# Joshua Faskowitz

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# EDUCATION

- Ph.D. Neuroscience and Psychology, Indiana University, Bloomington, 2021 Advisor: Dr. Olaf Sporns Research committee: Dr. Olaf Sporns, Dr. Aina Puce, Dr. Amanda Mejia, Dr. Richard Betzel
- B.A. Neuroscience and Cognitive Science, University of Southern California, 2014

## **RESEARCH EXPERIENCE**

2022-	Postdoctoral Fellow National Institute of Mental Health, Bethesda, MD Section on Functional Imaging Methods PI: Dr. Peter Bandettini
	Analyzing fMRI data to better understand neural correlation patterns in space and time
2021–22	Postdoctoral Researcher IU Department of Psychological and Brain Sciences, Bloomington, IN PI: Dr. Olaf Sporns & Dr. Richard Betzel
	Employing the tools of network science to analyze human and animal brains
	Support colleagues during remote work by teaching super-computing tools and processing/organizing neuroimaging data
2016–21	Graduate Student IU Computational Cognitive Neuroscience Lab, Bloomington, IN PI: Dr. Olaf Sporns
	Support lab by fostering brainstorming, discussing papers, and sharing data
	Engage in collaborations with internal and external labs by discussing, sharing, and teaching network science methods and neuroscience fundamentals
2014–16	Project Assistant USC Imaging Genetics Center, Los Angeles, CA PI: Dr. Paul Thompson; under supervision of Dr. Neda Jahanshad
	Manipulating raw MRI data to normalized, pre-processed, and analysis-ready neuroimages by writing workflows in Bash & Python
2012–14	Undergraduate Research Assistant USC Emotion & Cognition Lab, Los Angeles, CA PI: Dr. Mara Mather; under supervision of Dr. Allison Ponzio (graduate student)
	Over 800 lab hours, 5 semesters, 1 summer
	Ran participants through experimental protocols, including electrical stimulation, physiological monitoring, and assisted setup for fMRI study

## **RESEARCH AREAS**

Network neuroscience: network science algorithms and applications, community detection, edge-centric modeling, network features of changes over human lifespan

## **HONORS & AWARDS**

2021	IU Gill Center Linda and Jack Gill Graduate Student Award Honorable Mention One of four awardees; selected from IN neuroscience programs (IUB, IUPUI, Purdue, & Notre Dame)
2021	IU Department of Psychological and Brain Sciences J.R. Kantor Graduate Award Departmental outstanding advanced graduate student, shared with another student
2020-21	IU College of Arts and Sciences Dissertation Research Fellowship (\$20,000)
2016,19	ACNN Travel Award (~\$300) Travel to Advanced Computational Neuroscience Network Workshop
2019	PNS Travel Award (\$800) Travel to Network Neuroscience satellite, NetSci 2019
2016-21	NSF GRFP (\$34,000/yr, 3 years) <i>National Science Foundation</i> Graduate Research Fellowship
2016	IU Department of Psychological and Brain Sciences Rebec Fellow (\$4000)
2010-14	USC Trustee Scholarship (\$43,000/yr, 4 years) Full tuition; awarded for academics, leadership, and community service
2014	USC Order of Troy For academic and leadership excellence; one of 112 undergraduate awardees
2014	Renaissance Scholar and Discovery Scholar For excelling in two widely separated fields of study & for conducting scholarly research One of 64 graduates with multiple scholar honors at graduation
2014	Undergraduate Student Government Academic Research Fund Award
2013	Dornsife Student Opportunities for Academic Research Grant
2013	Dornsife Summer Undergraduate Research Fund Grant
2013	Davis School of Gerontology Travel Undergraduate Research Fund Grant

## **ACADEMIC ACTIVITIES**

For dates corresponding to academic activities: (Fa) Fall semester; (Sp) Spring semester; (Su) Summer.

