# DIGITAL 2022

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Congress for Digitalisation in Orthopaedics & Traumatology

# HYBRID

02./03.12.2022

Meliá Berlin, Germany

# www.OTdigital.eu

# INVITATION

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Welcome to the first OTdigital congress,

Digital transformation has revolutionised our daily life and has also become an integral part of orthopaedics and traumatology.

Our congress wants to provide a scientific platform for exchanging current and future core topics of digitalisation in orthopaedics and traumatology. Digitalisation is significantly changing the way how we provide care for our patients, communicate with colleagues or other healthcare partners, and conduct research.

What we currently see is just the beginning!

Digital tools can improve our patients' safety through various points - from prevention to diagnostics, therapy and rehabilitation - and assist us in focusing more on our patient care delivery. This potential gives surgeons, nurses, and therapists worldwide broader access to high-quality performance and a relief of their workload.

Our goal is to present relevant aspects of current developments, trends, and controversies of digitalisation in orthopaedics and traumatology.

We want to establish a scientific platform and community to improve digitalisation's use in our daily work.



# PROGRAM, FRIDAY 02.12.2022

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11:00	Registration & Welcome Coffee	14:30	Session 2
12:00	Welcome, greetings and introduction		Al & Big Data Chairs: Li Felländer-Tsai Georg Osterhoff
12:30	Keynote Where is the value of digital health? The emergence of digital health ecosystems and implications for orthopaedics Tobias Silberzahn	20'	Al in O&T: Introduction and thoughts on ethics and accountability
		10'	Artificial intelligence for outcome prediction in fractures
13:00	Session 1 mHealth: Apps & Wearables Chairs: Bernd Grimm Serafeim Tsitsilonis	10'	Pearls and pitfalls in clinical Al research
20'	What's possible and happening with wearables & apps in orthopaedics & traumatology Bernd Grimm	10'	Al-based decision-making in the management of severely injured patients
10'	Validating digital mobility biomarkers	10'	Discussion
	from wearables as clinical trial end- points in hip fracture patients and beyond: The Mobilise-D consortium Silvia Del Din	15:30	Workshop
10'	The MOVITA consortium - wearable sensors to reduce hospital visits after knee joint replacement Pieter van Doorn		
10'	Smartphone apps to support the patient journey, collect self-reports and harvest wearable data in clinical practice		
10'	Discussion		
14:00	Break		

# PROGRAM, FRIDAY 02.12.2022

16:00	Break
16:30	Session 3 Training and education in mixed reality (AR/VR) Chairs:  Philip Fürnstahl Nassir Navab
15'	Surgical training in clinics: status quo, emerging technologies and outlook Philip Fürnstahl
15'	Medical augmented reality in orthopaedic and trauma surgery
10'	Surgical Training in the Medical Metaverse Steve Kateros
10'	VR/AR helps to educate the next generation of orthopaedic and trauma surgeon Wathik El Alami
10'	Discussion
17:30	International panel discussion Chair: Dominik Pförringer Digitalisation – euphoria and reality after Covid Stefano A. Bini Li Felländer-Tsai Marko Neva Tobias Silberzahn
18:30	Closure
18:45	Get-together

# PROGRAM, SATURDAY 03.12.2022

09:00	Welcome and introduction		
09:15	Session 1 Telemedicine and digital communication Chairs: Thomas Freude Marko Neva		
20'	Telemedical consultations before during and after the COVID lockdowns - where are we now? Wojciech Glinkowski		
10'	Telemedicine in remote orthopaedic consultations. A randomized controlled trial		
10'	Remote mobile consultation in austere environments - a british military initiative Richard Booker		
10'	The needs and possibilities of digital communication in orthopaedics and trauma - case example of the use of digital communications in a level-1 hospital		
10'	Discussion		
10:15	Keynote Drivers of innovation and the inevita- bility of digital transformation in health care Stefano A. Bini		
10:45	Break		

