



# OTdigital

**Congress for Digitalisation in  
Orthopaedics and Traumatology**



**13<sup>th</sup> and 14<sup>th</sup> March, 2026  
Berlin, Germany**

**PROGRAM**

**[www.OTdigital.eu](http://www.OTdigital.eu)**

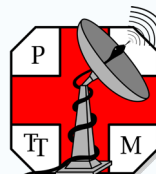




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# OTdigital

13<sup>th</sup> and 14<sup>th</sup> March, 2026



## WELCOME

Digitalisation has become a defining element of modern orthopaedics and traumatology. We warmly welcome you to the 4<sup>th</sup> international OTdigital Congress, where scientific ideas meet clinical practice and digital solutions are critically evaluated for their potential to improve patient safety, profession workflows, and the future development of our field.



Prof. Dr. David A. Back, MBA  
*Center for Musculoskeletal Surgery, Charité - Universitätsmedizin Berlin*

## THE EVENT

The OTdigital Congress 2026 will engage participants in an international and interdisciplinary exchange on digitalisation in orthopaedics and traumatology. It will serve as a platform for experts from medical, scientific, and economic fields, offering a variety of presentation formats and networking opportunities.



## OUR MISSION

The OTdigital community fosters the dialogue between experts and users on the decisive role of digitalisation in orthopaedics and traumatology, and supports digital innovations that enhance patient care at every stage – from prevention and diagnostics to therapy and rehabilitation.

# OTdigital

13<sup>th</sup> and 14<sup>th</sup> March, 2026



## Program

### Friday, 13<sup>th</sup> March 2026

11:00 Registration

12:00 Welcome and introduction

David Back 

12:10 Digital updates from patronage societies

Representatives of the societies - European Orthopaedic Research Society (EORS), Society of Computer Assisted Orthopaedic Surgery (CAOS), German Society for Orthopaedics and Trauma Surgery (DGOU), Polish Telemedicine Society (PTTM)

12:30 Keynote: European view on the topic of digitalisation for hospitals and healthcare systems: the current European University Hospital Alliance (EUHA) perspective

Anders Vedsted , Peter Gocke 

13:00 SESSION 1 - Digital solutions for pre- and re-habilitation in O&T

Inger Mechlenburg , Wojciech Glinkowski 

AI-Based Phenotyping and Digital Rehabilitation in Low Back Pain

Fabrizio Russo 

Progressive resistance and flexibility exercises versus usual care advice for improving pain and function after distal radius fracture in adults aged 50 years or older. An RCT within the Danish Orthopaedic Academy (DOA) platform.

Inger Mechlenburg 

From scales to ecosystems: How PROMs and PROMIS are shaping digital orthopaedics and orthopaedic trauma care

Wojciech Glinkowski 

Accelerometer based physical activity of operatively and non-operatively treated distal radius fracture patients – A secondary analysis of the multicenter, randomized, controlled trial \*

Lisa Urup Tønning 

Discussion

14:00 Break

14:30 Industry presentations: ORTHOKEY, MEDACTA, OPED, AWS

From complexity to simplicity: Practical digital orthopedic care with Mawendo and Orthelligent

Tobias Gehlen 



ROBIN - a step forward to support the surgeon's freedom of choice

Cristiano Paggetti 



AI for good - how AWS technologies help scaling personalised medicine in practice

Yin Cai 






Precision with NextAR in reverse shoulder arthroplasty - from 3D planning to intraoperative navigation and Augmented Reality


Agahan Hayta 




15:30 SESSION 2 - Digital advances in Orthopaedics and Traumatology - Part 1

Philipp Fürnstahl , Koroush Kabir , Bernd Grimm 


Digital follow-up after total knee arthroplasty: a qualitative study among orthopaedic healthcare professionals \*

Casper Craamer 

Leveraging Apple HealthKit for Continuous Postoperative Monitoring After Total Knee Arthroplasty: A 12-Week Prospective Study \*

Stefano Pagano 


Physical Activity After Total Hip Arthroplasty Compared with Progressive Resistance Training for Severe Hip Osteoarthritis: Secondary Analysis of the Randomized PROHIP Trial \*

Lisa Urup Tønning 


\* Participant for the OTdigital2026 Science Award 2026




ChatGPT-5.2-Assisted Quantification of Structural Overload in Rotator Cuff Disease: Test-Retest Validation of Critical Shoulder Angle, Acromiohumeral Distance, and MRI-Based Glenoid Inclination With Decision-Impact and Quality-Control Profiling \*

Muhammed Yusuf Afacan 

Feasibility of Longitudinal Gait Monitoring using the NewKnee-App in Knee Osteoarthritis and after Total Knee Arthroplasty \*

Christina Valle 

The Effect of QR Code-Supported Digital Patient Education on Anxiety and Treatment Compliance in Patients Undergoing Total Knee Arthroplasty \*

Muhammed Yunus Gazaioğlu 

16:30 Break


17:00 SESSION 3 - Which digital solutions can optimize our outcome in the OR?

