



Kilian M Pohl

Associate Professor (Research) of Psychiatry and Behavioral Sciences (Public Mental Health and Population Sciences)

 Curriculum Vitae available Online

Bio

BIO

The research of my lab focuses on computational neuroscience aimed at identifying biomedical phenotypes to improve the mechanistic understanding, diagnosis, and treatment of neuropsychiatric disorders.

ACADEMIC APPOINTMENTS

- Associate Professor (Research), Psychiatry and Behavioral Sciences
- Member, Bio-X
- Faculty Affiliate, Institute for Human-Centered Artificial Intelligence (HAI)
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Editorial Board, Medical Image Analysis, (2017- present)
- Associate Editor, IEEE Transactions on Medical Imaging, (2016- present)
- Review Editor, Frontiers in Brain Imaging Methods, (2013- present)

HONORS AND AWARDS

- Creative and Novel Ideas in HIV Research Award, The 20th International AIDS Conference (2014)
- Two Top 10 most accessed papers, IEEE Transactions on Medical Image Analysis (2012)
- Top 10 Paper (of 736 submissions), 8th International Symposium on Biomedical Imaging (2011)
- IBM Research Accomplishment, IBM (2009)
- Best Paper Prize (of 575 submissions), Medical Image Analysis-MICCAI 06 (2007)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Program Committee Member, Workshop on Biomedical Image Registration (2012 - 2018)
- Program Committee Member, International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) (2011 - 2016)
- Session Chair, National Alliance for Medical Image Computing Registration Retreat (2011 - 2011)
- Program Committee Member, Biennial International Conference on Information Processing in Medical Imaging (2009 - 2017)
- Program Committee Member, 9th Workshop on Mathematical Methods in Biomedical Image Analysis (2008 - 2008)

PROFESSIONAL EDUCATION

- Ph.D., Massachusetts Institute of Technology , Computer Science (2005)

- M.S., University of Karlsruhe, Karlsruhe, Germany , Mathematics (1999)
- B.S., University of Karlsruhe, Karlsruhe, Germany , Mathematics (1995)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

The foundation of the laboratory of Associate Professor Kilian M. Pohl, PhD, is computational science aimed at identifying biomedical phenotypes improving the mechanistic understanding, diagnosis, and treatment of neuropsychiatric disorders. The biomedical phenotypes are discovered by unbiased, machine learning-based searches across biological, neuroimaging, and neuropsychological data. This data-driven discovery currently supports the adolescent brain research of the NIH-funded National Consortium on Alcohol and NeuroDevelopment in Adolescence (NCANDA) and the Adolescent Brain Cognitive Development (ABCD), the largest long-term study of brain development and child health in the US. The laboratory also investigates brain patterns specific to alcohol use disorder and the human immunodeficiency virus (HIV) across the adult age range, and have advanced the understanding of a variety of brain diseases including schizophrenia, Alzheimer's disease, glioma, and aging.

Publications

PUBLICATIONS

- **Memory impairment in alcohol use disorder is associated with regional frontal brain volumes.** *Drug and alcohol dependence*
Fama, R., Le Berre, A., Sassoon, S. A., Zahr, N. M., Pohl, K. M., Pfefferbaum, A., Sullivan, E. V.
2021; 228: 109058
- **Going Beyond Saliency Maps: Training Deep Models to Interpret Deep Models.** *Information processing in medical imaging : proceedings of the ... conference*
Liu, Z., Adeli, E., Pohl, K. M., Zhao, Q.
2021; 12729: 71-82
- **Longitudinal Pooling & Consistency Regularization to Model Disease Progression From MRIs.** *IEEE journal of biomedical and health informatics*
Ouyang, J., Zhao, Q., Sullivan, E. V., Pfefferbaum, A., Tapert, S. F., Adeli, E., Pohl, K. M.
2021; 25 (6): 2082-2092
- **Preliminary Evidence for a Relationship between Elevated Plasma TNF alpha and Smaller Subcortical White Matter Volume in HCV Infection Irrespective of HIV or AUD Comorbidity** *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*
Zahr, N. M., Pohl, K. M., Kwong, A. J., Sullivan, E. V., Pfefferbaum, A.
2021; 22 (9)
- **POOR SLEEP AS A PREDICTOR OF COVID-19 RELATED STRESS, FEAR AND SADNESS IN YOUNG ADOLESCENTS: A LONGITUDINAL STUDY**
Kiss, O., Alzueta, E., Yuksel, D., Durley, I., Volpe, L., Dulai, T., Arra, N., Obilor, T., Pohl, K., de Zambotti, M., Baker, F.
OXFORD UNIV PRESS INC.2021: A90-A91
- **Longitudinal self-supervised learning.** *Medical image analysis*
Zhao, Q., Liu, Z., Adeli, E., Pohl, K. M.
2021; 71: 102051
- **Performance ramifications of abnormal functional connectivity of ventral posterior lateral thalamus with cerebellum in abstinent individuals with Alcohol Use Disorder.** *Drug and alcohol dependence*
Honnorat, N. n., Saranathan, M. n., Sullivan, E. V., Pfefferbaum, A. n., Pohl, K. M., Zahr, N. M.
2021; 220: 108509
- **Preliminary Evidence for a Relationship between Elevated Plasma TNF# and Smaller Subcortical White Matter Volume in HCV Infection Irrespective of HIV or AUD Comorbidity.** *International journal of molecular sciences*
Zahr, N. M., Pohl, K. M., Kwong, A. J., Sullivan, E. V., Pfefferbaum, A.
2021; 22 (9)
- **Representation Learning with Statistical Independence to Mitigate Bias.** *IEEE Winter Conference on Applications of Computer Vision. IEEE Winter Conference on Applications of Computer Vision*

