# 9<sup>TH</sup> *Virtual* Winter Symposium of the HUMAN MOTION PROJECT



Human Motion in times of COVID-19: A booster for walking, the use of wearables in clinical trials and telemedicine in clinical practice?

### 16 March 2022 09:00-17:00 CET | Virtually through Zoom

Link to access the Symposium will be provided to registered participants

Register until 11 March 2022 Scan QR-Code or go to: https://goo.gl/forms/koSMGNtHe2GuBgRl2



Contact: Prof. Dr. Martin Daumer SLCMSR e.V. -The Human Motion Institute Email: <u>daumer@slcmsr.org</u> Website: https://humanmotioninstitute.de/

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### **Preliminary PROGRAM**

#### 08:45 Registration & Virtual waiting room

#### 09:00 Welcome

Martin Daumer, SLC-The Human Motion Institute, Trium Analysis Online, Technical University of Munich (TUM), GER

## 09:15 Keynote lecture: Triage and Equality — Only chance is fair

**Tonio Walter**, University of Regensburg, Department of Criminal Law, Judge at the Bavarian Supreme Court, GER

# 09:45 An upper bound on one-to-one exposure to infectious human respiratory particle

**Eberhard Bodenschatz, Gholamhossein Bagheri**, Max Planck Institute for Dynamics and Self-Organization Laboratory for Fluid Physics, Pattern Formation and Biocomplexity, Göttingen, GER

10:00 Student Presentation

#### 10:15 Discussion, Coffee break, Time buffer

# 10:30 A tripartite brain system supporting navigation and memory

Shane O'Mara, Professor of Experimental Brain Research, School of Psychology and Institute of Neuroscience, Trinity College Dublin - the University of Dublin, IRL

# 10:45 Should we be assessing leg stiffness? Or is it the same as force?

Jörn Rittweger, German Aerospace Center (DLR), Institute of Aerospace Medicine, Cologne, GER

## 11:00 Exercise, friend or foe in arterial blood clot formation?

**Yiva Hellsten**, University of Copenhagen, Integrative Physiology, Department of Nutrition, Exercise and Sport, DK

#### 11:15 EBDiMS – Evidence Based Decision Support in MS

Insa Schiffmann, University Medical Center Hamburg-Eppendorf, Institute of Neuroimmunology and Multiple Sclerosis (INIMS), GER

### **Preliminary PROGRAM**

#### 11:30 Discussion, Lunch break

## 12:45 Computerized Fetal labour monitoring (CTG) analysis in Oxford: past, present & future

Antoniya Georgieva, University of Oxford, Nuffield Department of Women's & Reproductive Health and The Big Data Institute, UK

## 13:00 Covid-19 as an opportunity - Mobile-monitoring of pregnant women in Denmark

Olav Bennike Bjørn Petersen, Rigshospitalet, Department of Obstetrics and Gynaecology, Copenhagen, DK

# 13:15 FitMum - a project for the promotion of physical activity during pregnancy to improve maternal and offspring health

Caroline Borup Roland, University of Copenhagen, Department of Biomedical Sciences, DK

#### 13:30 Case study Corona & Telemedicine

Teresa Starrach, Uwe Hasbargen, Perinatal Center Großhadern, Department of Obstetrics and Gynecology, University Hospital, LMU Munich, GER

Martin Daumer, SLC-The Human Motion Institute, Trium Analysis Online, Technical University of Munich (TUM), GER

13:45 Student Presentation

#### 14:00 Discussion, Coffee break, Time buffer

#### 14:15 Innovative trial design

**Franz König,** Medical University of Vienna, Center for Medical Statistics, Informatics, and Intelligent Systems, AUT

**14:30** Mobility and physical activity in orthogeriatric patients Alexander Keppler, Ludwig-Maximilians-University of Munich, Department of Traumatology and Orthopaedic Surgery, GER

14:45 Interactive analysis of data from wearables Marcin Mider, Trium Analysis Online, GER

