

NEW Congress Venue

Lohmann & Birkner Health Care Consulting Alt-Reinickendorf 25 13407 Berlin (GER)

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INVITATION

Dear Ladies and Gentlemen,

We cordially invite you to the 2nd hybrid congress, OTdigital - Congress for Digitalisation in Orthopaedics & Traumatology" in Berlin (Germany) on 24th and 25th November 2023.

OTdigital is a platform for the exchange on current and future core topics of digitalisation in orthopaedics and traumatology and meant to build a scientific community to improve the use of digitalisation in our daily work.

Internationally renowned experts will present relevant aspects of current developments, trends and controversies in this field, gathered around the topics:

- mHealth, Apps & Wearables
- Training and education in mixed realities
- Digital OR & smart implants
- AI & Big Data
- Telemedicine and digital communication

with interactive focus sessions keynotes, panel discussions, breakout sessions and industry workshops and industry presentations.

Do you have ideas on how digitalisation can shape the future of orthopedics and traumatology and would like to share the results of your scientific work? Then join our poster submission on research projects in the field of "Digitalisation in Orthopaedics and Traumatology"!

Are you about to change the digital market of orthopaedics and traumatology with your start-up? Then apply for participation in our start-up pitch and get awarded as most innovative O&T start-up in 2023!

All information about the congress can be found on our website: https://www.otdigital.eu.

Looking forward to welcoming you in Berlin!

Yours





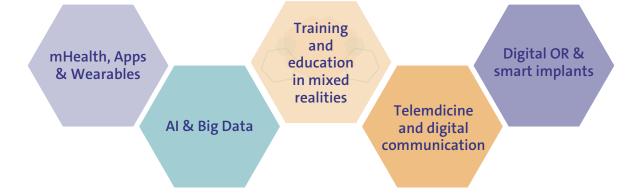


Koroush Kabir

PROGRAMM OVERVIEW

Friday, 24 November 2023				
10:30	Registration & Welcome coffee			
12:00	Welcome & introduction			
12:30	Keynote: From iFactory to iHospital - how healthcare can learn from digital transformation in the automotive industry			
13:00	SESSION 1 - mHealth: Apps & Wearables			
14:00	Break			
14:30	SESSION 2 - AI & Big Data			
15:30	Company presentations			
16:30	Break			
17:00	SESSION 3 - Digital training and education			
18:00	Panel discussion			
19:00	Summary and conclusion			
19:15	Get-together			





GENERAL INFORMATION

Meeting Dates

24. & 25.11.2023

NEW Congress Venue

Lohmann & Birkner Health Care Consulting Alt-Reinichendorf 25 13407 Berlin (GER)

Congress Chairs

Prof. Dr. med. David Alexander Back, MBA Charité - Universitätsmedizin Berlin (GER)

PD Dr. med. Koroush Kabir, MBA, FACS, FEBS Helios University Hospital Wuppertal, Witten/Herdecke University (GER)

Congress Secretaries

Dr. med. Dominik Adl Amini Charité - Universitätsmedizin Berlin (GER)

Dr. med. Christian Prangenberg University Hospital Bonn (GER)

Start-up Pitch Host

PD Dr. med. Dominik Pförringer Technical University of Munich (GER) Further information about the Start-up Pitch please see page 15 of this program.

Congress Organisation

Alexia Ploetz University Hospital Bonn (GER) Telefon +49 228 287-15582 Fax +49 228 287-9015582 E-Mail info@otdigital.de

Poster Submission

For further information please see page 15 of this program.

Get-together

On Friday 24. November 2023, all participants are invited to take part in the get-together in the congress loaction.

Certification

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

MedTech Europe

The congress has been assessed to be complient in all categories.

Exhibition & Sponsoring

An exhibition will be held in conjunction with the congress. There are also other individual presentation options. Information can be found on the homepage, or please contact the congress organisation.

Congress Language

The official congress language will be English.

Congress Website

www.otdigital.eu

Participation fees	on site	online
Physician/Scientist/Industry*	245,00	195,00
Resident/Scientist in training	145,00	95,00
Student, Nures, other Healtcare professionals	45,00	5,00

In the booking process, you will be also asked to select your participation in one of our breakout sessions on Saturday, 25th November.

Please book your participation via our homepage or use the followoing link: https://pretix.eu/ortho-unfall-bonn/otdigital2023

The fee includes 19% VAT, catering during the breaks and the get-together evening on Friday. *not sponsors or exhibitors

CALL FOR POSTER

Young colleagues, researchers and students are invited to submit abstracts about their research on digitalisation in orthopaedics and traumatology for our poster presentation.

