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Professor

Department of Neurobiology | David Geffen School of Medicine
Department of Biological Chemistry | David Geffen School of Medicine
Department of Bioengineering | Samueli School of Engineering
University of California, Los Angeles

• EDUCATION

2012–2015	Postdoctoral Fellow	California Institute of Technology
2006–2012	Ph.D. in Neuroscience	Stanford University
2002–2006	B.S. in Biology	Tsinghua University

• PROFESSIONAL EXPERIENCES

2023–now	Professor Department of Neurobiology David Geffen School of Medicine Department of Biological Chemistry David Geffen School of Medicine Department of Bioengineering Samueli School of Engineering University of California, Los Angeles
2020–2023	Associate Professor Department of Neurobiology David Geffen School of Medicine Department of Biological Chemistry David Geffen School of Medicine Department of Bioengineering Samueli School of Engineering University of California, Los Angeles
2016–2020	Assistant Professor Department of Neurobiology David Geffen School of Medicine Department of Biological Chemistry David Geffen School of Medicine University of California, Los Angeles

• PROFESSIONAL ACTIVITIES

2022–now	Associate Editor, <i>Science Advances</i>
2016–now	Ad hoc reviewer for <i>Nature</i> , <i>Cell</i> , <i>Science</i> , <i>Neuron</i> , <i>Nature Neuroscience</i> , <i>Science Advances</i> , <i>Nature Communications</i> , <i>eLife</i> , <i>Cell Reports</i> , <i>Journal of Neuroscience</i> , etc.

• HONORS AND AWARDS

- 2023 H. W. Magoun Distinguished Lectureship, UCLA
- 2023 National Finalist of the Blavatnik National Awards for Young Scientists
- 2021 John H. Walsh Young Investigator Research Prize, UCLA David Geffen School of Medicine
- 2021 Keck Foundation Junior Faculty Award, W. M. Keck Foundation
- 2020 Young Investigator Award, Society for Neuroscience
- 2020 Vallee Scholar Award, The Vallee Foundation
- 2020 Mallinckrodt Scholar Award (the 69th Mallinckrodt Scholar), Edward Mallinckrodt, Jr. Foundation
- 2019 Early Career Award, Society for Social Neuroscience
- 2019 McKnight Scholar Award, McKnight Foundation
- 2019 Kavli Fellow of Frontiers of Science, National Academy of Sciences
- 2018 Packard Fellowship in Science and Engineering, The David & Lucile Packard Foundation
- 2018 Klingenstein-Simons Fellowship Award, Klingenstein Funds and Simons Foundation
- 2017 Searle Scholar Award, Searle Scholars Program
- 2017 Sloan Research Fellowship, Alfred P. Sloan Foundation
- 2016 NARSAD Young Investigator Award, Brain and Behavior Research Foundation
- 2013 Category Winner in Developmental Biology, *Science* & SciLifeLab Prize for Young Scientists
- 2013 Larry Sandler Memorial Award, Genetics Society of America
- 2013 Helen Hay Whitney Fellowship
- 2012 Larry Katz Memorial Lectureship, Cold Spring Harbor Meeting of Neural Circuits

• SPECIAL LECTURESHIP

- 2023 H. W. Magoun Distinguished Lecture, University of California, Los Angeles
- 2023 John H. Walsh Lecture, University of California, Los Angeles
- 2022 Keynote Lecture, Annual Retreat of Department of Neurobiology and Behavior, University of California, Irvine
- 2019 Early Career Award Lecture, Society for Social Neuroscience Annual Meeting, Chicago, IL
- 2013 Larry Sandler Memorial Lecture, the 52nd annual Drosophila Research Conference, Washington DC
- 2012 Larry Katz Memorial Lecture, Cold Spring Harbor Conference on Neuronal Circuits, New York

• SELECT PUBLICATIONS

– Research articles • After 2016 –

1. **Cortical regulation of helping behavior toward others in pain.** *Nature*. 626, 136–144
Zhang M, Wu YE, Jiang M, Hong W. (2024)
(Featured by Zhang, Chen, and Hu. *Trends in Cognitive Sciences*. 28, 281-283)
2. **Neural control of affiliative touch in prosocial interaction.** *Nature*. 599, 262–267
Wu YE, Dang J, Kingsbury L, Zhang M, Sun F, Hu RK, Hong W. (2021)
(Featured by Ranade. *Nature Neuroscience*. 24, 1640)
3. **An amygdala-to-hypothalamus circuit for social reward.** *Nature Neuroscience*. 24, 831–842
Hu RK, Zuo Y, Ly T, Wang J, Meera P, Wu YE, Hong W. (2021)
(Featured by Szelenyi, Goodwin, and Golden. *Nature Neuroscience*. 24, 761–762)
4. **Cortical representations of conspecific sex shape social behavior.** *Neuron*. 107, 941–953
Kingsbury L, Huang S, Raam T, Ye LS, Wei D, Hu RK, Ye L, Hong W. (2020)
5. **Correlated neural activity and encoding of behavior across brains of socially interacting animals.** *Cell*. 178, 429–446 | Kingsbury L, Huang S, Wang J, Gu K, Golshani P, Wu YE, Hong W. (2019)
(Featured by Omer, Zilkha, and Kimchi. *Cell*. 178, 272–274)
6. **Sexually dimorphic control of parenting behavior by the medial amygdala.** *Cell*. 176, 1206–1221
Chen PB, Hu RK, Wu YE, Pan L, Huang S, Micevych PE, Hong W. (2019)
(Featured by Whalley. *Nature Reviews Neuroscience*. 20, 190–191)
7. **Detecting activated cell populations using single-cell RNA-seq.** *Neuron*. 96, 313–329
Wu YE, Pan L, Zuo Y, Li X, Hong W. (2017)
(Featured by Jones and Reijmers. *Neuron*. 96, 248–249)

