21 November (Thursday)

7:30 - 12:30 Pre - Course: Surgical Skills (Center for Anatomy & Cell Biology, Medical University of Vienna)
Instructor: Nehrer Stefan (AT) Instructor: Farr Jack (US) Instructor: Niemeyer Philipp (DE) Instructor: Nakamura Norimasa (JP) Instructor: Gobbi Alberto (IT) Instructor: Erggelet Christoph (CH) Instructor: Bobic Vladimir (UK) Instructor: Stotter Christoph (AT) Instructor: Neubauer Markus (AT)

07:30 - 07:40 Welcome & Badge Pick-Up
10 Min Assessment Cartilage Defect: Debridement Technique, Grading
   Farr Jack (US)
10 Min Treatment Strategy & Indication
   Erggelet Christoph (CH)
10 Min Bone Marrow Stimulation: Microfracture, Microdrill (Arthrex), Nanofracture
   Nakamura Norimasa (JP)
10 Min Biomaterial Augmentation: AMIC (Geistlich)
   Bobic Vladimir (UK)
10 Min Biomaterial Augmentation: Hyalofast Knee (Anika)
   Gobbi Alberto (IT)
10 Min Biomaterial Augmentation: Hyalofast Ankle (Anika)
   Nehrer Stefan (AT)
10 Min ACT Cell Transplantation: Spherox (Codon)
   Niemeyer Philipp (DE)
5 Min All Autologous Cartilage Repair
5 Min Chondrektoms – New Surgical Instruments
   Sadlik Boguslaw (PL)
09:00 - 09:30 Coffee Break /Lab Organization
09:30 - 11:00 Hands-on Skills Knee: Defect Preparation BMS, AMIC, Hyalofast, Spherox
11:15 - 12:30 Hands-on Skills Ankle: Defect Preparation BMS, AMIC, Hyalofast, Spherox
9:00 - 12:00 Pre - Course: Imaging Skills (High Field MR Center, Medical University Vienna)
Instructor: Trattnig Siegfried (AT) Instructor: Szomolanyi Pavol (AT) Instructor: Raudner Marcus (AT)
09:00 - 09:15 Welcome Badge & Pick-Up
09:15 - 10:15 Part 1: Morphological Cartilage Imaging
15 Min Basic Morphological MR of Cartilage, Optimization of Protocols
Trattnig Siegfried (AT)
15 Min MR Case Studies of Cartilage Degeneration and Injuries with Staging
Trattnig Siegfried (AT)
15 Min The MOCART Score 2.0 What is new Compared to the Original MOCART
Raudner Marcus (AT)
10:15 - 10:30 Short Break
10:30 - 12:00 Part 2: Compositional Cartilage Imaging
30 Min T2 Mapping from Sequence to Postprocessing to Clinical Trials
Szomolanyi Pavol (AT)
30 Min GLCM with T2 Mapping - What is it and How to do it
Juras Vladimir (AT)
30 Min How to Image GAG
Trattnig Siegfried (AT)
12:00 - 13:00 Focus Meeting Registration (Van Swieten Room)
Welcome Lunch Reception / Refreshments
13:00 - 14:30 Module 1 - Background
Moderator: Trattnig Siegfried (AT) Moderator: Nehrer Stefan (AT)
15 Min Introduction: See what you can do, what you have done!
Nehrer Stefan (AT) Trattnig Siegfried (AT)
15 Min Morphological Imaging State of the Art
Link Thomas (US)
15 Min Compositional MR Imaging
Mlynarik Vladimir (AT)
15 Min Artificial Intelligence in Cartilage Imaging Methods
Juras Vladimir (AT)
15 Min Digitized X-Ray Analysis of OA
Nehrer Stefan (AT)
15 Min Panel Discussion
14:30 - 15:15 Coffee Break / Exhibition / Networking
15:15 - 16:45  **Module 2 - Diagnosis**  
*Moderator: Shabshin Nogah (IL) Moderator: Gobbi Alberto (IT)*

