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)
15 Min The MOCART Score 2.0: Complimentary Atlas & Case Presentations
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)

10:00 - 13:00 Focus Meeting Registration (Van Swieten Room)
12:00 - 13:00 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**  

---  

**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**
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)

Lunch Break / Industry Symposium

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

Coffee Break / Exhibition / Networking

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)

Closing Remarks & Take Home Points
Moderator: Nehrer Stefan (AT) Moderator: Trattnig Siegfried (AT)