## **Invited Talks**

2020 Sp	Publicly Available Neuroimaging Databases	
-	CUNY2020, Workshop on Remote Data Collection	

2022 Sp Network Outcomes, Uses, and Null Models PANN (Practical Applications of Network Neuroscience) Workshop Co-organized with Dr. Jenya Chumin

2022 Sp	Brain Networks: Close to the Edge
_	Washington University in St. Louis "Neuroimaging in Health and Disease" Seminar Series

2022 Sp *Brain Networks: Close to the Edge* Dr. Lucina Uddin Lab Meeting

2022 Su *fMRI Preprocessing Workshop* Three day workshop (3hr/day) covering workflows for processing functional neuroimaging data on IU high performance computing resources

#### Teaching

- 2018 Fa P211: Methods of Experimental Psychology Instructor of record
- 2019 Sp P303: Health Psychology Teaching assistant

#### **Departmental involvement**

2018–20 Organizer of Grey Matters grad student colloquium series

- 2020 Sp Talk: *Decoding Neural Representational Spaces Using Multivariate Pattern Analysis* Guest lecture for Neuro seminar
- 2019 Fa Talk: *Networks and Brain Networks* Grey Matters graduate student colloquium
- 2019 Su Poster: Mapping The Community Structure Of The Connectome With Weighted Stochastic Block Modeling Emerging Area of Research symposium
- 2019 Sp Poster: Mapping The Community Structure Of The Connectome With Weighted Stochastic Block Modeling CNS NRT Research Showcase
- 2019 Sp Talk: *Human Connectomics: Structural networks* + *community detection* Guest lecture for *P*<sub>457</sub>, The Connected Brain
- 2019 Sp Talk: *The Stochasic Blockmodel, (SBM & WSBM)* Departmental meeting for Emerging Areas of Research grant
- 2019 Sp Poster: Mapping The Community Structure Of The Connectome With Weighted Stochastic Block Modeling CNS NRT Research Showcase
- 2018 Sp Poster: The development of community structure in the human connectome across the life span: an application of weighted stochastic blockmodels CNS NRT Research Showcase
- 2017 Fa Poster: Development Of Community Structure In The Human Connectome Across The Life Span: An Application Of Weighted Stochastic Blockmodels Departmental first-year research symposium
- 2017 Sp Talk: *Bag o' DICOMS or: How I learned to love the Spaghetti* Lab meeting covering DWI processing
- 2017 Sp Talk: Connectomes, Weighted Stochastic Blockmodels, and the Life Span Grey Matters graduate student colloquium

#### Workshops/Hackathons

2019 Su	OHBM Hackathon Pre-OHBM 2019, Rome, IT
2019 Su	Brainhack-Networks Pre-NetSci 2019, University of Vermont
2018 Sp	Brainhack Global at IU Indiana University
2017 Fa	5 <sup>th</sup> Indiana Neuroimaging Symposium and Hackathon Purdue University
2017 Fa	Neurohackweek University of Washington eScience Institute
2016 Fa	4 <sup>th</sup> Indiana Neuroimaging Symposium and Hackathon Indiana University
2015 Su	OHBM Hackathon Pre-OHBM 2015, Honolulu, U.S.A

## **Code and Data Sharing**

Selected software development, please see github.com/faskowit for more

- Multi Atlas Transfer Tools Scripts to fit canonical parcellations using FreeSurfer Run over 19,000 times as app on Brainlife.io
- fMRI-2-Mat Strategically nuisance regress fMRI data
- blockmodelTools Functions for study of network block structure
- Support for Brainlife, An open-science neuroimaging platform

Selected shared data, please see figshare for more

- Lifespan structural connectivity matrices from Faskowitz (2018) paper
- Brain-networks-across-the-web Compilation of openly available brain networks
- Multi-atlas training data Gaussian classifier atlases to several surface parcellations

