

BUNSE, LUKAS, DR. MED.

GENERAL INFORMATION



Post Doc

University Hospital Heidelberg, Department of Neurology
Im Neuenheimer Feld 400
69120 Heidelberg, Germany

B03

ACADEMIC EDUCATION & QUALIFICATION

Year(s)	Education
2009-2016	Medical School Medical School, University Heidelberg, Germany Institute of Neurology, University College London (UCL), England

SCIENTIFIC EDUCATION & QUALIFICATION

Year(s)	Education
2016	MD doctoral thesis; supervisor: Prof. Dr. Michael Platten, MD; German Cancer Research Center Heidelberg and Neurology Clinic, University Hospital Heidelberg, University Heidelberg; summa cum laude

PROFESSIONAL EXPERIENCE

Year(s)	Education
Since 2016	Postdoc at German Cancer Research Center, Clinical Cooperation Unit Neuroimmunology and Brain Tumor Immunology (Prof. Dr. Michael Platten, MD) and Neurology Clinic, University Hospital Heidelberg (Prof. Dr. Wolfgang Wick, MD)
2013-2014	Research fellow at Ann Romney Center of Neurologic Diseases, Brigham and Women's Hospital, Harvard Medical School, Boston, USA (Prof. Francisco Quintana, PhD)

OTHER QUALIFICATIONS/ROLES/RESPONSIBILITIES

Year(s)	
2018	Ruprecht-Karls-Award, University Heidelberg Foundation
2017	Württemberg Cancer Award, Young Investigator, Dres. Bayer-Foundation
2017	Dr.-Feldbausch-Foundation Award, Medical School, University Heidelberg
2015	Andreas-Zimprich Award in Neuro-Oncology, Andreas-Zimprich-Foundation
2015	Carl Duisberg-Fellow, Bayer Science & Education Foundation
2014	Dr. Holger Müller Award, Care-for-Rare Foundation
2013-2014	Research Fellow, International Academy of Life Sciences
2012-2013	Research Fellow, Heinrich F. C. Behr-Foundation
2011-2018	Fellow, MD/PhD program, University Heidelberg
2011-2016	Fellow, Cusanuswerk e.V.

SELECTED PUBLICATIONS

1. Bunse L*, Pusch S*, Bunse T*, Sahm F, Sanghvi K, Friedrich M, Alansary D, Sonner JK, Green E, Deumelandt K, Kilian M, Neftel C, Uhlig S, Kessler T, von Landenberg A, Berghoff AS, Marsh K, Steadman M, Zhu D, Nicolay B, Wiestler B, Breckwoldt MO, Al-Ali R, Karcher-Bausch S, Bozza M, Oezen I, Kramer M, Meyer J, Habel A, Eisel J, Poschet G, Weller M, Preusser M, Nadji-Ohl M, Thon N, Burger MC, Harter PN, Ratliff M, Harbottle R, Benner A, Schrimpf D, Okun J, Herold-Mende C, Turcan S, Kaulfuss S, Hess-Stumpp H, Bieback K, Cahill DP, Plate KH, Hänggi D, Dorsch M, Suvà ML, Niemeyer BA, von Deimling A, Wick W, Platten M. Suppression of antitumor T cell immunity by the oncometabolite (R)-2-hydroxyglutarate. **Nat Med** 2018;24(8):1192-1203
2. Ochs K, Ott M, Bunse T, Sahm F, Bunse L, Deumelandt K, Sonner JK, Keil M, von Deimling A, Wick W, Platten M. K27M-mutant Histone-3 as novel target for glioma immunotherapy. **Oncolimmunology** 2017;e1328340
3. Rothhammer V, Mascanfroni ID, Bunse L, Takenaka MC, Kenison J, Mayo L, Chao C, Patel B, Yan R, Blain M, Alvarez JI, Kébir H, Anandasabapathy N, Izquierdo G, Jung S, Obholzer N, Pochet N, Clish CB, Prinz M, Prat A, Antel J, Quintana FQ. Type I interferons and microbial metabolites of tryptophan modulate astrocyte activity and central nervous system inflammation via the aryl hydrocarbon receptor. **Nat Med** 2016;22(6):586-97
4. Silginer M, Burghardt I, Gramatzki D, Bunse L, Leske H, Rushing EJ, Hao N, Platten M, Weller M, Roth P. The aryl hydrocarbon receptor links integrin signaling to the TGF-beta pathway. **Oncogene** 2016; 35(25):3260-71
5. Platten M, Bunse L, Wick W, Bunse T. Concepts in glioma immunotherapy. **Cancer Immunol Immun** 2016;65(10):1269-75
6. Bunse L*, Schumacher T*, Sahm F*, Pusch S, Oezen I, Rauschenbach K, Gonzalez M, Solecki G, Osswald M, Capper D, Wiestler B, Winkler F, Herold-Mende C, von Deimling A, Wick W, Platten M. Proximity ligation assay evaluates IDH1R132H presentation in gliomas. **J Clin Invest** 2015;125, 593-606
7. Ott M*, Litzenburger U*, Rauschenbach K, Bunse L, Ochs K, Sahm F, Pusch S, Opitz CA, Blaes J, von Deimling A, Wick W, Platten M. Suppression of TDO-mediated tryptophan catabolism in glioblastoma cells by a steroid-responsive FKBP52-dependent pathway. **Glia** 2015;63(1):78-90
8. Schumacher T*, Bunse L*, Pusch S, Sahm F, Wiestler B, Quandt J, Menn O, Osswald M, Oezen I, Ott M, Keil M, Balß J, Grabowska AK, Vogler I, Diekmann J, Trautwein N, Eichmüller SB, Okun J, Stevanović S, Riemer AB, Sahin U, Friese MA, Beckhove P, von Deimling A, Wick W, Platten M. A vaccine targeting mutant IDH1 induces antitumor immunity. **Nature** 2014;512(7514):324-7
9. Schumacher T, Bunse L, Wick W, Platten M. Mutant IDH1: an immunotherapeutic target in tumors. **Oncolimmunology** 2014; 3(12):e974392
10. Weiler M*, Blaes J*, Pusch S*, Sahm F, Czabanka M, Luger S, Bunse L, Solecki G, Eichwald V, Jugold M, Hodecker S, Osswald M, Meisner C, Hielscher T, Rübmann P, Pfenning PN, Ronellenfitsch M, Kempf T, Schnölzer M, Abdollahi A, Lang F, Bendszus M, von Deimling A, Winkler F, Weller M, Vajkoczy P, Platten M, Wick W. mTOR target NDRG1 confers MGMT-dependent resistance to alkylating chemotherapy. **Proc Natl Acad Sci U S A** 2013;111(1):409-14

*Co-first authors

PATENTS

- Platten, Wick, Bunse L.: Means and methods for treating or diagnosing H3.3K27M mutant-positive cancers (UKH 14-15ERF; DKFZ, P1248)
- Platten, Wick, Bunse L., Bunse T., Sahm: Method For The Detection Of Antigen Presentation (EPA 14190538.0)