

# ABDOLLAHI, AMIR, PROF. DR.MED. DR.RER.NAT

## GENERAL INFORMATION



**Professor and Chair for Translational Radiation Oncology**  
Heidelberg Ion-Beam Therapy Center (HIT)  
Heidelberg University Hospital  
Im Neuenheimer Feld 450, 69120 Heidelberg, Germany  
Email: amir.abdollahi@med.uni-heidelberg.de  
Tel: +49 6221 56 5100

C05

## ACADEMIC EDUCATION & QUALIFICATION

Year(s)	Education
2003	Medicine, Heidelberg University
2002	M.Sc. in Molecular Cell Biology, Heidelberg University

## SCIENTIFIC EDUCATION & QUALIFICATION

Year(s)	Education
Since 2021	Professor and Chair (W3) for Translational Radiation Oncology, Heidelberg Medical Faculty (MFHD), Heidelberg University
2006-2014	Assistant Professor, Tufts University and Harvard University (2006-09), Boston, USA
2006	Dr.rer.nat., DKFZ/Heidelberg University
2004	Dr. med., Heidelberg University
2002	M.Sc., EMBL/Heidelberg University

## PROFESSIONAL EXPERIENCE

Year(s)	Education
Since 2023	Managing Director, National Center for Tumor Diseases (NCT) Heidelberg
Since 2021	Chief Scientific Officer (CSO) Heidelberg Ion-Beam Therapy Center (HIT), , Department of Radiation Oncology, Heidelberg University Hospital (UKHD)
Since 2019	Head: Clinical Cooperation Unit Translational Radiation Oncology, German Cancer Consortium (DKTK) Core Center Heidelberg, Heidelberg University Hospital (UKHD) and German Cancer Research Center (DKFZ)
Since 2019	Director NCT Radiation Oncology Program
Since 2016	Head, Division of Molecular and Translational Radiation Oncology, Heidelberg Ion-Beam Therapy Center (HIT), Heidelberg Medical Faculty (MFHD), Heidelberg University
2015-2019	PI & Head: NCT 3.0 Personalized Radiation Oncology Program (NCT-PRO)
Since 2011	PI & scientific program coordinator of the Heidelberg Institute of Radiation Oncology (HIRO), National Center for Radiation Research in Oncology (NCRO)
2010-2018	Head: Max-Eder Group Molecular- & Translational Radiation Oncology, Heidelberg University (HIT) and DKFZ (NCT)
2008-2010	PI, NASA Specialized Center of Research (NSCOR), Director: Dr. Lynn Hlatky
2002-2005	Research Fellow and Visiting Scientist, Biochemical Instrumentation Programme, European Molecular Biology Laboratory (EMBL), Heidelberg, Germany
2002-2005	Research fellow, Post Doc, Group Leader, Deputy, Department of Radiation Oncology (CCU, Chair Dr. Debus), UKHD and DKFZ

## OTHER QUALIFICATIONS/ROLES/RESPONSIBILITIES

Year(s)	Qualifications/Roles/Responsibilities
Since 2022	Project Leader, National Institute of Health Program Grant (NIH-1P01CA257904-01A1)
Since 2014	Member of the Scientific Council for Radiation Research (Kompetenzverbund Strahlenforschung, KVSF) consulting the Federal Ministries BMBF and BMUB.

Since 2013	Member of the Editorial Boards of PLoS One and Nature Scientific Report
Since 2012	Coordinator of two radiation oncology programs of the German Cancer Consortium for translational cancer research (DKTK) Radiation Oncology and Imaging (ROI)
2009	Max-Eder-Young Investigator Award, Molecular Radiation Oncology. The excellence initiative of the German Cancer Aid (Deutsche Krebshilfe)
2005	"Walther und Christine Richtzenhain"-Award for Cancer Research
2005	Young Investigator Award of The Medical Faculty of Heidelberg University
2004	Doctoral Thesis, Dr. med., "summa cum laude"

