



Curriculum Vitae

Personal information **Katharina Lückerath**

Work experience

03/2021 - present, Professor (W2), University Duisburg-Essen/ Medical Faculty, research & teaching / leading the Preclinical Theranostics Team

10/2019 - 01/2022, Adjunct Assistant Professor, University of California Los Angeles, research & teaching / leading the preclinical team at the Department of Nuclear Medicine

01/2017 - 09/2019, Research Fellow, University of California Los Angeles, research & teaching / leading the preclinical team at the Department of Nuclear Medicine

02/2012 - 01/2027, Postdoc, University Hospital Würzburg, Nuclear Medicine, research & teaching (nuclear medicine)

01/2011 - 06/2011, Postdoc, University Würzburg, Rudolf-Virchow Center, research (atherosclerosis)

Education and training

01/2007-12/2010, PhD student, Institute for Tumor Biology and Experimental Therapy (Georg-Speyer-Haus), Germany, preclinical research / analysis of a disease mouse model / cell signaling

10/2004 - 10/2006, M.Sc., University Bonn-Rhein Sieg, Germany, Biology with biomedical sciences

10/2001 - 09/2004, B.Sc., University Bonn-Rhein Sieg, Germany, and University of Aberdeen, UK, Biology

Additional information

Publications

<https://www.ncbi.nlm.nih.gov/myncbi/1TaJ-dmcsPAJ/bibliography/public/>

Projects

My group focuses on theranostic approaches with the goal to deliver new insights into tumor biology, heterogeneity and metabolism and their relationship and relevance to functional imaging and biomarker-driven treatments in nuclear medicine. Radioligand therapy is a promising treatment option for various cancers. However, outcomes are rarely curative. We address this clinical need by investigating new RLT modalities and the mechanisms underlying the limited effectiveness of RLT. These mechanisms include, for example, tumor cell intrinsic resistance mechanisms, tumor protection by microenvironmental factors, and a suboptimal radiotherapeutic strategy. Poor understanding of these mechanisms represents a key barrier to the development of more effective RLT approaches. To improve RLT outcomes, we establish phenotypic imaging biomarkers and develop rationally chosen, translatable RLT-based combination therapies, we characterize cancer mouse models and patient samples, and use diverse *in vitro*, *ex vivo*, and *in vivo* analyses to identify targetable RLT-induced alterations in tumor, stroma and immune cells that mitigate the effects of RLT and could be exploited therapeutically.

Memberships

EANM (membership in society, member of the radiobiology working group, member of the INSPIRE initiative)

ESMI

Other Relevant Information