

Qingyu Zhao, Ph.D.

Weill Cornell Medicine, Department of Radiology

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Professional Positions

Weill Cornell Medicine, Cornell University

– Assistant Professor

– Faculty of Neuroscience

– Faculty of Electrical and Computer Engineering

Department of Radiology

2023–Present

2024–Present

2026–Present

Stanford University

– Instructor

– Member of Wu Tsai Neurosciences Institute

– Research Scientist

– Postdoctoral Research Fellow

Department of Psychiatry and Behavioral Sciences

2022–2023

2022–2023

2020–2022

2017–2019

SRI International

– Consultant

Center for Health Sciences

2017–Present

Kitware Co., USA

– Long-term Visitor

Medical Computing Team

2017

UNC Chapel Hill

– Research Assistant, Medical Image Display & Analysis Group

Department of Computer Science

2012–2017

North Carolina Cancer Hospital

– Research Assistant

Radiation Oncology

2015–2016

Shanghai Jiao Tong University

– Research Assistant, Image Video Multimedia Lab

– Research Assistant, Robot and Autonomous System Group

Department of Computer Science & Engineering

2010–2012

2010–2012

Education

Ph.D.

University of North Carolina at Chapel Hill, Computer Science

Graduation Date: 05/13/2017

NC, USA

2012–2017

Bachelor of Science

Shanghai Jiao Tong University, Computer Science

Shanghai, China

2008–2012

Ongoing Funding

Mastercard AI/Big Data/Enabling Technologies Seed Grant, co-I

Real-Time Computer Vision "Stone Navigation"

for Automated Residual Fragment Tracking During Suction Ureteroscopy

WCM

2026–2027

NAIRR Pilot Resource Grant NAIRR250120, PI

Deep Functional Charting and Encoding of the Developing Brain

NSF

2025–2026

NARSAD Young Investigator Grant, PI**BBRF***Neural and Behavioral Risk Factors to Forecast Heavy Drinking in Young Adulthood:
Role of Sex and Adverse Childhood Experiences*

2024-2026

NIH R00 AA028840, PI**NIH/NIAAA***Longitudinal Analysis of Diffusion Tensor Imaging to Discover Adolescent Alcohol Use Effect*

2024-2026

Completed Funding

K99 AA028840, PI**NIH/NIAAA***Longitudinal Analysis of Diffusion Tensor Imaging to Discover Adolescent Alcohol Use Effect*

2021-2023

Department of Psychiatry and Behavioral Sciences Innovator Grants, PI**Stanford***Neural and Behavioral Risk Factors for Depressive Symptoms in Emerging Adults during COVID-19*

2022-2023

HAI-Google Cloud Credits Grant, Co-PI**Stanford, HAI***Interpretable and Unbiased Deep Learning for Neuroimaging Applications*

2021-2023

Teaching

Guest Lecturer**Weill Cornell Medicine***AI in Biomedical Imaging*

Jul 22, 2025

Survey of Machine Learning and Artificial Intelligence Applications in Biomedical Research

Apr 17, 2026

Course Instructor**Stanford University***PSYC 221: Current Topics in Machine Learning for Neuroimaging*

Fall 2022-2024

Teaching Assistant**UNC Chapel Hill***COMP 550, Algorithm Analysis*

Fall 2012

Mentoring

Principal Advisor**2024-Present***Department of Radiology, Weill Cornell Medicine*

- Leo Milecki, Postdoc
- Bahram Jafrasteh, Postdoc
- Link Tejavibulya, Postdoc
- Yimin Luo, Postdoc
- Qingyu Hu, Ph.D. candidate
- Cheng Wan, Ph.D. candidate

Independent Student Research Project Mentor**2018-Present***Stanford & Cornell*Mentored 30+ students from CS, EE, BME, Stats, and Neuroscience on independent research projects**Course Project Mentor****2018–2021***CS-230*

- Using VQ-VAEs on T1-Weighted MRI Data to Embed Local Brain Regions
- Prediction of Biological Age and Sex by Comparison and Synergy between Spatial Temporal Graph CNN on functional MRI data and CNN on structural MRI
- Deep Learning for Classifying Heavy Drinkers from Normal Controls

CS-231N

- Convolutional Neural Networks for Visual Recognition:
Visualizing CNNs for Interpretable Alzheimer's Diagnosis Through Neuroimaging

CS-229

- Gender Classification of Diffusion-Weighted Brain Images via Convolutional Neural Network
- Classifying Adolescent Excessive Alcohol Drinkers from fMRI Data

Peer-reviewed Full-length Publications (N=98, Citations>2500, H-Index=25)

