Juyoun Yoo

Ph.D. Candidate
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EDUCATION

Ph.D. candidate in Neuroscience	**University of California, Los Angeles, United States** Neuroscience Interdepartmental Program (NSIDP) Advisor: S. Lawrence Zipursky, PhD	**2015 – present**
M.S. in Biological Sciences	**Seoul National University, Seoul, South Korea** Department of Biological Sciences Advisor: Bong-Kiun Kaang, PhD	**2012 - 2014**
B.S. in Life Sciences	**Ewha Womans University, Seoul, South Korea** Major: Life Sciences / Minor: Cognitive Science	**2008 - 2012**

RESEARCH EXPERIENCE

Graduate Student	**University of California, Los Angeles** *Larry Zipursky Lab* I study neural circuit formation and the molecular mechanisms underlying synaptic specificity. I use single-cell RNA sequencing to explore gene expression patterns in developing nervous system, and use imaging techniques such as confocal microscopy in drosophila visual system.	**Apr 2016 - Present**
Graduate Rotation Student	**University of California, Los Angeles** *Carlos Portera-Cailliau Lab* Performed Intrinsic Optical Imaging through cranial window over barrel cortex to test various conditions of isofluorene anesthesia effect on piezo induced cortical activity in mice.	**Jan 2016- Mar 2016**
Intern Researcher	**Korea Institute of Science and Technology (KIST)** **Center for Functional Connectomics, Seoul, South Korea** *George J. Augustine Lab* Performed primary hippocampal neuron autapse culture of synapsin triple knock-out mice for *in vitro* electrophysiology.	**Jun 2014- Dec 2014**
Graduate Researcher	**Seoul National University, Seoul, South Korea** *Bong-Kiun Kaang Lab* Studied behaviors of autism spectrum disorder model mice Shank2 KO and CD38 KO. Tested learning&memory impairment and social behavior deficits. M.S. Thesis: Social Behavior Assay in Mouse model of Autism Spectrum Disorder.	**Mar 2012 – Feb 2014**
Undergraduate Researcher	**Seoul National University, Seoul, South Korea** *Bong-Kiun Kaang Lab* Performed mouse behavioral experiments to test learning and memory functions of hippocampus.	**Jun 2011- Sep 2011**

Undergraduate	**Ewha Womans University, Seoul, South Korea**	**Dec 2010-**
Rotation	*Woojin Jeong lab*	**Feb 2011**
Student	Participated in peroxiredoxins J14 derivative to test hyperoxidation reactions.	

PUBLICATIONS

Transcriptional programs of circuit assembly in the Drosophila visual system
Kurmangaliyev Y, **Yoo J**, Valdes-Aleman J, Sanfilippo P, Zipursky SL.
Neuron. 2020 Dec 23;108(6):1045-1057.e6. doi:10.1016/j.neuron.2020.10.006

Modular transcriptional program defines neuron subtype-specific connectivity.
Kurmangaliyev Y*, **Yoo J***, LoCascio SL*, Zipursky SL.
eLife. 2019 Nov 5;8:e50822 doi: 10.7554/eLife.50822
*equal contribution

Interactions between the Ig-Superfamily proteins DIP-α and Dpr6/10 Regulate Assembly of Neural Circuits.
Xu S, Xiao Q, Cosmanescu F, Sergeeva AP, **Yoo J**, Lin Y, Katsamba PS, Ahlsen G, Kaufman J, Linaval NT, Lee PT, Bellen HJ, Shapiro L, Honig B, Tan L, Zipursky SL.
Neuron. 2018 Nov 14. pii: S0896-6273(18)30992-9. doi: 10.1016/j.neuron.2018.11.001

PKCα-mediated phosphorylation of LSD1 is required for presynaptic plasticity and hippocampal learning and memory.
Lim CS, Nam HJ, Lee J, Kim D, Choi JE, Kang SJ, Kim S, Kim H, Kwak C, Shim KW, Kim S, Ko HG, Lee RU, Jang EH, **Yoo J**, Shim J, Islam MA, Lee YS, Lee JH, Baek SH, Kaang BK.
Sci Rep. 2017 Jul 7;7(1):4912. doi: 10.1038/s41598-017-05239-7