## **Journal Peer Review**

Please see Publons profile for more information

Brain Imaging and Behavior Brain Structure and Function Biological Psychiatry Cerebral Cortex Human Brain Mapping Network Science Network Neuroscience NeuroImage Scientific Data Scientific Reports The Journal of Neuroscience

## **Professional Affiliations**

Network Science Society Organization for Human Brain Mapping Society for Neuroscience

## **Research Skills**

Coding/Scripting Languages MATLAB, Unix (bash, awk, grep, sed), Python, R Computational Tools GitHub, HPC environments (PBS & SGE schedulers), Docker/Singularity, Linux Neuroimaging Packages

FSL, FreeSurfer, ANTs, Dipy, fMRIPrep, MRtrix

## PUBLICATIONS

Please see Google Scholar profile for citation metrics

Entries marked with '\*' indicate co-authorship

## **Pre-prints**

- 9. Betzel, R, Cutts, S, Tanner, J, Greenwell, S, Varley, T, **Faskowitz, J**, Sporns, O, Hierarchical organization of spontaneous co-fluctuations in densely-sampled individuals using fMRI. bioRxiv 2022.
- 8. Betzel, R, **Faskowitz, J**, Misic, B, Sporns, O, Seguin, C, Multi-policy models of interregional communication in the human connectome. bioRxiv 2022.
- 7. Puxeddu, MG, **Faskowitz**, J, Sporns, O, Astolfi, L, Betzel, RF, Multi-modal and multi-subject modular organization of human brain networks. bioRxiv 2022.
- 6. Tanner, JC, **Faskowitz, J**, Byrge, L, Kennedy, D, Sporns, O, Betzel, R, Synchronous high-amplitude co-fluctuations of functional brain networks during movie-watching. bioRxiv 2022.
- 5. Varley, TF, Pope, M, **Faskowitz, J**, Sporns, O, Multivariate Information Theory Uncovers Synergistic Subsystems of the Human Cerebral Cortex. arXiv preprint arXiv:2206.06477 2022.
- 4. **Faskowitz**, \*, Tanner, \*, Misic, B, Betzel, R, An edge-centric model for harmonizing multi-relational network datasets. bioRxiv 2021.
- 3. Greenwell, S, **Faskowitz, J**, Pritschet, L, Santander, T, Jacobs, EG, Betzel, RF, High-amplitude network co-fluctuations linked to variation in hormone concentrations over menstrual cycle. bioRxiv 2021.
- 2. Jahanshad, N, Ganjgahi, H, Bralten, J, Den Braber, A, **Faskowitz, J**, Knodt, A, Lemaitre, H, Nir, T, Patel, B, Richie, S, Do Candidate Genes Affect the Brain's White Matter Microstructure? Large-Scale Evaluation of 6,165 Diffusion MRI Scans. BioRxiv 2017.
- 1. Moyer, D, Gutman, BA, **Faskowitz, J**, Jahanshad, N, Thompson, PM, An Empirical Study of Continuous Connectivity Degree Sequence Equivalents. arXiv 2016.

## **Journal Articles**

- 33. Betzel, RF, Cutts, SA, Greenwell, S, **Faskowitz, J**, Sporns, O, Individualized event structure drives individual differences in whole-brain functional connectivity. NeuroImage 2022;252:118993.
- 32. Chumin, EJ, **Faskowitz, J**, Esfahlani, FZ, Jo, Y, Merritt, H, Tanner, J, Cutts, SA, Pope, M, Betzel, R, Sporns, O, Cortico-subcortical interactions in overlapping communities of edge functional connectivity. NeuroImage 2022;250:118971.
- 31. Cutts, SA, **Faskowitz**, J, Betzel, RF, Sporns, O, Uncovering individual differences in fine-scale dynamics of functional connectivity. Cerebral Cortex (New York, NY: 1991) 2022.
- 30. Idesis, S, **Faskowitz, J**, Betzel, RF, Corbetta, M, Sporns, O, Deco, G, Edge-centric analysis of stroke patients: An alternative approach for biomarkers of lesion recovery. NeuroImage: Clinical 2022:103055.
- 29. Milardi, D, Basile, GA, **Faskowitz, J**, Bertino, S, Quartarone, A, Anastasi, GP, Bramanti, A, Ciurleo, R, Cacciola, A, Effects of diffusion signal modeling and segmentation approaches on subthalamic nucleus parcellation. NeuroImage 2022;250:118959.
- 28. Thiele, J, **Faskowitz**, J, Sporns, O, Hilger, K, Multitask Brain Network Reconfiguration Is Inversely Associated with Human Intelligence. Cerebral Cortex (New York, NY: 1991) 2022.