* denotes co-first authors, † denotes co-corresponding authors

1. T. Gunawan, T. Brumback, B.P. Hasler, Q. Zhao, S.F. Tapert, A.D. Meruelo, Multivariate associations between sleep patterns and self-regulation in adolescence: Canonical correlation analysis across ABCD and NCANDA cohorts, *Chronobiology International*, 2026
— Role: methodology, editing
2. L. Milecki, Q. Hu, B. Jafrasteh, M. Sabuncu, Q. Zhao, Network-Aware Bilinear Tokenization for Brain Functional Connectivity Representation Learning, *Medical Image Computing and Computer-Assisted Intervention*, Accepted, 2026
3. C. González, T.T. Nguyen-Louie, E.V. Sullivan, A. Pfefferbaum, J. Klo, J. Dehoney, Q. Zhao, E. Adeli, S.F. Tapert, K.M. Pohl, Divergent Pathways Taken in Adolescence Predict Embracing or Resisting Moderate to Heavy Drinking in Young Adulthood, *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, Accepted, 2026
— Role: methodology, editing
4. B. Jafrasteh, Y. Wang, Q. Hu, K. Jamison, A. Kuceyeski, Q. Zhao, Individualized Structure–Function Coupling Reveals Behavioral Signatures in the Adolescent Brain, *Imaging Neuroscience*, Accepted, 2026
5. Y. Wang, E. Müller-Oehring, S. Sassoon, K. Salinas, A. Pfefferbaum, E.V. Sullivan, Q. Zhao, K.M. Pohl, Using Deep Learning to Identify Brain Networks Mediating Cognitive and Motor Impairments in Alcohol Use Disorders, *Translational Psychiatry*, Accepted, 2026
— Role: methodology, supervision, editing
6. F. Nerrise, N. Schuetz, Q. Zhao, C. Gould, A. Milstein, K. Schulman, V. Henderson, J. Landay, L. Fei-Fei, F.V. Lin, and E. Adeli, A Categorization Framework of Digital Biomarkers for Neurodegenerative Diseases, *Nature Reviews Bioengineering*, Accepted, 2026
— Role: conceptualization, editing
7. T. Bosschieter, L. Franca, J. Wolk, Y. Wu, B. Mehta, J. Dehoney, O. Kiss, F.C. Baker, Q. Zhao, R. Caruana, K.M. Pohl, The Most Important Features in Generalized Additive Models Might Be Groups of Features, *Scientific Reports*, Accepted, 2026
— Role: conceptualization, editing
8. Q. Zhao, K.M. Pohl, Leveraging Machine Learning to Advance Alcohol Research: Current Applications, Challenges, and Opportunities, *Alcohol Research: Current Reviews*, Accepted, 2026
9. G. Zamora, T. Gunawan, Q. Zhao, A.D. Meruelo AD, Comparing Random Forest and Elastic Net Models to Predict Substance Use Disorder Transitions in Cannabis and Stimulant Users: Evidence from the All of Us Cohort, *Drug and Alcohol Dependence*, 278 (113012), 2026
— Role: methodology, editing
10. L. Schilling, S.P. Singleton, C. Tozlu, M. Hédo, Q. Zhao, K.M. Pohl, K. Jamison, A. Kuceyeski, Sex-specific differences in brain activity dynamics of youth with a family history of substance use disorder, *Nature Mental Health*, 3, pp 1493–1511, 2025
— Role: data curation, editing
11. A. Ortega-Leon, D. Urda, I.J. Turias, S.P. Lubián-López, I. Benavente-Fernández, Q. Zhao, Bahram Jafrasteh, An Innovative Method for Assessing the Relationship Between Longitudinal Brain Volume Measurements and Neurodevelopmental Outcomes in Preterm Infants, *Computers in Biology and Medicine*, 198 (111127), 2025
— Role: methodology, editing
12. L. Milecki, C. Gonzalez, E. Adeli, K.B. Nooner, M.R. Sabuncu, A. Kuceyeski, Q. Zhao, Regularized CCA Identifies Sex-Specific Brain-Behavior Associations in Adolescent Psychopathology, *Translational Psychiatry*, 15 (405), 2025
13. Q. Zhao, N.M. Zahr, In vivo growth trajectories of regional brain volumes in the Wistar rat, *Neurobiology of Aging*, Vol 156, pp 101-110, 2025
14. W. Peng, T. Xia, F. De Sousa Ribeiro, Tomas Bosschieter, E. Adeli, Q. Zhao, B. Glocker, K.M. Pohl, Latent

Causal Modeling for 3D Brain MRI Counterfactuals, *Deep Generative Models for Medical Image Computing and Computer Assisted Interventions Workshop, Lecture Notes in Computer Science, Vol 16128*, pp 192–201, 2025

— Role: methodology

15. Q. Zhao, L. Milecki, A. Kuceyeski, L. Groseknick, T. Brumback, A. Pfefferbaum, E.V. Sullivan, K.M. Pohl, Socioemotional and Executive Control Mismatch in Adolescence and Risks for Initiating Drinking, *JAMA Network Open*, 8 (9), 2025
16. B. Jafrasteh, E. Adeli, K.M. Pohl, A. Kuceyeski, M.R. Sabuncu, Q. Zhao, Statistical Variability in Comparing Accuracy of Neuroimaging Based Classification Models via Cross Validation, *Scientific Reports*, 15(28745), 2025
17. B. Jafrasteh*, W. Peng*, C. Wan, Y. Luo, E. Adeli, and Q. Zhao, WASABI: A Metric for Evaluating Morphometric Plausibility of Synthetic Brain MRIs, *Medical Image Computing and Computer-Assisted Intervention, Lecture Notes in Computer Science*, vol 15961, pp 684–694, 2025
18. T. Nakase, G. Henderson, T. Barba, R. Bareja, G. Guerra, Q. Zhao, S.S. Francis, O. Gevaert, L. Kachuri, Integration of MRI radiomics and germline genetics to predict the IDH mutation status of gliomas, *npj Precision Oncology*, 9(1):187, 2025
— Role: methodology, editing
19. Y. Shah, C. Gonzalez, M. Abbasi, Q. Zhao, K.M. Pohl, E. Adeli, Confounder-Free Continual Learning via Recursive Feature Normalization, *ICML*, 2025
— Role: methodology
20. M. Woodley, Q. Zhao, D. Goldston, A. Michael, D. Clark, S.A. Brown, K.B. Nooner, Adverse Childhood Experiences and Post-Traumatic Stress Impacts on Brain Connectivity and Alcohol Use in Adolescence, *Child Neuropsychology*, 31(6), pp 850-870, 2025
— Role: data curation, methodology, editing
21. H. Kim, B. Karaman, Q. Zhao, A. Wang, M Sabuncu, Learning-based Inference of Longitudinal Image Changes: Applications in Embryo Development, Wound Healing, and Aging Brain, *PNAS*, 122(8):e2411492122, 2025
— Role: experiment design, editing
22. M. Paschali, Q. Zhao, S.A. Sassoon, A. Pfefferbaum, E.V. Sullivan, K.M. Pohl, Multi-domain Predictors of Grip Strength Differentiate Individuals with and without Alcohol Use Disorder, *Addiction Biology*, 29(11), pp 1-10, 2024
— Role: methodology, formal analysis, editing
23. Q. Zhao, K.B. Nooner, S.F. Tapert, E. Adeli, K.M. Pohl, A. Kuceyeski, M.R. Sabuncu, The Transition From Homogeneous to Heterogeneous Machine Learning in Neuropsychiatric Research, *Biological Psychiatry: Global Open Science*, 5(1), pp 1-10, 2024
24. W. Peng, T. Bosschier, J. Ouyang, R. Paul, E.V. Sullivan, A. Pfefferbaum, E. Adeli, Q. Zhao[†], K.M. Pohl[†], Metadata-Conditioned Generative Models to Synthesize Anatomically-Plausible 3D Brain MRIs, *Medical Image Analysis*, 98(103325), 2024
25. M. Paschali, Y. Jiang, S. Siegel, C. Gonzalez, K.M. Pohl, A. Chaudhari, Q. Zhao, Spectral Graph Sample Weighting for Interpretable Sub-cohort Analysis in Predictive Models for Neuroimaging, *International Workshop on PRedictive Intelligence in MEdicine, Lecture Notes in Computer Science*, vol 15155, pp 24–34, 2024
26. Y. Wang, W. Peng, Y. Zhang, A. Pfefferbaum, E.V. Sullivan, E. Adeli, Q. Zhao[†], K.M. Pohl[†], Brain-Cognition Fingerprinting via Graph-GCCA with Contrastive Learning, *International Workshop on Machine Learning in Clinical Neuroimaging, Lecture Notes in Computer Science*, vol 15266, pp 24–34, 2024
— Role: methodology, editing
27. J. Ouyang, Q. Zhao, E. Adeli, G. Zaharchuk, K.M. Pohl, SOM2LM: Self-Organized Multi-Modal Longitudinal Maps, *Medical Image Computing and Computer-Assisted Intervention, Lecture Notes in Computer Science*, vol 15002, pp 400-410, 2024
— Role: methodology, editing
28. Q. Zhao, M. Paschali, J. Dehone, F.C. Baker, M. de Zambottib, M.D. De Bellis, D.B. Goldston, K.B. Nooner, D.B. Clark, B. Luna, B.J. Nagel, S.A. Brown, S.F. Tapert, S. Eberson, W.K. Thompson, A. Pfefferbaum, E.V. Sullivan, K.M. Pohl, Identifying High School Risk Factors that Forecast Heavy Drinking Onset in Understudied Young Adults, *Developmental Cognitive Neuroscience*, 68(101413), 2024
29. M. Endo, F. Nerrise, Q. Zhao, E.V. Sullivan PhD, L. Fei-Fei, V.W. HendersonM, K.M. Pohl, K.L. Poston,