Jane Walsh  , Cristiano Paggetti 

AI-assisted preoperative osteosynthesis planning for complex fractures

Julian Zierke 


Rationale for patient-specific knee arthroplasty: towards digitally enhanced personalized care

Arnaud Clavé 

Telemedical emergency surgery: An experimental workflow-orientated comparison of endoscope and augmented reality-based remote guidance \*

Michael Mellulis 

Effect of ChatGPT-5.2-Assisted Surgical Preparation on Operative Performance in Orthopaedic Residents and Specialists: A Prospective Controlled Simulation Study \*

Selahattin Ertuğrul Erdoğan 

The OTdigital DeepDive Pisa25 on robotics in knee surgery: key take-home messages

Paolo Parchi 

Discussion

18:00 Panel discussion: Robotic Orthopaedics - Where are we heading between market forces, human factors and AI?

Jane Walsh  , Walter van der Weegen  , Arne Kienzle  , Cristiano Paggetti  - moderation: David Back 

19:00 Summary and conclusion

19:30 Get together at CharitéCrossOver Atrium

\* Participant for the OTdigital2026 Science Award 2026



## Saturday, 14<sup>th</sup> March 2026

### 09:00 SESSION 4 - From mixed realities to digital twins: Current status in O&T

*Li Felländer-Tsai* 🇸🇪, *Paolo Parchi* 🇮🇹

Digital Twins in Orthopaedics - basics and backgrounds

*Guillaume Dardenne* 🇧🇪 🇫🇷

Photorealistic Digital Twins for Orthopedic Surgical Training

*Sergey Prokudin* 🇷🇺

Building Better Surgeons: A Data-Driven Approach to Trainee Selection with VR and Psychology

*Li Felländer-Tsai* 🇸🇪

Beyond Accuracy: Benchmarking Reasoning-Optimised LLMs on Orthopaedic Board-Style Exams

*Pedro Diniz* 🇵🇹 🇮🇹

Making Rehabilitation Visible: Combining Smart-Crutch Monitoring with Computer Simulation for a Digital Twin of Fracture Healing \*

*Andreas Arnegger* 🇩🇪

Discussion

### 10:00 Keynote: Lessons learned in translation from research ideas to successful startups on Orthopaedics and Traumatology

*Georg Duda* 🇩🇪

### 10:30 Break

### 11:00 Start-up Pitch

*Jury: Yin Cai (Amazon Web Services (AWS)), Dr. Lucas Mittelmeier (Heal Capital), Dr. Fidelius von Rehlingen-Prinz (Oxbridge Clinical)*

1. Just Schornagel - CEO & Co-founder SLAM Orthopedic - A sensor platform for better fracture treatment

2. Abhishek Dhawan - Forest BLOOM - Transforming health with technology

3. Kenan Nazdrajic - Motus Health GmbH - Standardizing Surgical Readiness

4. Mathieu Rimaud - Twinsight SAS - Driving Healthcare 4.0: Developing Digital Twins to enhance automated AI-powered planning and shaping the era of truly personalized orthopedic surgery

5. Johannes Pawelczyk - OrthoCoPilot team - Know your patient, before you enter the room. Next-generation digital anamnesis for musculoskeletal care

6. Sascha Kraus - MYON CLINIQUE - The virtual patient manager for orthopedics

7. Ilya Popov - ComeBack Mobility - Smart Crutch Tips & Mobile Platform to help surgeons control weight-bearing after lower-limb injury

### 11:30 SESSION 5 - Digital advances in Orthopaedics and Traumatology - Part 2

*Philipp Fürnstahl* 🇨🇭, *Bernd Grimm* 🇩🇪

Machine Learning-Based Pediatric Postural Risk Stratification Using 3D Surface Topography and Anthropometric Data \*

*Gerard Motak* 🇧🇪 🇫🇷

Heavy Slow Resistance Training Combined with Patient Education in Adults with Gluteal Tendinopathy Recruited Digitally via Targeted Social Media Advertising: A Feasibility Study \*

*Jan Moritz Grigat* 🇩🇪

Comparison of Generative AI Models (ChatGPT vs. Gemini) in Cobb Angle Measurement and Clinical Decision-Making for Adolescent Idiopathic Scoliosis \*

