

Saturday, August 25th

9.30	<b>Antimicrobial coatings for medical devices</b> Cynthia Calligaro, INSERM, University of Strasbourg, France
10.00	<b>Core Cross-linked Micelles: From Synthetic Concepts for Precise Control of Morphology and Function to Clinical Translation</b> Matthias Barz, Institute for Organic Chemistry, JGU Mainz, Germany
10.30	<b>Tumor-targeted drug delivery systems based on tumor-specific markers and tumor acidic microenvironment</b> Guo-Bin Ding, Shanxi University, China
11.00	<b>Coffee Break</b>
11.30	<b>Nanoantibiotics - Fact or fiction?</b> Svenja Siemer, Department of Nanobiomedicine/ENT, UMM
11.45	<b>Novel Strategies in Biomaterial Surface Modification in vivo</b> Jonas Eckrich, ENT department, UMM
12.00	<b>Discussion round table: "The Clinician Scientist: Trapped between bed and benchside? Scientists versus Publisher: Who is shaping science?"</b> Julia Weinmann-Menke, Krishnaraj Rajalingam, Sebastian Strieth, Roland Stauber, Désirée Wünsch UMM Mainz, Germany
12.30	<b>Time to say goodbye - Closing Remarks, Awards</b>

We support education - if you also care - please, donate:

CVJM Edenkoben  
IBAN DE85 5485 0010 0034 0000 42  
BIC SOLADES1SUW  
Spende Zweck Primary-School Pangani



IMPULSFONDS FORSCHUNGSINITIATIVE



Rheinland-Pfalz  
MINISTERIUM FÜR  
WISSENSCHAFT, WEITERBILDUNG  
UND KULTUR

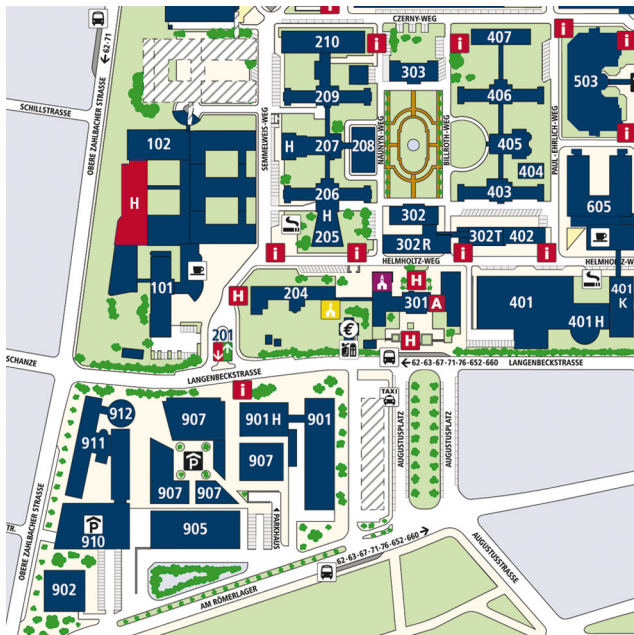
Organisation and Contact

Sebastian Strieth, Roland Stauber, Désirée Wünsch  
University Medical Center Mainz  
Langenbeckstr. 1  
55131 Mainz

wuensch@uni-mainz.de  
rstauber@uni-mainz.de  
sebastian.strieth@unimedizin-mainz.de

Lageplan

Universitätsmedizin Mainz



Universitätsmedizin  
der Johannes Gutenberg-Universität Mainz,  
Langenbeckstr. 1, 55131 Mainz

Conference Venue  
Lecture Hall, Building 102

Auf unserer Homepage [www.unimedizin-mainz.de](http://www.unimedizin-mainz.de) finden Sie Anfahrtsskizzen sowie mögliche Busverbindungen.



Universitätsmedizin Mainz

Debugging Nanobio-interfaces to promote clinical translation

23th to 25th August 2018  
Mainz

Unser Wissen für Ihre Gesundheit



# Debugging Nanobio-interfaces to promote clinical translation

Dear colleagues,

developments allowing the precise and controlled manufacturing of nanomaterials even in large scales boosted nanotechnology as a key technology of the 21th century. Applications now reach various areas of life sciences, including their implementation in novel medical diagnostics, biomaterials, and therapeutic products. This has raised high expectations for further translation and realistic clinical improvements. In contrast, few NMs have ultimately reached clinical applications as robust tools for nanomedicine.

