

# Dale Zhou

## Curriculum Vitae

✉ dalezhou@pennmedicine.upenn.edu

🌐 dalezhou.com

🐙 github.com/dalejn

### Education

- 2017– **PhD Student, *Neuroscience***,  
University of Pennsylvania.
- 2015 **B.Sc. with Honors in Psychology, Minor in *Neuroscience***.  
**B.A. with Honors in Philosophy**,  
University of Maryland, College Park.

### Publications

#### Accepted/Published

##### *Journal articles*

- Zhou, D.**, Liu, S., Zhou, X., Berman, R.A., Broadnax, D.D., Rapoport, J.L., & Thomas, A.G. (2018) *7 Tesla MRI reveals regional hippocampus abnormalities underlying false memory in childhood-onset schizophrenia*. Schizophrenia Research. DOI: 10.1016/j.schres.2018.07.023
- Zhou, D.**, Gochman, P., Broadnax, D.D., Rapoport, J.L., & Ahn, K. (2016). *15q13.3 duplication in two patients with childhood-onset schizophrenia*. American Journal of Medical Genetics Part B: Neuropsychiatric Genetics. DOI: 10.1002/ajmg.b.32439

##### *Book chapters*

- Zhou, D.**, Sequeira, S., Driver, D., Thomas, S. (2018). *Disruptive Mood Dysregulation Disorder*. In S. Thomas & D. Driver (Eds.), Complex Disorders in Pediatric Psychiatry: A Clinician's Guide. Clinics Review Articles, Elsevier Inc. ISBN: 9780323511476
- Rapoport, J.L., **Zhou, D.**, & Ahn, K. (Accepted). *Aetiology of intellectual disability: general issues and prevention*. In N. Andreasen, J. Geddes, & G. Goodwin (Eds.), New Oxford Textbook of Psychiatry, Third Edition. Oxford University Press.

##### *Open-source software*

- Gorgolewski, K.J., Esteban, O., [110 others, including **Zhou, D.**], & Ghosh, S. (2016). *Nipype: a flexible, lightweight and extensible neuroimaging data processing framework in Python*. 0.13.0. DOI: 10.5281/zenodo.581704

#### In Preparation

##### *Journal articles*

- Metabolic running costs of brain network communication in developing youth*  
*Exploring curiously: A generative model of naturalistic information-seeking*  
*7 Tesla MRI reveals no effect of ketamine on hippocampal subfield structure in treatment resistant depression patients*

## Conference Presentations

Julius Axelrod Symposium (2017). *Ultra-high field 7-Tesla MRI reveals hippocampal subfield volume and shape abnormalities in childhood-onset schizophrenia patients compared to healthy siblings and controls*. Affiliated with Society for Neuroscience. NIMH, Intramural Research Program, Bethesda, Maryland.

## Conference Abstracts

- Zhou, D.**, Liu, S., Zhou, X., Berman, R.A., Broadnax, D.D., Rapoport, J.L., & Thomas, A.G. (2017). *Ultra-high field 7-Tesla MRI reveals hippocampal subfield volume and shape abnormalities in childhood-onset schizophrenia patients compared to healthy siblings and controls*. Julius Axelrod Symposium, Bethesda, Maryland.
- Zhou, D.**, Liu, S., Zhou, X., Berman, R.A., Broadnax, D.D., Rapoport, J.L., & Thomas, A.G. (2017). *Ultra-High Field 7-Tesla MRI Shape Analysis of Hippocampal Subfields in Childhood-Onset Schizophrenia and Healthy Siblings*. Society for Biological Psychiatry, San Diego, California.
- Zhou, D.**, Liu, S., Berman, R.A., Broadnax, D.D., Rapoport, J.L., & Thomas, A.G. (2016). *7-Tesla MRI Reveals Regional Hippocampal Deficits in Childhood-Onset Schizophrenia*. American College of Neuropsychopharmacology, Hollywood, Florida. In *Neuropsychopharmacology*, Vol. 41, pp. S591-S591.
- Zhou, D.**, Liu, S., Berman, R.A., Broadnax, D.D., Rapoport, J.L., & Thomas, A.G. (2016). *7-Tesla MRI reveals regional hippocampal volume deficits of dentate gyrus in childhood-onset schizophrenia*. Society for Neuroscience, San Diego, California.
- Zhou, D.**, Gochman, P., Broadnax, D.D., Rapoport, J.L., & Ahn, K. (2016). *15q13.3 duplication in two patients with childhood-onset schizophrenia*. Society of Biological Psychiatry, Atlanta, Georgia.
- Zhou, D.** (2012). *The psychology of social movements in the U.S.* 16th Annual College Park Scholars Academic Showcase, College Park, MD.
- Zhou, D.** (2009). *BIRC5 survivin protein cloning vector shows promise for anti-cancer drug discovery*. Roswell Park Cancer Institute Research Symposium, Buffalo, NY.

