



Neal Dilip Amin

- Resident in Psychiatry and Behavioral Sciences
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Bio

BIO

Neal D. Amin, MD, PhD received his bachelors in Biochemistry from Columbia University where he studied the structure-function relationship of neurexins and neuroligins, proteins implicated in familial autism. He continued his research interests as a medical and doctoral student at the University of California, San Diego in the Medical Scientist Training Program (MD/PhD). Dr. Amin's doctoral research was conducted at the Salk Institute for Biological Studies in the laboratory of Howard Hughes Medical Investigator Samuel Pfaff, where he studied spinal cord development and neurodegenerative disease. He used transcriptomics, mouse genetics, and deep phenotyping to uncover novel gene regulatory pathways driving the establishment of neuronal identity and function. Dr. Amin is currently a resident physician in the research track in the Department of Psychiatry and Behavioral Sciences at Stanford University with a particular interest in neurobiology and understanding molecular mechanisms behind neuropsychiatric disease. Within the lab of Dr. Sergiu Pasca, he uses human brain organoids derived from induced pluripotent stem cells to model neurodevelopment and neuropsychiatric disease.

Publications

PUBLICATIONS

- **Building Models of Brain Disorders with Three-Dimensional Organoids.** *Neuron*
Amin, N. D., Pasca, S. P.
2018; 100 (2): 389–405
- **Loss of motoneuron-specific microRNA-218 causes systemic neuromuscular failure** *SCIENCE*
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2015; 350 (6267): 1525-1529
- **Speed and segmentation control mechanisms characterized in rhythmically-active circuits created from spinal neurons produced from genetically-tagged embryonic stem cells** *ELIFE*
Sternfeld, M. J., Hinckley, C. A., Moore, N. J., Pankratz, M. T., Hilde, K. L., Driscoll, S. P., Hayashi, M., Amin, N. D., Bonanomi, D., Gifford, W. D., Sharma, K., Goulding, M., Pfaff, et al
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