# Hunter L. Mathews, PhD

Postdoctoral Research Associate Institute for Behavioral Genetics University of Colorado UCB 447 Boulder, CO 80309

#### Education

University of Maryland University College		B.S.	12/2009	Psychology
University of Houston – Clear Lake		M.A	01/2013	Psychology
University of Colorado – Boulder		M.A	12/2017	Psychology
University of Colorado – Boulder		Ph.D.	07/2020	Psychology &
				Neuroscience
Positions and Appointments				
Graduate Research Assistant	University of Houston – Clear Lake			01/2011 - 05/2013
Volunteer Lab Technician	University of Colorado - Boulder			08/2013 - 07/2014
Predoctoral Trainee	University of Colorado – Boulder			08/2014 - 07/2020
NIDA Training Grant Trainee	University of Colorado – Boulder			07/2016 - 07/2019
Postdoctoral Research Associate	University of Colorado – Boulder			08/2020 - Present
Adjunct Assistant Professor	University of Maryland Global			03/2021 - Present
	Campus			

### **Presentations and Abstracts**

- Malin, D. H., Moon, W. D., Goyarzu, P., Vela, A.J., Taylor, J., Barclay, E., Mathews, H., Negrete, A.P. Pinales, R., Magallanes, N. (2011). Differential effects of monoamine oxidase A and B inhibition on nicotine withdrawal syndrome. Poster presented at Society for Neuroscience, Washington, D. C.
- Mathews, H. L., Malin, D. H., Feiler, P., Thompson, L., Bautista, J., Negrete, A., Goyarzu, P., Ward, C. P. (2012) Effect of nicotine withdrawal on sleep quantity and quality in rats. Poster presented at Society for Neuroscience, New Orleans, LA.
- Mathews, H. L., Malin, D. H., Thompson, Feiler, P., Bautista, J., Negrete, A., Goyarzy, P., Ward, C. P. (2013) The effect of nicotine withdrawal on sleep quantity and quality in rats. Poster presented at Society for Neuroscience, San Diego, CA.
- Bautista, J., Malin, D. H., Mathews, H. L., Nghein, D. M., Izygon, J. J., Shahin, J. C., Madison, C. D., McGhiey, D., Ward, C P. (2014). A minimally invasive method for the analysis of sleep/wake behavior in rats. Poster presented at Society for Neuroscience, Washington, D.C.
- Mathews, H. L., Grimshaw, V., Stitzel, J. A. (2015) The effect of nicotine administration and withdrawal on sleep in mice. Poster presented at Society for Neuroscience, Chicago, IL.
- Mathews, H. L., Grimshaw, V., Stitzel, J. A. (2016) The effect of nicotine consumption and withdrawal on sleep in mice. Poster presented at SLEEP 2016, Denver, CO
- Mathews, H. L., Jimenez, L., Ahmad, S., Stitzel, J. A. (2016). Nicotine consumption and withdrawal alters sleep and EEG in mice. Poster presented at Society for Neuroscience, San Diego, CA.
- Mathews, H. L. (2017). Nicotine Consumption, Withdrawal, and Sleep: The role of  $\alpha$ 4 nAChR's. Oral presentation of CU Boulder Sleep symposium. Boulder, Co.
- Mathews, H. L. & Stitzel, J. A. (2017). Nicotine administration and withdrawal alters sleep and preproorexin levels in mice. Poster presented at SLEEP 2017. Boston, MA.
- Mathews, H. L., Ahmad, S., Stitzel, J. A. (2017). Nicotine administration and withdrawal alters sleep and prepro-hypocertin levels in mice. Poster Presented at Society for Neuroscience, Washington, D. C.
- Mathews, H. L., Iyer, V., Stitzel, J. A. (2018). The effects of nicotine and withdrawal on sleep latency in C57BL/6J mice. Poster presented n at Society for Neuroscience, San Diego, CA.
- Ahmad, A., Mathews, H. L., Stitzel, J. A. (2018). Quantification of OX2R mRNA during baseline, oral nicotine, and withdrawal conditions. Poster presented at Society for Neuroscience, San Diego, CA.

- Alvarado, A., Mathews, H. L., Stitzel, J. A. (2018). Quantification of active phase corticosterone during baseline, oral nicotine, and withdrawal conditions. Poster presented at Society for Neuroscience, San Diego, CA.
- Mathews, H.M., Iyer, V., & Stitzel, J. A (2019). Novel sleep latency testing in C57 mice during periods of nicotine administration and abstinence. Poster presented at SLEEP 2019. San Antonio, Texas.
- Mathews, H. L., Bellati, S., Myers, E., Werner, Z., Brown, M., Starbuck, P., Stitzel, J. A., Radcliffe, R. A. (2022). Mapping of modifiers that alter oral nicotine consumption in Chrna5 knockout mice. Poster presented at Society for Neuroscience, San Diego, CA.
- Aki, S., Brown, M., Stitzel, J. A., Mathews, H. L. (2022). The effect of nicotine on diurnal sleep patterns and delta homeostasis in female C57BL.6J mice. Poster presented at Society for Neuroscience, San Diego, CA.

# Publications

- Mathews, H. L. (2013). The effect of nicotine withdrawal on sleep quantity and quality in a rodent model (Master's Thesis). University of Houston Clear Lake, Houston, Texas.
- Malin, D. H., Moon, W. D., Goyarzu, P., Barclay, N., Magallanes, N., Vela, A. J., Negrete, A. P., Mathews, H. L., Stephens, B, Mills, W. R. (2013). Inhibition of monoamine oxidase isoforms modulates nicotine withdrawal syndrome in the rat. *Life Sciences*, *93*, 448-453.
- Wooden, J. I., Pido, J., Mathews, H. L., Keiltyka, R., Montemayor, B. A., Ward, C. P. (2013) Sleep deprivation impairs recall of social transmission of food preference in rats. Journal of Nature and Science of Sleep, 4(6), 129-135.
- Mathews, H. L. & Stitzel, J. A. (2019) The effect of oral nicotine administration and abstinence on sleep in male C57BL/6J mice. *Psychopharmacology*, 2018 Dec 18. doi: 10.1007/s00213-018-5139-6.
- Myers, E., Werner, Z., Wichman, D., Mathews, H. L., Radcliffe, R. A., Nadeau, J. H., Stitzel, J. A. (2021). Genetic Modifiers of Oral Nicotine Consumption in Chrna5 Null Mutant Mice. Frontiers in Psychiatry, 12: 773400. doi: 10.3389/fpsyt.2021.773400

# **Teaching and Advising**

- Adjunct Assistant Professor of Psychology (UMGC), 2021 Present
- Introduction to Neuroscience (NRSC 2100) Recitation Instructor, 2019
- Undergraduate and Volunteer Research Assistant Supervisor, 2014 Present
- Graduate Teaching Assistant (TA), 2014-2016