

WINKLER, FRANK, PROF. DR. MED.

GENERAL INFORMATION



Managing senior physician / full professor for experimental neurooncology
University Hospital Heidelberg, Department of Neurology
Im Neuenheimer Feld 400
69120 Heidelberg, Germany

A01

ACADEMIC EDUCATION & QUALIFICATION

Year(s)	Education
1998	Final part of the MD exam (final mark „good“).
1997 – 1998	Practical year (6th year) in Karlsruhe and National Hospital for Neurology and Neurosurgery, Queen Square, London (02.1998 – 05.1998)
1991 – 1998	Med School, University of Hamburg (until 03.1994) and Albert-Ludwigs-University Freiburg (04.1994 – 11.1998), Germany

SCIENTIFIC EDUCATION & QUALIFICATION

Year(s)	Education
2011	<i>Venia legendi</i> for Neurology, University of Heidelberg
2010	<i>Venia legendi</i> for Neurology, LMU Munich
2010	Scientific Discussion, faculty council, Munich
2009	Faculty colloquium, LMU Munich
2009	Submission of the habilitation / these „The impact of blood vessels for the growth and therapy of brain tumors“, LMU Munich, Dpt. of Neurology, Prof. Th. Brandt / M. Dieterich
1994 - 1996	MD thesis, supervisor: Prof. Dr. med. H. Drexler, Medical Clinic of the Albert-Ludwig-University Freiburg, Cardiology: "Cloning and sequencing of pig iNOS and cNOS - Gene expression of iNOS and cNOS after angioplasty". 3.1997 MD colloquium, "magna cum laude"

PROFESSIONAL EXPERIENCE

Year(s)	Experience
since 2016	Managing senior physician ("Geschäftsführender Oberarzt"), Dpt. of Neurology, University of Heidelberg; permanent position
since 2012	Professor (W3) for Experimental Neuro-oncology, Heidelberg University and DKFZ (German Cancer Research Center) Heidelberg, Germany. May 2018: tenured position ("Entfristung")
since 2010	Lead of the research group "Experimental Neuro-Oncology", DKFZ and UNI Heidelberg
2014 – 2016	Attending / senior physician, Dpt. of Neurology, University of Heidelberg
2010 - 2014	Attending / senior physician, Department of Neuro-oncology, University of Heidelberg, and DKFZ (German Cancer Research Center)
2010	Dr. med. habil. degree (equivalent to Assistant professorship), LMU München
2009	Board exam for Neurology, München
2005 – 2010	Principal Investigator (Research group Neuro-Oncology) and Clinical fellow, Department of Neurology, Ludwig-Maximilians University München (director: Prof. Dr. med. Th. Brandt and Prof. Dr. M. Dieterich).
2003 – 2004	Research Fellow, E.L. Steele Laboratory, Harvard Medical School, Boston, USA (Prof. Rakesh Jain)
1999 – 2002:	Junior Investigator and Clinical fellow, Department of Neurology, Ludwig-Maximilians University München (director: Prof. Dr. med. Th. Brandt). Research group of Prof. W.

OTHER QUALIFICATIONS/ROLES/RESPONSIBILITIES

Year(s)	
2010	Neuro-oncology prize of the foundation Sibylle Assmus
2003 – 2004	Emmy-Noether Stipend of the Deutsche Forschungsgemeinschaft (German Research Foundation)
2002	Scientific Prize of the Paul-Ehrlich society
1991 -1998	Stipend of the "Studienstiftung des deutschen Volkes" (German State Scholarship for gifted students)

SELECTED PUBLICATIONS

- Osswald M, Jung E, Sahm F, Solecki G, Venkataramani V, Blaes J, Weil S, Horstmann H, Wiestler B, Syed M, Huang L, Ratliff M, Karimian Jazi K, Kurz FT, Schmenger T, Lemke D, Gommel M, Pauli M, Liao Y, Haring P, Pusch S, Herl V, Steinhauser C, Kronic D, Jarahian M, Miletic H, Berghoff AS, Griesbeck O, Kalamakis G, Garaschuk O, Preusser M, Weiss S, Liu H, Heiland S, Platten M, Huber PE, Kuner T, von Deimling A, Wick W, Winkler F. Brain tumour cells interconnect to a functional and resistant network. **Nature** 2015; 528:93-8
- Weil S, Osswald M, Solecki G, Grosch J, Jung E, Lemke D, Ratliff M, Hänggi D, Wick W, Winkler F (2017). Tumor microtubules convey resistance to surgical lesions and chemotherapy in gliomas. **Neuro Oncol** 2017; 19(10):1316-1326
- Jung E, Osswald M, Blaes J, Wiestler B, Sahm F, Schmenger T, Solecki G, Deumelandt K, Kurz FT, Xie R, Weil S, Heil O, Thomé C, Gömmel M, Syed M, Häring P, Huber PE, Heiland S, Platten M, von Deimling A, Wick W, Winkler F. Tweety-Homolog 1 Drives Brain Colonization of Gliomas. **J Neurosci** 2017;37(29):6837-6850
- Osswald M, Blaes J, Liao Y, Solecki G, Gömmel M, Berghoff AS, Salphati L, Wallin JJ, Phillips HS, Wick W, Winkler F. Impact of blood-brain barrier integrity on tumor growth and therapy response in brain metastases. **Clin Cancer Res** 2016;22: 6078-87
- Winkler F, Wick W. Harmful networks in the brain and beyond. **Science** 2018;359:1100-1101
- von Baumgarten L, Brucker D, Tirniceru A, Kienast Y, Grau S, Burgold S, Herms J, Winkler F. Bevacizumab has differential and dose-dependent effects on glioma blood vessels and tumor cells. **Clin Cancer Res** 2011;17:6192-205
- Kienast Y, von Baumgarten L, Fuhrmann M, Klinkert W, Goldbrunner R, Herms J, Winkler F. Real-time imaging reveals the single steps of brain metastasis formation. **Nat Med** 2010;16:116-122
- Winkler F, Kienast Y, Fuhrmann M, von Baumgarten L, Burgold S, Mitteregger G, J Herms. Imaging glioma cell invasion in vivo reveals mechanisms of dissemination and peritumoral angiogenesis. **Glia** 2009;57:1306-1315
- Winkler F, Kozin SV, Tong RT, Chae S, Booth MF, Garkavtsev I, Xu L, Hicklin DK, Fukumura D, di Tomaso E, Munn LL, RK Jain RK. Kinetics of vascular normalization by VEGFR2 blockade governs brain tumor response to radiation: Role of oxygenation, Angiopoietin-1, and matrix metalloproteinases. **Cancer Cell** 2004;6:553-563
- Garkavtsev I, Kozin SV, Chernova O, Xu L, Winkler F, Brown E, Barnett GH, RK Jain. The candidate tumour suppressor protein ING4 regulates brain tumour growth and angiogenesis. **Nature** 2005;428:328-32

PATENTS

- F Winkler, M Osswald, W Wick, J Blaes. Agents for Use in the treatment of glioma. (Inhibition von Tumor Microtubules; AZ EP 15002323.2)
- RK Jain, F Winkler; R Tong, S Kozin. Use of Angiopoietins in Tumor Therapy (20,080,193,461).