Bearing such limitations in mind, with this symposium, we aim to not only bring together leading researchers in both experimental and (pre)clinical nanobiomedicine but also to provide a platform for young researchers to educate trans-disciplinary communication in the growing though still split areas of nanobiomedicine. Hence, we would appreciate to welcoming you on this occasion at the University Medical Center Mainz!

With best regards,  
Sebastian Strieth, Roland Stauber, Désirée Wunsch

## Thursday, August 23th

12.45	<b>Get together</b> Lunch and Registration
13.45	<b>Opening and welcome</b> Sebastian Strieth, Roland Stauber, Désirée Wunsch
14.00	<b>On the role of ambiphilicity in nanoparticle-protein interfaces</b> Francesco Stellacci, EPFL, Lausanne, Switzerland
14.30	<b>Ultra-small nanoparticle interaction with different cells</b> Marie Kalbacova, University of Prague, Czech Republic
15.00	<b>Coffee with the experts</b>
15.30	<b>Surface structure and interactions between bacteria lipopolysaccharide membranes</b> Wuge Briscoe, University of Bristol, UK
16.00	<b>Toxicity mechanisms of metal oxide nanoparticles under realistic exposure and bio-transformation processes</b> Chengfang Pang, Technical University of Denmark, Denmark
16.30	<b>Super-Resolution Light Microscopy of cellular Nanostructures</b> Christoph Cremer, IMB Mainz, University Heidelberg, KIP, Germany
17.00	<b>Science and Wine</b> Discussion at the Mainzer Weinmarkt

## Friday, August 24th

9.15	<b>Greetings &amp; Welcome</b> Stefan Müller-Stach, Vice President for Research and Early Career Academics, JGU Mainz
9.30	<b>Personalized Cancer Nanomedicines: Design principles and applications</b> Avi Schroeder, Technion, Israel
10.00	<b>A Novel Scavenging Tool for Cancer Biomarker Discovery based on the Blood-Circulating Nanoparticle Protein Corona</b> Marilena Hadjidemetriou, University of Manchester, UK
10.30	<b>DNA in extracellular vesicles (exosome): biomarker and functional potential in cancer and metastasis</b> Basant Thakur, University Medical Center Essen, Germany
11.00	<b>Coffee with the experts</b>
11.30	<b>Cell function diagnostics and clinical acceptance</b> Oliver Hayden, TU Munich, Germany
12.00	<b>Nanotechnology for prevention of biofilm-related implant infections</b> Meike Stiesch, Hannover Medical School, Germany
12.30	<b>Biocompatibility and clearance of nanoparticles</b> Carsten Weiss, Karlsruhe Institute of Technology, Germany
13.00	<b>Lunch</b> Interdisciplinary tables to foster broad scientific exchange

14.00	<b>miRNA and mRNA useful small molecules for musculoskeletal regeneration</b> Martijn van Griensven, TU Munich, Germany
14.30	<b>Small meets smaller - Nanomaterial-based modulation of microbes</b> Shirley Knauer, University of Duisburg-Essen, Germany
15.00	<b>Smart Macro-Nanomedicine</b> Twan Lammers, ExMI, University Hospital Aachen, Germany
15.30	<b>Coffee with the experts</b>
16.00	<b>Learning to transform 2D nanomaterials for medicine using imaging and pharmacology</b> Kostas Kostarelos, University of Manchester, UK
16.30	<b>Bone Regeneration: Interaction of Biomaterials and the Biological Interface</b> Bilal Al-Nawas, Oral and Maxillofacial Surgery, UMM, Germany
17.00	<b>Application potential of 3D printing for the simulation of surgical intervention</b> Bernhard Dorweiler, Thoracic and heart surgery, UMM, Germany
17.30	<b>Science and Food for Debugging</b> Location: Restaurant Bootshaus Mainz