

# Stanford

---



## Adam Pines

Postdoctoral Scholar, Psychiatry

### Bio

---

#### BIO

Adam Pines, Ph.D., is a postdoctoral fellow in the Stanford PanLab for Precision Psychiatry and Translational Neuroscience with Director Leanne M. Williams, PhD. Adam completed his Ph.D. in Neuroscience at the University of Pennsylvania in Philadelphia. Adam's work centers on hierarchical cortical development and its overlap with hierarchical cognition (i.e., bottom-up and top-down processing). In the PanLab, Adam is investigating the role of deficits in cortical function in cognitive psychopathology. His other research interests include developmental neuroscience, brain-environment interactions, and adaptive plasticity in the brain.

#### HONORS AND AWARDS

- Dean's Fellowship, School of Medicine (2023-2024)
- NRSA F31: Personalized Mapping of Affective Liability, NIMH (2021-2022)
- Jameson-Hurvich Award in Behavioral Neuroscience, University of Pennsylvania (2021)

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Pennsylvania (2022)
- PhD, University of Pennsylvania, Neuroscience (2022)
- BA, Loyola Marymount University, Psychology (2015)

#### STANFORD ADVISORS

- Leanne Williams, Postdoctoral Faculty Sponsor

#### LINKS

- My personal website: <https://adpines.github.io/site/>

### Research & Scholarship

---

#### LAB AFFILIATIONS

- Leanne Williams (5/15/2023)

### Publications

---

#### PUBLICATIONS

- **Personalized functional brain network topography is associated with individual differences in youth cognition.** *Nature communications*  
Keller, A. S., Pines, A. R., Shanmugan, S., Sydnor, V. J., Cui, Z., Bertolero, M. A., Barzilay, R., Alexander-Bloch, A. F., Byington, N., Chen, A., Conan, G. M., Davatzikos, C., Feczko, et al  
2023; 14 (1): 8411

- **Development of top-down cortical propagations in youth.** *Neuron*  
Pines, A., Keller, A. S., Larsen, B., Bertolero, M., Ashourvan, A., Bassett, D. S., Cieslak, M., Covitz, S., Fan, Y., Feczko, E., Houghton, A., Rueter, A. R., Saggari, et al  
2023
- **Linking Individual Differences in Personalized Functional Network Topography to Psychopathology in Youth** *BIOLOGICAL PSYCHIATRY*  
Cui, Z., Pines, A. R., Larsen, B., Sydnor, V. J., Li, H., Adebimpe, A., Alexander-Bloch, A. F., Bassett, D. S., Bertolero, M., Calkins, M. E., Davatzikos, C., Fair, D. A., Gur, et al  
2022; 92 (12): 973-983
- **Dissociable multi-scale patterns of development in personalized brain networks** *NATURE COMMUNICATIONS*  
Pines, A. R., Larsen, B., Cui, Z., Sydnor, V. J., Bertolero, M. A., Adebimpe, A., Alexander-Bloch, A. F., Davatzikos, C., Fair, D. A., Gur, R. C., Gur, R. E., Li, H., Milham, et al  
2022; 13 (1): 2647
- **Functional imaging studies of acute administration of classic psychedelics, ketamine, and MDMA: Methodological limitations and convergent results.** *Neuroscience and biobehavioral reviews*  
Linguiti, S., Vogel, J. W., Sydnor, V. J., Pines, A., Wellman, N., Basbaum, A., Eickhoff, C. R., Eickhoff, S. B., Edwards, R. R., Larsen, B., McKinstry-Wu, A., Scott, J. C., Roalf, et al  
2023: 105421
- **Individual differences in delay discounting are associated with dorsal prefrontal cortex connectivity in children, adolescents, and adults.** *Developmental cognitive neuroscience*  
Mehta, K., Pines, A., Adebimpe, A., Larsen, B., Bassett, D. S., Calkins, M. E., Baller, E. B., Gell, M., Patrick, L. M., Shafiei, G., Gur, R. E., Gur, R. C., Roalf, et al  
2023; 62: 101265
- **Hierarchical functional system development supports executive function.** *Trends in cognitive sciences*  
Keller, A. S., Sydnor, V. J., Pines, A., Fair, D. A., Bassett, D. S., Satterthwaite, T. D.  
2023; 27 (2): 160-174
- **Caregiver monitoring, but not caregiver warmth, is associated with general cognition in two large sub-samples of youth** *DEVELOPMENTAL SCIENCE*  
Keller, A. S., Mackey, A. P., Pines, A., Fair, D., Feczko, E., Hoffman, M. S., Salum, G. A., Barzilay, R., Satterthwaite, T. D.  
2023; 26 (3): e13337
- **An analysis-ready and quality controlled resource for pediatric brain white-matter research.** *Scientific data*  
Richie-Halford, A., Cieslak, M., Ai, L., Caffarra, S., Covitz, S., Franco, A. R., Karipidis, I. I., Kruper, J., Milham, M., Avelar-Pereira, B., Roy, E., Sydnor, V. J., Yeatman, et al  
2022; 9 (1): 616
- **Mobile footprinting: linking individual distinctiveness in mobility patterns to mood, sleep, and brain functional connectivity** *NEUROPSYCHOPHARMACOLOGY*  
Xia, C., Barnett, I., Tapera, T. M., Adebimpe, A., Baker, J. T., Bassett, D. S., Brotman, M. A., Calkins, M. E., Cui, Z., Leibenluft, E., Linguiti, S., Lydon-Staley, D. M., Martin, et al  
2022; 47 (9): 1662-1671
- **Article Developmental coupling of cerebral blood flow and fMRI fluctuations in youth** *CELL REPORTS*  
Baller, E. B., Valcarcel, A. M., Adebimpe, A., Alexander-Bloch, A., Cui, Z., Gur, R. C., Gur, R. E., Larsen, B. L., Linn, K. A., O'Donnell, C. M., Pines, A. R., Raznahan, A., Roalf, et al  
2022; 38 (13): 110576
- **Associations between neighborhood socioeconomic status, parental education, and executive system activation in youth** *CEREBRAL CORTEX*  
Murtha, K., Larsen, B., Pines, A., Parkes, L., Moore, T. M., Adebimpe, A., Alexander-Bloch, A., Calkins, M. E., Davila, D. G., Lindquist, M. A., Mackey, A. P., Roalf, D. R., Scott, et al  
2022
- **A developmental reduction of the excitation:inhibition ratio in association cortex during adolescence** *SCIENCE ADVANCES*  
Larsen, B., Cui, Z., Adebimpe, A., Pines, A., Alexander-Bloch, A., Bertolero, M., Calkins, M. E., Gur, R. E., Gur, R. C., Mahadevan, A. S., Moore, T. M., Roalf, D. R., Seidlitz, et al  
2022; 8 (5): eabj8750
- **Neurodevelopment of the association cortices: Patterns, mechanisms, and implications for psychopathology** *NEURON*