- E. Adeli, Data-Driven Parkinson's Disease Subtyping and Digital Biomarker Discovery by Correlating Video-Captured Gait with rs-fMRI Brain Connectivity, *Nature Machine Intelligence*, 130(6), pp 763-776, 2024
— Role: data curation, methodology, editing
30. J. Hwa, Q. Zhao, A. Lahiri, A. Masood, B. Salimi, E. Adeli, Enforcing Conditional Independence for Fair Representation Learning and Causal Image Generation, *CVPR Workshop on Fair, Data-efficient, and Trusted Computer Vision*, pp 103-122, 2024
— Role: conceptualization, methodology, editing
31. E.V. Sullivan, N.M. Zahr, Q. Zhao, K.M. Pohl, S.A. Sassoon, A. Pfefferbaum, Contributions of Cerebral White Matter Hyperintensities to Postural Instability in Aging with and without Alcohol Use Disorder, *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 9(10), pp 998-1009, 2024
— Role: data curation
32. E.V. Sullivan, N.M. Zahr, Q. Zhao, K.M. Pohl, S.A. Sassoon, A. Pfefferbaum, Contributions of Cerebral White Matter Hyperintensities, Age, and Pedal Perception to Postural Sway in People Living with HIV, *AIDS*, 38(8), pp 1153-1162, 2024
— Role: data curation
33. A. Pfefferbaum, Q. Zhao, K.M. Pohl, S.A. Sassoon, N.M. Zahr, E.V. Sullivan, Age-Accelerated Increase of White Matter Hyperintensity Volumes is Exacerbated by Heavy Alcohol Use in People Living with HIV, *Biological Psychiatry*, 95(3), pp 231-244, 2024
— Role: data curation
34. Y. Wang, W. Peng, S. Tapert, Q. Zhao, K.M. Pohl, Imputing Brain Measurements Across Data Sets via Graph Neural Networks, *PRedictive Intelligence in MEdicine, Springer Lecture Notes in Computer Science*, vol 14277, pp 172-183, 2023
— Role: conceptualization, editing
35. D.J. Piekarski, N.M. Zahr, Q. Zhao, U. Ferizi, K.M. Pohl, E.V. Sullivan, A. Pfefferbaum, White matter microstructural integrity continues to develop from adolescence to young adulthood in mice and humans: Same phenotype, different mechanism, *Neuroimage: Reports*, 3(3), 100179, 2023
— Role: data curation
36. F. Nerrise, Q. Zhao, K. Poston, K.M. Pohl, E. Adeli, An Explainable Geometric-Weighted Graph Attention Network for Identifying Functional Networks Associated with Gait Impairment, *Medical Image Computing and Computer-Assisted Intervention, Springer Lecture Notes in Computer Science*, vol 14221, pp 723-733, 2023
— Role: data curation, editing
37. W. Peng, E. Adeli, T. Bosschieter, Q. Zhao, K.M. Pohl, Generating Realistic Brain MRIs via a Conditional Diffusion Probabilistic Model, *Medical Image Computing and Computer-Assisted Intervention, Springer Lecture Notes in Computer Science*, vol 14227, pp 14-24, 2023
— Role: conceptualization, editing
38. J. Ouyang, Q. Zhao, E. Adeli, W. Peng, G. Zaharchuk, K.M. Pohl, LSOR: Longitudinally-Consistent Self-Organized Representation Learning, *Medical Image Computing and Computer-Assisted Intervention, Springer Lecture Notes in Computer Science*, vol 14220, pp 279-289, 2023
— Role: methodology, editing
39. X. Li, Y. Zhang, Q. Zhao, Deep Learning in Neuroimaging-based Neurological Disease Analysis, *Frontiers in Neuroimaging, Sec. Neuroimaging Analysis and Protocols*, 2023
40. S. Su, S. Kwong, Q. Zhao, D. Huang, J.C. Niebles, E. Adeli, Identifying Auxiliary or Adversarial Tasks Using Necessary Condition Analysis for Adversarial Multi-Task Video Understanding, *2nd International Workshop on Distributed Smart Cameras*, 2022
— Role: methodology, formal analysis
41. Q. Zhao*, K. Wang*, O. Kiss*, D. Yuksel, M. De Zambotti, D.B. Clark, D. Goldston, K.B. Nooner, S.A. Brown, S.F. Tapert, W.K. Thompson, B.J. Nagel, A. Pfefferbaum, E.V. Sullivan, K.M. Pohl, F.C. Baker, Earlier Bedtime and Effective Coping Skills Predict a Return to Low-Risk of Depression in Young Adults during the COVID-19 Pandemic, *International Journal of Environmental Research and Public Health*, 19(16), 10300, 2022
42. J. Ouyang, Q. Zhao, E. Adeli, G. Zaharchuk, K.M. Pohl, Self-supervised Learning of Neighborhood Embedding for Longitudinal MRI, *Medical Image Analysis (Special Issue of MICCAI 2021)*, 82(102571), pp 1-11, 2022
— Role: conceptualization, methodology, editing