- Adeli, E., Zhao, Q., Pfefferbaum, A., Sullivan, E. V., Fei-Fei, L., Niebles, J. C., Pohl, K. M.
2021; 2021: 2512-2522
- **Quantifying Parkinson's disease motor severity under uncertainty using MDS-UPDRS videos.** *Medical image analysis*
Lu, M., Zhao, Q., Poston, K. L., Sullivan, E. V., Pfefferbaum, A., Shahid, M., Katz, M., Kouhsari, L. M., Schulman, K., Milstein, A., Niebles, J. C., Henderson, V. W., Fei-Fei, et al
2021; 73: 102179
 - **Attenuated cerebral blood flow in frontolimbic and insular cortices in Alcohol Use Disorder: Relation to working memory.** *Journal of psychiatric research*
Sullivan, E. V., Zhao, Q. n., Pohl, K. M., Zahr, N. M., Pfefferbaum, A. n.
2021; 136: 140–48
 - **Association of Heavy Drinking With Deviant Fiber Tract Development in Frontal Brain Systems in Adolescents.** *JAMA psychiatry*
Zhao, Q., Sullivan, E. V., Honnorat, N., Adeli, E., Podhajsky, S., De Bellis, M. D., Voyvodic, J., Nooner, K. B., Baker, F. C., Colrain, I. M., Tapert, S. F., Brown, S. A., Thompson, et al
2020
 - **Alcohol Use Disorder and Its Comorbidity With HIV Infection Disrupts Anterior Cingulate Cortex Functional Connectivity.** *Biological psychiatry. Cognitive neuroscience and neuroimaging*
Honorat, N., Fama, R., Muller-Oehring, E. M., Zahr, N. M., Pfefferbaum, A., Sullivan, E. V., Pohl, K. M.
2020
 - **Spatio-Temporal Graph Convolution for Resting-State fMRI Analysis.** *Medical image computing and computer-assisted intervention : MICCAI ... International Conference on Medical Image Computing and Computer-Assisted Intervention*
Gadgil, S., Zhao, Q., Pfefferbaum, A., Sullivan, E. V., Adeli, E., Pohl, K. M.
2020; 12267: 528–38
 - **Inpainting Cropped Diffusion MRI using Deep Generative Models.** *PRedictive Intelligence in MEDicine. PRIME (Workshop)*
Ayub, R., Zhao, Q., Meloy, M. J., Sullivan, E. V., Pfefferbaum, A., Adeli, E., Pohl, K. M.
2020; 12329: 91-100
 - **Vision-based Estimation of MDS-UPDRS Gait Scores for Assessing Parkinson's Disease Motor Severity.** *Medical image computing and computer-assisted intervention : MICCAI ... International Conference on Medical Image Computing and Computer-Assisted Intervention*
Lu, M., Poston, K., Pfefferbaum, A., Sullivan, E. V., Fei-Fei, L., Pohl, K. M., Niebles, J. C., Adeli, E.
2020; 12263: 637–47
 - **Deep Parametric Mixtures for Modeling the Functional Connectome.** *PRedictive Intelligence in MEDicine. PRIME (Workshop)*
Honorat, N., Pfefferbaum, A., Sullivan, E. V., Pohl, K. M.
2020; 12329: 133–43
 - **Deep Learning Identifies Morphological Determinants of Sex Differences in the Pre-Adolescent Brain.** *NeuroImage*
Adeli, E., Zhao, Q., Zahr, N. M., Goldstone, A., Pfefferbaum, A., Sullivan, E. V., Pohl, K. M.
2020: 117293
 - **Accelerated aging and motor control deficits are related to regional deformation of central cerebellar white matter in alcohol use disorder** *ADDICTION BIOLOGY*
Zhao, Q., Pfefferbaum, A., Podhajsky, S., Pohl, K. M., Sullivan, E. V.
2020; 25 (3)
 - **Corrigendum: Graded Cerebellar Lobular Volume Deficits in Adolescents and Young Adults with Fetal Alcohol Spectrum Disorders (FASD).** *Cerebral cortex (New York, N.Y. : 1991)*
Sullivan, E. V., Moore, E. M., Lane, B., Pohl, K. M., Riley, E. P., Pfefferbaum, A.
2020
 - **Graded Cerebellar Lobular Volume Deficits in Adolescents and Young Adults with Fetal Alcohol Spectrum Disorders (FASD).** *Cerebral cortex (New York, N.Y. : 1991)*
Sullivan, E. V., Moore, E. M., Lane, B., Pohl, K. M., Riley, E. P., Pfefferbaum, A.
2020
 - **Regional growth trajectories of cortical myelination in adolescents and young adults: longitudinal validation and functional correlates** *BRAIN IMAGING AND BEHAVIOR*

