

Meet Our Editorial Board Member

Dr. Angélique Bordey, PhD

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Dr. Angélique Bordey is a neuroscientist who received a PhD Degree from the Université Louis Pasteur, Strasbourg, France. She is a tenured professor and vice-chair for research at the department of Neurosurgery, Yale.

She has been working on postnatal subventricular zone neurogenesis and more recently on cortical development in the context of Tuberous Sclerosis Complex (TSC) and focal cortical dysplasia (FCD). TSC and FCD are monogenic disorders occurring in 1/6,000 and 1/3,000 individuals with mutations in *TSC1* or *TSC2* and mTOR leading to malformations of cortical development associated with seizures and a spectrum of cognitive and psychiatric deficits. As a result, her laboratory has expertise at the crossroads of different neuroscience fields making her unique in her ability to test hypotheses and reach her goal of better understanding the cellular and molecular underpinnings of cortical defects in TSC and FCD, and the associated behavioral symptoms including cognitive and psychiatric defects. Most of our work is performed *in vivo* using a combination of sophisticated tools including *in utero* electroporation combined with EEG recordings in adult mice, patch clamp electrophysiology, translating ribosome affinity purification followed by microarray, and the use of conditional system for shRNA expression.



She has published over 95 papers, cited over 4900 times with an h-index of 37.

SELECTED PUBLICATIONS

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- [3] Feliciano, D.M.; Su, T.; Lopez, J.; Platel, J.C.; Bordey, A. Single-cell *Tsc1* knockout during murine corticogenesis generates tuber-like lesions and reduces seizure threshold without astrogliosis. *J. Clin. Investig.*, **2011**, *121*, 1596-1607. PMID: PMC3069783.
- [4] Zhang, L.; Bartley, C.M.; Gong, X.; Hsieh, L.S.; Lin, T.V.; Feliciano, D.M.; Bordey, A. MEK-ERK1/2-dependent FLNA overexpression promotes abnormal dendritic patterning in tuberous sclerosis independent of mTOR. *Neuron*, **2014**, *84*, 78-91. PMID: PMC4185153.
- [5] Hsieh, L.S.; Wen, J.H.; Claycomb, K.; Huang, Y.; Harrsch, F.A.; Naegele, J.R.; Hyder, F.; Buchanan, G.F.; Bordey, A. Convulsive seizures from experimental focal cortical dysplasia occur independently of cell misplacement. *Nat. Commun.*, **2016**, *7*, 11753.
- [6] Lin, T.V.; Hsieh, L.; Kimura, T.; Malone, T.J.; Bordey, A. Normalizing translation through 4E-BP prevents mTOR-driven cortical mislamination and ameliorates aberrant neuron integration. *Proc. Natl. Acad. Sci. U. S. A.*, **2016**, *113*, 11330-11335. PMID: PMC5056085