

Einladung zum Vortrag von

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**„Molecular Imaging, Image-Guided Drug Delivery, and
Theranostics”**

The Molecular Imaging and Nanotechnology Laboratory at the University of Wisconsin - Madison (<http://mi.wisc.edu/>) is mainly focused on three areas: 1) development of multimodality molecular imaging agents; 2) nanotechnology and its biomedical applications; and 3) molecular therapy of cancer.

In this talk, I will present our recent work on molecular imaging and image-guided drug delivery of cancer and some cardiovascular diseases with peptides, proteins, and a variety of nanomaterials. The primary imaging techniques used in these studies are positron emission tomography (PET), photoacoustic tomography (PAT), optical imaging, and magnetic resonance imaging (MRI). Some of the major molecular targets that we are investigating are CD105 (*i.e.* endoglin), PD-1/PD-L1, CTLA-4, VEGFR, CD146, integrin $\alpha_v\beta_3$, among others. The nanomaterials that will be discussed in this presentation may include silica-based nanoparticles, nano-graphene oxide, micelles, iron oxide nanoparticles, 2-D nanomaterials, hybrid nanomaterials, among many others. Lastly, the emerging paradigm of intrinsically radiolabeled nanomaterials will be discussed as multi-modal PET/MRI, PET/PAT imaging agents, as well as for theranostic applications.

Montag, 16. Oktober 2017, 11:00 Uhr

Seminarraum 2

Währinger Straße 42, 1090 Wien

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