- Kwon, D., Pfefferbaum, A., Sullivan, E. V., Pohl, K. M.
2020; 14 (1): 242–66
- **Training confounder-free deep learning models for medical applications.** *Nature communications*
Zhao, Q. n., Adeli, E. n., Pohl, K. M.
2020; 11 (1): 6010
 - **Adolescent alcohol use disrupts functional neurodevelopment in sensation seeking girls.** *Addiction biology*
Zhao, Q. n., Sullivan, E. V., M#ller-Oehring, E. M., Honnorat, N. n., Adeli, E. n., Podhajsky, S. n., Baker, F. C., Colrain, I. M., Prouty, D. n., Tapert, S. F., Brown, S. A., Meloy, M. J., Brumback, et al
2020: e12914
 - **Multi-modal imaging reveals differential brain volumetric, biochemical, and white matter fiber responsivity to repeated intermittent ethanol vapor exposure in male and female rats.** *Neuropharmacology*
Zahr, N. M., Lenart, A. M., Karpf, J. A., Casey, K. M., Pohl, K. M., Sullivan, E. V., Pfefferbaum, A. n.
2020: 108066
 - **Age differences in brain structural and metabolic responses to binge ethanol exposure in fisher 344 rats.** *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*
Zahr, N. M., Sullivan, E. V., Pohl, K. M., Pfefferbaum, A. n.
2020
 - **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*
Zhao, Q. n., Pohl, K. M., Sullivan, E. V., Pfefferbaum, A. n., Zahr, N. M.
2020
 - **Pattern of Cerebellar Lobular Volume Deficits in Adolescents and Adults With Fetal Alcohol Effects (FAE) and Fetal Alcohol Syndrome (FAS)**
Sullivan, E., Moore, E., Pohl, K., Riley, E., Pfefferbaum, A.
NATURE PUBLISHING GROUP.2019: 281–82
 - **Confounder-Aware Visualization of ConvNets.** *Machine learning in medical imaging. MLMI (Workshop)*
Zhao, Q., Adeli, E., Pfefferbaum, A., Sullivan, E. V., Pohl, K. M.
2019; 11861: 328–36
 - **Covariance Shrinkage for Dynamic Functional Connectivity.** *Connectomics in neuroImaging : third International Workshop, CNI 2019, held in conjunction with MICCAI 2019, Shenzhen, China, October 13, 2019, Proceedings. CNI (Workshop) (3rd : 2019 : Shenzhen Shi, China)*
Honorat, N., Adeli, E., Zhao, Q., Pfefferbaum, A., Sullivan, E. V., Pohl, K.
2019; 11848: 32–41
 - **Data Augmentation Based on Substituting Regional MRIs Volume Scores.** *Large-Scale Annotation of Biomedical Data and Expert Label Synthesis and Hardware Aware Learning for Medical Imaging and Computer Assisted Intervention : International Workshops, LABELS 2019, HAL-MICCAI 2019, and CuRIOUS 2019, held in c...*
Leng, T., Zhao, Q., Yang, C., Lu, Z., Adeli, E., Pohl, K. M.
2019; 11851: 32–41
 - **Disturbed Cerebellar Growth Trajectories in Adolescents Who Initiate Alcohol Drinking.** *Biological psychiatry*
Sullivan, E. V., Brumback, T., Tapert, S. F., Brown, S. A., Baker, F. C., Colrain, I. M., Prouty, D., De Bellis, M. D., Clark, D. B., Nagel, B. J., Pohl, K. M., Pfefferbaum, A.
2019
 - **Dissociable Contributions of Precuneus and Cerebellum to Subjective and Objective Neuropathy in HIV** *JOURNAL OF NEUROIMMUNE PHARMACOLOGY*
Zahr, N. M., Pohl, K. M., Pfefferbaum, A., Sullivan, E.
2019; 14 (3): 436–47
 - **CNS Correlates of "Objective" Neuropathy in Alcohol Use Disorder.** *Alcoholism, clinical and experimental research*
Zahr, N. M., Pohl, K. M., Pfefferbaum, A., Sullivan, E. V.
2019
 - **Accelerated aging and motor control deficits are related to regional deformation of central cerebellar white matter in alcohol use disorder.** *Addiction biology*