43. M. Paschali, Q. Zhao, E. Adeli, K.M. Pohl, Bridging the Gap between Deep Learning and Hypothesis-Driven Analysis via Permutation Testing, *PRedictive Intelligence in MEDicine, Springer Lecture Notes in Computer Science*, vol 13564, pp 13-23, 2022
— Role: conceptualization, methodology, editing
44. A. Singla, Q. Zhao, D.K. Do, Y. Zhou, K.M. Pohl, E. Adeli, Multiple Instance Neuroimage Transformer, *PRedictive Intelligence in MEDicine, Springer Lecture Notes in Computer Science*, vol 13564, pp 36-48, 2022
— Role: conceptualization, data curation, editing
45. D. Piekarski, N. Zahr, Q. Zhao, E.V. Sullivan, A. Pfefferbaum, Alcohol's effects on the mouse brain are modulated by age and sex, *Addiction Biology*, 27(5), pp 1-13, 2022
— Role: formal analysis, methodology
46. M. Paschali, O. Kiss, Q. Zhao, E. Adeli, S. Podhajsky, I.H. Gotlib, K.M. Pohl, Fiona Baker, Detecting Negative Valence Symptoms in Adolescents based on Longitudinal Self-Reports and Behavioral Assessments, *Journal of Affective Disorders*, 312, pp 30-38, 2022
— Role: conceptualization, methodology, editing
47. A. Vento, Q. Zhao, R. Paul, K.M. Pohl, E. Adeli, A Penalty Approach for Normalizing Feature Distributions to Build Confounder-Free Models, *Medical Image Computing and Computer-Assisted Intervention, Springer Lecture Notes in Computer Science*, vol 13433, pp 387-397, 2022
— Role: data curation, methodology, editing
48. Y. Li, Q. Wei, E Adeli, K.M. Pohl, Q. Zhao, Joint Graph Convolution for Analyzing Brain Structural and Functional Connectome, *Medical Image Computing and Computer-Assisted Intervention, Springer Lecture Notes in Computer Science*, vol 13431, pp 231-240, 2022
— Role: conceptualization, methodology, supervision, review, editing
49. J. Ouyang*, Q. Zhao*, E. Adeli, G. Zaharchuk, and K.M. Pohl, Disentangling Normal Aging from Severity of Disease via Weak Supervision on Longitudinal MRI, *IEEE Transactions on Medical Imaging*, 41(10), pp 2558 - 2569, 2022
50. W.E. Pelham, D. Yuksel, F.C. Baker, S.F. Tapert, K.M. Pohl, W.K. Thompson, S. Podhajsky, C. Reuter, Q. Zhao, S.C. Ebersson-Shumate, D.B. Clark, D.B. Goldston, B.J. Nagel, K.B. Nooner, S.A. Brown, Did the acute impact of the COVID-19 pandemic on drinking or nicotine use persist? Evidence from a cohort of emerging adults followed for up to nine years. *Addictive Behaviors*, 131, pp 1-8, 2022
— Role: methodology
51. N.M. Zahr, Q. Zhao, R. Goodcase, A. Pfefferbaum, Systemic administration of the TLR7/8 agonist Resiquimod (R848) to mice is associated with transient, in vivo-detectable brain swelling, *Biology*, 11(2), pp 1-13, 2022
— Role: formal analysis, methodology
52. P. Sahu, S. Gerber, Q. Zhao, T. Nguyen, B. Paniagua, J. Vicory, Thin shell demons for dental scan registration, *Medical Imaging: Image Processing*, vol 120322, pp 1-8, 2022
— Role: software
53. J.Q. Zhang*, Q. Zhao*, E. Adeli, A. Pfefferbaum, E.V. Sullivan, R. Paul, V. Valcour, K.M. Pohl, Multi-Label, Multi-Domain Learning Identifies Compounding Effects of HIV and Cognitive Impairment, *Medical Image Analysis*, 75, pp 1-9, 2022
54. M.A. Infante, Y. Zhang, T. Brumback, S.A. Brown, I.M. Colrain, F.C. Baker, D.B. Clark, M. De Bellis, D. Goldston, B.J. Nagel, K.B. Nooner, Q. Zhao, K.M. Pohl, E.V. Sullivan, A. Pfefferbaum, S.F. Tapert, W.K. Thompson, Adolescent binge drinking is associated with accelerated decline of gray matter volume, *Cerebral Cortex*, 32(12) June 2022, pp 2611-262, 2022
— Role: data analysis and interpretation
55. E. Alzueta*, S. Podhajsky*, Q. Zhao*, S.F. Tapert, W.K. Thompson, M. de Zambotti, D. Yuksel, O. Kiss, R. Wang, L. Volpe, D. Prouty, I.M. Colrain, D.B. Clark, D.B. Goldston, K.B. Nooner, M. D. De Bellis, S.A. Brown, B.J. Nagel, A. Pfefferbaum, E.V. Sullivan, F.C. Baker, K.M. Pohl, Risk for Depression Tripled during COVID-19 Pandemic in Emerging Adults Followed for the Last 8 Years, *Psychological Medicine*, pp 1-8, 2021
56. A. Butskova, R. Juhl, D. Zukic, A. Chaudhary, K.M. Pohl, Q. Zhao, Adversarial Bayesian Optimization for Quantifying Motion Artifact within MRI, *PRedictive Intelligence in MEDicine, Springer Lecture Notes in Computer Science*, vol 12928, pp 83-92, 2021
— Role: conceptualization, methodology, supervision, review, editing
57. Q. Zhao, E. Adeli, K.M. Pohl, Longitudinal Correlation Analysis for Decoding Multi-Modal Brain Development,

