



ESAO Winter School 2018 Program

Therapeutic Apheresis, Biomaterials & Cellular Therapies

Semmering, Austria
January 25-27, 2018



www.esao.org/winterschool

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Aims

- ❖ To provide high level education in specific fields of extracorporeal therapies (“teach the teachers”)
- ❖ To foster synergies between basic and applied science in an attempt to bring together biomaterial scientists, engineers, and clinicians

Scientific Committee (Chairs)

Viktoria Weber (Krems, Austria)
Volker Witt (Vienna, Austria)
Michael B. Fischer (Krems, Austria)

Organising Committee

Jens Hartmann
Carla Tripisciano
Anita Aichinger
Margit Schinerl

(all Krems, Austria)

Contact

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Topics

- ❖ Coagulation & Anticoagulation
- ❖ Separation Techniques and Devices
- ❖ Applications of Apheresis and Clinical Outcome
- ❖ The Blood-Biomaterial Interface
- ❖ Innovative Methods and Functional Aspects

Venue

Sporthotel Semmering
Carolusstrasse 10
2680 Semmering
www.sporthotel-semmering.at

Hotel Reservation

Karoline Koller
Phone: +43 2664 8038 12
reservation@semmering.com

reservation code: **WS2018**

€ 83,- / € 103,- single room
€ 138,- / € 162,- double room
breakfast and dinner are included

Travel

By car

Semmering is located less than 10 km from the S6 motorway and 90 km from Vienna.

By train

More than 20 trains from Vienna and Graz stop at the Semmering railway station daily. <http://www.oebb.at>

By plane

Vienna International Airport is located 100 km from Semmering. Take the city airport train from the airport to Vienna, change train to Semmering. <https://www.cityairporttrain.com>; <http://www.oebb.at>

Semmering

Die Semmeringbahn (Semmering railway) is commonly referred to as the world's first true mountain railway, given the very difficult terrain and the considerable altitude difference that was mastered during its construction between 1848 and 1854 by some 20,000 workers under the direction of Carl Ritter von Ghega. The construction features 14 tunnels, 16 viaducts and over 100 curved stone bridges, as well as 11 iron bridges. Across an overall track length of 41 km, the Semmering railway overcomes an altitude difference of 460 m. It was built with the attempt of achieving a harmonious combination of technology and nature and contributed significantly to the opening of the Semmering region for tourism.

In the early 1900s, Semmering became one of the most decent resorts in Europe, with guests from the Austro-Hungarian monarchy and from all over Europe. It hosted composers, writers, actors, artists, and philosophers, such as Gustav Mahler, Alma Mahler-Werfel, Oscar Kokoschka, Josefine Baker, Arthur Schnitzler, Stefan Zweig, Joseph Roth, Hemito von Doderer, Carl Moll, and Ludwig Wittgenstein, just to name a few. Famous architects and designers such as Adolf Loos, Walter Gropius, Joseph Urban, and Koloman Moser were active for their prominent customers, and numerous hotels and mansions are witnesses of this era.

In 1998, the Semmering railway was added to the list of the UNESCO World Heritage Sites. Today, Semmering has kept much of its flair and is an attractive destination for winter sports, hiking, and leisure.

Thursday, January 25

- 16:30 – 16:45 **Welcome**
- 16:45 – 17:30 **ÖGTERM Lecture:**
M. Dominici, Modena, Italy
Cellular Therapies for Tissue Regeneration and Drug Delivery
- 17:30 – 18:15 **P. Perseghin**, Monza, Italy
The Growing Tree of Cell Therapy
- 18:15 – 19:00 **S. Nehrer**, Krems, Austria
Cellular Therapies in Cartilage Regeneration
- 19:30 *Dinner & Happy Hour*

Friday, January 26

- Session 1: Coagulation & Anticoagulation**
Chair: V. Weber, Krems
- 09:00 – 10:00 **C. Mannhalter**, Vienna, Austria
Principles of Coagulation
- 10:00 – 10:30 *Coffee Break*
- Session 2: Separation Techniques and Devices**
Chair: J. Vienken, Bad Homburg
- 10:30 – 11:00 **V. Witt**, Vienna, Austria
Separation Techniques in Apheresis: an Overview
- 11:00 – 11:30 **J. Vienken**, Usingen, Germany
Adsorbent-Based Systems
- 11:30 – 12:00 **A. Campbell Ritchie**, Nottingham, UK
Filter-Based Techniques
- 12:00 – 12:30 **C. Legallais**, Compiègne, France
Bioartificial Approaches
- Session 3: Applications of Apheresis and Clinical Outcome**
Chair: V. Witt, Vienna
- 16:00 – 16:45 **G. Leitner**, Vienna, Austria
Cellular Therapies

- 16:45 – 17:30 **T. Lion**, Vienna, Austria
Vital Infections in the Severely Immunocompromised Host
- 17:30 – 18:00 **J. Schwartz**, New York, USA
The Dilemma of Outcome in Apheresis
- 18:00 – 19:00 **Poster Session for Young Researchers**
- 19:30 **J. Vienken**, Usingen, Germany
Dinner & Movie
"Dialysis and Extracorporeal Blood Circuits - When the Movies Were Young!"

Saturday, January 27

- Session 4: The Blood-Biomaterial Interface**
Chair: M. Fischer, Krems
- 08:30 – 09:15 **T. Groth**, Halle, Germany
Biomaterials in Extracorporeal Therapies
- 09:15 – 09:45 **V. Weber**, Krems, Austria
Cellular Activation in Extracorporeal Circuits and Extracellular Vesicles
- 09:45 – 10:15 **V. Boerger**, Essen, Germany
Mesenchymal Stem Cell-Derived Extracellular Vesicles, a Potential New Tool in Regenerative Medicine
- 10:15 – 10:30 *Coffee Break*
- Session 5: Innovative Methods and Functional Aspects**
Chair: M. Dominici, Modena
- 10:30 – 10:50 **C. Kasper**, Vienna, Austria
Cell Expansion and Differentiation using Bioreactors
- 10:50 – 11:10 **MB. Fischer**, Krems, Austria
Counter Flow Elutriation
- 11:10 – 11:40 **W. Schwinger**, Graz, Austria
T Cell Therapies
- 11:40 – 12:10 **T. Felzmann**, Vienna, Austria
Dendritic Cell Based Immunotherapies
- 12:10 – 12:30 **V. Witt**, Vienna, Austria
Concluding Remarks and Future Perspectives