

KOREA-US Frontiers in Health and Life Sciences

2025. 11. 6^(Thu) - 7^(Fri)
Four Seasons Hotel, Grandballroom(3F)



Curriculum Vitae

Name	First Name	Gloria	Last Name	Choi
Country	USA			
Affiliation	The Picower Institute for Learning and Memory, MIT			



Educational Background

- 1995 University of California, Berkeley
B.A. in Molecular and Cellular Biology
- 2005 California Institute of Technology
Ph.D. in Biology, Thesis Advisor: Professor David Anderson

Professional Career

- 2005–2006 Postdoctoral Research Scientist, Department of Biology, California Institute of Technology, Pasadena, CA, Laboratory of David J. Anderson
- 2006–2012 Postdoctoral Research Scientist, Center for Neurobiology & Behavior, Columbia University, New York, NY, Laboratory of Richard Axel
- 2012–2013 Associate Research Scientist, Center for Neurobiology & Behavior, Columbia University, New York, NY, Laboratory of Richard Axel
- 2013–2018 Investigator, McGovern Institute for Brain Research, MIT, Cambridge, MA
- 2013–2020 Assistant Professor, Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, MA
- 2019 – Investigator, Picower Institute for Learning and Memory, MIT, Cambridge, MA
- 2020 – Associate Professor, Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, MA

Research Field

Neuroscience, Neuro-immunology

Papers, Books, etc. presented or published by your name

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Selected Publications

- Yang, L., Andina, M.L., King, H., Wickersham, I., Huh, R.H.* and **Choi, G.B.*** (2025). IL-1R-expressing dorsal raphe neurons mediate self-imposed social withdrawal during sickness. *Cell*. In Press.
- Lu, G., Zhang, S., Feng, M., Kim, E., Cho, D., Kim, J.H., Caris, H., Silberstein, L., **Choi, G.B.*** and Huh, R.H.* (2025). A new approach for detecting immune responses with *in vivo* labeling of cytokine activity. *Cell*. In Press. *co-corresponding author
- Lee, B., Kwon, J.T., Jeong, Y., Caris, H., Oh, D., Feng, M., Mejia, I.D., Zhang, X., Ishikawa, T., Watson, B.R., Moffitt, J.R., Chung, K., Huh, J.R.*, **Choi, G.B.*** (2025). Inflammatory and anti-inflammatory cytokines bidirectionally modulate amygdala circuits regulating anxiety. *Cell*. 188(8):2190-2202. PMID:40199321.
- Lee, Y., Ishikawa, T., Lee, H., Lee, B., Ryu, C., Mejia, I.D., Kim, M., Lu, G., Hong, Y., Feng, M., Shin, H., Meloche, S., Locksley, R.M., Koltsova, E., Grivennikov, S.I., Heiman, M., **Choi, G.B.*** and Huh, J.R.* (2025). Brain-wide mapping of immune receptors uncovers a neuro-modulatory role of interleukin-17E and the receptor IL-17RB. *Cell*. 18(8):2203-2217. PMID:40199322. *co-corresponding author
- Kim, E., Paik, D., **Choi, G.B.*** and Huh, J.R.* (2022). Maternal gut bacteria drive intestinal inflammation in offspring with neurodevelopmental disorders by altering the chromatin landscape of CD4⁺ T cells. *Immunity*. 55(1):145-158. PMID:34879222. *co-corresponding author
- Kwon, J., Ryu, C., Lee, H., Sheffield, A., Fan, J., Cho, D.H., Bigler, S., Sullivan, H.A., Choe, H.K., Wickersham, I.R., Heiman, M. and **Choi, G.B.** (2021). An amygdala circuit that suppresses social engagement. *Nature*. 593(7857):114-118. PMID:33790466.
- Reed, M.D., Yim, Y.S., Wimmer, R.D., Kim, H., Ryu, C., Welch, G.M., Andina, M., King, H.O., Waisman, A., Halassa, M.M., Huh, J.R.* and **Choi, G.B.*** (2020). IL-17a promotes sociability in mouse models of neurodevelopmental disorders. *Nature*. 577(7789):249-253. PMID:31853066.
- Shin Yim, Y., Park, A., Berrios, J., Lafourcade, M., Pascual, L.M., Soares, N., Yeon Kim, J., Kim, S., Kim, H., Waisman, A., Littman, D.R., Wickersham, I.R., Harnett, M.T., Huh, J.R.* and **Choi, G.B.*** (2017). Reversing behavioural abnormalities in mice exposed to maternal inflammation. *Nature*. 549(7673):482-487. PMID:28902835.
- Kim, S.D., Kim, H., Yim, Y.S., Ha, S., Atarashi, K., Tan, T.G., Longman, R.S., Honda, K., Littman, D.R., **Choi, G.B.*** and Huh, J.R.* (2017). Maternal gut bacteria promote neurodevelopmental abnormalities in mouse offspring. *Nature*. 549(7673):528-532. PMID:28902840. *co-corresponding author
- Choi, G.B.**, Yim, Y.S., Wong, H., Kim, S.D., Kim, H.J., Kim, S.V., Hoeffler, C.A., Littman, D.R., and Huh, J.R. (2016). The maternal interleukin-17a pathway in mice promotes autism-like phenotypes in offspring. *Science*. 351(6276):933-9. PMID:26822608.
- Choe, H.K., Reed, M.D., Benavidez, N., Montgomery, D., Soares, N., Yim, Y.S. and **Choi, G.B.** (2015). Oxytocin mediates entrainment of sensory stimuli to social cues of opposing valence. *Neuron*. 87(1):152-163. PMID:26139372.
- Choi, G.B.**, Stettler, D.D., Kallman, B.R., Bhaskar, S.T., Fleishman, A. and Axel, R. (2011). Driving opposing behaviors with ensembles of piriform neurons. *Cell*. 146(6):1004-15. PMID:21925321.
- Choi, G.B.**, Dong, H.W., Murphy, A.J., Valenzuela, D.M., Yancopoulos, G.D., Swanson, L.W., and Anderson, D.J. (2005). Lhx6 delineates a pathway mediating innate reproductive behaviors from the amygdala to the hypothalamus. *Neuron*. 46(4):647-60. PMID:15944132.