- Medical Image Computing and Computer-Assisted Intervention, Springer Lecture Notes in Computer Science, vol 12907, pp 400-409, 2021*
58. J. Ouyang, Q. Zhao, E. Adeli, A. Pfefferbaum, E.V. Sullivan, G. Zaharchuk, K.M. Pohl, Self-Supervised Longitudinal Neighbourhood Embedding, *Medical Image Computing and Computer-Assisted Intervention, Springer Lecture Notes in Computer Science, vol 12902, pp 80-89, 2021*
— Role: conceptualization, methodology, supervision, review, editing
 59. M. Lu, Q. Zhao, K.L. Poston, E.V. Sullivan, A. Pfefferbaum, M. Shahid, M. Katz, L.M. Kouhsari, K. Schulman, A. Milstein, J.C. Niebles, V.W. Henderson, L. Fei-Fei, K.M. Pohl, E. Adeli, Quantifying Parkinson's Disease Motor Severity Under Uncertainty Using MDS-UPDRS Videos, *Medical Image Analysis, vol 73, pp 1-12, 2021*
— Role: statistical analysis, review, editing
 60. Q. Zhao*, Z. Liu*, E. Adeli, K.M. Pohl, Longitudinal Self-supervised Learning, *Medical Image Analysis, vol 71, pp 1-11, 2021*
 61. M. Lu, Q. Zhao, J. Zhang, K.M. Pohl, L. Fei-Fei, J.C. Niebles, E. Adeli, Metadata Normalization, *Computer Vision and Pattern Recognition, pp 10917-10927, 2021*
— Role: conceptualization, methodology, data curation, supervision, review, editing
 62. E.V. Sullivan, Q. Zhao, K.M. Pohl, N.M. Zahr, A. Pfefferbaum, Attenuated Cerebral Blood Flow in Frontolimbic and Insular Cortices in Alcohol Use Disorder: Relation to Working Memory, *Journal of Psychiatric Research, vol 136, pp 140-148, 2021*
— Role: formal analysis, methodology
 63. J. Ouyang, E. Adeli, K.M. Pohl, Q. Zhao, G. Zaharchuk, Representation Disentanglement for Multi-modal MR Analysis, *Information Processing in Medical Imaging, Springer Lecture Notes in Computer Science, vol 12729, pp 321-333, 2021*
— Role: conceptualization, methodology, data curation, supervision, review, editing
 64. Z. Liu, E. Adeli, K.M. Pohl, Q. Zhao, Going Beyond Saliency Maps: Training Deep Models to Interpret Deep Models, *Information Processing in Medical Imaging, Springer Lecture Notes in Computer Science, vol 12729, pp 71-82, 2021*
 65. E. Adeli*, Q. Zhao*, A. Pfefferbaum, E. V. Sullivan, L. Fei-Fei, J. C. Niebles, K. M. Pohl, Representation Learning with Statistical Independence to Mitigate Bias, *IEEE Winter Conference on Applications of Computer Vision, pp 2513-2523, 2021*
 66. Q. Zhao, E.V. Sullivan, N. Honnorat, E. Adeli, S. Podhajsky, M.D. De Bellis, K.B. Nooner, F.C. Baker, I.M. Colrain, S.F. Tapert, S.A. Brown, W.K. Thompson, B.J. Nagel, D.B. Clark, A. Pfefferbaum, K.M. Pohl, Association of Heavy Drinking With Deviant Fiber Tract Development in Frontal Brain Systems in Adolescents, *JAMA Psychiatry, 78 (4), pp 407-415, 2020*
 67. Q. Zhao*, E. Adeli*, K.M. Pohl, Training Confounder-Free Deep Learning Models for Medical Applications, *Nature Communications, 11 (6010), pp 1-9, 2020*
 68. J. Ouyang, Q. Zhao, E.V. Sullivan, A. Pfefferbaum, S.F. Tapert, E. Adeli, and K.M. Pohl, Longitudinal Pooling and Consistency Regularization to Model Disease Progression from MRIs, *IEEE Journal of Biomedical And Health Informatics, 25(6), pp 2082-2092, 2020*
— Role: conceptualization, methodology, supervision, review, editing
 69. S. Gadgil*, Q. Zhao*, A. Pfefferbaum, E. V. Sullivan, E. Adeli, K. M. Pohl, Spatio-Temporal Graph Convolution for Functional MRI Analysis, *Medical Image Computing and Computer-Assisted Intervention, Springer Lecture Notes in Computer Science, vol 12267, pp 528-538, 2020*
 70. R. Ayub, Q. Zhao, M.J. Meloy, A. Pfefferbaum, E.V. Sullivan, E. Adeli, K. M. Pohl, Inpainting Cropped Diffusion MRI using Deep Generative Models, *PRedictive Intelligence in MEDicine, Springer Lecture Notes in Computer Science, vol 12329, pp 91-100, 2020*
— Role: conceptualization, methodology, supervision, review, editing
 71. Q. Zhao, K.M. Pohl, E.V. Sullivan, A. Pfefferbaum, N.M. Zahr, Jacobian mapping reveals converging substrates of disruption and repair in response to ethanol exposure and abstinence in two strains of rats, *Alcoholism: Clinical and Experimental Research, 45(1), pp 92-104, 2020*
 72. M. Fritz, A.M. Klawonn, Q. Zhao, E.V. Sullivan, N. Zahr, A. Pfefferbaum, Structural and biochemical imaging reveals systemic LPS-induced changes in the rat brain, *Journal of Neuroimmunology, vol 348, pp 1-10, 2020*
— Role: formal analysis, methodology
 73. E. Adeli*, Q. Zhao*, N.M. Zahr, A. Goldstone Pfefferbaum, E.V. Sullivan, K.M. Pohl, Deep Learning Identifies

- Morphological Determinants of Sex Differences in the Pre-Adolescent Brain. *NeuroImage*, 223(117293), pp 1-13, 2020
74. Q. Zhao, E.V. Sullivan, E. Muller-Oehring, N. Honnorat, E. Adeli, S. Podhajsky, F.C. Baker, I.M. Colrain, D. Prouty, S.F. Tapert, S.A. Brown, M.J. Meloy, T. Brumback, B.J. Nagel, A.M. Morales, D.B. Clark, B. Luna, M.D. De Bellis, J.T. Voyvodic, A. Pfefferbaum, K.M. Pohl, Adolescent Alcohol Use Disrupts Functional Neurodevelopment in Sensation Seeking Girls. *Addiction Biology*, 26(2), pp 1-12, 2020
 75. Q. Zhao, A. Pfefferbaum, S. Podhajsky, K.M. Pohl, E.V. Sullivan, Accelerated Aging and Motor Control Deficits Are Related to Regional Deformation of Central Cerebellar White Matter in Alcohol Use Disorder. *Addiction Biology*, 25(3) pp 1-12, 2019
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— Role: review, editing
 78. T. Leng, Q. Zhao, C. Yang, Z. Lu, E. Adeli, K. M. Pohl, Data Augmentation based on Substituting Regional MRI Volume Scores, *Large Scale Annotation of Biomedical Data and Expert Label Synthesis, Springer Lecture Notes in Computer Science*, vol 11851, pp 32-41, 2019
— Role: conceptualization, methodology, data interpretation, review, editing
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— Role: conceptualization, review, editing
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— Role: methodology, review, editing
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— Role: conceptualization, review, editing
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— Role: statistical analysis, validation
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— Role: statistical analysis, validation
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— Role: conceptualization, methodology, review, editing
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- Connectivity, *Medical Image Computing and Computer-Assisted Intervention, Springer Lecture Notes in Computer Science*, vol 11072, pp 145–153, 2018
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— Role: methodology, software
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— Role: software
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— Role: software

