

## Summary of the Symposium on 13.10.2017

Cardiovascular diseases (CVD) are responsible for the majority of deaths worldwide. Recent years brought about a widespread interest in the potential applications of nanotechnology for the diagnostics and the therapy of human diseases. To date, nanoparticles have been successfully applied in oncology for the targeted transport of pharmaceutical agents and also for imaging, but despite intensive research efforts in the field of cardiovascular nanomedicine, no specific nanoparticle-based system has yet been approved for diagnosis or therapy of CVD.

To address this problem, SEON (Section of Experimental Oncology and Nanomedicine) organized an International Symposium titled **Cardiovascular Diseases and Nanomedicine: Perspectives and Challenges**. The symposium under the patronage of the German Society of Cardiology (Deutsche Gesellschaft für Kardiologie, DGK), took place on 13<sup>th</sup> October 2017. After opening the symposium, a thematic introduction was given by Prof. Alexiou (Head of SEON) and a welcome address by the dean of the Medical Faculty and the Director of the University Hospital Erlangen. In the first session, the leading scientists in the field of cardiology, including Prof. S. Achenbach (Department of Cardiology, University Hospital Erlangen), Prof. H. Mangge (Medical University of Graz, Austria) and Prof. M. Joner (German Heart Center, Munich) gave an overview of the state-of-the-art diagnostics and therapy in CVD, to provide the background information to the audience and highlight the unmet clinical needs in cardiology. In the second session, the scientific experts in the field of cardiovascular nanomedicine proposed the novel, nanotechnology-based solutions to improve CVD diagnostics and therapy, and highlight the challenges that must be overcome in order to fill the gap existing between the promising bench trials and the successful bedside applications. The presenters in this session included Prof. A. Yilmaz (University Hospital Münster), Dr. Didier Letourneur (Inserm 1148, Paris), Dr. B. Metselaar (Twente University and RWTH Aachen) and PD Dr. Iwona Cicha (SEON). The subsequent round table discussion moderated by Prof. C. Garlichs (Diako Hospital, Flensburg) helped to critically review the potential of novel nanomedical approaches to the management of cardiovascular diseases. The audience had a chance to interact with the presenters also during the breaks and after the symposium, at the displayed posters. Furthermore, the guided tour through SEON laboratories was well-frequented. We were very pleased about the large number of participants and their positive feedback concerning our symposium.



Impressions of the Symposium **“Cardiovascular Diseases and Nanomedicine: Perspectives and Challenges”**: **A)** Symposium banner in front of the Rudolf-Wöhrl Lecture Hall. **B)** Discussions at the posters. **C)** Speakers (left to right): Prof. Alexiou, Prof. Mangge, Prof. Achenbach, PD Dr. Cicha, Dr. Letourneur, Prof. Joner, Prof. Garlichs, Prof. Yilmaz, Dr. Metselaar.