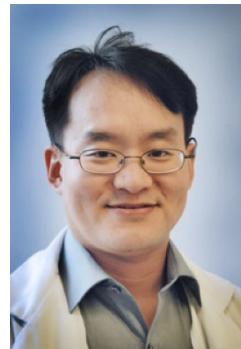


# Ja Wook Koo

## Curriculum Vitae



### **Personal:**

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### **Education and Training:**

2002-2008 PhD, Department of Psychology, Yale University, New Haven, Connecticut, USA  
(Area of specialization: Behavioral Neuroscience/ Molecular Psychiatry)  
Supervisor: Ronald S. Duman, PhD  
2000-2002 MS, School of Biological Sciences, Seoul National University, Seoul, Korea  
Supervisor: Yoo-Hun Suh, MD, PhD  
1993-2000 BS, School of Biological Sciences, Seoul National University, Seoul, Korea  
Supervisor: Jae Chun Choe, PhD

### **Professional Positions:**

2019-present Director, Research strategy office  
Korea Brain Research Institute, Deagu, Korea  
2019-2019 Group leader , Emotion, cognition & Behavior Research Group  
Director, Brain Research Policy Center  
Korea Brain Research Institute, Deagu, Korea  
2015-present Principal Investigator, Behavioral Neuroepigenetics Lab  
Department of Neural Development and Disease,  
Korea Brain Research Institute, Deagu, Korea  
2015-present Adjunct Professor, Brain Science Department, Daegu Gyeongbuk Institute of Science and  
Technology, Daegu, Korea.  
2008-2015 Post-doctoral Fellow, Fishberg Department of Neuroscience, Icahn School of Medicine at  
Mount Sinai, New York, USA. Supervisor: Eric J. Nestler, MD, PhD

### **Honors and awards:**

2011 Young Investigators Travel Award, NIDA  
2006 University Dissertation Fellowship, Graduate School of Arts and Sciences, Yale University  
2001 Research Assistantship, National Creative Research Initiative Centre for AD, Seoul National University  
2000 Graduate Fellowship, College of Natural Sciences, Seoul National University

### **Publications:**

1. Xu S, Park M, Kang UG\*, Choi JS\*, **Koo JW\*** (2021) Problematic Use of Alcohol and Online Gaming as Coping Strategies during the COVID-19 Pandemic: A Mini Review. *Front Psychiatry* (in press)
2. Park G, Ryu C, Kim S, Jeong SJ, **Koo JW**, Lee YS, Kim SJ (2021) Social isolation impairs the prefrontal-nucleus accumbens circuit subserving social recognition in mice. *Cell Rep* 35(6):109104
3. Kim BM, Lee J, Choi AR, Chung SJ, Park M, **Koo JW**, Kang UG, Choi JS (2021) Event-related brain response to visual cues in individuals with Internet gaming disorder: relevance to attentional bias and decision-making. *Transl Psychiatry* 11(1):258
4. **Koo JW**, Wohleb ES (2021) How stress shapes neuroimmune function: implications for the neurobiology of psychiatric disorders. *Biol Psychiatry* (in press)
5. Xu S, **Koo JW\***, Kang UG\* (2021) Comparison of the sensitizing effects of cocaine and ethanol on histone deacetylase isoforms in the rat brain. *Neuroreport* 32(6):423-430 \*contributed equally
6. Choi T-Y\*, Choi YP, **Koo JW\*** (2020) Mental disorders linked to crosstalk between the gut microbiome and the brain. *Exp Neurobiol* 29(6):403-416 \*contributed equally
7. Lee J, Ribeiro E, Kim J, Ko B, Kronman HG, Jeong YH, Kim JK, Janak PH, Nestler EJ\*, **Koo JW\***, Kim J-H\* (2020) Dopaminergic regulation of nucleus accumbens cholinergic interneurons demarcates susceptibility to cocaine addiction. *Biol Psychiatry* 88(10):746-757 \*contributed equally