### Preliminary PROGRAM

# **15:00** From Project to Practice: Testing Entrepreneurial Ideas using the Lean Startup Method

**Oliver Alexy,** Technical University of Munich (TUM), Strategic Entrepreneurship, GER

15:15 Student Presentation, in particular of the TUM lecture Clinical Applications of Computational Medicine (CACOM)

Muscle fascicle arching: how it may emerge, and what it may mean to muscles Jule Heieis (DLR)

Towards an image analysis tool for the research on zero-gravity effects on muscles Oliver Kovacs, Maresa Fees, Emir Music, Zeineb Chaabouni

Evaluation of at-home fetal heart rate monitoring devices using a physiological phantom Etay Kalifa Yacov, Andrés Biedma, Defne Tüzün, Ahmet Gülmez

#### Evaluation of Aerosol Filters in a Gymnasium in Munich Achraf Zouaghi, Mohamed Zouaghi, Mohamed Koussay Berrahal (TUM) Benjamin Schober, Simon Wagner, Michael Albani & supported by the AG Technik (Michaeli Gymnasium)

Building Blocks of a Web-Application for the Simulation of COVID-19 Spreading Likelihood Noor Ali, Ragshanan Ragunathan, Rami Alkafahie

Methods for Evaluating the Antiviral Impact on Home Lightbulbs Lisa Regler (LMU)

Wheelchair mobility tracking with actibelt Lukas Volpers, Jakob Lechner, Katharina Bauer

Smart sleep alarm clock based on the regularity of the sleep cycle Zhihao Zhang, Hongfei Yan, Donghao Song, Yinxian Li, Yake Li

Overview of "Stop Snoring" devices Yiyi Yao, Yichu Chen, Huiyu Wang

Teeth grinding monitoring with a "Smart-mouthguard" System Arda Ay, Yanjun Guo, Amir Shadad, Fanlin Meng, Shuheng Xu

Your personal fragrance assistant - Smart Aromatherapy Yuqicheng Zhu, Wantao Li

Impact on Social Health of Students in Munich due to COVID-19 pandemic Siyi Dai, Yangcan Zhou, Su-In Hwang

#### Ca. 16:30 Panel Discussion, Closing Remark

The organizers reserve the right for rearrangements

### REGISTRATION

#### **REGISTRATION FEE**

We believe in the importance of holding this Winter Symposium and we rely on your attendance to make it a success.

Given the economic impact that COVID-19 is still having across the world the registration fee has been waived off for all participants.

The symposium fee (VAT included) would be charged as follow:Industry200€Academic/Research100€Student50€TUM CACOM studentfreeInterested patient and pressfreeSpeakerfree

Therefore Donations to support the symposium will be much appreciated and acknowledged.

Donate through your credit card or PayPal.



You can also scan the QR Code.

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If you require assistance regarding your donation, please contact our donor help team at <a href="mailto:sambo@slcmsr.org">sambo@slcmsr.org</a>

For online registration scan QR Code or go to: https://goo.gl/forms/koSMGNtHe2GuBgRI2



Zoom Link to access the Symposium will be provided to registered participants

### REGISTRATION CLOSING DATE FRIDAY MARCH 11, 2022

### **GENERAL INFORMATION**

#### SCIENTIFIC COMMITTEE:

**Martin Daumer**, SLC-Human Motion Institute, Trium Analysis GmbH, Technical University of Munich (TUM)

**Yiva Hellsten**, University of Copenhagen, Integrative Physiology, Dept. of Nutrition, Exercise and Sport

Jörn Rittweger, German Aerospace Center (DLR), Head of the Division of Muscle and Bone Metabolism

#### ACADEMIC PARTNERS



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This Symposium will be certified by the Bavarian Medical Association (BLÄK) with 8 medical education points (CME-credits)

+++ Please note, that the event will be recorded and we will make the recording available to registered participants afterwards in order to receive CMEs +++

#### **General Data Protection Regulation**

The applicant agrees that SLCMSR electronically saves and processes personal data necessary for the registration process and upcoming symposia (§28 GDPR)