- 27. Zamani Esfahlani, F, **Faskowitz, J**, Slack, J, Mišić, B, Betzel, RF, Local structure-function relationships in human brain networks across the lifespan. Nature communications 2022;13:1–16.
- 26. Caron, B, Stuck, R, McPherson, B, Bullock, D, Kitchell, L, **Faskowitz, J**, Kellar, D, Cheng, H, Newman, S, Port, N, Collegiate athlete brain data for white matter mapping and network neuroscience. Scientific Data 2021;8:1–17.
- 25. Esfahlani, FZ, Jo, Y, Puxeddu, MG, Merritt, H, Tanner, JC, Greenwell, S, Patel, R, **Faskowitz, J**, Betzel, RF, Modularity maximization as a flexible and generic framework for brain network exploratory analysis. NeuroImage 2021;244:118607.
- 24. **Faskowitz, J**, Betzel, RF, Sporns, O, Edges in brain networks: contributions to models of structure and function. Network Neuroscience 2021:1–63.
- 23. Jo, Y, Esfahlani, FZ, **Faskowitz, J**, Chumin, EJ, Sporns, O, Betzel, RF, The diversity and multiplexity of edge communities within and between brain systems. Cell reports 2021;37:110032.
- 22. Jo, Y, **Faskowitz, J**, Esfahlani, FZ, Sporns, O, Betzel, RF, Subject identification using edge-centric functional connectivity. NeuroImage 2021:118204.
- 21. Levakov, G, **Faskowitz**, J, Avidan, G, Sporns, O, Mapping individual differences across brain network structure to function and behavior with connectome embedding. NeuroImage 2021:118469.
- 20. Nir, TM, Fouche, JP, Ananworanich, J, Ances, BM, Boban, J, Brew, BJ, Chang, L, Chaganti, JR, Ching, CR, ... Faskowitz, J, ... Jahanshad, N, Association of immunosuppression and viral load with subcortical brain volume in an international sample of people living with HIV. JAMA network open 2021;4:e2031190–e2031190.
- 19. Sporns, O, **Faskowitz, J**, Teixeira, AS, Cutts, SA, Betzel, RF, Dynamic expression of brain functional systems disclosed by fine-scale analysis of edge time series. Network Neuroscience 2021;5:405–33.
- 18. Esfahlani, FZ, Jo, Y, **Faskowitz, J**, Byrge, L, Kennedy, DP, Sporns, O, Betzel, RF, High-amplitude cofluctuations in cortical activity drive functional connectivity. Proceedings of the National Academy of Sciences 2020;117:28393–401.
- 17. **Faskowitz, J**, Esfahlani, FZ, Jo, Y, Sporns, O, Betzel, RF, Edge-centric functional network representations of human cerebral cortex reveal overlapping system-level architecture. Nature Neuroscience 2020.
- 16. **Faskowitz, J**, Sporns, O, Mapping the community structure of the rat cerebral cortex with weighted stochastic block modeling. Brain Structure and Function 2020;225:71–84.
- 15. Hughes, C, **Faskowitz, J**, Cassidy, BS, Sporns, O, Krendl, AC, Aging relates to a disproportionately weaker functional architecture of brain networks during rest and task states. NeuroImage 2020:116521.
- 14. Pizzagalli, F, Auzias, G, Yang, Q, Mathias, SR, **Faskowitz, J**, Boyd, JD, Amini, A, Rivière, D, McMahon, KL, Zubicaray, GI, The reliability and heritability of cortical folds and their genetic correlations across hemispheres. Communications Biology 2020;3:1–12.
- 13. Puxeddu, MG, **Faskowitz**, J, Betzel, RF, Petti, M, Astolfi, L, Sporns, O, The modular organization of brain cortical connectivity across the human lifespan. NeuroImage 2020:116974.
- 12. Hughes, C, Cassidy, BS, **Faskowitz**, J, Avena-Koenigsberger, A, Sporns, O, Krendl, AC, Age differences in specific neural connections within the Default Mode Network underlie theory of mind. NeuroImage 2019;191:269–77.