– Reviews and commentaries • After 2016 –

8. **Control of social hierarchy beyond neurons.** *Nature Neuroscience*. 26, 1485–1486
Phi NT, Yu X, Hong W. (2023)
9. **Neural mechanisms of comforting: prosocial touch and stress buffering.** *Hormones and Behavior*. 153, 105391 | Lim KY, Hong W. (2023)
10. **Neural basis of prosocial behavior.** *Trends in Neurosciences*. 45, 749–762
Wu YE, Hong W. (2022)
11. **Organization of neural circuits underlying social behaviors: a consideration of the medial amygdala.** *Current Opinion in Neurobiology*. 68, 124–136 | Raam T, Hong W. (2021)
12. **A multi-brain framework for social interaction.** *Trends in Neurosciences*. 43, 651–666
Kingsbury L, Hong W. (2020)
13. **Understanding social behavior—setting the stage for the next generation of neuroscience.** *Neuron*. 99, 11–12 (Neuron Voices) | Hong W. (2018)
14. **Neural circuit mechanisms of social behavior.** *Neuron*. 98, 16–30
Chen P, Hong W. (2018)

– First/co-first-author publications • Prior to 2016 –

15. **Hong W**, Kennedy A, Burgos-Artizzu XP, Zelikowsky M, Navonne SG, Perona P, Anderson DJ. (2015) **Automated measurement of mouse social behaviors using depth sensing, video tracking, and machine learning.** *Proc. Natl. Acad. Sci. USA*. 112, E5351-5360
16. Ward A*, **Hong W***, Favaloro V, Luo L. (2015) **Toll receptors instruct axon and dendrite targeting and participate in synaptic partner matching in a *Drosophila* olfactory circuit.** *Neuron*. 85, 1013-1028 (*co-first authors)
17. **Hong W**, Kim DW, Anderson DJ. (2014) **Antagonistic control of social versus repetitive self-grooming behaviors by separable amygdala neuronal subsets.** *Cell*. 158, 1348-1361
(Featured by Welberg. *Nature Reviews Neuroscience*. 15, 700-701)
18. **Hong W**, Luo L. (2014) **Genetic control of wiring specificity in the fly olfactory system.** *Genetics*. 196, 17-29
19. **Hong W**. (2013) **Assembly of A Neural Circuit.** *Science*. 342, 1186
20. Mosca TJ*, **Hong W***, Dani VS, Favaloro V, Luo L. (2012) **Trans-synaptic Teneurin signaling in neuromuscular synapse organization and target choice.** *Nature*. 484, 237-241 (*co-first authors)
21. **Hong W**, Mosca TJ, Luo L. (2012) **Teneurins instruct synaptic partner matching in an olfactory map.** *Nature*. 484, 201-207
22. **Hong W***, Wu YE*, Fu X, Chang Z. (2012) **Chaperone-dependent mechanisms for acid resistance in enteric bacteria.** *Trends in Microbiology*. 20, 328-335 (*co-first authors)
23. de Wit J*, **Hong W***, Luo L, Ghosh A. (2011) **Role of leucine-rich repeat proteins in the development and function of neural circuits.** *Annual Review of Cell and Developmental Biology*. 27, 697-729 (*co-first authors)
24. **Hong W**, Zhu H, Potter CJ, Barsh G, Kuruzu M, Zinn K, Luo L. (2009) **Leucine-rich repeat transmembrane proteins instruct discrete dendrite targeting in an olfactory map.** *Nature Neuroscience*. 12, 2542-2550
25. **Hong W**, Luo L. (2009) **Dendritic tiling through TOR signaling.** *EMBO Journal*. 28, 3783-3784
26. Wu YE*, **Hong W***, Zhang L, Liu C, Chang Z. (2008) **Conserved amphiphilic feature is essential for periplasmic chaperone HdeA to support acid resistance in enteric bacteria.** *Biochemical Journal*. 412, 389-397 (*co-first authors)
27. **Hong W**, Jiao W, Hu J, Zhang J, Liu C, Fu X, Shen D, Xia B, Chang Z. (2005) **Periplasmic protein HdeA exhibits chaperone-like activity exclusively within stomach pH range by transforming into disordered conformation.** *Journal of Biological Chemistry*. 280, 27029-27034