The role of nuclear PKMζ in memory maintenance.
Ko HG, Kim JI, Sim SE, Kim T, **Yoo J**, Choi SL, Baek SH, Yu WJ, Yoon JB, Sacktor TC, Kaang BK.
Neurobiol Learn Mem. 2016 Jun 14. pii: S1074-7427(16)30085-5. doi: 10.1016/j.nlm.2016.06.010

A transducible nuclear/nucleolar protein, mLLP, regulates neuronal morphogenesis and synaptic transmission.
Yu NK, Kim HF, Shim J, Kim S, Kim DW, Kwak C, Sim SE, Choi JH, Ahn S, **Yoo J**, Choi SL, Jang DJ, Lim CS, Lee YS, Kang C, Choi SY, Kaang BK.
Sci Rep. 2016, Mar 10;6:22892, doi: 10.1038/srep22892

Impaired learning and memory in CD38 null mutant mice
Kim S, Kim T, Lee HR, Jang EH, Ryu HH, Kang M, Rah SY, **Yoo J**, Lee B, Kim JI, Lim CS, Kim SJ, Kim UH, Lee YS, Kaang BK.
Mol Brain. 2016 Feb 9, doi: 10.1186/s13041-016-0195-5

Shank Mutant Mice as an Animal Model of Autism
Yoo J, Bakes J, Bradley C, Collingridge GL, Kaang BK.
Philos Trans R Soc Lond B Biol Sci. 2013 Dec 2; 369(1633):20130143, doi: 10.1098/rstb.2013.0143

CONFERENCE PRESENTATIONS

Cold Spring Harbor Laboratory Meeting: Neurobiology of Drosophila (Poster) **2021**
Title: Cell type and subcellular synaptic specificity in the visual system

Society for Neuroscience, Chicago, United States (Oral) **2019**
Nanosymposium: Molecular Mechanisms of Synaptogenesis and Connectivity
Title: Modular transcriptional programs define neuron subtype-specific connectivity

Society for Neuroscience, San Diego, United States (Poster) **2013**
Title: Disrupted social behaviors of CD38 Knock-out mice assayed via three-chamber test and pup retrieval test

COURSE/WORKSHOP PARTICIPATIONS

Janelia Junior Scientist Workshop on Mechanistic Cognitive Neuroscience	Janelia Research Campus, VA, United States (Online)	**2021**
Gene Regulatory Networks for Development course	Marine Biology Laboratory, Woods Hole, MA, United States.	**2018**

HONORS AND SCHOLARSHIPS

Research Fellowship	UCLA Graduate Division Dissertation Year Fellowship	**2020**
Graduate Student Travel Award	UCLA Brain Research Institute and Semel Institute for Neuroscience & Human Behavior.	**2019**
Student Research Fellowship	Brain Korea 21 Fellowship. Seoul National University, Seoul, South Korea	**2012 - 2013**
Student Poster Award	Undergraduate Lab Rotation Research Program. Ewha Womans University Korea	**2011**
Academic Excellence Scholarship	School of Natural Science Scholarship. Ewha Womans University, Seoul South Korea	**2011**
Honors Scholarship	Department of Life Sciences, Ewha Womans University, Seoul, South Korea	**2008 - 2009**
Dean's List	Department of Life Sciences, Ewha Womans University, Seoul, South Korea	**2008**

TEACHING EXPERIENCE

Graduate Course TA	M201 Cell, Developmental and Molecular Neurobiology UCLA	**2018**
Research TA	Korea Science Academy of KAIST, Busan and Seoul, South Korea (Science high school for gifted students) Research & Education Program. 1st prize in National Highschool R&E Awards.	**2013**
Undergraduate Lab TA	Seoul National University, Seoul, South Korea 010.322 Experimental Biology I	**2013**

References

S. Lawrence Zipursky, Ph.D.
Jerome J. Belzer Chair of Medical Research
Distinguished Professor of Biological Chemistry
Investigator, Howard Hughes Medical Institute
Chair, UCLA Neuroscience Theme
David Geffen School of Medicine
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Mark A. Frye, Ph.D.
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