The winner of the chosen best poster will be identified in Berlin and will receive an award.

Please send your abstract to: poster@otdigital.eu Submission deadline: 16. November 2023

START-UP PITCH

OTdigital is dedicated to support innovative business ideas and inventions in the field of digitalisation in orthopaedics and traumatology. The best 6 ideas will be invited to present live in Berlin. The winner will be identified in Berlin by a jury hosted by Dominik Pförringer and will receive an award.

Please send your abstract to: poster@otdigital.eu Submission deadline: 20. November 2023



Dominik Pförringer

FRIDAY, 24 NOVEMBER 10:30 – 14:30

FRIDAY, 24 NOVEMBER 14:30 - 22:00

David Back (GER), Koroush Kabir (GER)

Get-together at the congress location

	10:30 Registration & Welcome coffee12:00 Welcome & introduction		14:30	SESSION 2 - AI & Big Data CHAIRS: Jacobien Oosterhoff (NLD), Georg Osterhoff (GER)
	David Back (GER), Koroush Kabir (GER)			Clinical applications of AI in O&T
from digital transformation in the automotiv industry		From iFactory to iHospital - how healthcare can learn from digital transformation in the automotive industry		Job Doornberg (NLD) Al-guided excercises for home Tele Monitored MSK Rehabilitation Marco Conti (ITA)
13:00	13.00	Volker Richter (GER) SESSION 1 - mHealth: Apps & Wearables		Large scale RCTs in the era of big data Dirk Stengel (GER)
	23.00	CHAIRS: Bernd Grimm (LUX), Inger Mechlenburg (DNK)		No Al & Big Data Without Good Data - Opportunities, Challenges, and Solutions
		Wearables for assessing upper extremity activity - Lessons learned		Martin Kasparick (GER)
		Inger Mechlenburg (DNK)	15:30	Discussion
		AO Smart Digital Solution task force: BYOD (bring- your-own-device) as a wearable for remote patient monitoring and clinical research: First results from a	16:30	Company presentations Break
		trauma cohort Benedikt Braun (GER)	17:00	SESSION 3 - Digital training and education CHAIRS: Li Felländer-Tsai (SWE), Paolo Parchi (ITA)
		Patient Journey App in clinical routine: Implementation, results and lessons learned Frank Jonkers (NLD)		Patient-specific spine anthropomorphic phantoms: a possibility to bring part of the learning curve outside
		Digital mobility metrics from wearables as trial endpoints in proximal femoral fractures: Clinical		the sugical room Marina Carbone (ITA)
		validation and regulatory approval in the Mobilise-D consortium Clemens Becker (GER)		Functional near infrared spectroscopy (fNIR); A new tool for testing arthroscopic skills Emin Aksoy (TUR)
		Discussion		Augmented Reality - A new paradigm in Medical Educaton and Surgical Training Fabio Carrillo (CHE), Matthias Seibold (CHE)
14:00		Break		Establishing an VR education lab for O/T residents - a case report Łukasz Wysieński (POL)
				Discussion
			18:00	Panel discussion: Academia vs. economy - who will dominate the race for digitalisation?
			19:00	Summary and conclusion David Back (CER) Voyageh Vabin (CER)

19:15

SATURDAY, 25 NOVEMBER 09:00 – 13:45

SATURDAY, 25 NOVEMBER 13:45 - 16:00

09:00 Welcome & introduction

David Back (GER), Koroush Kabir (GER)

09:15 SESSION 4 - Telemedicine and digital communication CHAIRS: Wojciech Glinkowski (POL); Gijs Willinge

(NLD)

Review: Telerehabilitation

Wojciech Glinkowski (POL)

Virtual Fracture Care: Innovating follow-up treatment

in trauma care

Gijs Willinge (NLD)

Use of social media in orthopaedics and traumatology

- from the perspective of physicians and patients

Yasmin Youssef (GER)

Brain computer Interface in motor rehabilitation

rehabilitation

Viviana Versace (ITA)

Discussion

10:15 Keynote

Drones - their Impact on our trauma care of

tomorrow

Peter Biberthaler (GER)

10:45 Break

11:15 Poster session (hybrid)

MODERATORS: David Back (GER), Koroush Kabir (GER)

12:15

Venture Pitch: Rocket start-ups in O&T

HOST: Dominik Pförringer (GER)

12:45 B Break

13:45 **Breakout sessions**

(booking in advance, limited number of participants per session, all 5 sessions will take place in parallel)

The future of digital rehabilitation - how to assist our patients best

HOSTS: Wojciech Glinkowski (POL)

How to establish a good AR/VR training in O&T - my experiences, tricks and pitfalls

HOSTS: Li Felländer-Tsai (SWE), Paolo Parchi (ITA),

Łukasz Wysieński (POL)

Robotics in the OR - what solutions can be used today?

