

## CURRICULUM VITAE

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### **Degrees**

Ph.D. in Pharmaceutical Sciences, University of Shizuoka, March 2001

M.S. in Pharmaceutical Sciences, University of Shizuoka, March 1993

B.S. in Pharmaceutical Sciences, University of Shizuoka, March 1991

### **Work experience**

Assistant professor, University of Shizuoka, April 2015 to present

Research assistant professor, University of Shizuoka, July 2012 to March 2015

Visiting research fellow, University of Shizuoka, April 2001 to June 2012

Visiting research fellow, RIKEN, April 1999 to March 2001

Researcher, Amersham K.K., April 1993 to March 1999

### **Publications (last 5 years)**

1. Haruna Tamano, Ryusuke Nishio, Yukina Shakushi, Miku Sasaki, Yuta Koike, Misa Osawa, Atsushi Takeda: In vitro and in vivo physiology of low nanomolar concentrations of Zn<sup>2+</sup> in artificial cerebrospinal fluid. **Sci. Rep.** *in press*.
2. Atsushi Takeda, Haruna Tamano, Marie Hisatsune, Taku Murakami, Hiroyuki Nakada, Hiroaki Fujii: Maintained LTP and memory are lost by Zn<sup>2+</sup> influx into dentate granule cells, but not Ca<sup>2+</sup> influx. **Mol Neurobiol.** *in press*.
3. Yuki Fujise, Mitsuyasu Kubota, Miki Suzuki, Haruna Tamano, Atsushi Takeda: Blockade of intracellular Zn signaling in the basolateral amygdala affects object recognition memory via attenuation of dentate gyrus LTP. **Neurochem. Int.** *in press*
4. Haruna Tamano, Kazuki Ide, Paul Anthony Adlard, Ashley Ian Bush, and Atsushi Takeda: Involvement of hippocampal excitability in amyloid  $\beta$ -induced behavioral and psychological symptoms of dementia. **J. Toxicol. Sci.**, 41, 449-457 (2016).
5. Haruna Tamano, Yusuke Enya, Kazuki Ide, Atsushi Takeda: Influences of Yokukansankachimpihange on aggressive behavior of zinc-deficient mice and actions of the ingredients on excessive neural exocytosis in the hippocampus of zinc-deficient rats. **Exp Anim**, 65, 353-361 (2016).
6. Hanuna Tamano, Yuta Koike, Hiroyuki Nakada, Yukina Shakushi, and Atsushi Takeda: Significance of synaptic Zn<sup>2+</sup> signaling in zincergic and non-zincergic synapses in the hippocampus in cognition. **J. Trace Elem. Med. Biol.**, 38, 93-98 (2016).

