A**

Office of Gábor Gerber, Floor 2

Department of Anatomy, Histology and Embryology

Faculty of Medicine, Semmelweis University

Address: Tűzoltó utca 58, Budapest, H-1094

#### **Module 2B**

Bánóczy Meeting Room, Floor 7

Department of Restorative Dentistry and Endodontics

Educational Centre, Faculty of Dentistry, Semmelweis University

Address: Szentkirályi utca 47, Budapest, H-1088

#### **Module 3A and Module 3B**

Library of the Department of Oral Biology, Floor 18

Department of Oral Biology, Faculty of Dentistry, Semmelweis University

Address: Nagyváradi tér 4, Budapest, H-1089

#### **Module 4A and Module 4B**

Library of the Department of Oral Biology, Floor 18

Department of Oral Biology, Faculty of Dentistry, Semmelweis University

Address: Nagyváradi tér 4, Budapest, H-1089

## **Organiser**

*Gábor Varga, Semmelweis University*

## **Co-organisers**

*Gábor Gerber, Semmelweis University*

*Bálint Molnár, Semmelweis University*

*Martin C. Steward, Semmelweis University*

*János Vág, Semmelweis University*

*Péter Windisch, Semmelweis University*

## **Faculty members**

*Márk Czumbel, Semmelweis University*

*Réka Fazekas, Semmelweis University*

*Anna Földes, Semmelweis University*

*Bianca Golzio, Semmelweis University*

*Barbara Mikecs, Semmelweis University*

*Ákos Mikolicz, Semmelweis University*

*Eszter Molnár, Semmelweis University*

*Tamás László Nagy, Semmelweis University*

*Róbert Rácz, Semmelweis University*

*Alexander Schulze Wenning, Semmelweis University*

*Arvin Shahbazi, Semmelweis University*

*Botond Simon, Semmelweis University*

*Eleonóra Sólyom, Semmelweis University*

## **Get-together reception**

Date: 18:15 on Monday, 04 July 2022

Location: Veranda Grill & Wine Restaurant

Address: Vendel utca 9, Budapest, H-1096

## **Farewell dinner**

Date: 18:30 on Thursday, 07 July 2022

Location: Trófea Grill Restaurant

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

## DAY 1 Monday, 04 July 2022

Árkövy Room (Ground Floor), Educational Centre, Faculty of Dentistry, Semmelweis University

**13:00–13:30**

Registration Desk

**REGISTRATION AND SANDWICH LUNCH**

**13:30–14:00**

Árkövy Room

**WELCOME AND PROGRAMME OVERVIEW**

**14:00–18:00**

Árkövy Room

**PLENARY SESSION**

Chairs: *Gábor Varga*, vice-chair, Centre for Translational Medicine  
*Gábor Gerber*, dean, Faculty of Dentistry

14:00–14:30

**The Translational Research Program at Semmelweis University**

*Péter Hegyi*, Centre for Translational Medicine

14:30–15:00

**State of the art periodontal plastic surgery**

*Bálint Molnár*, Department of Periodontology

15:00–15:30

**Oral blood flow analysis in patients**

*Réka Fazekas*, *Eszter Molnár*, Department of Restorative Dentistry and Endodontics

**15:30–15:45**

Foyer

**COFFEE BREAK**

15:45–16:15

**Oral anatomical and histological studies leading to clinical applications in dentistry and medicine**

*Gábor Gerber*, Department of Anatomy, Histology and Embryology

16:15–16:45

**Digital forensic odontology. Palatal identification in humans**

*János Vág*, Department of Restorative Dentistry and Endodontics

**16:45–17:00**

Foyer

**COFFEE BREAK**

17:00–17:30

**Salivary research – from molecular physiology to diagnostics**

*Martin C. Steward*, University of Manchester

17:30–18:00

**Enamel research – from molecular physiology to the effectiveness of enamel restorative processes**

*Gábor Varga*, Centre for Translational Medicine and Department of Oral Biology

**18:15–20:00**

**GET-TOGETHER RECEPTION**

## DAY 2-3-4-5

**Monday-Tuesday-Thursday-Friday, 05-06-07-08 July 2022**

The practical part of the Summer School consists of 4 modules, each of them divided into a morning and afternoon session (Module A and Module B). You will be attending your 2 daily modules at the same location on the respective day – except for Modules 2A and 2B that will be held at different locations. Sandwich lunches and coffee breaks will be offered in the same building.