HOSTS: Cristiano Paggetti (ITA)

Use ChatGPT & other AI tools in our daily work

HOSTS: Jacobien Oosterhoff (NLD), Georg Osterhoff (GER)

Wearables to monitor outcomes of Upper Extremity conditions and treatments

HOSTS: Bernd Grimm (LUX), Inger Mechlenburg (DNK)

14:45

SESSION 5 - Digital OR & smart implants

CHAIRS: Cristiano Paggetti (ITA); Jane Walsh (IRL)

Ongoing evolution in Digital Surgery towards surgeon's experience

Arnaud Clavé (FRA)

Behavioral change factors in the adoption of digital solutions in OR

Jane Walsh (IRL)

Potential future robotics applications and the role of scientific community

Willem van der Merve (ZAF)

Research prospectives and challanges for Robotic Assisted Orthopedic Surgery

Maria Pasquini (ITA)

Discussion

15:45

Venture pitch and digital poster presentation – award ceremony

HOSTS: Dominik Pförringer (GER), David Back (GER),

Koroush Kabir (GER)

16:00

Closure and summary

David Back, Koroush Kabir

POSTERSESSOIN

SATURDAY, 25 NOVEMBER 11:15

P-01 INTEGRATED DATA COLLECTION FOR SHOULDER PATIENTS IN PATIENT CARE

E. Kővári¹, V. Weninger¹, I. Sallai¹, E. Virág-Tulassay¹, B. Kovács¹, A. Várnagy¹, I. Antal¹, G. Szőke¹, G. Skaliczki¹ Department of Orthopaedics, Semmelweis University, Budapest (HUN)

P-02 DIGITAL HEALTH SUPPORT FOR REHABILITATION AFTER LO-WER LIMB ORTHOPEDIC AND TRAUMA SURGERY IN OLDER PATIENTS: A SYSTEMATIC REVIEW AND META-ANALYSISS

S. Ivanova¹, A. Benbrih², M. Müller³, K. Kabir⁴, S. Bini⁵, H. Baur⁶, M.Wilhelm⁷, JD. Bastian¹

¹Department of Orthopedic Surgery and Traumatology, Inselspital, Bern University Hospital, Bern (CHE); ²University of Bern, Bern (CHE); ³Department of Emergency Medicine, Inselspital, Bern University Hospital, University of Bern, Bern (CHE); ⁴Department of Orthopedic Surgery and Traumatology, Helios University Hospital Wuppertal, Wuppertal (GER); ⁵Department of Orthopedic Surgery, University of California San Francisco, San Francisco (USA); ⁶Department of Health Professions, Bern University of Applied Sciences, Division of Physiotherapy in Bern, Bern (CHE); ⁷Department for Rehabilitation and Sports Medicine, Inselspital, Bern University Hospital, Bern (CHE)

P-03 HOW TO BUILD A PATIENT-SPECIFIC HYBRID SIMULATOR FOR ORTHOPAEDIC OPEN SURGERY: BENEFITS AND LIMITS OF MIXED-REALITY USING THE MICROSOFT HOLOLENS

 $B. \ Scognamiglio^{1}, S. \ Condino^{2,3}, PD. \ Parchi^{1}, \ N. Piolanti^{1}, \\ V. Ferrari^{2,3}$

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P-04 AUGMENTED REALITY TO GUIDE PERCUTANEOUS SPINE SURGERY PROCEDURES

M. Natale¹, S. Condino², F. Cutolo², M. Carbone², V. Ferrari², PD. Parchi¹

¹Department of Orthopaedic and Trauma Surgery, University of Pisa, Pisa (ITA); ²ENDOCAS Center, Department of Translational Research and New Technologies in Medicine and Surgery, University of Pisa, Pisa (ITA)