- Zhao, Q., Pfefferbaum, A., Podhajsky, S., Pohl, K. M., Sullivan, E. V.
2019
- **Hippocampal subfield CA2+3 exhibits accelerated aging in Alcohol Use Disorder: A preliminary study.** *NeuroImage. Clinical*
Zahr, N. M., Pohl, K. M., Saranathan, M., Sullivan, E. V., Pfefferbaum, A.
2019; 22: 101764
 - **Novel Machine Learning Identifies Brain Patterns Distinguishing Diagnostic Membership of Human Immunodeficiency Virus, Alcoholism, and Their Comorbidity of Individuals.** *Biological psychiatry. Cognitive neuroscience and neuroimaging*
Adeli, E., Zahr, N. M., Pfefferbaum, A., Sullivan, E. V., Pohl, K. M.
2019
 - **Dissociable Contributions of Precuneus and Cerebellum to Subjective and Objective Neuropathy in HIV.** *Journal of neuroimmune pharmacology : the official journal of the Society on NeuroImmune Pharmacology*
Zahr, N. M., Pohl, K. M., Pfefferbaum, A., Sullivan, E. V.
2019
 - **Logistic Regression Confined by Cardinality-Constrained Sample and Feature Selection.** *IEEE transactions on pattern analysis and machine intelligence*
Adeli, E. n., Li, X. n., Kwon, D. n., Zhang, Y. n., Pohl, K. n.
2019
 - **Variational Autoencoder with Truncated Mixture of Gaussians for Functional Connectivity Analysis**
Zhao, Q., Honnorat, N., Adeli, E., Pfefferbaum, A., Sullivan, E. V., Pohl, K. M., Chung, A. C., Gee, J. C., Yushkevich, P. A., Bao, S.
SPRINGER INTERNATIONAL PUBLISHING AG.2019: 867–79
 - **Convergence of three parcellation approaches demonstrating cerebellar lobule volume deficits in Alcohol Use Disorder.** *NeuroImage. Clinical*
Sullivan, E. V., Zahr, N. M., Saranathan, M. n., Pohl, K. M., Pfefferbaum, A. n.
2019; 24: 101974
 - **Variational AutoEncoder for Regression: Application to Brain Aging Analysis**
Zhao, Q., Adeli, E., Honnorat, N., Leng, T., Pohl, K. M., Shen, D., Liu, T., Peters, T. M., Staib, L. H., Essert, C., Zhou, S., Yap, P. T., Khan, et al
SPRINGER INTERNATIONAL PUBLISHING AG.2019: 823–31
 - **Variational Autoencoder with Truncated Mixture of Gaussians for Functional Connectivity Analysis.** *Information processing in medical imaging : proceedings of the ... conference*
Zhao, Q. n., Honnorat, N. n., Adeli, E. n., Pohl, K. M.
2019; 11492: 867–79
 - **Longitudinally consistent estimates of intrinsic functional networks** *Human Brain Mapping*
Zhao, Q., Kwon, D., Müller-Oehring, E. M., Le Berre, A., Pfefferbaum, A., Sullivan, E. V., Pohl, K. M.
2019
 - **Longitudinally consistent estimates of intrinsic functional networks.** *Human brain mapping*
Zhao, Q. n., Kwon, D. n., Müller-Oehring, E. M., Le Berre, A. P., Pfefferbaum, A. n., Sullivan, E. V., Pohl, K. M.
2019
 - **Hippocampal subfield CA2+3 exhibits accelerated aging in Alcohol Use Disorder: A preliminary study** *NEUROIMAGE-CLINICAL*
Zahr, N. M., Pohl, K. M., Saranathan, M., Sullivan, E., Pfefferbaum, A.
2019; 22
 - **Relations between cognitive and motor deficits and regional brain volumes in individuals with alcoholism.** *Brain structure & function*
Fama, R. n., Le Berre, A. P., Sassooun, S. A., Zahr, N. M., Pohl, K. M., Pfefferbaum, A. n., Sullivan, E. V.
2019
 - **Sensitivity of ventrolateral posterior thalamic nucleus to back pain in alcoholism and CD4 nadir in HIV.** *Human brain mapping*
Zahr, N. M., Sullivan, E. V., Pohl, K. M., Pfefferbaum, A. n., Saranathan, M. n.
2019
 - **Jacobian Maps Reveal Under-reported Brain Regions Sensitive to Extreme Binge Ethanol Intoxication in the Rat** *FRONTIERS IN NEUROANATOMY*
Zhao, Q., Fritz, M., Pfefferbaum, A., Sullivan, E. V., Pohl, K. M., Zahr, N. M.
2018; 12