**09:30–12:30**

### MORNING MODULES

#### Module 1A

**Current trends in minimally invasive hard- and soft tissue reconstruction: surgical module**

Module instructor: *Bálint Molnár*

Module faculty: *Réka Fazekas, Eleonóra Sólyom*

Location: Department of Periodontology, Floor 4

Educational Centre, Faculty of Dentistry, Semmelweis University

Address: Szentkirályi utca 47, Budapest, H-1088

#### Module 2A

**Oral micro- and macro-anatomical studies, hard tissue sectioning and immunohistochemistry, soft palate surface bioprint patterns**

Module instructor: *Gábor Gerber, Arvin Shahbazi, Emese Pálfi*

Location: Office of Gábor Gerber, Floor 2

Department of Anatomy, Histology and Embryology, Faculty of Medicine, Semmelweis University

Address: Tűzoltó utca 58, Budapest, H-1094

#### Module 3A

**Computational modeling of salivary fluid secretion using COPASI**

Module instructor: *Martin C. Steward*

Location: Library of the Department of Oral Biology, Floor 18

Department of Oral Biology, Faculty of Dentistry, Semmelweis University

Address: Nagyvárad tér 4, Budapest, H-1089

#### Module 4A

**Molecular physiological methods to study enamel formation – microfluorometry and patch clamping to detect ion transport processes**

Module instructor: *Gábor Varga*

Module faculty: *Anna Földes, Kristóf Kádár, Róbert Rácz, Bianca Golzio*

Location: Library of the Department of Oral Biology, Floor 18

Department of Oral Biology, Faculty of Dentistry, Semmelweis University

Address: Nagyvárad tér 4, Budapest, H-1089

**12:30–13:30**

**SANDWICH LUNCH**

Location: Same location where your daily modules take place.  
N.B. Lunch for participants taking part at Module 2A will be offered at the location of Module 2B (Educational Centre, Floor 7, Szentkirályi utca 47).

**13:30–16:30**

**AFTERNOON MODULES**

**Module 1B**

**Laser Speckle Contrast analysis of oral microcirculation in patients**

Module instructor: *Eszter Molnár*  
Module faculty: *Réka Fazekas, Barbara Mikecs, Tamás László Nagy*  
Location: Department of Restorative Dentistry and Endodontics, Floor 7  
Educational Centre, Faculty of Dentistry, Semmelweis University  
Address: Szentkirályi utca 47, Budapest, H-1088

**Module 2B**

**Digital forensic odontology by intraoral scanning and 3D surface evaluation**

Module instructor: *Botond Simon*  
Module faculty: *Ákos Mikolicz, Arvin Shahbazi, János Vág*  
Location: Bánóczy Meeting Room, Floor 7  
Department of Restorative Dentistry and Endodontics  
Educational Centre, Faculty of Dentistry, Semmelweis University  
Address: Szentkirályi utca 47, Budapest, H-1088

**Module 3B**

**Saliva collection and molecular biological methods to diagnose SARS-CoV-2 – comparison to nasopharyngeal sampling**

Module instructor: *Gábor Varga*  
Module faculty: *Anna Földes*  
Location: Library of the Department of Oral Biology, Floor 18  
Department of Oral Biology, Faculty of Dentistry, Semmelweis University  
Address: Nagyvárad tér 4, Budapest, H-1089

**Module 4B**

**Saliva collection and molecular biological methods to diagnose SARS-CoV-2 – comparison to nasopharyngeal sampling**

Module instructor: *László Márk Czumbel*  
Module faculty: *Bianca Golzio, Alexander Schulze Wenning*  
Location: Library of the Department of Oral Biology, Floor 18  
Department of Oral Biology, Faculty of Dentistry, Semmelweis University  
Address: Nagyvárad tér 4, Budapest, H-1089



[www.ced-iadr.eu/summer-school](http://www.ced-iadr.eu/summer-school)