Abstracts, Preprints, and Others

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2. Y. Luo, Y. Fan, H. Kim, H. Zhao, M.R. Sabuncu, Q. Zhao, Normalized Total Gradient-Guided Multi-Scale Dilated Vision Transformer for 3d Medical Image Registration, *SSRN 5254872* 2026
3. Y. Qian, C. Wan, C. Jia, Y. Yang, Q. Zhao, Z. Gan, Where did the Reasoning Go Wrong? A Benchmark of Puzzle-Based Visual Tasks with Error Detection, *ResponsibleFM @ NeurIPS* 2025
4. J. Kim, Q. Zhao, M. Sabuncu, A. Kuceyeski, Predicting Future Alcohol Use via Connectome-Behavior Mapping, *Organization for Human Brain Mapping Annual Meeting*, 2025
5. L. Schilling, S.P. Singleton, M. Hedro, C. Tozlu, Q. Zhao, K.M. Pohl, K. Jamison, A. Kuceyeski, Family History of Substance Use Disorder Alters Brain Dynamics in a Sex-Dependent Manner in Substance-Naïve Youth: Findings From the ABCD Study, *Society of Biological Psychiatry Annual Meeting*, 2025
6. Q. Zhao, L. Milecki, A. Pfefferbaum, E. Sullivan, K.M. Pohl, Risks and Effects of Alcohol Use during Dual-System Brain and Cognitive Development in Adolescence and Young Adulthood, *Accepted, 48th Annual RSA Scientific Meeting*, 2025
7. C. Gonzalez, T. Nguyen-Louie, E. Sullivan, A. Pfefferbaum, Q. Zhao, E. Adeli, S.F. Tapert, K.M. Pohl, Identifying Unique Pathways towards Heavy Alcohol Drinking During Adolescence, *Accepted, 48th Annual RSA Scientific Meeting*, 2025
8. L. Milecki, A. Kuceyeski, M. Sabuncu, Q. Zhao, Heterogeneous brain functional mapping of childhood psychiatric symptoms, *Society for Neuroscience*, 2024
9. Q. Zhao, A. Pfefferbaum, E.V. Sullivan, K.M. Pohl, IDENTIFYING SEX-SPECIFIC PREDICTORS OF HEAVY DRINKING YOUNG ADULTS TAKING DIFFERENT CAREER PATHS, *Sex & Gender & Alcohol Satellite*

Meeting at RSA 2024

10. K.M. Pohl, M. Paschali, Q. Zhao, S.A. Sassoon, A. Pfefferbaum, E.V. Sullivan, Identifying Predictors of Grip Strength Specific to Alcohol Use Disorder with and without HIV Comorbidity, *47th Annual RSA Scientific Meeting, 2024*
11. M.O. Woodley, K.B. Nooner, Q. Zhao. Adverse Childhood Experiences and Post-Traumatic Stress in the Neurodevelopment of Problematic Alcohol Use, *46th Annual RSA Scientific Meeting, 2023*
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13. F.C. Baker, Q. Zhao, W.E. Pelham III, E. Alzueta, S. Podhasky, D. Yuksel, W. Thompson, S.F. Tapert, and K.M. Pohl. Changes in Alcohol Consumption and Mental Health across the Coronavirus Pandemic in Early Adulthood, *45th Annual RSA Scientific Meeting, 2022*
14. K.M. Pohl, Q. Zhao, E. Adeli, E. V. Sullivan, A. Pfefferbaum, Deep Learning Identifies Effects of Alcohol Drinking on the Early Adult Brain, *45th Annual RSA Scientific Meeting, 2022*
15. E Adeli, E.V. Sullivan, M. Lu, Q. Zhao, L. Montaser Kouhsari, M. Katz, A. Pfefferbaum, K.M. Pohl, V.W. Henderson, K. Poston, Automatic Estimation of MDS-UPDRS Gait Scores from Videos with Multi-Rater Disagreements, *Movement Disorders Society Congress, 2021*
16. Q. Zhao, E.V. Sullivan, N. Honnorat, E. Adeli, S. Podhasky, M.D. De Bellis, K.B. Nooner, F.C. Baker, I.M. Colrain, S.F. Tapert, S.A. Brown. W.K. Thompson, B.J. Nagel, D.B. Clark, A. Pfefferbaum, K.M. Pohl, Young Teens Who Initiate Heavy Drinking Risk Deviant Fiber Tract Development in Frontal Brain Systems, *44th Annual RSA Scientific Meeting / ISBRA Congress, 2021*
17. K.M. Pohl, Q. Zhao, E. Adeli, Advancing Neuroscientific Discovery via Bias-Resilient Neural Networks, *the 54th Asilomar Conference on Signals, Systems and Computers, 2020*
18. S.M. Pizer, J. Frahm, J.G. Rosenman Q. Zhao, R. Wang, R. Ma, J.T. Price, M. Fan, S.K. McGill, Methods, systems, and computer readable media for deriving a three-dimensional (3D) textured surface from endoscopic video, *United States Patent Application No. 16/241,356, UNC Ref. 18-0149, 2020*
19. A. Pfefferbaum, N.M. Zahr, Q. Zhao, K.M. Pohl, E.V. Sullivan, Translational Studies of Alcohol Use Disorder, *7th International Drug Abuse Research Society Meeting (IDARS), 2019*
20. Q. Zhao, Variational Autoencoder with Truncated Mixture of Gaussians for Functional Connectivity Analysis (poster), *Big Data in Precision Health Conference, 2019*
21. R. Wang, Q. Zhao, T. Price, R. Ma, A. Aji, J. Frahm, J. G. Rosenman, S. Pizer, Endoscopography: Deriving a 3D Textured Surface from Endoscopic Video, Then Registration with CT, *Technical Report, Preprint available at <https://www.semanticscholar.org>, 2019*
22. Q. Zhao, N. Honnonrat, E. Adeli, K.M. Pohl, Truncated Gaussian-Mixture Variational AutoEncoder, *Technical Report, Preprint available at arXiv:1902.03717, 2019*
23. S.K. McGill, J. Rosenman, Q. Zhao, R. Wang, R. Ma, M. Fan, M. Niethammer, R. Alterovitz, J.M. Frahm, J. Tepper, S.m. Pizer, Missed Colonic Surface Area at Colonoscopy Can Be Calculated with Computerized 3D Reconstruction (poster). *Digestive Diseases Week, 2018*
24. Q. Zhao, Longitudinal analysis on resting-state functional connectivity (poster), *Natural/Artificial Intelligence Symposium, 2018*
25. Q. Zhao, Surface Registration for Pharyngeal Radiation Treatment Planning, *University of North Carolina at Chapel Hill, Computer Science, PhD Thesis, 2017*
26. T. Price, Q. Zhao, J. Rosenman, S. Pizer, J.M. Frahm, Shape from motion and shading in uncontrolled environments, *Technical Report UNC Computer Science, 2016*
27. B. Sheng, Q. Zhao, L. Ma, GPU (Graphic Processing Unit) accelerating encoder rate control method, *Patent CN102724507B, 2014*

Media and Commentary

Forbes

2026/03/29

L. Eliot, *Stanford Smartly Using AI-Generated Synthetic Data To Map And Unlock The Mysteries Of The Brain*

– Report on Peng et al., Medical Image Analysis 2024"

