

## Course Organizing Office

Cartilage Executive Office (CEO) GmbH | Spitalstrasse 190A | 8623 Wetzikon, Switzerland  
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## Course Directors

- **Stefan Nehrer**, Danube University Krems Center for Regenerative Medicine, Krems, AT
- **Siegfried Trattnig**, Medical University of Vienna, High Field MR Center, Department of Biomedical Imaging and Image Guided Therapy, Vienna, AT

## Course Venues

- **Main Venue/Lectures**  
Medical University Vienna | Van Swieten Room | Van Swieten - Gasse 1a | 1090 Vienna
- **Imaging Workshop (limited to 20 participants)**  
Medical University of Vienna | High Field MR Center | Lazarettgasse 14 | 1090 Vienna
- **Surgical Skills Workshop (Limited to 30 participants)**  
Medical University of Vienna | Center for Anatomy and Cell Biology | Währinger Straße 13 | 1090 Vienna

## Registration & Fees

Registration is accepted online only through [www.cartilage.org](http://www.cartilage.org)

Main Course	Until Jan 31 Early Fee	Feb 01–Mar 30 Normal Fee	From Apr 01 Onsite Fee
Residents/Students*	EUR 250.00*	EUR 330.00*	EUR 390.00*
ICRS-Member	EUR 350.00	EUR 430.00	EUR 490.00
Non-ICRS Members	EUR 450.00	EUR 530.00	EUR 590.00
Corporate / Industry	EUR 500.00	EUR 600.00	EUR 690.00

Add 1 Workshop	Imaging Skills	or	Surgical Skills
Residents/Students*	EUR 100.00*		EUR 290.00*
ICRS-Members	EUR 150.00		EUR 390.00
Non-ICRS Members	EUR 200.00		EUR 490.00
Corporate / Industry	EUR 300.00		EUR 590.00

\* to be accompanied by a respective certificate signed by the head of department.

## Included in the Registration Fee

- Access to all Sessions and Industry Exhibition
- 3 Coffee Breaks
- Registration Material/Programme/App
- 1 Welcome Lunch Reception
- 1 Lunch on Tuesday
- Certificate of Attendance

## Refunds for course cancellations are as follows:

50% refund for cancellations before January 31, 2024. No refund thereafter. Name changes will be charged with a fee of €100.00.

## Payment

Fees are in Euros and are accepted as follows: bank transfer, credit cards (VISA, AMEX, Mastercard)

## ICRS Membership Benefits

Attendees who apply for ICRS membership right before registration will immediately benefit from the highly reduced members' fee. Membership applications should be made online before course registration. Please note that ICRS Members who are not in good standing with their membership dues 2023/2024 will be charged the non-member fee.

## Important Dates

Deadline Course Registration Early Bird	January 31, 2024
Deadline Cancellation of Registration (50% refund)	January 31, 2024
Deadline Hotel Reservation (first come-first serve)	February 15, 2024
Deadline Course Registration Normal Fee	March 30, 2024
Onsite Fee as of	April 1, 2024

## Language

English, no simultaneous translation

## Accommodation/Official Hotel

**Hotel Regina** (5 min walking distance to course venue)  
Rooseveltplatz 15, Vienna | Tel: +43 1 40 44 671 | Email: [regina@kremslehnerhotels.at](mailto:regina@kremslehnerhotels.at)

We have secured a limited number of rooms. Participants are requested to book their hotel arrangements directly with [this link](#), at the latest until **February 15, 2024**, using the **Group Code "ICRS"**. Rooms will be confirmed on a first-come-first-serve basis.

Room Rates: SGL: EUR 189.00/DBL: EUR 225.00 (incl. breakfast, service & taxes)

## Faculty/Course Dinner

Take this unique opportunity to enhance your professional network with your colleagues and invited faculty in a relaxed and informal atmosphere. Sign-up for the course dinner, taking place on Monday from 19.30–23.00. Rate: 120.00 Euros (food & drinks included).

## Icebreaker Reception

Ice Breaker / Networking Event at Hotel Regina, Sunday, April 21, 2024, 17.00-19.00 h, at Hotel Regina. Rate: 30.00 Euros.

## Updated Information

For updated information visit our website [www.cartilage.org](http://www.cartilage.org)

## Industry Support & Exhibition

The Industry is invited to contribute and to support this important event. Affordable tabletop exhibits and sponsoring opportunities are available to expose and enhance your organization's visibility. Interested companies please contact Anouk Bürgisser-Marti ([anouk.buergisser@cartilage.org](mailto:anouk.buergisser@cartilage.org)).

