SYMPOSIUM 2016
NANODIMENSIONAL POLYMERIC THERAPEUTICS FOR TUMOR IMMUNOTHERAPY
SEPTEMBER 15TH–16TH • MAINZ

CHEMICAL DESIGN —
bioMEDICAL APPLICATIONS

Schedule

Staudinger Lecture Hall
Max Planck Institute for Polymer Research
September 15th–16th • Mainz

The Symposium is organized by the CRC 1066
‘Nanodimensional polymeric Therapeutics for Tumor Therapy’
& its Integrated Research Training Group

Johannes Gutenberg Universität Mainz
Max-Planck-Institut für Polymerforschung
Universität Mainz medizin.
Deutsche Forschungsgemeinschaft
Program

Thursday September 15th 2016

Session I – Chair: Rudolf Zentel & Philipp Heller

0900 – 0910 Opening Remarks

0910 – 0940 Christoph Alexiou, University Hospital Erlangen
Investigating immunological features of mitoxantrone-loaded SPIONs for Magnetic Drug Targeting

0940 – 1010 Katharina Landfester, Max Planck Institute for Polymer Research Mainz
Nanoparticles for specific drug delivery

1010 – 1040 Coffee Break

Session II – Chair: Detlef Schuppan & Nadine Leber

1040 – 1125 Daniel Anderson, Massachusetts Institute of Technology
Nucleic acid delivery systems for RNA therapy and gene editing

1125 – 1155 Ugur Sahin, University Medical Center JGU Mainz, TRON gGmbH & BioNTech AG
Delivering messages for cancer immunotherapy

1155 – 1225 Twan Lammers, RWTH Aachen University Clinic
Drug targeting to tumors and metastases

1225 – 1245 Lunch
Buffet on the MPI-P premises

Session III – Chair: Ruth Duncan & Antje Ziller

1345 – 1415 Till Opatz, Johannes Gutenberg University Mainz
Carbohydrates and Carbohydrate-Mimetics for Cell-Targeting

1415 – 1445 Stefaan De Smedt, Ghent University
Ultrasound triggered mRNA delivery to dendritic cells – towards an in vivo cancer vaccination strategy

1445 – 1515 Matthias Barz, Johannes Gutenberg University Mainz
Polypept(o)idic Nanomedicines: Reducing Synthetic Complexity, while Enhancing Functionality

1515 – 1545 Coffee Break
Session IV – Chair: Matthias Barz & Katharina Stockhofe

15:45 – 16:15 Rudolf Zentel, Johannes Gutenberg University Mainz
Biodegradable Carriers for Transport of Peptides and Nucleotides

16:15 – 16:45 Christian Becker and Tobias Bopp, University Medical Center JGU Mainz
Suppression of melanoma growth through nanoparticle-mediated nucleotide cyclase inhibition

16:45 – 17:00 Short Break

17:00 – 19:00 Poster Session

19:00 – Conference Dinner
Buffet on the MPI-P premises
Friday September 16th 2016

Session V – Chair: Ruth Duncan & Laura Müller

0900 – 0930  **Stephan Grabbe**, University Medical Center JGU Mainz
*Protein corona-mediated targeting of nano-carriers to B cells induces humoral immune responses*

0930 – 1000  **Thomas Tüting**, University of Magdeburg
*Preclinical development of combinatorial treatment approaches for melanoma immunotherapy*

1000 – 1030  **Coffee Break**

Session VI – Chair: Stephan Grabbe & Jonathan Schupp

1030 – 1100  **Philipp Beckhove**, Regensburg Center for Interventional Immunology & German Cancer Research Center (dkfz) and National Centre for Tumor Diseases (NCT)
*Immunmodulatory pathways in cancer*

1100 – 1130  **Detlef Schuppan**, University Medical Center JGU Mainz & Harvard Medical School Boston
*Therapeutic approaches using siRNA and antisense DNA*

1130 – 1200  **Claus-Michael Lehr**, Helmholtz Institute for Pharmaceutical Research Saarland & Saarland University
*Nanoparticles for overcoming Epithelial and Microbial Barriers*

1200  **Wiley-VCH Poster Prize – Award ceremony**

1205 – 1315  **Lunch**
Buffet on the MPI-P premises

Session VII – Chair: Katharina Landfester & Dominika Hobernik

1315 – 1345  **Wolfgang Tremel**, Johannes Gutenberg University Mainz
*PEI-PEG Copolymer Gated Dendritic Mesoporous Silica Nanoshuttles for Targeting Cancer: Encapsulation of TNF-α*

1345 – 1415  **Ernst Wagner**, Ludwig-Maximilians-Universität München & Nanosystems Initiative Munich
*Design of Nucleic Acid Nanoparticles for Cancer Therapy*

1415 – 1445  **Volker Mailänder**, University Medical Center JGU Mainz
*The Protein Corona: From Deciphering the Miracle of PEGylation to Intracellular Trafficking*
Coffee Break

Session VIII – Chair: Volker Mailänder & Claudia Weber

15\textsuperscript{45} – 15\textsuperscript{45}  \textbf{Gerd Ulrich Nienhaus}, Karlsruhe Institute of Technology & University of Illinois

\textit{The Protein Corona on Nanoparticles: Insights from Quantitative Fluorescence Microscopy}

15\textsuperscript{45} – 16\textsuperscript{15}  \textbf{Kaloian Koynov}, Max Planck Institute for Polymer Research Mainz

\textit{Nanocarrier Based Drug Delivery: What We Can Learn Using Fluorescence Correlation Spectroscopy}