*Okan Can Karadeniz* 🇹🇷

Guiding Stars: Storefront Ratings in Orthopaedic Patient Companion Apps \*

*Arun Watts* 🇬🇧

MOSAIC: A Modular Methodology for Structured Musculoskeletal Clinical Data Across Orthopaedic Domains \*

*Eszter Kovari* 🇮🇪

Digital Engagement and Value-Based Care May Offset Socioeconomic Disparities in Patient Satisfaction After Joint Replacement \*

*Axel Sylvan* 🇬🇧

### 12:30 Lunch break

\* Participant for the OTdigital2026 Science Award 2026



13:30 **SESSION 6 - Individualized therapies in O&T by smart devices**

*Bernd Grimm* , *Benedikt Braun* 

Co-creating smart implants with patient and healthcare professionals: First results from a European survey

*Paulina Villalobos* 

Sensoric osteosynthesis plate: First clinical experience with the AO Fracture Monitor

*Benedikt Braun* 

Deformation sensing beacon as modular tech for smart implants and devices: Clinical results from an instrumented CAM boot

*Samuel di Bartolo* 

Exoskeletons as smart devices for individualised therapy - current concepts

*Rene Bremm* 

Passive smartphone sensor data as a valid surrogate for patient reported outcome measures in knee osteoarthritis \*

*Florian Hinterwimmer* 

Discussion

15:00 **SESSION 7 - The AI driven hospital**

*Dirk Stengel* , *Walter van der Weegen* 

Integration of Generative AI in Orthopaedic Care: Ambient Listening, Draft Messaging and Beyond

*Anne H. Hoekman* 

The role of psychology in the digital transformation of healthcare and AI

*Jane Walsh* 

Human interaction with virtual assistants in orthopedic consultations

*Walter van der Weegen* 

From Skepticism to Adoption: How Real World Use Shapes Orthopaedic Surgeons' Acceptance of AI \*

*Martin Breitwieser* 

AI-Assisted Detection and AO/OTA Classification of Pelvic Ring Fractures:  
An Inter - and Intraobserver Variability Study Using Polytrauma CT Data \*

*Nicole Gebhard* 

Discussion


16:00 **The OTdigital 2026 Science Award & the OTdigital 2026 StartUp Award** 

16:15 **Closure & Summary**

\* Participant for the OTdigital2026 Science Award 2026




## FACULTY

**Muhammed Yusuf Afacan, M.D., FEBOT, Ph.Dc** 

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# OTdigital


13<sup>th</sup> and 14<sup>th</sup> March, 2026



## FACULTY

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Denmark Chief Data Officer, Aarhus University Hospital,  
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*MINDS & SPARKS GmbH, Vienna*

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*Julius Wolff Institute, Berlin Institute of Health at Charité -  
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## GENERAL INFORMATION

**Meeting Dates:**  
13<sup>th</sup> and 14<sup>th</sup> March, 2026

**Location:**

**Campus Address:**  
Charité - Universitätsmedizin Berlin,  
Campus Charité Mitte (CCM),  
Charitéplatz 1, 10117 Berlin, Germany

**Specific Building Address:**  
Charité Crossover (CCO) Virchowweg 6

**Official Language:**  
English, simultaneous translation  
will not be provided

**Chairman:**  
David A. Back, M.D., MBA, Prof.

**Congress Manager:**  
Veronica Boller

**Congress Secretary:**  
Alahan Alkis Sensoy, M.D.



**Charité  
Navi app**

## PARTICIPATION FEES

	<b>EARLY BIRD</b> Registration until December 31 <sup>st</sup> , 2025	<b>REGULAR REGISTRATION</b> Registration January 1 <sup>st</sup> , 2026 to February 28 <sup>th</sup> , 2026	<b>LATE / ON-SITE REGISTRATION</b> From March 1 <sup>st</sup> , 2026 and On Site	<b>ONLINE PARTICIPATION</b>
Physician / Senior Scientist / Industry Representative	€150	€200	€250	€65
Resident / Junior Scientist	€100	€150	€200	€45
Students / Nursing Personnel / Other Healthcare Professional	€25	€10	€10	€10



## REGISTRATION

For more information about the congress and the registration, please visit [www.OTdigital.eu/registration](http://www.OTdigital.eu/registration).

## PRESENTATION SUBMISSION

For information on submitting abstracts, please visit: <https://otdigital.eu/abstract/>  
Submission deadline: 15<sup>th</sup> February 2026

## STARTUP PITCH

For information on applying your pitch, please visit: [www.OTdigital.eu/startup-pitch](http://www.OTdigital.eu/startup-pitch)  
Submission deadline: 15<sup>th</sup> February, 2026

## ORGANIZER

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