- **Chained regularization for identifying brain patterns specific to HIV infection** *NEUROIMAGE*
Adeli, E., Kwon, D., Zhao, Q., Pfefferbaum, A., Zahr, N. M., Sullivan, E. V., Pohl, K. M.
2018; 183: 425–37
- **Distribution of brain iron accrual in adolescence: Evidence from cross-sectional and longitudinal analysis.** *Human brain mapping*
Peterson, E. T., Kwon, D., Luna, B., Larsen, B., Prouty, D., De Bellis, M. D., Voyvodic, J., Liu, C., Li, W., Pohl, K. M., Sullivan, E. V., Pfefferbaum, A.
2018
- **Regional growth trajectories of cortical myelination in adolescents and young adults: longitudinal validation and functional correlates.** *Brain imaging and behavior*
Kwon, D., Pfefferbaum, A., Sullivan, E. V., Pohl, K. M.
2018
- **Chained regularization for identifying brain patterns specific to HIV infection.** *NeuroImage*
Adeli, E., Kwon, D., Zhao, Q., Pfefferbaum, A., Zahr, N. M., Sullivan, E. V., Pohl, K. M.
2018
- **Accelerated and Premature Aging Characterizing Regional Cortical Volume Loss in Human Immunodeficiency Virus Infection: Contributions From Alcohol, Substance Use, and Hepatitis C Coinfection.** *Biological psychiatry. Cognitive neuroscience and neuroimaging*
Pfefferbaum, A., Zahr, N. M., Sassoan, S. A., Kwon, D., Pohl, K. M., Sullivan, E. V.
2018
- **Alcohol use effects on adolescent brain development revealed by simultaneously removing confounding factors, identifying morphometric patterns, and classifying individuals** *SCIENTIFIC REPORTS*
Park, S., Zhang, Y., Kwon, D., Zhao, Q., Zahr, N. M., Pfefferbaum, A., Sullivan, E. V., Pohl, K. M.
2018; 8: 8297
- **The Role of Aging, Drug Dependence, and Hepatitis C Comorbidity in Alcoholism Cortical Compromise** *JAMA PSYCHIATRY*
Sullivan, E. V., Zahr, N. M., Sassoan, S. A., Thompson, W. K., Kwon, D., Pohl, K. M., Pfefferbaum, A.
2018; 75 (5): 474–83
- **eCurves: A Temporal Shape Encoding** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*
Bernardis, E., Zhang, Y., Konukoglu, E., Ou, Y., Javitz, H. S., Axel, L., Metaxas, D., Desjardins, B., Pohl, K. M.
2018; 65 (4): 733–44
- **CNS CORRELATES OF HIV-ASSOCIATED PERIPHERAL NEUROPATHY AND POSTURAL INSTABILITY**
Zahr, N., Kwon, D., Pohl, K., Sullivan, E., Pfefferbaum, A.
SPRINGER.2018: S94
- **CNS CORRELATES OF HIV-ASSOCIATED PERIPHERAL NEUROPATHY AND POSTURAL INSTABILITY**
Zahr, N., Kwon, D., Pohl, K., Sullivan, E., Pfefferbaum, A.
SPRINGER.2018: S94
- **Altered Brain Developmental Trajectories in Adolescents After Initiating Drinking.** *The American journal of psychiatry*
Pfefferbaum, A., Kwon, D., Brumback, T., Thompson, W. K., Cummins, K., Tapert, S. F., Brown, S. A., Colrain, I. M., Baker, F. C., Prouty, D., De Bellis, M. D., Clark, D. B., Nagel, et al
2018; 175 (4): 370–80
- **The mediating role of cortical thickness and gray matter volume on sleep slow-wave activity during adolescence** *BRAIN STRUCTURE & FUNCTION*
Goldstone, A., Willoughby, A. R., de Zambotti, M., Franzen, P. L., Kwon, D., Pohl, K. M., Pfefferbaum, A., Sullivan, E. V., Muller-Oehring, E. M., Prouty, D. E., Hasler, B. P., Clark, D. B., Colrain, et al
2018; 223 (2): 669–85
- **End-To-End Alzheimer's Disease Diagnosis and Biomarker Identification** *Stanford University / SRI International*
Esmailzadeh, S.
2018
- **End-To-End Alzheimer's Disease Diagnosis and Biomarker Identification.** *Machine learning in medical imaging. MLMI (Workshop)*
Esmailzadeh, S. n., Belivanis, D. I., Pohl, K. M., Adeli, E. n.
2018; 11046: 337–45

