Sora Shin

Fralin Biomedical Research Institute at VTC,
Department of Human Nutrition, Foods and Exercise,
College of Agriculture and Life Sciences, Virginia Tech
Assistant Professor
Phone: (858) 349-8531
E-mail: srshin@vtc.vt.edu

EDUCATION

2007-2014 **Yonsei University College of Medicine** Seoul, South Korea
Ph.D. in Medical Science, Thesis advisor: Dong Goo Kim and Chul Hoon Kim
- Thesis: Metabotropic glutamate receptor 5 in the nucleus accumbens promotes resilience in various animal models of stress: *in vivo* assessment adopting knockout mice and viral mediated gene transfer

2005-2007 **Sungkyunkwan University College of Medicine** Suwon, South Korea
M.S. in Department of Physiology, Thesis advisor: Sungkwon Chung
- Thesis: Regulation of intracellular Ca^{2+} by Alzheimer's disease associated presenilin

2001-2004 **Chung-Ang University** Seoul, South Korea
Bachelor of Biological Science
- Early graduation in undergraduate program

RESEARCH AND PROFESSIONAL EXPERIENCE

2015-2020 **Postdoctoral Fellow with Dr. Byungkook Lim** University of California, San Diego
- Project: Dopamine receptor 3 signaling in the lateral septum underlying early social deprivation-induced social dysfunction.
- Skills: Optogentics, *In vivo* Ca^{2+} imaging, Behavioral tests, Viral tracing strategies, Pharmacological modulation.

2004-2005 **Research Assistant with Dr. Sungkwon Chung** Sungkyunkwan University
- Project: Modulation of transient receptor potential melastatin related 7 channel by presenilins.
- Skills: Intracellular Ca^{2+} measurement, Cell viability assay, Aβ peptide assay, Western blotting.

GRANTS AND FELLOWSHIPS

2018-2019 **Kavli Institute for Brain and Mind (KIBM)**
Innovative Research Grant Award, #2018-1493 (Sora Shin, PI)

2016-2018 **Tobacco-related disease research program (TRDRP)**
Postdoctoral Fellowship Award, #25FT-0007 (Sora Shin, PI)

HONORS AND FELLOWSHIPS

2005 Korean Brain Society Award for excellent poster presentation

2006 Korean Society for Brain and Neural Science Award for excellent poster presentation

2006 Annual Research Fair of Sungkyunkwan University Award for excellent presentation

2012 Korean Society for Brain and Neural Science Award for excellent poster presentation

2013 Korean Society for Brain and Neural Science Award for excellent poster presentation

2013 Korean Society of Pharmacology Award for excellent poster presentation

2016 Postdoctoral fellowship award, Tobacco-related disease research program

2018 Travel Award for Stress Neurobiology Workshop

2018 Kavli Institute for Brain and Mind (KIBM) innovative research grant award

PATENT

(Pending) "The novel method for the treatment of social dysfunction associated with autism spectrum disorder (ASD) by activating dopamine receptor 3 (Drd3) signaling", Lim BK, **Shin S**, UCSD Docket Number SD 2018-177

SOCIETY MEMBERSHIP

Since 2009 Society for Neuroscience

Since 2018 International Behavioral Neuroscience Society

TEACHING EXPERIENCE

2013-2015 **Teaching Assistant, Yonsei University College of Medicine**
Undergraduate course in Department of Neuropharmocology

2015-2018 **Mentoring, University of California, San Diego**

- Rama Pranadinata, Undergraduate
- Mina N Askar, Undergraduate
- Jessica Chang, Undergraduate
- Christopher Lee, Ph.D. student
- Robert Gallant, Ph.D. student

POSTER PRESENTATIONS AND PUBLIC ABSTRACTS (SELECTED)

October 2009 J. JANG, **S. R. SHIN**, J.-H. KIM. Psychostimulants decrease the phosphorylation levels of Akt in the nucleus accumbens in a time-dependent manner. Society of Neuroscience, 39th Annual Meeting, Chicago, IL.

November 2017 **S. SHIN**, H. PRIBIAG, V. LILASCHAROEN, D. KNOWLAND, X.-Y. WANG, B. LIM. Drd3 signaling in the lateral septum mediates early life stress-induced social dysfunction. Society of Neuroscience, 47th Annual Meeting, Washington, DC.

November 2018 **S. SHIN**, H. PRIBIAG, V. LILASCHAROEN, D. KNOWLAND, X.-Y. WANG, B. LIM. Drd3 signaling in the lateral septum mediates early life stress-induced social dysfunction. Society of Neuroscience, 48th Annual Meeting, San Diego, CA.

PUBLICATIONS

Shin S, Pribiag H, Lilascharoen V, Knowland D, Wang XY, Lim BK. (2018). Drd3 signaling in the lateral septum mediates early life stress-induced social dysfunction. ***Neuron,*** 97(1):195-208

Knowland D, Lilascharoen V, Pacia CP, **Shin S**, Wang EH, Lim BK. (2017). Distinct ventral pallidal neural populations mediate separate symptoms of depression. ***Cell,*** 170(2):284-297.

Shin S*, Kwon O*, Kang JI, Kwon S, Oh S, Choi J, Kim CH, Kim DG. (2015). mGluR5 in the nucleus accumbens is critical for promoting resilience to chronic stress. ***Nature Neuroscience,*** 18(7):1017-24.
*Contributed equally to this work

Kwon O, Kang ES, Kim I, **Shin S**, Kim M, Kwon S, Oh SR, Ahn YS, Kim CH. (2014). GPR30 mediates anorectic estrogen-induced STAT3 signaling in the hypothalamus. ***Metabolism,*** 63(11):1455-61.

Choi JY, **Shin S**, Lee M, Jeon TJ, Seo Y, Kim CH, Kim DG, Yi CH, Lee K, Choi TH, Kang JH, Ryu YH. (2014). Acute physical stress induces the alteration of the serotonin 1A receptor density in the hippocampus. ***Synapse,*** 68(8):363-8.

Oh HG, Chun YS, Kim Y, Youn SH, **Shin S**, Park MK, Kim TW, Chung S. (2012). Modulation of transient receptor potential melastatin related 7 channel by presenilins. ***Developmental Neurobiology***, 72(6):865-77.

Chun YS, **Shin S**, Kim Y, Cho H, Park MK, Kim TW, Voronov SV, Di Paolo G, Suh BC, Chung S. (2010). Cholesterol modulates ion channels via down-regulation of phosphatidylinositol 4,5-bisphosphate. ***Journal of Neurochemistry,*** 112(5):1286-94.

Kim WY, **Shin SR**, Kim S, Jeon S, Kim JH. (2009). Cocaine regulates ezrin-radixin-moesin proteins and RhoA signaling in the nucleus accumbens. ***Neuroscience,*** 163(2):501-5.