- Sydnor, V. J., Larsen, B., Bassett, D. S., Alexander-Bloch, A., Fair, D. A., Liston, C., Mackey, A. P., Milham, M. P., Pines, A., Roalf, D. R., Seidlitz, J., Xu, T., Raznahan, et al  
2021; 109 (18): 2820-2846
- **QSIPrep: an integrative platform for preprocessing and reconstructing diffusion MRI data.** *Nature methods*  
Cieslak, M., Cook, P. A., He, X., Yeh, F., Dhollander, T., Adebimpe, A., Aguirre, G. K., Bassett, D. S., Betzel, R. F., Bourque, J., Cabral, L. M., Davatzikos, C., Detre, et al  
2021
  - **Sex Differences in Functional Topography of Association Networks**  
Shanmugan, S., Seidlitz, J., Cui, Z., Adebimpe, A., Bassett, D. S., Bertolero, M. A., Davatzikos, C., Fair, D. A., Gur, R. E., Gur, R. C., Li, H., Pines, A., Raznahan, et al  
ELSEVIER SCIENCE INC.2021: S178
  - **Pairwise maximum entropy model explains the role of white matter structure in shaping emergent co-activation states** *COMMUNICATIONS BIOLOGY*  
Ashourvan, A., Shah, P., Pines, A., Gu, S., Lynn, C. W., Bassett, D. S., Davis, K. A., Litt, B.  
2021; 4 (1): 210
  - **Leveraging multi-shell diffusion for studies of brain development in youth and young adulthood** *DEVELOPMENTAL COGNITIVE NEUROSCIENCE*  
Pines, A. R., Cieslak, M., Larsen, B., Baum, G. L., Cook, P. A., Adebimpe, A., Davila, D. G., Elliott, M. A., Jirsaraie, R., Murtha, K., Oathes, D. J., Piiwaa, K., Rosen, et al  
2020; 43: 100788
  - **Characterizing the Role of the Structural Connectome in Seizure Dynamics**  
Shah, P., Ashourvan, A., Mikhail, F., Pines, A., Kini, L., Shinohara, R. T., Bassett, D., Litt, B., Davis, K. A.  
WILEY.2019: S261-S262
  - **Characterizing the role of the structural connectome in seizure dynamics** *BRAIN*  
Shah, P., Ashourvan, A., Mikhail, F., Pines, A., Kini, L., Oechsel, K., Das, S. R., Stein, J. M., Shinohara, R. T., Bassett, D. S., Litt, B., Davis, K. A.  
2019; 142: 1955-1972
  - **Multi-unit relations among neural, self-report, and behavioral correlates of emotion regulation in comorbid depression and obesity** *SCIENTIFIC REPORTS*  
Pines, A. R., Sacchet, M. D., Kullar, M., Ma, J., Williams, L. M.  
2018; 8
  - **The ENGAGE study: Integrating neuroimaging, virtual reality and smartphone sensing to understand self-regulation for managing depression and obesity in a precision medicine model** *Behaviour Research and Therapy*  
Williams, L., Pines, A., Goldstein-Piekarski, A., Goldman-Rosas, L., Kullar, M., Sachet, M., Gevaert, O., Bailenson, J., Lavori, P., Dagum, P., Wandell, B., Correa, C., Greenleaf, et al  
2018: 58-70
  - **A Public Database of Immersive VR Videos with Corresponding Ratings of Arousal, Valence, and Correlations between Head Movements and Self Report Measures** *FRONTIERS IN PSYCHOLOGY*  
Li, B. J., Bailenson, J. N., Pines, A., Greenleaf, W. J., Williams, L. M.  
2017; 8: 2116