## Honors & Awards

2015-2017	NIH Intramural Research Training Award	\$60,000
2015	Departmental Honors in Psychology	
2015	Departmental Honors in Philosophy	
2013	College Park Scholars Co-Curricular Scholarship Award	\$250
2012	College Park Scholar in Global Public Health	
2011	Ling Ho Anita K'ung Tong Scholarship	\$500
2010-2014	University of Maryland President's Scholarship	\$20,000

## Research Experience

- 2017– **Special Volunteer**, *Experimental Therapeutics & Pathophysiology Branch*, NIMH, Bethesda, MD.
- Using 7-Tesla structural MRI to study how ketamine treatment affects longitudinal hippocampus morphometry in treatment-resistant depression patients.

- 2017–2018 **Rotating Student**, *University of Pennsylvania*, Philadelphia, PA.  
 ◦ Kable Lab (Joseph Kable, PI), Psychiatric and Developmental Imaging Lab (Theodore Satterthwaite, PI), Complex Systems Group (Danielle Bassett, PI)
- 2015–2017 **NIH Intramural Research Trainee**, *Child Psychiatry Branch*, NIMH.  
 ◦ Investigated genetic and neural bases of childhood-onset schizophrenia.
- 2014–2015 **Psychology Honors Candidate**, *Decision, Attention, and Memory Lab*, University of Maryland, College Park.  
 Committee: Drs. Michael Dougherty (Chair), Donald Bolger & Robert Slevc  
 ◦ Thesis used structural equation modeling, factor analysis, and Bayesian regression to investigate behavioral and neural correlates of working memory.
- 2014–2015 **Philosophy Honors Candidate**, University of Maryland, College Park.  
 Committee: Drs. Peter Carruthers (Chair), Dan Moller & Erin Eakers  
 ◦ Thesis investigated conceptual commitments of beliefs as rational and truth-tracking. Compared theories defining belief, their limitations, and implications for psychiatric understanding of delusional belief and psychosis.
- 2013–2014 **Special Volunteer**, *NIH*, Laboratory/Branch of Genitourinary Cancer Pathogenesis, Bethesda, MD.  
 ◦ Investigated efficacy of immunotoxins targeting the Fn-14 receptor for abating metastatic prostate cancer growth in vitro
- 2014 **Research Assistant**, *Maryland Psychotherapy Clinic and Research Lab*, University of Maryland, College Park.  
 ◦ Implemented qualitative model of grief based on attachment theory
- 2012–2013 **College Park Scholars Capstone**, *U.S. Library of Congress*, Washington, D.C.  
 ◦ Researched social movements in the U.S., marking completion of a selective 2-year interdisciplinary Living-Learning program in Global Public Health
- 2011–2013 **Research Assistant**, *Decision, Attention, and Memory Lab*, University of Maryland, College Park.  
 ◦ Studied the limits of improving working memory capacity and fluid intelligence
- 2009–2010 **Summer Student**, *Roswell Park Cancer Institute*, Buffalo, NY, Department of Pharmacology and Therapeutics.  
 ◦ Engineered novel nucleic acid cloning vector for tumor suppressor BIRC5 protein associated with tumorigenesis and successfully transfected the protein into human lung cancer cells

## Service & Outreach

### Teaching

Tutorial: How to construct semantic networks, (2018) *EAS244/CLST344/INTG344*  
*Curiosity: Ancient and Modern Thinking About Thinking*. [github.com/dalejn/semanticNetworks](https://github.com/dalejn/semanticNetworks)

### Ad hoc reviewer

*Biological Psychiatry*, *Cerebral Cortex*, *IEEE: Transactions on Network Science and Engineering*

### Presentations

Panelist, *Post-Baccalaureate Research Experiences in Behavioral Sciences* (2017).

University of Maryland, College Park.

Organizations

2017– **Section Chief**, *Brains in Brief*, Section on Computational and Sensory Neuroscience, Graduate-Led Initiatives and Activities (GLIA), University of Pennsylvania.  
<https://www.upenn.org/glia/brainsinbriefs/>

2017– **Founder**, *Psychology Honors Alumni Mentors*, University of Maryland, College Park.

2014–2015 **Vice President**, *Philosophy Club*, University of Maryland, College Park.