# Lyle Kingsbury

**EDUCATION** 

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Ph.D.	University of California Los Angeles Neuroscience	2021
B.A.	Hunter College — City University of New York Biological Sciences (Bioinformatics concentration)	2015
	Eugene Lang College — The New School Interdisciplinary Science	2011 - 2012
Harol	ORS AND AWARDS  d M. Weintraub Graduate Student Award al award recognizing outstanding achievement during graduate study in the biologica	2021 l sciences
	Samuel Eiduson Student Lecture Award al award given to one UCLA neuroscience PhD student for outstanding thesis work	2020
UCLA	Brain Research Institute & Semel Institute SfN Travel Award	2019
F31 R	uth L. Kirschstein National Research Service Award (NRSA)	2018 - 2021
T32 N	IINDS/NIH Training Program in Neural Microcircuits	2017 - 2018
. 1.	vement Awards for College Scientists (ARCS) Fellowship	2016 - 2019

Most Outstanding Research Award	2014
Best poster presentation at the Hunter College Undergraduate research conference	

2015

Hunter College Thomas Hunter Honors Program 2013 - 2015

# RESEARCH EXPERIENCE

**Hunter College Else Seringhaus Award in Biological Sciences** 

Given for excellence in biology research and coursework

# Doctoral Research (UCLA) 2016 - 2021

**Advisor:** Dr. Weizhe Hong

**Projects:** Studied cortical encoding of social sensory cues and control of social behavior using in vivo microendocscope calcium imaging and optogenetic manipulations. Studied inter-brain neural dynamics during social interaction using dual calcium imaging in freely behaving animals.

# **Undergraduate Research (Hunter College CUNY)**

**Advisor:** Dr. Carmen Melendez-Vasquez

**Projects:** Studied the cellular mechanisms of myelin formation in glial cells using analysis of gene expression, localization of transcription factors, and cell morphology.

#### NSF TECBio REU (University of Pittsburgh)

2014 Summer

**Advisor:** Dr. James Faeder

**Projects:** Constructed biophysical models to investigate the mechanisms underlying antigen recognition in T-cells and used network models to explore how T-cell receptor clustering regulates antigen search efficiency.

# NSF CMACS with Dr. Nancy Griffith (Lehman College CUNY)

2014 Winter

Advisor: Dr. Nancy Griffith

**Projects:** Developed and expanded computational models of cancer signaling pathways and studied the effects of oncogenic point mutations on cell proliferation.

#### **PUBLICATIONS**

- **Kingsbury, L.\***, Huang, S.\*, Wang, J., Gu, K., Golshani, P., Wu, Y. E., & Hong, W. (2019). Correlated Neural Activity and Encoding of Behavior across Brains of Socially Interacting Animals. *Cell*, *178*(2), 429-446.e16. (\*Equal Contribution)
  - -Highlighted by Omer, Zilkha, and Kimchi. Cell. (2019) 178, 272-274
- **Kingsbury, L.\***, Huang, S.\*, Raam, T., Ye, L. S., Wei, D., Hu, R., Ye, L. & Hong, W. (2020). Cortical Representations of Conspecific Sex Shape Social Behavior. *Neuron*. (\*Equal Contribution)
- Kingsbury, L. & Hong, W. A Multi-Brain Framework for Social Interaction. (2020). *Trends in Neurosciences*.
- Wu, Y.E., Dang, J., **Kingsbury, L.,** Zhang, M., Sun, F., Hu, R.K., Hong, W. (2021). Neural Control of Affiliative Touch in Prosocial Interaction. *Nature*.
- Urbanski, M. M., **Kingsbury, L.**, Moussouros, D., Kassim, I., Mehjabeen, S., Paknejad, N., & Melendez-Vasquez, C. V. (2016). Myelinating glia differentiation is regulated by extracellular matrix elasticity. *Scientific Reports*, *6*(1), 33751.
- Lin, A., Vajdi, A., Kushan-Wells, L., Helleman, G., Hansen, L. P., Jonas, R. K., Jalbrzikowski M., **Kingsbury, L.**, Raznahan, A., Bearden, C. E. (2020). Reciprocal copy number variations at 22q11.2 produce distinct and convergent neurobehavioral impairments relevant for Schizophrenia and Autism Spectrum Disorder. *Biological Psychiatry*.

#### **PRESENTATIONS**

**Kingsbury, L.**, Huang, S., Wang, J., Gu, K., Golshani, P., Wu, Y.E., and Hong, W. "Interbrain Neural Dynamics in Socially Interacting Animals" *Computational and Systems Neuroscience (Cosyne)*. (2020)

**Kingsbury, L.**, Huang, S., Wang, J., Gu, K., Golshani, P., Wu, Y.E., and Hong, W. "Neural Synchronization across Brains of Socially Interacting Animals" *Society for Neuroscience*. (2019)

2013 - 2015

**Kingsbury, L.,** Hong, W. "Encoding of Social Information in Cortical Ensembles" *Conference on Collective Computation in Biological Systems, Janelia Research Campus.* (2018)

**Kingsbury, L.**, Hong, W. "Neural Mechanisms of Social Behavior" *Computational Neuroscience Workshop, RIKEN Brain Science Institute.* (2017)

**Kingsbury, L.**, Hong, W. "Neural Mechanisms of Social Behavior" *Neural Microcircuits Symposium, UCLA*. (2017)

**Kingsbury, L.,** Urbanski, M.M., Mehjabeen , S., Melendez-Vasquez C.V. "Mechanical cues from extracellular matrix regulate Olig1 localization in oligodendrocytes." *Undergraduate Research Conference, Hunter College.* (2014)

**Kingsbury, L.**, Faeder, J.R., Anikeeva, N. "Understanding antigen recognition in T-cells using a rule-based model." *Summer Research Symposium, Duquesne University*. (2014)

## **TEACHING EXPERIENCE**

# Systems Neuroscience (Neuro M205 — UCLA)

Winter 2020

Teaching assistant for a graduate systems neuroscience course covering sensory processing and perception, computational models of learning and memory, cognitive and executive functions, and motor control.

## Neurophysiology (Neuro M202 — UCLA)

Fall 2017

Teaching assistant for a graduate neurophysiology course covering electrical signaling in neurons, ion homeostasis, computational models of action potentials, synaptic transmission, and sensory perception.

#### Neuroscientific Methods (Neuro 210B — UCLA)

Winter 2017

Teaching assistant for a seminar style graduate neuroscience methods course covering the basis and applications of modern neuroscientific techniques.

#### Functional Neuroanatomy (Neuro 201 — UCLA)

Fall 2016

Teaching assistant for an undergraduate neuroanatomy course. Developed and lead laboratory exercises, course materials, and group lessons.