

KNOLL, MAXIMILIAN, DR. MED

GENERAL INFORMATION



Clinician Scientist/ PostDoc

Heidelberg University Hospital/German Cancer Research Center
Division of Molecular and Translational Radiation Oncology
Heidelberg Ion-Beam Therapy Center (HIT)
Im Neuenheimer Feld 450, 69120 Heidelberg, Germany

C05

ACADEMIC EDUCATION & QUALIFICATION

Year(s)	Education
2016-2019	Master of Science, Medical Biometry/Biostatistics
2008-2015	Medical School, Heidelberg University

SCIENTIFIC EDUCATION & QUALIFICATION

Year(s)	Education
2017	MD thesis, Prof. Dr. Roth, Department of Pathology, Heidelberg University

PROFESSIONAL EXPERIENCE

Year(s)	Experience
Since 2016	Postdoctoral researcher, Prof. Dr. Dr. Abdollahi, Heidelberg University Hospital/German Cancer Research Center: The molecular landscape of tumor evolution under therapy in Glioblastoma multiforme
2018-2019	Postdoctoral researcher, PD. Dr. Stock, IMBI, Heidelberg University: Empirical validation of statistical approaches to the projection of cancer incidence rates based on short-term cancer registry data
2010-2015	MD thesis student, Prof. Dr. Roth, Department of Pathology, Heidelberg University: Cell-death regulation by the mTOR inhibitor Everolimus in renal cell carcinoma

OTHER QUALIFICATIONS/ROLES/RESPONSIBILITIES

Year(s)	
Since 2014	MD/PhD fellowship, University Heidelberg
2008	Scholarship of the Studienstiftung des deutschen Volkes e.V.

SELECTED PUBLICATIONS

- Nowrouzi A, Sertorio M.G., Akbarpour M, Knoll M, Kronic D, Kuhar M, Schwager C, Brons S, Debus J, Wells S.I., Wells J.M., Abdollahi A. Personalized Assessment of Normal Tissue Radiosensitivity via Transcriptome Response to Photon, Proton and Carbon Irradiation in Patient-Derived Human Intestinal Organoids. **Cancers** 2020, 12(2), 469;
- Waltenberger M, Knoll M, Schlegel J, Wirkner U, Schwager C, Bernhardt D, Adeberg S, Rieken D, Combs S.E, Herold-Mende C, Debus J, Abdollahi A. A Transcriptional Fingerprint of Carbon Ion Radiotherapy in Patients with Recurrent Glioma Utilizing Peripheral Blood as a Sentinel Organ. **International Journal of Radiation Oncology**. Volume 105, Issue 1, Supplement, Page E111
- Knoll M, Waltenberger M, Bougatf N, Bernhardt D, Adeberg S, Budach V, Baumann M, Stuschke M, Fokas E, Grosu AL, Zips D, Belka C, Combs SE, von Deimling A, Bendszus M, Wick W, Unterberg A, Rieken S, Debus S, Abdollahi A. Efficacy of re-irradiation with carbon ions (RiCi) in patients with recurrent high-grade glioma (rHGG) compared to the standard re-irradiation with photons (RiP): The reference multicenter cohort of the German Cancer Consortium Radiation Oncology Group (DKTK-ROG). **J Clin Oncol** 37, 2019 (suppl; abstr 2057)

4. [Knoll M](#), Debus J, Furkel J, Warta R, Bougatf N, Rapp C, Brors B, Wick W, Unterberg A, Herold-Mende C, Abdollahi A. Glioblastoma evolution pattern under surgery and radio(chemo)therapy (RCHT) to identify novel methylome based glioma subtypes. **J Clin Oncol** 37, 2019 (suppl; abstr 2012).
5. Hasheminasab S, [Knoll M](#), Schwager C, Nowrouzi A, Pfarr N, Weichert W, Rieken S, Pöttgen C, Gauler TC, Eberhardt W, Schuler M, Theegarten D, Aigner C, Debus J, Stuschke M, Abdollahi A. Clonal tumor evolution under induction chemotherapy and concurrent radiochemotherapy (RCHT) in patients with resectable stage IIIA (N2) and selected IIIB non-small cell lung cancer (NSCLC): Molecular analysis of the ESPATUE randomized phase III trial. **J Clin Oncol** 37, 2019 (suppl; abstr 8543)
6. Chiblak S, Tang Z, Lemke D, [Knoll M](#), Dokic I, Warta R, Moustafa M, Mier W, Brons S, Rapp C, Muschal S, Seidel P, Bendszus M, Adeberg S, Wiestler OD, Haberkorn U, Debus J, Herold-Mende C, Wick W, Abdollahi A. Carbon irradiation overcomes glioma radioresistance by eradicating stem cells and forming an antiangiogenic and immunopermissive niche. **JCI Insight**. 2019 Jan 24;4(2). pii: 123837. doi: 10.1172/jci.insight.123837.
7. Debus C, Afshar-Oromieh A, Floca R, Ingrisich M, [Knoll M](#), Debus J, Haberkorn U, Abdollahi A. Feasibility and robustness of dynamic 18F-FET PET based tracer kinetic models applied to patients with recurrent high-grade glioma prior to carbon ion irradiation. **Sci Rep**. 2018 Oct 3;8(1):14760. doi: 10.1038/s41598-018-33034-5.
8. Debus C, Waltenberger M, Floca R, Afshar-Oromieh A, Bougatf N, Adeberg S, Heiland S, Bendszus M, Wick W, Rieken S, Haberkorn U, Debus J, [Knoll M](#), Abdollahi A. Impact of 18F-FET PET on Target Volume Definition and Tumor Progression of Recurrent High Grade Glioma Treated with Carbon-Ion Radiotherapy. **Sci Rep**. 2018 May 8;8(1):7201. doi: 10.1038/s41598-018-25350-7.
9. [Knoll M](#), Debus J, Abdollahi A. cnAnalysis450k: an R package for comparative analysis of 450k/EPIC Illumina methylation array derived copy number data. **Bioinformatics**. 2017 Aug 1;33(15):2266-2272. doi: 10.1093/bioinformatics/btx156.
10. [Knoll M](#), Macher-Goeppinger S, Kopitz J, Duensing S, Pahernik S, Hohenfellner M, Schirmacher P, Roth W. The ribosomal protein S6 in renal cell carcinoma: functional relevance and potential as biomarker. **Oncotarget**. 2016 Jan 5;7(1):418-32. doi: 10.18632/oncotarget.6225.