- 11. Jahanshad, N, **Faskowitz, JI**, Roshchupkin, G, Hibar, D, Gutman, BA, Tustison, NJ, Adams, HH, Niessen, W, Vernooij, MW, Ikram, MA, MULTI-SITE META-ANALYSIS OF MORPHOMETRY. IEEE/ACM transactions on computational biology and bioinformatics 2019.
- 10. Corlier, F, Hafzalla, G, **Faskowitz, J**, Kuller, LH, Becker, JT, Lopez, OL, Thompson, PM, Braskie, MN, Systemic inflammation as a predictor of brain aging: contributions of physical activity, metabolic risk, and genetic risk. Neuroimage 2018;172:118–29.
- 9. **Faskowitz, J**, Yan, X, Zuo, XN, Sporns, O, Weighted Stochastic Block Models of the Human Connectome across the Life Span. Scientific reports 2018;8:12997.
- 8. Kelly, S, Jahanshad, N, Zalesky, A, Kochunov, P, Agartz, I, Alloza, C, Andreassen, O, Arango, C, Banaj, N, ... **Faskowitz, J**, ... Donohoe, G, Widespread white matter microstructural differences in schizophrenia across 4322 individuals: results from the ENIGMA Schizophrenia DTI Working Group. Molecular psychiatry 2018;23:1261.
- 7. Van Erp, TG, Walton, E, Hibar, DP, Schmaal, L, Jiang, W, Glahn, DC, Pearlson, GD, Yao, N, ... Faskowitz, J, ... Turner, JA, Cortical brain abnormalities in 4474 individuals with schizophrenia and 5098 control subjects via the Enhancing Neuro Imaging Genetics Through Meta Analysis (ENIGMA) Consortium. Biological psychiatry 2018;84:644–54.
- 6. Dennis, EL, **Faskowitz, J**, Rashid, F, Babikian, T, Mink, R, Babbitt, C, Johnson, J, Giza, CC, Jahanshad, N, Thompson, PM, Diverging volumetric trajectories following pediatric traumatic brain injury. Neuroimage: clinical 2017;15:125–35.
- 5. Moyer, D, Gutman, BA, **Faskowitz, J**, Jahanshad, N, Thompson, PM, Continuous representations of brain connectivity using spatial point processes. Medical image analysis 2017;41:32–9.
- 4. Wang, J, Braskie, MN, Hafzalla, GW, **Faskowitz, J**, McMahon, KL, Zubicaray, GI, Wright, MJ, Yu, C, Thompson, PM, Relationship of a common OXTR gene variant to brain structure and default mode network function in healthy humans. Neuroimage 2017;147:500–6.
- 3. Hibar, D, Westlye, LT, Erp, TG, Rasmussen, J, Leonardo, CD, **Faskowitz, J**, Haukvik, UK, Hartberg, CB, Doan, NT, Agartz, I, Subcortical volumetric abnormalities in bipolar disorder. Molecular psychiatry 2016;21:1710.
- 2. Lee, PH, Baker, JT, Holmes, AJ, Jahanshad, N, Ge, T, Jung, JY, Cruz, Y, Manoach, DS, Hibar, DP, **Faskowitz, J**, Partitioning heritability analysis reveals a shared genetic basis of brain anatomy and schizophrenia. Molecular psychiatry 2016;21:1680.
- 1. Whelan, CD, Hibar, DP, Velzen, LS, Zannas, AS, Carrillo-Roa, T, McMahon, K, Prasad, G, Kelly, S, **Faskowitz, J**, deZubiracay, G, Heritability and reliability of automatically segmented human hippocampal formation subregions. Neuroimage 2016;128:125–37.