# PROGRAM, SATURDAY 03.12.2022

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11:15	International Panel Chair: Dominik Pförringer Robotics & Cyborgs – where is our orthopaedic future? Stefano A. Bini Katrin Kirchert Georg Osterhoff Katrin Paggetti	<b>14:45</b> 20' 10'	Session 3 Digital OR and smart implantsChairs:Francisco Chana Rodríguez Bergita GanseRobotics in the digital OR Cristiano PaggettiNew approaches in the development of smart implants for the treatment of
12:15	Venture Pitch Rocket start-ups in O&T Dominik Pförringer	10'	<ul> <li>fractures</li> <li>Bergita Ganse</li> <li>3D printing as planning tool for complex operations</li> </ul>
12:45	Break		Francisco Chana Rodríguez
13:45	Session 2 Digital documentation and legal aspects Chairs: Katre Maasalu Robert Zahn	10'	<ul> <li>1-year experience with AR guided intraoperative operations in knee arthroplasty</li> <li>Michael Engl</li> <li>Discussion</li> </ul>
20'	The smart hospital - where are we today, where is our near future?	15:45	Venture Pitch & Digital poster presentation - Award ceremony
10'	Maximising the value of PROMs for our patients	16:00	Closure
10'	Digitizing the informed consent pro- cess: a review of the regulatory land- scape in the European Union Janos Meszaros		
10'	Digital world options for doctors based on Estonian national health information system Katre Maasalu		
10'	Discussion		

## CHAIRS AND SPEAKERS

**Back, David A.**, M.D., MBA Bundeswehr Hospital Berlin, Academic Teaching Hospital of Charité – Universitätsmedizin Berlin, Germany

**Bini, Stefano A.**, M.D., Prof. Department of Orthopaedic Surgery, University of California San Francisco (UCSF) & DOCSF, San Francisco, USA

**Booker, Richard**, Lt. Col. Research & Clinical Innovation SO1 Implementation, Defence Medical Services, London, United Kingdom

Buvik, Astrid, M.D., Ph.D. Department of Orthopaedic Surgery, University Hospital of North Norway, Tromsø, Norway

**Chana Rodríguez, Francisco**, M.D., Prof. Orthopedic Surgery and Traumatology Service, Hospital General Universitario Gregorio Marañón, Madrid, Spain

Translational and Clinical Research Institute, Newcastle University, Newcastle, United Kingdom

El Alami, Wathik, Guy's and St Thomas' NHS Foundation Trust, London, UK

**Engl, Michael**, M.D., M.P.H Orthopedic and Trauma Unit, General Hospital Sterzing, Südtiroler Sanitätsbetrieb / Azienda sanitaria dell'Alto Adige, Sterzing, Italy

Felländer-Tsai, Li, M.D., Ph.D., Prof. Center for Advanced Medical Simulation and Training (CAMST), Karolinska Institutet & Karolinska University Hospital, Stockholm, Sweden

Freude, Thomas, M.D., Prof. Department of Orthopedics and Traumatology, Salzburg University Hospital, Paracelsus Medical University, Salzburg, Austria

**Fürnstahl, Philip**, Ph.D., Prof. Research in Orthopaedic Computer Science (ROCS), University Hospital Balgrist, Zurich, Switzerland

**Ganse, Bergita**, M.D., Ph.D., Prof. Department of Trauma, Hand and Reconstructive Surgery & Innovative Implant Development, Saarland University, Saarbrücken, Germany

# CHAIRS AND SPEAKERS

**Glinkowski, Wojciech**, M.D., Ph.D., Prof. Department of Medical Informatics and Telemedicine, Medical University of Warsaw, Warschau, Poland

**Gordon, Max**, M.D., Ph.D. Clinical Artificial Intelligence Laboratory(CAIR-Lab), Karolinska Institutet, Stockholm, Sweden

**Grimm, Bernd**, Ph.D. Human Motion, Orthopaedics, Sports Medicine, Digital Methods (HOSD), Luxembourg Institute of Health, Luxembourg, Luxembourg

Kabir, Koroush, M.D. Helios University Hospital Wuppertal, University of Witten/Herdecke, Germany

