

Curriculum Vitae

Name:

Kanzo Suzuki, Ph.D.

Department of Pharmacology, Vanderbilt University
465 21st Avenue South, Suite 7140 MRBIII, Nashville, TN 37232
Phone: 615-343-4633
Email: kanzo.suzuki@Vanderbilt.Edu

Education:

- 2008.4-2012.3 **Doctorate degree** (Ph.D. in Medical Science)
The University of Tokyo, Graduate School of Medicine, Tokyo, Japan
Department of Neurochemistry (Mentor: Dr. Haruhiko Bito)
- 2006.4-2008.3 **Master degree** (Medical Science)
Kitasato University, Graduate School of Medical Sciences, Kanagawa, Japan
Laboratory of Molecular Signal Biology (Mentor: Prof. Kenzo Ohtsuki)
- 2002.4-2006.3 **Bachelor degree** (Hygienic Technology)
Kitasato University, School of Allied Health Sciences, Kanagawa, Japan
Major in Laboratory Medicine
Laboratory of Biochemistry (Mentor: Prof. Kenzo Ohtsuki)

Academic Appointments:

- 2018.9-present **Postdoctoral fellow**
Vanderbilt University, Nashville, TN
Department of Pharmacology (Mentor: Prof. Lisa Monteggia)
- 2014.3-2018.8 **Postdoctoral fellow**
UT Southwestern Medical Center, Dallas, TX
Department of Neuroscience (Mentor: Prof. Lisa Monteggia)
- 2014.4-2014.12 **Program specific research associate**
The University of Tokyo, Graduate School of Medicine, Tokyo, Japan
Department of Neurochemistry (Mentor: Prof. Haruhiko Bito)
- 2012.4-2014.3 **Postdoctoral fellow**
The University of Tokyo, Graduate School of Medicine, Tokyo, Japan
Department of Neurochemistry (Mentor: Prof. Haruhiko Bito)

Teaching Activities:

- 2006-2007 Teaching assistant, Kitasato University, Graduate School of Medical Sciences
Course "Laboratory in Biochemistry"

Research Program:

- 2019-2020 National Alliance for Research on Schizophrenia and Depression, Young Investigator Award
(\$35K per year, 2 years)
- 2010.4-2012.3 Japan Society for the Promotion of Science (JSPS) Research fellowship
(\$24K for salary + \$15K for research per year, 2 years)

Publications and Presentations:

• **Articles in referred journals:**

- 1) Kamijo S, Ishii Y, Horigane SI, **Suzuki K**, Ohkura M, Nakai J, Fujii H, Takemoto-Kimura S, Bito H. A critical neurodevelopmental role for L-type voltage-gated calcium channels in neurite extension and radial migration. *J. Neurosci.* 38, 5551-5566, 2018
- 2) **Suzuki K**, Nosyreva E, Hunt KW, Kavalali ET, Monteggia LM. Effects of a ketamine metabolite on synaptic NMDAR function. *Nature*, 546, E1-E3, 2017