8. Joo B, **Koo JW\***, S Lee\* (2020) Posterior parietal cortex mediates fear renewal in a novel context. *Molecular Brain* 13:16 \*contributed equally
9. Xu S, Jeong SJ, Li G, **Koo JW\***, Kang UG\* (2020) Repeated ethanol exposure influences key enzymes in cholesterol and lipid homeostasis via the AMPK pathway in the rat prefrontal cortex. *Alcohol* 85:49-56 \*contributed equally
10. **Koo JW\***, Chaudhury D\*, Han MH, Nestler EJ (2019) Role of Mesolimbic Brain-Derived Neurotrophic Factor in Depression. *Biol Psychiatry* 86(10):738–748. \*contributed equally
11. Lee J\*, Nam YP\*, Joo B\*, Han K, Cho H, Koh YH, **Koo JW**, Kim J#, We Y#, Hoe H#(2019) ALWPs improve cognitive function and regulate A $\beta$  plaque and tau hyperphosphorylation in a mouse model of Alzheimer's disease. *Front Mol Neurosci* 12:192 \*,#contributed equally
12. Labonté B\*, Jeong YH\*, Engmann O, Parise E, Issler O, Nestler EJ, **Koo JW** (2019) Gadd45b mediates depressive-like role through DNA demethylation. *Sci Rep* 9 (1):4615. \*contributed equally
13. Ribeiro EA, Nectow AR, Pomeranz LE, Ekstrand MI, **Koo JW**, Bagot RC, Nestler EJ (2019) Viral Labeling of Neurons Synaptically Connected to Nucleus Accumbens Somatostatin Interneurons. *Plos One* 14(3):e0213476
14. Jeong SJ, Lee IY, Jun BO, Ryu YJ, Sohn JW, Kim SP, Woo CW, **Koo JW**, Cho II, Oh U, Kim K, Suh PG (2019) Korea Brain Initiative: Emerging Issues and Institutionalization of Neuroethics. *Neuron* 101(3):390-393
15. Lee J\*, Joo B\*, Nam JH, Lee W, Nam HY, Seo Y, Kang H, Cho H, Jang YP, Kim J, We Y#, **Koo JW**#, Hoe H# (2018) An aqueous extract of herbal medicine ALWPs enhances cognitive performance and inhibits LPS-induced neuroinflammation via FAK/NF- $\kappa$ B signaling pathways. *Front Aging Neurosci* 10:269. \*,#contributed equally
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17. Ribeiro E, Salery M, Scarpa JS, Calipari ES, Hamilton PJ, Ku S, Kronman HG, Purushothaman I, Juarez B, Heshmati M, Doyle MA, Lardner CK, Burek D, Strat A, Pirpinias S, Mouzon E, Han MH, Neve RL, Bagot RC, Kasarskis A, **Koo JW**, Nestler EJ (2018) Transcriptional and Physiological Adaptations in Nucleus Accumbens Somatostatin Interneurons That Regulate Behavioral Responses to Cocaine. *Nat Commun* 9(1):3149
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20. **Koo JW**, Labonte B, Engmann O, Calipari ES, Lorsch Z, Juarez B, Friedman AK, Walsh JJ, Han MH, Nestler EJ (2016). Essential Role of Mesolimbic Brain-Derived Neurotrophic Factor in Chronic Social Stress-Induced Depressive Behaviors. *Biol Psychiatry* 80(6):469-478
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#### **Patents:**

1. **Koo JW**, Nestler EJ (2018) A BDNF (Brain-derived neurotrophic factor) overexpressed animal model for depression disorder and a method of producing thereof. Korea Patent #10-1884650, filed Oct. 2, 2016 and issued July 18, 2018
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#### **Professional Activities:**

- 2018 Mol. & Cell. Biol. News Committee, KSMCB
- 2018 Planning Committee Coordinator, KSBNS
- 2015-2016 Academic Affairs Committee Coordinator, KSBNS
- 2008-2015 Association for Psychological Science
- 2002-2015 Association of Korean Neuroscientists
- 2000-present Society for Neuroscience