15 Min  **Chondral vs. Osteochondral Lesions**
Bohndorf Klaus (DE)

15 Min  **Bone Marrow Edema, Osteonecrosis**
Shabshin Nogah (IL)

15 Min  **Correlation Arthroscopic & MRI Defect Assessment**
Gobbi Alberto (IT)

15 Min  **Imaging Correlation with Clinical Symptoms**
Welsch Goetz (DE)

15 Min  **Focal OA vs. Generalized OA**
Roemer Frank (DE)

15 Min  **Panel Discussion: See Your Diagnosis**

16:45 - 17:30  **Module 3 - Case Discussions**  
*Moderator: Nehrer Stefan (AT) Moderator: Trattnig Siegfried (AT)*

19:00 - 23:00  **Faculty / Course Dinner**

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22 November (Friday)

8:30 - 10:00  **Module 4 - Outcomes 1: Results & Imaging**  

15 Min  **MR Outcome Score, MOCART 2.0**
Trattnig Siegfried (AT)

15 Min  **Cartilage Repair Outcome in the Athlete**
Welsch Goetz (DE)

15 Min  **Cartilage Registry & the Role of Imaging**
Niemeyer Philipp (DE)

15 Min  **Is Quantitative MRI good enough to Evaluate Cartilage Repair Quality?**
Nakamura Norimasa (JP)

15 Min  **Relation of Imaging & Clinical Symptoms**
Bobic Vladimir (UK)

15 Min  **Panel Discussion: See What You Have Done**

10:00 - 10:45  **Coffee Break / Exhibition / Networking**
10:45 - 12:15  **Module 5 - Outcomes 2: Results & Imaging**  
*Moderator: Kon Elizaveta (IT) Moderator: Roemer Frank (DE)*  
15 Min  **Microfracture and AMIC Techniques**  
Niemeyer Philipp (DE)  
15 Min  **Fat & Bone Marrow Concentrate, MSC Techniques**  
Nakamura Norimasa (JP)  
15 Min  **ACT, MACI**  
Minas Tom (US)  
15 Min  **Mosaicplasty, Allografts**  
Link Thomas (US)  
15 Min  **Osteochondral Repair/ Biomaterials**  
Kon Elizaveta (IT)  
15 Min  **Appearance of Different Cartilage Repair Techniques on MRI**  
Gersing Alexandra (DE)  

12:15 - 13:30  **Lunch Break / Industry Symposium**  

13:30 - 15:00  **Module 6 - Concomitant Damage & Background Factors**  
* Moderator: Farr Jack (US) Moderator: Kainberger Franz (AT)*  
15 Min  **Predictive Marker in Cartilage Damage**  
Lattermann Christian (US)  
15 Min  **OA Outcomes in MRT**  
Roemer Frank (DE)  
15 Min  **Associated Meniscus & Ligament Lesions - Clinical**  
Farr Jack (US)  
15 Min  **Associated Meniscus & Ligament Lesions - Imaging**  
Kainberger Franz (AT)  
15 Min  **Cartilage Damage in the Adolescence**  
Chiari Catharina (AT)  
15 Min  **Panel Discussion: Associated Damage & Confounding Factors**  

15:00 - 15:30  **Coffee Break / Exhibition / Networking**  

15:30 - 16:45  **Module 7 - Evidence Based Medicine Study Designs**  
* Moderator: Marlovits Stefan (AT) Moderator: Kon Elizaveta (IT)*  
15 Min  **Regulation Issues in Cartilage Repair**  
Marlovits Stefan (AT)  
15 Min  **Evidence in Cartilage Repair - Imaging**  
Jungmann Pia (DE)  
15 Min  **Histology & Imaging, Experimental & Clinical**  
Redl Heinz (AT)  
15 Min  **See What You Can Expect in Cartilage Treatment**  
Filardo Giuseppe (IT)  
15 Min  **Panel Discussion: How to Prepare Study Designs for Cartilage Multicentre Trials**  
Kon Elizaveta (IT)  

16:45 - 17:00  **Closing Remarks & Take Home Points**  
* Moderator: Nehrer Stefan (AT) Moderator: Trattnig Siegfried (AT)*