P-05 AR INTERACTION PARADIGM FOR CLOSED REDUCTION OF LONG-BONE FRACTURES VIA EXTERNAL FIXATION

G. Balestrieri¹, V, Ferrari², S.Condino², M. Carbone³, PD. Parchi¹

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P-06 AUGMENTED REALITY FOR THE MANAGEMENT OF IMPAIRED BONE HEALING

A. Arnegger¹, F. Niemeyer¹, L. Engelhardt¹, C. Degenhart², K. Schütze²

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P-07 THE REPAIR PROJECT "RECOMMENDATION FOR EVIDEN-CE-BASED PREOPERATIVE AI-CONTROLLED VIRTUAL REDUC-TION AND OSTEOSYNTHESIS OF COMPLEX FRACTURES"

N. Tuttle¹, S. Hölzl1, A. Bejaoui², H. Tzschätzsch², M. Heyland³, F. Balzer², G. Duda³, M. Toussaint⁴, T. Auer⁵, S. Tsitsilonis¹. DA. Back¹

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POSTERSESSOIN

Berlin (GER)

SATURDAY, 25 NOVEMBER 11:15

P-08 EVALUATING CHATGPT RESPONSES TO FREQUENTLY ASKED PATIENT QUESTIONS REGARDING PERIPROSTHETIC JOINT INFECTION AFTER TOTAL HIP AND KNEE ARTHROPLASTY

H. Xiaojun¹, 2, M. Niemann¹, A. Kienzle¹, K. Braun3, DA. Back¹, A. Trampuz¹, C. Perka¹, S. Meller¹

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P-09 A NOVEL COMPLETE TRAINING PROGRAM IN TOTAL HIP ARTHROPLASTY FOR ORTHOPEDIC RESIDENTS THAT INVOLVE CADAVER LAB TRAINING AND TRAINING ON PATIENTS' SPECIFIC SIMULATORS

PD. Parchi¹, F. Falcinelli¹, N. Piolanti¹, E. Bonicoli¹, S. Condino², M. Carbone², V. Ferrari², M. Scaglione¹

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P-10 PATIENTS-SPECIFIC SPINE SIMULATORS FOR SURGICAL TRAI-NING AND REHEARSAL IN PEDICLE SCREWS PLACEMENT: A NEW WAY FOR SURGICAL EDUCATION

M. Carbone², S. Condino², V. Ferrari², M. Natale¹,

G. Balestieri¹, PD. Parchi1

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P-11 REFERENCE VALUES FOR DAILY PHYSICAL ACTIVITY MEASU-RED WITH ACCELEROMETERS IN A DANISH BACKGROUND POPULATION BETWEEN 18 AND 80 YEARS OF AGE

C. Krogsgaard Schrøder¹, L. Urup Tønning¹, M. Tjur¹, PK. Kristensen¹, I. Mechlenburg¹

¹Department or Orthopaedic Surgery, Aarhus University Hospital, Aarhus (DNK); Department of Clinical Medicine, Aarhus University, Aarhus (DNK)

P-12 EXPERT-LEVEL ACCRACY AND RELIABILITY OF ARTIFICIAL INTELLIGENCE FOR FULLY AAUTOMATED ANALYSIS OF THE MECHANICAL ALIGNMENT OF THE LOWER EXTREMITY – RESULTS FROMM A MULTI-CENTRIC VALICATION STUDY

M.-C. RUPP

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P-13 INEMATICAL DIFFERENTS BETWEEN HEALTHY AND SHOUL-DER-INJURED SOFTBALL PLAYERS

L. Bragonzoni¹, S. Di Paolo1, H. Maxime2, A. Minardi¹, R. Zinno1

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P-14 OPTIMIZING PATIENT INFORMATION BEFORE, DURING AND AFTER SURGERY USING A SMARTHPHONE APP

O. Christensen¹, P. Szentivanyi¹, E. Goytia-Vasquez¹, K. Tufberg¹, M. Heijkenskjöld¹, J. Ehne¹, P. Landell,¹ L. Felländer-Tsai¹

¹Department of Orthopaedics, Karolinska University Hospital, Stockholm (SWE)

P-15 DOES CLOTHING STYLE MATTER WHEN MEASURING PATI-ENTS WITH AI-DRIVEN MARKERLESS MOTION ANALYSIS?

M. Flood¹, P. Gette¹, J. Cabri², B. Grimm¹
¹Luxembourg Institute of Health (LIH), Department of
Precision Health, Luxembourg (LUX); ²Luxembourg Institute
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