## Diamond Partners



## Academic Partners



# Preliminary Programme

#ICRSFOCUSMEETING

**VIENNA**  
**Austria**  
**April 21-23, 2024**

**Focus Meeting**  
**Imaging &**  
**Decision Making**



## Hands-On Skills Workshop & Wet-Lab

Choose between:

**Imaging Skills:** The first part of the Imaging Workshop will focus on training of the new updated MOCART Score 2.0 on selected cases. The second part will be dedicated to advanced compositional MR imaging in routine clinical MR examinations with T2 Mapping and GLCM of cartilage workflow. Finally the MR scanner MSK Package (Syngo via, MapIt) will be presented and the clinical application will be demonstrated.

**Surgical Skills:** The surgical skills course will be a very comprehensive wet-lab on human specimen at the Anatomic Institute of Vienna and it will be focused on cartilage regeneration and repair procedures only. The cell transplantation technologies, which are right now available in Europe as well as biomaterials, augmentation techniques or microfracture or Bone Marrow Aspirate Concentrate (BMAC) will be demonstrated and also practiced on Anatomic specimens. Leading orthopaedic surgeons will guide through the course and help to develop the skills for cartilage regeneration procedures.

**ICRS**

International Cartilage Regeneration  
& Joint Preservation Society

[www.cartilage.org](http://www.cartilage.org)

# WELCOME

Advanced Imaging Technology in radiology, particularly Magnetic Resonance Imaging, has emerged during the last decades and has always been the focus of cartilage repair. The proper treatment indication before surgery and a relevant noninvasive evaluation of the outcome after surgery is essential and can be strongly supported by noninvasive imaging. Additionally, imaging can evaluate and monitor the efficacy of newly developed surgical cartilage repair techniques.

The semiquantitative MOCART Score was developed in Vienna 20 years ago and was a hallmark in the systematic morphological analysis of cartilage repair. Moreover, new compositional MR methods such as T2 mapping, dGEMRIC, sodium imaging, gagCEST imaging and diffusion-weighted imaging were developed or improved in Vienna and applied for the first time in patients after cartilage repair surgery. Also, cell-based cartilage repair therapies were applied and studied in Vienna by pioneers in the field and published with partners all over Europe. Austria was also one of the first countries in Europe with a remuneration of ACT in the social system.

Five years after our last meeting on imaging and cartilage surgery, we will meet again in Vienna for a Focus Meeting to revisit the latest developments in surgical technology and new imaging scoring systems like MOCART 2.0 on various joints and new advanced compositional MR methods such as texture analysis.

A comprehensive wet-lab skills course on human specimens will start at the Vienna Anatomical Institute and will be held on Monday morning. In the afternoon, talks will follow on the updated MRI and radiology technology, including the latest news from the Artificial Intelligence sector. Clinical scientists, surgeons, and experienced radiologists will discuss and present the latest insights in imaging interpretation for indication and evaluation in cartilage surgery. The Medical University of Vienna, with its High Field MR Center and the ICRS expert group in Austria, welcomes an international faculty and audience to meet again after the pandemic to support ICRS mission: education, skills and science in cartilage repair – worldwide!

The vibrant city of Vienna will serve as a fruitful and exciting background to host this Focus Meeting. So, learn about the MOCART Score and “See what you can do in cartilage repair!”. But also enjoy inspiring Mozart music and visiting the perfect fine arts of Vienna’s cultural heritage.

Welcome back to Vienna,

*Stefan Nehrer & Siegfried Trattig, Course Directors*

## Invited Faculty

Albrecht Christian, AT	Juras Vladimir, AT	Runer Armin, AT
Aurich Matthias, DE	Kon Elizaveta, IT	Schreiner Markus, AT
Brittberg Mats, SE	Lattermann Christian, US	Szomolanyi Pavol, AT
Bugbee William, US	Link Thomas, US	Toegel Stefan, AT
Ergelet Christoph, CH	Marlovits Stefan, AT	Trattig Siegfried, AT
Fickert Stefan, DE	Minas Tom, US	Welsch Goetz, DE
Filardo Giuseppe, IT	Nehrer Stefan, AT	Weninger Wolfgang, (AT)
Goyal Deepak, IN	Nieminen Miika, FI	
Janacova Veronika, AT	Roemer Frank, DE	