Research Society on Alcoholism <i>S. Wasilow, Researchers Identify Adolescent Pathways of Problematic Drinking During Adolescence</i> – Report on "Gonzalez et al., RSA 2025"	2025/6/12
Biological Psychiatry: Global Open Science <i>D. Scheinost, M.N. Spann, Embracing Model Heterogeneity for Better Brain-Behavior Associations</i> – Commentary on "Zhao et al., Biological Psychiatry: Global Open Science 2025"	2025/1
SfN Press Conference: Adolescence <i>Heterogeneous brain functional mapping of childhood psychiatric symptoms</i>	2024/10/7
Towards Data Science <i>M. Reynolds, Longitudinal Self-Supervised Learning: Exploiting longitudinal measurements to learn better representations</i> – Report on "Zhao et al., Medical Image Analysis 2021"	2022/6/20
Forbes <i>R. Coffey, The Risk Of Depression In Emerging Adults Suddenly Tripled During COVID-19, And Young Women Are Particularly Vulnerable</i> – Report on "Alzueta*, Podhajsky*, Zhao* et al., Psychological Medicine 2021"	2021/11/18
Healio News <i>J. Gramigna, Heavy alcohol consumption produces 'deleterious' effects on adolescents' white matter</i> – Report on "Zhao et al., JAMA Psychiatry 2021"	2021/1/4
Medscape Medical News <i>P. Anderson, Heavy Drinking by Teens May Affect White Matter Integrity</i> – Report on "Zhao et al., JAMA Psychiatry 2021"	2021/1/7

Invited Talks and Panel Discussions

Biomedical Imaging Technology & Translational Science Conference <i>Predictive Modeling in Developmental Neuroimaging</i>	New Haven, CT 2026
e184 × NeuroNYC <i>Foundation Models for the Brain: Laying the groundwork for the next stage in neurotech and AI</i>	New York, NY 2026
STAI Lab <i>Developmental Trajectories of an Adolescent PI</i>	Stanford, CA 2026
Generative Models for Synthesizing Medical Images Tutorial <i>Generating and Evaluating Anatomical Plausibility in Brain Morphometry and Longitudinal Change</i>	South Korea 2025
DGIST <i>Key Ingredients in Neuroimaging-Based Predictive Modeling</i>	South Korea 2025
RISE-MICCAI Summer School <i>Beyond Accuracy, Model than a Model: New Trends in AI for Neuroimaging Research</i>	Virtual 2025
Center for Machine Learning Seminars, MGH Martinos <i>Key Ingredients in Neuroimaging-Based Predictive Modeling</i>	Virtual 2025
Machine Intelligence for Medical Imaging (MIMI), Stanford University <i>Thoughts on Cross-Validation, Model Comparison, and Hypothesis Testing</i>	Stanford, CA 2024
Progress in Neuroscience Seminars, Weill Cornell Medicine <i>Brain-Behavior Effects and Predictive Risk Factors for Heavy Alcohol Drinking During Adolescence: A Computational Perspective</i>	New York, NY 2024
Department of Psychiatry and Behavioral Sciences, Stanford University <i>Brain-Behavior Effects and Predictive Risk Factors for Heavy Alcohol Drinking During Adolescence: A Computational Perspective</i>	Stanford, CA 2023
Department of Psychiatry, University of California San Diego <i>Identifying the Effects of Alcohol Drinking on the Adolescent Brain: from Hypothesis-driven to Data-driven Approaches</i>	San Diego, CA 2023

Department of Psychiatry and Behavioral Sciences, Northwestern University <i>Identifying the Effects of Alcohol Drinking on the Adolescent Brain: from Hypothesis-driven to Data-driven Approaches</i>	Chicago, IL 2023
Department of Radiology, Weill Cornell Medicine <i>Interpretable and Unbiased Deep Learning for Longitudinal and Multimodal Neuroimaging Studies</i>	New York, NY 2023
T32 Addictions Seminar, University of California San Diego <i>Identifying the Effects of Alcohol Drinking on the Adolescent Brain: from Hypothesis-driven to Data-driven Approaches</i>	Virtual 2022
Fairness of AI in Medical Imaging Workshop <i>Confounder-aware Deep Learning Models for Neuroimaging Applications</i>	Virtual 2022
KITE Research Institute, University of Toronto <i>Self-Supervised Learning for Longitudinal Neuroimaging Data</i>	Virtual 2022
Machine Learning in Medicine Seminar, Cornell University <i>Confounder-aware Deep Learning Models for Neuroimaging Applications</i>	Virtual 2022
Department of Psychiatry and Neurosciences, Charité-Universitätsmedizin Berlin <i>Controlling Confounding Effects in Machine-Learning-based Neuroimaging Studies</i>	Virtual 2022
Center for Research on Foundation Models, Stanford University <i>Self-Supervised Learning and Foundation Models in Neuroimaging Studies</i>	Stanford, CA 2022
Department of Radiology & Biomedical Imaging, Yale University <i>Computational Approaches for Longitudinal Neuroimaging Studies</i>	Virtual 2022
Neural Systems Analysis Laboratory, John Hopkins University <i>Longitudinal Methods for Neuroimage Analysis</i>	Virtual 2022
Meetup at AI in Medical Imaging <i>Interpretable Deep Learning for Neuroimaging Studies</i>	Cupertino, CA, USA 2020
Department of Computer Science, Stanford University <i>Variational Autoencoders for Clustering, Classification, and Regression with Applications to Neuroimaging</i>	Stanford, CA 2020
Beijing Institute of Big Data Research, Peking University <i>Variational Autoencoders for Clustering, Classification, and Regression with Applications to Neuroimaging</i>	Beijing, China 2019
Computer Science Department, Shanghai University <i>Variational Autoencoders for Clustering, Classification, and Regression with Applications to Neuroimaging</i>	Shanghai, China 2019
Biomedical Engineering Department, Shanghai Jiao Tong University <i>Variational Autoencoders for Clustering, Classification, and Regression with Applications to Neuroimaging</i>	Shanghai, China 2019

Oral Presentations at Conferences & Meetings

49th Annual RSA Scientific Meeting <i>Longitudinal Multivariate Modeling of Brain-Impulsivity Constructs Predicting Alcohol Outcomes in Adolescence</i>	San Antonio, TX 2026
48th Annual RSA Scientific Meeting <i>Risks and Effects of Alcohol Use During Dual-System Brain and Cognitive Development in Adolescence and Young Adulthood</i>	New Orleans, LA 2025
45th Annual RSA Scientific Meeting <i>Deep learning identifies alcohol drinking effects on the early adult brain</i>	Orlando, FL 2022
2021 NCANDA Annual Meeting with NIH/NIAAA <i>Youth Depression during the COVID Pandemic</i>	Bethesda, MD (Virtual) 2021