7. Atsushi Takeda, [Haruna Tamano](#), Ryusuke Nishio, and Taku Murakami: Behavioral abnormality induced by enhanced hypothalamo-pituitary-adrenocortical axis activity under dietary zinc deficiency and its usefulness as models. **Int. J. Mol. Sci.**, 17, 1149 (2016).
8. [Haruna Tamano](#), Yukina Shakushi, Mitsugu Watanabe, Kazumi Ohashi, Chiharu Uematsu, Tadamune Otsubo, Kiyoshi Ikeda, Atsushi Takeda: Preventive effect of 3,5-dihydroxy-4-methoxybenzyl alcohol (DHMBA) and zinc, components of the pacific oyster *crassostrea gigas*, on glutamatergic neuron activity in the hippocampus. **Biol. Bull.**, 229, 282-288 (2015).
9. Atsushi Takeda, Yukina Shakushi, [Haruna Tamano](#): Modification of hippocampal excitability in brain slices pretreated with a low nanomolar concentration of  $Zn^{2+}$ . **J Neurosci. Res.**, 93, 1641-1647 (2015).
10. Atsushi Takeda, Miki Suzuki, Munekazu Tempaku, Kazumi Ohashi, [Haruna Tamano](#): Influx of extracellular  $Zn^{2+}$  into the hippocampal CA1 neurons is required for cognitive performance via long-term potentiation. **Neuroscience**, 304, 209-216 (2015).
11. Miki Suzuki, Yuki Fujise, Yuka Tsuchiya, [Haruna Tamano](#), Atsushi Takeda: Excess influx of  $Zn^{2+}$  into dentate granule cells affects object recognition memory via attenuated LTP. **Neurochem. Int.**, 87, 60-65 (2015).
12. [Haruna Tamano](#), Tatsuya Minamino, Hiroaki Fujii, Shunsuke Takada, Masaki Ando, Atsushi Takeda: Blockade of intracellular  $Zn^{2+}$  signaling in the dentate gyrus erases recognition memory via impairment of maintained LTP. **Hippocampus**, 25, 952-962 (2015).
13. Atsushi Takeda, Masatoshi Nakamura, Hiroaki Fujii, Chiharu Uematsu, Tatsuya Minamino, Paul Anthony Adlard, Ashley Ian Bush, [Haruna Tamano](#): Amyloid  $\beta$ -mediated  $Zn^{2+}$  influx into dentate granule cells transiently induces a short-term cognitive deficit. **PLoS One**, 9, e115923 (2014).
14. [Haruna Tamano](#), Kotaro Fukura, Miki Suzuki, Kazuhiro Sakamoto, Hidehiko Yokogoshi, Atsushi Takeda: Advantageous effect of theanine intake on cognition. **Nutritional Neurosci.**, 17, 279-83 (2014).
15. Atsushi Takeda, [Haruna Tamano](#), Taisuke Ogawa, Shunsuke Takada, Masatoshi Nakamura, Hiroaki Fujii and Masaki Ando: Intracellular  $Zn^{2+}$  signaling in the dentate gyrus is required for object recognition memory. **Hippocampus**, 24, 1404-1412 (2014).
16. [Haruna Tamano](#), Kotaro Fukura, Miki Suzuki, Kazuhiro Sakamoto, Hidehiko Yokogoshi, Atsushi Takeda: Preventive effect of theanine intake on stress-induced impairments of hippocampal long-term potentiation and recognition memory. **Brain Res. Bull.**, 95, 1-6 (2013).
17. Atsushi Takeda, Masashi Iida, Masaki Ando, Masatoshi Nakamura, [Haruna Tamano](#) and Naoto Oku: Enhanced susceptibility to spontaneous seizures of noda epileptic rats by loss of synaptic  $Zn^{2+}$ . **PLoS One**, 8, e71372 (2013).
18. Atsushi Takeda, Haruka Iwaki, Kazuki Ide, [Haruna Tamano](#) and Naoto Oku: Therapeutic effect of Yokukansan on social isolation-induced aggressive behavior of zinc-deficient and pair-fed mice. **Brain Res. Bull.**, 87, 551-5 (2012).
19. Atsushi Takeda, [Haruna Tamano](#), Taisuke Ogawa, Shunsuke Takada, Masaki Ando, Naoto Oku and Mitsugu Watanabe: Significance of serum glucocorticoid and chelatable zinc in depression and cognition in zinc deficiency. **Behav. Brain Res.**, 226, 259-64 (2012).
20. Atsushi Takeda, Miki Suzuki, [Haruna Tamano](#), Shunsuke Takada, Kazuki Ide and Naoto Oku: Involvement of glucocorticoid-mediated  $Zn^{2+}$  signaling in attenuation of hippocampal CA1 LTP by acute stress. **Neurochem. Int.**, 60, 394-399 (2012).
21. Atsushi Takeda, [Haruna Tamano](#), Miki Suzuki, Kazuhiro Sakamoto, Naoto Oku, Hidehiko Yokogoshi: Unique induction of CA1 LTP components after intake of theanine, an amino acid in tea leaves and its effect on stress response. **Cell. Mol. Neurobiol.**, 32, 41-48 (2012).