**H** Kateros, Steve ORamaVR, Geneva, Switzerland

**Kirchert, Katrin** Cyborgs e.V.

Maasalu, Katre, M.D., Prof. Department of Traumatology and Orthopedics (ARTO), University of Tartu, Tartu, Estonia

Meszaros, Janos, Ph.D. Division of Clinical Pharmacology and Pharmacotherapy, Department of Pharmaceutical and Pharmacological Sciences, Katholieke Universiteit Leuven, Leuven, Belgium

Navab, Nassir, Ph.D., Prof. Computer Aided Medical Procedures & Augmented Reality Technical University of Munich, Munich, Germany

Neva, Marko, M.D., Ph.D. Department of Musculoskeletal Diseases, Tampere University Hospital, Tampere, Finland

**Oosterhoff, Jacobien H.F.**, M.D. Department of Orthopaedic Surgery, Amsterdam University Medical Center, Amsterdam, Netherlands

#### Osterhoff, Georg, M.D.

Department of Orthopaedics, Trauma and Reconstructive Surgery, University Hospital Leipzig, Leipzig, Germany

## REFERENTEN

Paggetti, Cristiano, Ph.D., Prof. School of Computing and Information Engineering, Ulster University, Ulster, United Kingdom

Pförringer, Dominik, M.D. Technical University of Munich, Germany

Pilot, Peter, Ph.D. IMUKA knowledge platform, Roosteren, Netherlands

Price, Andrew, M.D., Prof. Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford, Oxford, United Kingdom

Silberzahn, Tobias, Ph.D. McKinsey & Company, Berlin, Germany

Thun, Sylvia, M.D., Prof. Core-Unit eHealth and Interoperability (CEI), Berlin Institute of Health (BIH) & Charité-Universitätsmedizin Berlin, Berlin, Germany

Tsitsilonis, Serafeim, M.D., Ph.D. Center for Musculoskeletal Surgery, Charité - Universitätsmedizin Berlin, Berlin, Germany

Van Dalen, Anne Sophie, M.D. Department of Surgery, Amsterdam University Medical Center, University of Amsterdam, Netherlands

#### Van Doorn, Pieter Faculty of Behavioural and Movement Sciences, Neuromechanics, Vrije University Amsterdam, Amsterdam, Netherlands

Zahn, Robert, M.D. Center for Musculoskeletal Surgery, Charité - Universitätsmedizin Berlin, Berlin, Germany

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# **GENERAL INFORMATION**

#### **Meeting Dates**

02. & 03.12.2022

## Chairmen

Priv.-Doz. Dr. med. David A. Back, MBA Priv.-Doz. Dr. med. Koroush Kabir

## **Congress Secretaries**

Dr. med. univ. Dominik Adl Amini Dr. med. Eva-Maria Arndt

#### Pitch

Priv.-Doz. Dr. med. Dominik Pförringer

#### Location

Meliá Berlin Friedrichstraße 103, 10117 Berlin, Germany

or via Livestream

## **Official Language**

English, simultaneous translation will not be provided

## Patronage



## **Organizer and Registration**

Congress Compact 2C GmbH Gina Isemann Joachimsthaler Strasse 31-32 10719 Berlin | Germany Phone +49 30 32708233 E-Mail info@congress-compact.de

# **GENERAL INFORMATION**

## **Participation fees**

	On Site	Online
Physician/Scientist	300,-€	240,-€
Resident/Scientist in training	240,-€	180,-€
Nurse and other healthcare professional	160,-€	100,-€
Student	80,-€	20,-€

## Registration

For more information about the congress and the registration, please visit www.OTdigital.eu/registration

## **Poster submission**

For information on submitting posters, please visit www.OTdigital.eu/poster-submission

Submission deadline: - 15.11.2022 -

## **Startup pitch**

For information on applying your pitch, please visit www.OTdigital.eu/startup-pitch

## Certification

The certification of this event will be applied at the Medical Association of Berlin.

#### **Medtech Europe**

OT Digital congress has been evaluated and approved to be COMPLIANT in all categories.



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