44th Annual RSA Scientific Meeting <i>Young Teens Who Initiate Heavy Drinking Risk Deviant Fiber Tract Development in Frontal Brain Systems</i>	San Antonio, TX (Virtual) 2021
4th Workshop on PRedictive Intelligencein MEDicine <i>Adversarial Bayesian Optimization for Quantifying Motion Artifact within MRI</i>	Strasbourg, France (Virtual) 2021
3rd Workshop on PRedictive Intelligencein MEDicine <i>Inpainting Cropped Diffusion MRI using Deep Generative Models</i>	Lima, Peru (Virtual) 2020
Medical Image Computing and Computer-Assisted Intervention <i>Spatio-Temporal Graph Convolution for Functional MRI Analysis</i>	Lima, Peru (Virtual) 2020
International Workshop on Connectomics in NeuroImaging <i>Covariance Shrinkage for Dynamic Functional Connectivity</i>	Shenzhen, China 2019
NADIA/NCANDA Joint Meeting at NIH <i>Novel Longitudinal Analysis of Resting-state Functional Connectivity on the NCANDA Cohort</i>	Bethesda, MD 2019
Information Processing in Medical Imaging Conference <i>Orthotropic Thin Shell Elasticity Estimation for Surface Registration</i>	Boone, NC 2017
Medical Image Computing and Computer-Assisted Intervention <i>The Endoscopogram:a 3D Model Reconstructed from Endoscopic Video Frames</i>	Athens, Greece 2016
Medical Image Understanding and Analysis <i>Surface Registration in the Presence of Missing Patches and Topology Change</i>	Lincoln, UK 2015

Oral Presentations at Conference by Mentees

49th Annual RSA Scientific Meeting <i>Modeling Comorbidity Trajectories Across Substance Use, Mental Health, and Chronic Disease Using Longitudinal EHR Data From All of Us (by L. Milecki)</i>	San Antonio, TX 2026
Medical Image Computing and Computer-Assisted Intervention <i>Joint Graph Convolution for Analyzing Brain Structural and Functional Connectome (by Y. Li)</i>	Singapore (Virtual) 2022
Information Processing in Medical Imaging Conference <i>Going Beyond Saliency Maps: Training Deep Models to Interpret Deep Models (by Z. Liu)</i>	Bornholm, Denmark (Virtual) 2021

Selected Awards & Honors

Best Paper Award Runner-Up: Machine Learning in Clinical Neuroimaging (Wang et al.)	2024
NARSAD Young Investigator Award: Brain & Behavior Research Foundation	2024
Chairman's Award for Advancing Science: Stanford Psychiatry Department	2023
Best Paper Award: PRedictive Intelligence in MEDicine (Paschali et al.)	2022
Pathway to Independence Award (K99/R00): NIH/NIAAA	2021-Present
Innovator Grant Award: Stanford Psychiatry Department	2022
Young Scientist Award Runner-up: MICCAI (Ouyang et al.)	2021
Student Travel Awards: Medical Image Computing and Computer-Assisted Intervention	2016
Best Paper Award: Medical Image Understanding and Analysis	2015
Best Project Award: 4th Chinese University Students Creativity Forum	2011
Best Project Award: 7th Software Exposition, School of Software, SJTU	2011
Academic excellence scholarship (Third-class): Shanghai Jiao Tong University	2009,2010
Bronze medal: National Olympiad in Informatics	2007

Professional Service

Grant Review

- NSF Smart Health and Biomedical Research LLM 2025
- NIH/NIDA RFA-DA-22-037 & RFA-DA-24-037 2023 - 2025
- NIH/NIDA RFA-DA-25-024 & RFA-25-060 2026
- Swiss National Science Foundation 2024-2025
- Canada Foundation for Innovation (Public & Population Health) 2025

Service for Organizations

- *Organizer & Chair*, Modern Machine Learning and AI Methodology in Alcohol Research at Research Society on Alcohol Annual Meeting 2026
- Organizer, Machine Learning in Medicine (MLiM) Webinar 2025-Present
- Associate Editor, Medical Image Analysis 2025-Present
- Area Chair, MICCAI 2024-Present
- *Award Judge*, Women in MICCAI Award 2023
- *Review Editor*, Frontiers in Neurology 2023
- *Associate Editor & Review Editor*, Frontiers in Neuroimaging 2022
- *Guest Editor*, Applied Sciences 2022
- *Program Committee*, International Conference on Medical Image and Computer-Aided Diagnosis 2022
- *Organizer*: The 1st International Workshop on (Deep) Neural Networks for Brain Connectome Analysis (BrainNN2022) at IEEE International Conference on Big Data 2022
- *Program Committee*, International Workshop on PRedictive Intelligence in MEDicine at International Conference on Medical Image Computing and Computer Assisted Intervention 2018-Present
- *Chair & Program Committee*, Machine Learning in Medical Imaging at the International Conference on Medical Image Computing and Computer Assisted Intervention 2019
- *Reading Group Chair*, International Conference on Information Processing in Medical Imaging 2019

Journal Review

- Addiction
- Alcoholism: Clinical and Experimental Research (ACER)
- Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring
- American Journal of Psychiatry
- American Research Journal of Radiology and Nuclear Medicine
- Applied Sciences
- Arthritis & Rheumatology
- Artificial Intelligence In Medicine
- Brain Sciences
- Computer Vision and Image Understanding (CVIU)
- Frontiers In Aging Neuroscience
- Frontiers in Medicine
- Frontiers in Neuroimaging
- Frontiers in Neuroscience
- Frontiers in Psychology
- GigaScience
- IEEE Access
- IEEE Journal of Biomedical and Health Informatics (JBHI)
- IEEE Transactions on Biomedical Engineering (TBME)
- IEEE Transactions on Cognitive and Developmental Systems
- IEEE Transactions on Medical Imaging (TMI)
- IEEE Transactions on Pattern Analysis and Machine Intelligence
- International Journal of Automation and Computing (IJAC)
- International Journal of Computer Assisted Radiology and Surgery (IJCARS)

- JAMA Psychiatry
- Journal of Studies on Alcohol and Drugs
- International Journal of Environmental Research and Public Health (IJERPH)
- Knowledge-Based Systems
- Machine Learning for Biomedical Imaging
- Medical Image Analysis (MEDIA)
- Molecular Psychiatry
- National Science Review
- Nature Biomedical Engineering
- Nature Mental Health
- Neural Networks
- Neuroimage
- Neuroimage: Clinical
- Physics in Medicine and Biology
- PLOS ONE
- Psychiatry Research: Neuroimaging (PSYN)
- Scientific Reports

Conference Review

- AAAI Conference on Artificial Intelligence
- Conference on Computer Vision and Pattern Recognition (CVPR)
- Deep Neural Networks for Brain Connectome Analysis (BrainNN2022)
- European Conference on Computer Vision (ECCV)
- International Conference on Learning Representations (ICLR)
- International Conference on Computer Vision (ICCV)
- International Conference on Machine Learning (ICML)
- International Symposium on Biomedical Imaging (ISBI)
- Information Processing in Medical Imaging (IPMI)
- Machine Learning in Medical Imaging (MLMI)
- Medical Image Computing and Computer Assisted Intervention (MICCAI)
- Medical Imaging meets NeurIPS
- Medical Imaging with Deep Learning (MIDL)
- Neural Information Processing Systems (NeurIPS)
- Winter Conference on Applications of Computer Vision (WACV)
- Workshop on PRedictive Intelligence in MEDicine (PRIME)