

Britta Eickholt

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Curriculum vitae

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| since 2013 | Scientific Director, Charité Centrum 02, Basic Sciences, Charité |
| since 2013 | Head, Institute of Biochemistry, Charité |
| since 2011 | Professor (W3), Cellular and Molecular Biochemistry, Charité |
| 2010 - 2011 | Professor, Molecular Neurobiology, Biomedical School, Department of Anatomy and Human Sciences, King's College London |
| 2001 - 2011 | Principle Investigator, MRC Centre for Developmental Neurobiology, King's College London |
| 2005 - 2010 | Senior lecturer, King's College London |
| 2001 - 2005 | Lecturer, King's College London |
| 2000 - 2001 | Independent research investigator fellowship, King's College London |
| 1998 - 2000 | Postdoctoral researcher, Molecular Neurobiology Group, King's College London |
| 1995 - 1998 | PhD, Biochemistry (Advisor: Prof. Pat Doherty), Guy's Hospital, United Medical and Dental School, London |
| 1993 - 1994 | Diploma thesis, Max Planck Institute for Developmental Biology, Tübingen |
| 1989 - 1993 | Degree-Biology Eberhard Karls Universität Tübingen; |
| 1988 - 1989 | Degree-Biology Heinrich Heine Universität, Düsseldorf (transferred to Tübingen) |

Research fields

Our group is active in the field of:

- Cellular and molecular mechanisms of axon guidance and neuronal circuit formation
- Temporal and spatial aspect of neuronal signaling in developmental and regenerative growth
- Signaling mechanism in neurodevelopmental disorders and the aging brain

Activities in the scientific community, honors, awards

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| 2016 | Co-organizer, EMBO workshop, 'Cell size regulation', Joachimthal, Germany |
| 2015 | Co-organizer, FEBS meeting in Berlin |
| 2013 | Organizer, EMBO workshop, 'From spatial signalling to sensing spatiality', Dead Sea, Israel |
| 2011 | Co-organizer, EMBO practical course on 'Developmental Neurobiology: From Worms to Mammals', London |
| Since 2012 | Postgraduate training co-ordinator, PhD program NeuroCure, Berlin |
| 2006-2011 | Postgraduate training co-ordinator, PhD program in Developmental Neurobiology, King's College London |

since 2002 Recipient of external grants: Deutsche Forschungsgemeinschaft, British Councils (Medical Research Council, Biotechnology and Biological Sciences Research Council) and British Charities (Wellcome Trust, Research into Aging)

Selected publications

Schrotter S, Leondaritis G, Eickholt BJ. Capillary isoelectric focusing of Akt isoforms identifies highly dynamic phosphorylation in neuronal cells and brain tissue. *J Biol Chem*. 2016.

Spinelli L, Black FM, Berg JN, Eickholt BJ, Leslie NR. Functionally distinct groups of inherited PTEN mutations in autism and tumour syndromes. *J Med Genet*. 2015;52(2):128-34.

Kreis P, Leondaritis G, Lieberam I, Eickholt BJ. Subcellular targeting and dynamic regulation of PTEN: implications for neuronal cells and neurological disorders. *Front Mol Neurosci*. 2014;7:23.

Hsia HE, Kumar R, Luca R, Takeda M, Courchet J, Nakashima J, Wu S, Goebbels S, An W, Eickholt BJ, Polleux F, Rotin D, Wu H, Rossner MJ, Bagni C, Rhee JS, Brose N, Kawabe H. Ubiquitin E3 ligase Nedd4-1 acts as a downstream target of PI3K/PTEN-mTORC1 signaling to promote neurite growth. *Proceedings of the National Academy of Sciences of the United States of America*. 2014;111(36):13205-10.

Kreis P, Hendricusdottir R, Kay L, Papageorgiou IE, van Diepen M, Mack T, Ryves J, Harwood A, Leslie NR, Kann O, Parsons M, Eickholt BJ. Phosphorylation of the actin binding protein Drebrin at S647 is regulated by neuronal activity and PTEN. *PLoS One*. 2013;8(8):e71957.

Berglund FM, Weerasinghe NR, Davidson L, Lim JC, Eickholt BJ, Leslie NR. Disruption of epithelial architecture caused by loss of PTEN or by oncogenic mutant p110alpha/PIK3CA but not by HER2 or mutant AKT1. *Oncogene*. 2013;32(37):4417-26.

Kay L, Humphreys L, Eickholt BJ, Burrone J. Neuronal activity drives matching of pre- and postsynaptic function during synapse maturation. *Nat Neurosci*. 2011;14(6):688-90.

van Diepen MT, Parsons M, Downes CP, Leslie NR, Hindges R, Eickholt BJ. MyosinV controls PTEN function and neuronal cell size. *Nat Cell Biol*. 2009;11(10):1191-6.

Cosker KE, Shadan S, van Diepen M, Morgan C, Li M, Allen-Baume V, Hobbs C, Doherty P, Cockcroft S, Eickholt BJ. Regulation of PI3K signalling by the phosphatidylinositol transfer protein PITPalpha during axonal extension in hippocampal neurons. *J Cell Sci*. 2008;121(Pt 6):796-803.

Eickholt BJ, Ahmed AI, Davies M, Papakonstanti EA, Pearce W, Starkey ML, Bilancio A, Need AC, Smith AJ, Hall SM, Hamers FP, Giese KP, Bradbury EJ, Vanhaesebroeck B. Control of axonal growth and regeneration of sensory neurons by the p110delta PI 3-kinase. *PLoS One*. 2007;2(9):e869.

Chadborn NH, Ahmed AI, Holt MR, Prinjha R, Dunn GA, Jones GE, Eickholt BJ. PTEN couples Sema3A signalling to growth cone collapse. *J Cell Sci*. 2006;119(Pt 5):951-7.