



Benjamin Rein

Postdoctoral Scholar, Psychiatry

 Curriculum Vitae available Online

Bio

BIO

Ben Rein, Ph.D. is a postdoctoral fellow working in the lab of Dr. Robert Malenka. In his Ph.D. research, Ben investigated cellular and synaptic mechanisms underlying social deficits in various transgenic mouse models of autism spectrum disorder, with specific focus on models of 16p11.2 deletion and duplication. Outside of the lab, Ben runs multiple social media channels as a science communicator, and is the Founder & President of the Aspiring Scientists Coalition, an international organization designed to provide career guidance for students in science.

PROFESSIONAL EDUCATION

- Doctor of Philosophy, S.U.N.Y. State University at Buffalo (2021)
- Bachelor of Science, West Virginia University (2016)

STANFORD ADVISORS

- Robert Malenka, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Inhibition of histone deacetylase 5 ameliorates Abnormalities in 16p11.2 duplication mouse model.** *Neuropharmacology*
Rein, B., Conrow-Graham, M., Frazier, A., Cao, Q., Yan, Z.
2021: 108893
- **Age-related neurodegeneration and cognitive impairments of NRMT1 knockout mice are preceded by misregulation of RB and abnormal neural stem cell development.** *Cell death & disease*
Catlin, J. P., Marziali, L. N., Rein, B., Yan, Z., Feltri, M. L., Schaner Tooley, C. E.
2021; 12 (11): 1014
- **Mechanisms of synaptic transmission dysregulation in the prefrontal cortex: pathophysiological implications.** *Molecular psychiatry*
Yan, Z., Rein, B.
2021
- **Synergistic inhibition of histone modifiers produces therapeutic effects in adult Shank3-deficient mice** *TRANSLATIONAL PSYCHIATRY*
Zhang, F., Rein, B., Zhong, P., Shwani, T., Conrow-Graham, M., Wang, Z., Yan, Z.
2021; 11 (1): 99
- **16P11.2 Copy Number Variations and Neurodevelopmental Disorders** *TRENDS IN NEUROSCIENCES*
Rein, B., Yan, Z.
2020; 43 (11): 886–901
- **A standardized social preference protocol for measuring social deficits in mouse models of autism** *NATURE PROTOCOLS*

Rein, B., Ma, K., Yan, Z.

2020; 15 (10): 3464–77

- **Reversal of synaptic and behavioral deficits in a 16p11.2 duplication mouse model via restoration of the GABA synapse regulator Npas4** *MOLECULAR PSYCHIATRY*

Rein, B., Tan, T., Yang, F., Wang, W., Williams, J., Zhang, F., Mills, A., Yan, Z.

2020

- **Diminished social interaction incentive contributes to social deficits in mouse models of autism spectrum disorder** *GENES BRAIN AND BEHAVIOR*

Rein, B., Yan, Z., Wang, Z.

2020; 19 (1): e12610

- **Chemogenetic Activation of Prefrontal Cortex Rescues Synaptic and Behavioral Deficits in a Mouse Model of 16p11.2 Deletion Syndrome** *JOURNAL OF NEUROSCIENCE*

Wang, W., Rein, B., Zhang, F., Tan, T., Zhong, P., Qin, L., Yan, Z.

2018; 38 (26): 5939–48

- **Evaluation of an avatar-based training program to promote suicide prevention awareness in a college setting** *JOURNAL OF AMERICAN COLLEGE HEALTH*

Rein, B. A., McNeil, D. W., Hayes, A. R., Hawkins, T., Ng, H., Yura, C. A.

2018; 66 (5): 401–11