- **Multi-label Transduction for Identifying Disease Comorbidity Patterns**
Adeli, E., Kwon, D., Pohl, K. M., Frangi, A. F., Schnabel, J. A., Davatzikos, C., AlberolaLopez, C., Fichtinger, G.
SPRINGER INTERNATIONAL PUBLISHING AG.2018: 575–83
- **A Riemannian Framework for Longitudinal Analysis of Resting-State Functional Connectivity**
Zhao, Q., Kwon, D., Pohl, K. M., Frangi, A. F., Schnabel, J. A., Davatzikos, C., AlberolaLopez, C., Fichtinger, G.
SPRINGER INTERNATIONAL PUBLISHING AG.2018: 145–53
- **End-To-End Alzheimer's Disease Diagnosis and Biomarker Identification**
Esmailzadeh, S., Belivanis, D., Pohl, K. M., Adeli, E., Shi, Y., Suk, H. I., Liu, M.
SPRINGER INTERNATIONAL PUBLISHING AG.2018: 337–45
- **A Riemannian Framework for Longitudinal Analysis of Resting-State Functional Connectivity.** *Medical image computing and computer-assisted intervention : MICCAI ... International Conference on Medical Image Computing and Computer-Assisted Intervention*
Zhao, Q. n., Kwon, D. n., Pohl, K. M.
2018; 11072: 145–53
- **Multi-Label Transduction for Identifying Disease Comorbidity Patterns.** *Medical image computing and computer-assisted intervention : MICCAI ... International Conference on Medical Image Computing and Computer-Assisted Intervention*
Adeli, E. n., Kwon, D. n., Pohl, K. M.
2018; 11072: 575–83
- **Jacobian Maps Reveal Under-reported Brain Regions Sensitive to Extreme Binge Ethanol Intoxication in the Rat.** *Frontiers in neuroanatomy*
Zhao, Q. n., Fritz, M. n., Pfefferbaum, A. n., Sullivan, E. V., Pohl, K. M., Zahr, N. M.
2018; 12: 108
- **Adolescent Executive Dysfunction in Daily Life: Relationships to Risks, Brain Structure and Substance Use** *FRONTIERS IN BEHAVIORAL NEUROSCIENCE*
Clark, D. B., Chung, T., Martin, C. S., Hasler, B. P., Fitzgerald, D. H., Luna, B., Brown, S. A., Tapert, S. F., Brumback, T., Cummins, K., Pfefferbaum, A., Sullivan, E. V., Pohl, et al
2017; 11
- **Peripheral TNF alpha Levels Correlate With Hippocampal Volume in Alcoholism but not in HIV Infection**
Zahr, N., Kwon, D., Pohl, K., Sullivan, E., Pfefferbaum, A.
NATURE PUBLISHING GROUP.2017: S277–S278
- **Eveningness and Later Sleep Timing Are Associated with Greater Risk for Alcohol and Marijuana Use in Adolescence: Initial Findings from the National Consortium on Alcohol and Neurodevelopment in Adolescence Study.** *Alcoholism, clinical and experimental research*
Hasler, B. P., Franzen, P. L., de Zambotti, M., Prouty, D., Brown, S. A., Tapert, S. F., Pfefferbaum, A., Pohl, K. M., Sullivan, E. V., De Bellis, M. D., Nagel, B. J., Baker, F. C., Colrain, et al
2017; 41 (6): 1154-1165
- **Influences of Age, Sex, and Moderate Alcohol Drinking on the Intrinsic Functional Architecture of Adolescent Brains.** *Cerebral cortex*
Müller-Oehring, E. M., Kwon, D., Nagel, B. J., Sullivan, E. V., Chu, W., Rohlfing, T., Prouty, D., Nichols, B. N., Poline, J., Tapert, S. F., Brown, S. A., Cummins, K., Brumback, et al
2017: 1-15
- **Effects of prior testing lasting a full year in NCANDA adolescents: Contributions from age, sex, socioeconomic status, ethnicity, site, family history of alcohol or drug abuse, and baseline performance.** *Developmental cognitive neuroscience*
Sullivan, E. V., Brumback, T., Tapert, S. F., Prouty, D., Fama, R., Thompson, W. K., Brown, S. A., Cummins, K., Colrain, I. M., Baker, F. C., Clark, D. B., Chung, T., De Bellis, et al
2017; 24: 72-83
- **3D Motion Modeling and Reconstruction of Left Ventricle Wall in Cardiac MRI.** *Functional imaging and modeling of the heart : ... International Workshop, FIMH ..., proceedings. FIMH*
Yang, D. n., Wu, P. n., Tan, C. n., Pohl, K. M., Axel, L. n., Metaxas, D. n.
2017; 10263: 481–92
- **Adolescent Executive Dysfunction in Daily Life: Relationships to Risks, Brain Structure and Substance Use.** *Frontiers in behavioral neuroscience*
Clark, D. B., Chung, T. n., Martin, C. S., Hasler, B. P., Fitzgerald, D. H., Luna, B. n., Brown, S. A., Tapert, S. F., Brumback, T. n., Cummins, K. n., Pfefferbaum, A. n., Sullivan, E. V., Pohl, et al

