



## A Philosophical Garden for Digital Biomarkers

26 March 2024

08:40-16:00 CET | IN-PERSON

### Venue:

TranslaTUM - Central Institute for Translational Cancer Research  
Einsteinstraße 25 (Building 522)  
81675 Munich  
Germany

Register until March 15<sup>th</sup>, 2024

Scan QR-Code or go to:

<https://goo.gl/forms/koSMGNtHe2GuBgRI2>

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TUM School of Computation, Information and Technology  
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## FINAL PROGRAM

08:15 Registration

08:40 Welcome to the philosophical garden for digital biomarkers

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

08:45 Digital biomarkers and exercise on earth

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

09:00 Digital biomarker and exercise in space

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

09:15 Why do we need physiological CTG?

**Sophia Andres**, University of Ulm, Department of Obstetrics and Gynecology, GER

09:30 Benefit vs. Risks of electronic fetal monitoring: thoughts from a clinician's perspective

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

9:45 Progress in CTG telemonitoring in Denmark

**Camilla Marie Juel**, Copenhagen University Hospital, Rigshospitalet, DK

10:00 Benefit Risk Profile in line with the EU Legislation

**Andrew Gibson**, AKRA TEAM GmbH, GER

10:15 Discussion, Coffee break, Time buffer

10:45 Digital Biomarkers in neuromuscular diseases

**Benedict Schoer**, Friedrich-Baur-Institute, Department of Neurology LMU University Hospital, GER

11:00 Real world walking as digital biomarker in Duchenne – consequences of positive EMA decision

**Laurent Servais**, University of Oxford, MDUK Oxford, Neuromuscular Center, Department of Paediatrics, UK

## FINAL PROGRAM

11:15 Defining muscular health as a basis for disease agnostic digital biomarkers

**Jean-Yves Hogrel**, Institute of Myology, Neuromuscular Physiology and Evaluation Lab, FR

11:30 Long-term accelerometry in PPMS for regulatory decision making – OPRIMS

**Maëva Cotinat, Jan-Patrick Stellmann**, Aix-Marseille Université, Centre de Résonance Magnétique Biologique et Médicale (CRMBM), FR

**Christoph Heesen**, University Medical Center Hamburg-Eppendorf, Institute of Neuroimmunology and Multiple Sclerosis (INIMS), GER

11:45 Regulation of wearables, sensors, apps, digital therapeutics, digiceuticals, digital biomarkers and integrated systems – landscapes, barriers and strategies

**Stephen Gilbert**, TUD Dresden University of Technology, Else Kröner Fresenius Center for Digital Health, Department Medical Device Regulatory Science, GER

12:00 Discussion, Lunch break, Time buffer

13:15 Setting the scene: Innovation, regulation & academia

13:30 Panel Discussion “Towards an open collaborative platform for digital biomarkers”:

- Access to algorithm and raw data
- Disease agnostic
- Device agnostic
- “BIG CTG DATA”
- Initial focus on human motion monitoring:
  - Real world walking speed?
  - Duchenne and Multiple sclerosis?
  - Hip / ankle?
  - 6-minute walk test (6MWT) as intermediate step?

14:30 Funding options and next steps, Time buffer

15:00 Student Presentation of the [TUM lecture “Clinical Applications of Computational Medicine” \(CACOM\)](#)

## SURVEYS

**Group 1: "Paving the way for home-monitored pregnancies: A survey"**

[Premt Cara](#), [Nolwen Prat](#), [Maria Stumm](#), [Matilde Manigrasso](#)

**Group 2: "Development trends and business opportunities of tele-medicine market in China"**

[Junqing Du](#), [Yuchen Gu](#), [Junyi Huang](#), [Xiaoyu Zhang](#)

**Group 3: "An survey of the China's market potential for CTG telemonitoring solutions in the current health care system"**

[Haorui Long](#), [Runan Lyu](#), [Boyi Wang](#), [Boyu Zhang](#), [Shaopeng Zhang](#)

**Group 4: "MDR guide – navigating the medical device regulatory maze with the Help of AI"**

[Marc Herlitz](#), [Linus Rimpl](#)

**Group 5: "Integrative Perspectives on traditional chinese medicine: bridging ancient wisdom with modern science"**

[Yuming Li](#), [Peilin Lu](#), [Qinzhe Ren](#), [Tiezheng Wang](#), [Mengtian Xu](#)

**We value your input to the following two questionnaires which are directly related to focus area of the Winter Symposium. We plan to present the results at the event:**

Collection of CTG data for planning continuous, evidence-based improvement of digital delivery room monitoring and documentation

<https://de.surveymonkey.com/r/M6J37VT>

Regulatory acceptance of digital biomarker survey: perception of the field

<https://docs.google.com/forms/d/e/1FAIpQLSenMs9CqpPeeS21POo5aeD06Dbk6-UwemBCD3hzrpzNQn8aMg/viewform?usp=sharing>

The organizers reserve the right for rearrangements

## REGISTRATION

### REGISTRATION FEE

The symposium fee\* (VAT included) is as follow:

Industry	400€
Academic / Research	250€
PhD student	100€
Student	50€
TUM CACOM student	free
Interested patient and press	free
Speaker	free

\*Symposium fee includes drinks & lunch

Pay through your credit card or PayPal.

Pay Now



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If you require assistance regarding your payment, please contact our support team at [sambo@slcmsr.org](mailto:sambo@slcmsr.org)

For online registration scan QR Code or go to:

<https://goo.gl/forms/koSMGNtHe2GuBqRl2>



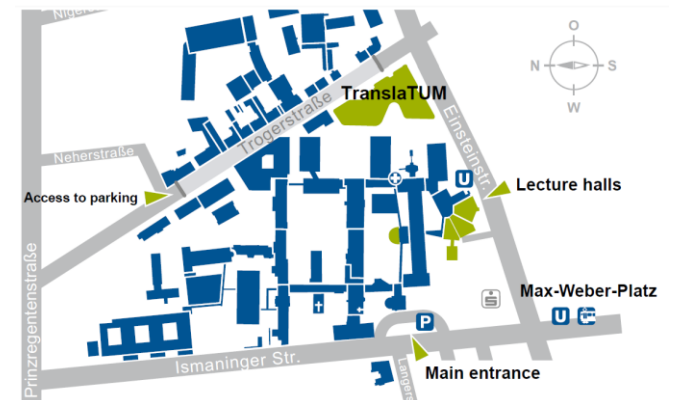
### General Data Protection Regulation

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

**REGISTRATION CLOSING DATE**  
**FRIDAY MARCH 15, 2024**

## GENERAL INFORMATION

### Map



### SCIENTIFIC COMMITTEE:

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

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

**Kazem Rahimi**, University of Oxford, Cardiovascular Medicine and Population Health, Clinical Trials, Epidemiology, Health Informatics, UK

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



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PRESS



This Symposium will be certified by the Bavarian Medical Association (BLÄK) with **seven 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 +++