

2nd International SIIRI Winter School 2024 “Interdisciplinary Implant Sciences”



Gefördert durch



January 22nd – January 23rd, 2024

Courtyard by Marriot Hannover Maschsee

Arthur-Menge-Ufer 3

30169, Hannover

Monday, 22nd of January, 2024

WELCOME

09:30 – 10:00 **Registration**

Session I: Interdisciplinarity in implant technologies

Moderation: A. Melk

10:00 – 10:10 **Welcome**
M. Stiesch, A. Melk

10:10 – 10:30 **Challenges and solutions of interdisciplinary collaboration in implant sciences**
SIIRI-IRTG PhD candidates

10:30 – 11:00 **Interactive impulse**
Y. Lueder, MHH, Dean's office for Academic Career Development

11:00 – 11:15 **Coffee break**

Session II: Basic knowledge – A good foundation for interdisciplinarity (parallel sessions)

Moderation: Session A: F. Nürnberger, Session B: K. Nikutta

Session A

Session B

11:15 – 11:40 **Material sciences**
F. Nürnberger, LUH
Institute of Material Sciences

Microscopy
L. Torres, LUH, Institute for Quantum Optics
K. Nikutta, MHH, Clinic for Dental Prosthetics and Biomedical Materials Science

11:50 – 12:15 **Anatomy and pathological conditions**
A. Hoffmann, MHH
Clinic of Orthopaedic Surgery

Research in communication sciences
E. Baumann, HMTMH
Department of Journalism and Communication Research

12:25 – 12:50 **Basics in simulation**
U. Nackenhorst, LUH
Institute of Mechanics and Computational Mechanics

Genetic engineering
H. Hauser, HZI

12:50 – 13:30 **Lunch break**

Poster Session: Learn from other disciplines

Moderation: T. Bode, Y. Lueder

13:30 – 15:00 **Poster walk & ranking**

15:00 – 15:15 **Coffee break**

Session III: Introducing important topics for implant technologies

Moderation: P. Junker & Y. Zhang

15:15 – 15:45 **Auditory Implants**
W. Nogueira, MHH
Department of Otorhinolaryngology

15:45 – 16:15 **Hip/Knee Implants**
H. Windhagen, MHH
Clinic of Orthopaedic Surgery

16:15 – 16:45 **Dental Implants**
P. Pott, MHH
Clinic for Dental Prosthetics and Biomedical Materials Science

17:00 **Dinner & social evening**

Tuesday, 23rd of January, 2024

Expert Session I: Let's go into detail

Moderation: H. Hauser & M. Eggers

- 09:30 – 09:55 **Exploring and Envisioning: Advancements in Biodegradable Surgical Wires from ZnMg Alloys with Potential Anti-cancer Properties**
Andrij Milenin, AGH University of Science and Technology
 Laboratory of Computational Mechanics
- 09:55 – 10:20 **Alloy design by machine learning**
Demircan Canadinç, Koç University
 Department of Mechanical Engineering

10:20 – 10:30 *Coffee break*

Methods & Coffee

Moderation: T. Bode, Y. Lueder

- 10:30 – 12:30 **Workshop Data management**
Marina Wurzbacher, LUH, Leibniz Information Centre for Science and Technology
- 10:30 – 12:30 **in parallel method discussion at posters**
 Participants and Experts

12:30 – 13:30 *Lunch break*

Expert Session II: Let's go into detail

Moderation: C. Hurschler & A. Joshi

- 13:30 – 13:55 **Clinically relevant research in the field of biofilm-infections in orthopaedics**
Volker Alt, University Hospital Regensburg
 Department of Trauma Surgery
- 13:55 – 14:20 **The main clinical and engineering challenges for implantable sensors**
Ben M. Maoz, Tel Aviv University
 Department of Biomedical Engineering
- 14:20 – 14:45 **Peri-implantitis - etiology, diagnosis and treatment**
James Deschner, Johannes Gutenberg University Mainz
 Department of Periodontology and Operative Dentistry

14:45 – 15:00 *Coffee break*

Meet the experts

- 15:00 – 17:00 **Career perspectives & research discussions**
 Individual meetings with the guest speakers
- 17:00 – 17:30 *Adjourning with Coffee and Snacks*

SIIRI Winter School was organized by SIIRI-IRTG with support of the Dean's Office for Academic Career Development, MHH.