- 3) Takemoto-Kimura S, **Suzuki K**, Horigane SI, Kamijo S, Inoue M, Sakamoto M, Fujii H, Bito H. Calmodulin kinases: essential regulators in health and disease. *J. Neurochem.*, 141, 808-818, 2017
- 4) Adachi M, Autry AE, Mahgoub M, **Suzuki K**, Monteggia LM. TrkB Signaling in Dorsal Raphe Nucleus is Essential for Antidepressant Efficacy and Normal Aggression Behavior. *Neuropsychopharmacology*, 42, 886-894. 2017
- 5) Mahgoub M, Adachi M, **Suzuki K**, Liu X, Kavalali ET, Chahrour MH, Monteggia LM. MeCP2 and histone deacetylases 1 and 2 in dorsal striatum collectively suppress repetitive behaviors. *Nat. Neurosci.*, 19, 1506-1512, 2016
- 6) Nonaka M, Kim R, Fukushima H, Sasaki K, **Suzuki K**, Okamura M, Ishii Y, Kawashima T, Kamijo S, Takemoto-Kimura S, Okuno H, Kida S, Bito H. Region-Specific Activation of CRTIC1-CREB Signaling Mediates Long-Term Fear Memory. *Neuron*, 83, 92-106, 2014
- 7) Kawashima T, Kitamura K, **Suzuki K**, Nonaka M, Kamijo S, Takemoto-Kimura S, Kano M, Okuno H, Ohki K, Bito H. Functional labeling of neurons and their projections using the synthetic activity-dependent promoter E-SARE. *Nat. Methods*. 10, 889-895. 2013
- 8) Okuno H, Akashi K, Ishii Y, Yagishita-Kyo N, **Suzuki K**, Nonaka M, Kawashima T, Fujii H, Takemoto-Kimura S, Abe M, Natsume R, Chowdhury S, Sakimura K, Worley PF, Bito H. Inverse synaptic tagging of inactive synapses via dynamic interaction of Arc/Arg3.1 with CaMKII β . *Cell*, 149, 886-898, 2012
- 9) Takemoto-Kimura S, **Suzuki K**, Kamijo S, Ageta-Ishihara N, Fujii H, Okuno H, Bito H. Differential roles for CaM kinases in mediating excitation-morphogenesis coupling during formation and maturation of neuronal circuits. *Eur. J. Neurosci.* 32, 224-230, 2010
- 10) Ageta-Ishihara N, Takemoto-Kimura S, Nonaka M, Adachi-Morishima A, **Suzuki K**, Kamijo S, Fujii H, Mano T, Blaeser F, Chatila TA, Mizuno H, Hirano T, Tagawa Y, Okuno H, Bito H. Control of cortical axon elongation by a GABA-driven Ca²⁺/calmodulin-dependent protein kinase cascade. *J. Neurosci.* 29, 13720-13729, 2009
- 11) **Suzuki K**, Kawakami F, Sasaki H, Maruyama H, Ohtsuki K. Biochemical characterization of tau protein and its associated syndapin 1 and protein kinase C ϵ for their functional regulation in rat brain. *Biochim. Biophys. Acta.* 1790, 188-197, 2009
- 12) Maruyama H, **Suzuki K**, Miyai S, Ohtsuki K. Characterization of meFucoidan as a selective inhibitor for secretory phospholipase A₂-IIA and the phosphorylation of meFucoidan-binding proteins by A-kinase *in vitro*. *Biol. Pharm. Bull.* 31,714-718, 2008
- 13) Kawakami F, **Suzuki K**, Ohtsuki K. A novel consensus phosphorylation motif in sulfatide- and cholesterol-3-sulfate-binding protein substrates for CK1 *in vitro*. *Biol. Pharm. Bull.* 31,193-200, 2008
- 14) Kawakami F, Yamaguchi A, **Suzuki K**, Yamamoto T, Ohtsuki K. Biochemical characterization of phospholipids, sulfatide and heparin as potent stimulators for autophosphorylation of GSK-3 β and the GSK-3 β -mediated phosphorylation of myelin basic protein *in vitro*. *J. Biochem.* 143, 359-367, 2008

• **Selected Presentations:**

- 1) **Suzuki K**, Nosyreva E, Hunt KW, Kavalali ET, Monteggia LM. The ketamine metabolite hydroxynorketamine impacts downstream signaling via NMDA receptor Inhibition. Neuroscience 2017, Washington DC, USA, November 2017
- 2) **Suzuki K**, Nosyreva E, Hunt KW, Kavalali ET, Monteggia LM. Elucidating eEF2 kinase function in synaptic plasticity. Gordon Research Conference (Synaptic Transmission), New Hampshire, USA, August 2016
- 3) **Suzuki K**, Takemoto-Kimura S, Horigane S, Kamijo S, Inoue M, Fujii H, Okuno H, Bito, H. Activity-dependent regulation of dendritogenesis via CLICK-III/CaMKI γ in developing cortical neurons. Neuroscience 2011, Washington DC, USA, November 2011
- 4) **Suzuki K**, Sasaki H, Kawakami F, Ohtsuki K. The biological significance of novel CK1-mediated phosphorylation of tau protein and its associated proteins in rat brain. 32nd FEBS Congress, Vienna, Austria, July 2007