# PRELIMINARY PROGRAMME

**Sunday, April 21, 2024**

**17:00 – 19:00 Icebreaker Reception at Hotel Regina (€ 30.00)**

**Monday, April 22, 2024**

## Workshops

08:00 – 13:00

09:30 – 12:00

## Pre Course – Hands-On Skills

Surgical Skills – Anatomy & Cell Biology, Medical University Vienna

Imaging Skills – High Field MR Center, Medical University Vienna

**10:00 – 18:00**

## Registration

**13:00 – 14:00**

## Welcome Lunch Reception / Refreshments

**14.00 – 13.15**

## Session 1: Morphological Assessment of Cartilage and Cartilage Repair - from AMADEUS to MOCART

*Moderators: Trattig Siegfried, AT / Marlovits Stefan, AT*

14:00 - 14:15

14:15 - 14:30

14:30 - 14:45

14:45 - 15:00

15:00 - 15:15

15:15 - 15:30

15:30 - 15:45

1.1 State of the Art Morphological Imaging of Cartilage Repair - *Roemer Frank (DE)*

1.2 AMADEUS Score – *Runer Armin (AT)*

1.3 MOCART 1.0 – How it all began - *Marlovits Stefan (AT)*

1.4 MOCART 2.0 – Knee Score - *Trattig Siegfried (AT)*

1.5 Ankle MOCART - *Schreiner Markus (AT)*

1.6 Classification of Bone Edema and Osteonecrosis - *Goyal Deepak (IN)*

1.7 Panel Discussion

**15:45 – 16.30**

## Coffee Break / Exhibition

**16:30 – 18.00**

## Session 2: From Conventional to Advances MR Imaging

*Moderators: Nieminen Miika (FI), Link Thomas (US)*

16:30 - 16:45

16:45 - 17:00

17:00 - 17:15

17:15 - 17:30

17:30 - 17:45

17:45 - 18:00

2.1 T2 Mapping + MT Mapping - *Juras Vladimir (AT)*

2.2 GAG Specific Imaging - *Nieminen Miika (FI)*

2.3 Biomechanical MRI - *Szomolanyi Pavol (AT)*

2.4 MRI and Histology - *Toegel Stefan (AT)*

2.5 Technical Developments in MRI: Field Strength, Coils, Faster Imaging - *Link Thomas (US)*

2.6 Panel Discussion

**19:30 – 23:00**

## Faculty / Course Dinner at Palais Todesco (€ 120.00)

# PRELIMINARY PROGRAMME

**Tuesday, April 23, 2024**

**8:30 - 10:00**

## Session 3a: From Imaging to Therapy I

*Moderators: Nehrer Stefan (AT), Minas Tom (US)*

08:30 - 08:45

08:45 - 09:00

09:00 - 09:15

09:15 - 09:30

09:30 - 09:45

09:45 - 10:00

3.1 MRI Imaging of Chondral Defects - *Welsch Goetz (DE)*

3.2 Cell-based Chondral Repair - *Albrecht Christian (AT)*

3.3 Cell-based Cartilage Repair of Multiple and Complex Defects - *Minas Tom (US)*

3.4 Non-cell Based Chondral Repair - *Ergelet Christoph (CH)*

3.5 Minced Cartilage - *Runer Armin (AT)*

3.6 Panel Discussion

**10:00 – 10.30**

## Coffee Break / Exhibition

**10:30 - 12:15**

## Session 3b: From Imaging to Therapy II

*Moderators: Ergelet Christoph (CH), Bugbee William (US)*

10:30 - 10:45

10:45 - 11:00

11:00 - 11:15

11:15 - 11:30

11:30 - 11:45

11:45 - 12:00

12:00 - 12:15

3.7 Bone Marrow Edema like Lesions and Osteochondral Defects (OCD) - *Link Thomas (US)*

3.8 Osteochondral Repair from Mosaicplasty to Biomaterials - *Kon Elizaveta (IT)*

3.9 Allografts - *Bugbee William (US)*

3.10 Cartilage Repair in the Ankle Joint - *Aurich Matthias (DE)*

3.11 Cartilage Repair in the Hip Joint - *Fickert Stefan (DE)*

3.12 MOCART Hip Score - *Schreiner Markus (AT)*

3.13 Panel Discussion

**12:15 - 13:15**

## Lunch Break / Symposium

**13:15 - 14:30**

## Session 4a: MR Imaging of Cartilage Repair: Correlation and Outcome I

*Moderators: Lattermann Christian (US), Filardo Giuseppe (IT)*

13:15 - 13:30

13:30 - 13:45

13:45 - 14:00

14:00 - 14:15

14:15 - 14:30

4.1 Correlation of Arthroscopy and MRI in Cartilage Defect Diagnostics - *Lattermann Christian (US)*

4.2 Imaging Correlation with Clinical Symptoms - *Filardo Giuseppe (IT)*

4.3 Cartilage Repair Outcome in the Athletes - *Welsch Goetz (DE)*

4.4 Artificial Intelligence in Cartilage Imaging Methods - *Juras Vladimir (AT)*

4.5 Panel Discussion

**14:30 - 15:00**

## Coffee Break | Exhibition

**15:00 - 16:00**

## Session 4b: MR Imaging of Cartilage Repair: Correlation and Outcome II

*Moderators: Kon Elizaveta (IT), Brittberg Mats (SE)*

15:00 - 15:15

15:15 - 15:30

15:30 - 15:45

15:45 - 16:00

4.6 Digital Analysis in MSK Radiology - *Nehrer Stefan (AT)*

4.7 Texture Analysis in Cartilage Repair - *Janakova Veronika (AT)*

4.8 The Future of Cartilage Repair - *Brittberg Mats (SE)*

4.9 Panel Discussion

**16:00**

## Adjourn

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