## SELECTED PUBLICATIONS

1. [Abdollahi A](#), Hahnfeldt P, Maercker C, Grone HJ, Debus J, Ansorge W, Folkman J, Hlatky L, and Huber PE. Endostatin's antiangiogenic signaling network. **Mol Cell** 2004 Mar 12;13(5):649-63. comments in: *Cancer Cell*, 2004, 3,205-206, Editors' Choice. *Science*, 2004, 303, 1949. *Science STKE*, 2004, 224, 93.
2. [Abdollahi A](#), Folkman J. Evading tumor evasion: Current concepts and perspectives of anti-angiogenic cancer therapy. **Drug Resist Updates**. 2010;13(1-2), 16-28
3. Chiblak S, Tang Z, Campos B, Gal Z, Unterberg A, Debus J, Herold-Mende C\*, [Abdollahi A](#)\*. Radiosensitivity of Patient-Derived Glioma Stem Cell 3-Dimensional Cultures to Photon, Proton, and Carbon Irradiation. **Int J Radiat Oncol Biol Phys** 2016; 95(1), 112-119
4. 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):e123837.
5. Tang Z, Dokic I, Knoll M, Ciamarone F, Schwager Ch, Klein C, Cebulla G, Hoffmann DC, Schlegel J, Seidel Ph, Rutenberg Ch, Brons S, Herold-Mende Ch, Wick W, Debus J, Lemke D, [Abdollahi A](#). Radioresistance and Transcriptional Reprogramming of Invasive Glioblastoma Cells. **Int J Radiat Oncol Biol Phys**. 2022 Feb 1;112(2):499513.
6. Dokic I, Meister S, Bojceviski J, Tessonnier T, Walsh D, Knoll M, Mein S, Tang Z, Vogelbacher L, Rittmueller C, Moustafa M, Kronic D, Brons S, Haberer T, Debus J, Mairani A, [Abdollahi A](#). Neuroprotective Effects of Ultra-High Dose Rate FLASH Bragg Peak Proton Irradiation. **Int J Radiat Oncol Biol Phys**. 2022 Feb 20:S0360-3016(22)00166-3.
7. Niklas M, Schlegel J, Liew H, Zimmermann F, Rein K, Walsh DWM, Dzyubachyk O, Holland-Letz T, Rahmanian S, Greilich S, Runz A, Jäkel O, Debus J, [Abdollahi A](#). Biosensor for deconvolution of individual cell fate in response to ion beam irradiation. **Cell Rep Methods**. 2022 Feb 17;2(2):100169.
8. Adeberg S, Knoll M, Koelsche C, Bernhardt D, Schrimpf D, Sahm F, König L, Harrabi SB, Hörner-Rieber J, Verma V, Beverunge-Hudler M, Unterberg A, Sturm D, Jungk C, Herold-Mende C, Wick W, von Deimling A, Debus J, Rieken S, [Abdollahi A](#). DNA-methylome-assisted classification of patients with poor prognostic subventricular zone associated IDH-wildtype glioblastoma. **Acta Neuropathol**. 2022 Jul;144(1):129-142.
9. Lan, Y., Moustafa, M., Knoll, M., Xu, C., Furkel, J., Lazorchak, A., Yeung, T.-L., Hasheminasab, S., Jenkins, M. H., Meister, S., Yu, H., Schlegel, J., Marelli, B., Tang, Z., Qin, G., Klein, C., Qi, J., Zhou, C., Locke, G., Kronic, D., Derner, M. G., Schwager, C., Fontana, R. E., Kriegsmann, K., Jiang, F., Rein, K., Kriegsmann, M., Debus, J., Lo, K.-M. and [Abdollahi, A](#). Simultaneous targeting of TGF- $\beta$ /PD-L1 synergizes with radiotherapy by reprogramming the tumor microenvironment to overcome immune evasion. **Cancer Cell** 2021, 39(10):1388-1403.e10 \*shared senior author
10. Tawk B, Rein K, Schwager C, Knoll M, Wirkner U, Hörner-Rieber J, Liermann J, Kurth I, Balermipas P, Rödel C, Linge A, Löck S, Lohaus F, Tinhofer I, Krause M, Stuschke M, Grosu AL, Zips D, Combs SE, Belka C, Stenzinger A, Herold-Mende C, Baumann M, Schirmacher P, Debus J, [Abdollahi A](#). DNA-Methylome-Based Tumor Hypoxia Classifier Identifies HPV-Negative Head and Neck Cancer Patients at Risk for Locoregional Recurrence after Primary Radiochemotherapy. **Clin Cancer Res**. 2023 Aug 15;29(16):3051-3064. Commented by Heft Neal ME & Brenner JC; Prognosis to Radiation Unlocked: How Hypoxia Methylome May Hold the Key in HNSCC. *Clin Cancer Res* (2023)

## PATENTS

- Five patent families related to tumor angiogenesis, fibrosis, integrative omics, molecular engineering and biotechnology EP3781589, EP2019/059747, EP18167832.7, WO2017093569A1, EP2016/079777, WO2013026913A3, EP2012/066467, WO2012027462A2, US2011/048951.