

18th EPFL – CHUV Research Day on Translational Musculoskeletal Biomechanics

**8H30-9H00****WELCOME COFFEE**

09:00 Welcome message A. Farron, Head of CHUV-DAL

09:05-10:35**MORNING SESSION I**

Chairman: K. Aminian, Head of EPFL-LMAM

09:05 **Keynote address**

Mixing Medicine, Sports science and engineering: a win-win approach Vincent Gremeaux-Bader (CHUV-CMS)

09:50 SmartSwim, a novel IMU-based swimming analysis system for exercise and training M. Rad Hamidi (EPFL-LMAM)

10:05 Longitudinal studies to assess the impact of physical activity interventions on daily life G. Prigent (EPFL-LMAM)

10:20 Running power estimation using body worn inertial sensors S. Apte (EPFL-LMAM)

10:35-11:15**COFFEE BREAK****11:15-12:00****MORNING SESSION II**

J. Wegrzyn (CHUV-OTR)

11:15 Knee Dislocations Treated by MLR: Prognostic Factors for Functional Outcomes V. Schneebeli (CHUV-UTR)

11:30 Hydrogel development for treating severe tracheomalacia F. Gorostidi (CHUV-ORL), E. Uslu (EPFL-LBO)

11:45 Analysis of Autologous Chondrocyte-Based Cytotherapy Production for Clinical Use V. Philippe (CHUV-UTR)

12:00-13:30**LUNCH BREAK****13:30-15:00****AFTERNOON SESSION**

Chairman: D. Pioletti, Head of EPFL-LBO

13:30 **Keynote address**

Robotics in hip and knee arthroplasty: state of the art and controversy J. Wegrzyn (CHUV-OTR)

14:15 Normative values of bone mineral density in the adult glenoid P. Goetti (CHUV-OTR), P. Eghbali (EPFL-LBO)

14:30 Development and Fabrication of Customized Modular Mouthguards M. Broome (CHUV-ORL), N. Nasrollahzadeh (EPFL-LBO)

14:45 Conclusion A. Farron, Head of CHUV-DAL

Formation continue reconnue par Swiss Orthopaedics : 5 points