2017; 11: 223

- **Computing group cardinality constraint solutions for logistic regression problems** *MEDICAL IMAGE ANALYSIS*
Zhang, Y., Kwon, D., Pohl, K. M.
2017; 35: 58–69
- **Active Mean Fields for Probabilistic Image Segmentation: Connections with Chan-Vese and Rudin-Osher-Fatemi Models** *SIAM JOURNAL ON IMAGING SCIENCES*
Niethammer, M., Pohl, K. M., Janoos, F., Wells, W. M.
2017; 10 (3): 1069–1103
- **Structural brain anomalies in healthy adolescents in the NCANDA cohort: relation to neuropsychological test performance, sex, and ethnicity.** *Brain imaging and behavior*
Sullivan, E. V., Lane, B., Kwon, D., Meloy, M. J., Tapert, S. F., Brown, S. A., Colrain, I. M., Baker, F. C., De Bellis, M. D., Clark, D. B., Nagel, B. J., Pohl, K. M., Pfefferbaum, et al
2016: -?
- **Adolescent Development of Cortical and White Matter Structure in the NCANDA Sample: Role of Sex, Ethnicity, Puberty, and Alcohol Drinking.** *Cerebral cortex*
Pfefferbaum, A., Rohlfing, T., Pohl, K. M., Lane, B., Chu, W., Kwon, D., Nolan Nichols, B., Brown, S. A., Tapert, S. F., Cummins, K., Thompson, W. K., Brumback, T., Meloy, et al
2016; 26 (10): 4101-4121
- **Joint Data Harmonization and Group Cardinality Constrained Classification.** *Medical image computing and computer-assisted intervention : MICCAI ... International Conference on Medical Image Computing and Computer-Assisted Intervention*
Zhang, Y., Park, S. H., Pohl, K. M.
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