## Peer-Reviewed Conference Proceedings

- 25. Ding, L, Zhu, AH, Saremi, A, **Faskowitz, JI**, Håberg, A, Thompson, PM, Jahanshad, N, Voxelwise meta-analysis of brain structural associations with genome-wide polygenic risk for Alzheimer's disease. In: *14th International Symposium on Medical Information Processing and Analysis*. Vol. 10975. International Society for Optics and Photonics. 2018:109750L.
- 24. Jahanshad, N, Roshchupkin, G, **Faskowitz, J**, Hibar, DP, Gutman, BA, Adams, HH, Niessen, WJ, Vernooij, MW, Ikram, MA, Zwiers, MP, Multisite metaanalysis of image-wide genome-wide associations with morphometry. In: *Imaging Genetics*. Academic Press, 2018:1–23.
- 23. Pizzagalli, F, Auzias, G, Amini, A, **Faskowitz, J**, Rashid, F, Moyer, D, Kochunov, P, Rivière, D, Mangin, JF, Thompson, PM, Sulcal-based morphometry in Parkinson's disease: a study of reliability and disease effects. In: *14th International Symposium on Medical Information Processing and Analysis*. Vol. 10975. International Society for Optics and Photonics. 2018:109750T.

- 22. Rinker, DA, Jahanshad, N, Hibar, DP, **Faskowitz, J**, McMahon, KL, Zubicaray, GI, Wright, MJ, Thompson, PM, Genetic Connectivity–Correlated Genetic Control of Cortical Thickness, Brain Volume, and White Matter. In: *Imaging Genetics*. Academic Press, 2018:25–43.
- 21. Dennis, EL, Rashid, F, **Faskowitz, J**, Jin, Y, McMahon, KL, De Zubicaray, GI, Martin, NG, Hickie, IB, Wright, MJ, Jahanshad, N, Mapping age effects along fiber tracts in young adults. In: 2017 IEEE 14th International Symposium on Biomedical Imaging (ISBI 2017). IEEE. 2017:101–4.
- 20. Hafzalla, GW, Ragothaman, A, Faskowitz, J, Jahanshad, N, McMahon, KL, De Zubicaray, GI, Wright, MJ, Braskie, MN, Prasad, G, Thompson, PM, A comparison of network definitions for detecting sex differences in brain connectivity using Support Vector Machines. In: 2017 IEEE 14th International Symposium on Biomedical Imaging (ISBI 2017). IEEE. 2017:961–5.
- 19. Harrison, MB, Riedel, BC, Prasad, G, Jahanshad, N, **Faskowitz, J**, Thompson, PM, Utilizing brain measures for large-scale classification of autism applying EPIC. In: *12th International Symposium on Medical Information Processing and Analysis*. Vol. 10160. International Society for Optics and Photonics. 2017:101600W.
- 18. Isaev, D, Gutman, BA, Moyer, D, **Faskowitz, J**, Thompson, PM, Cortical connectome registration using spherical demons. In: *12th International Symposium on Medical Information Processing and Analysis*. Vol. 10160. International Society for Optics and Photonics. 2017:101600M.
- Kurmukov, A, Ananyeva, M, Dodonova, Y, Gutman, B, Faskowitz, J, Jahanshad, N, Thompson, P, Zhukov, L, Classifying phenotypes based on the community structure of human brain networks. In: *Graphs in Biomedical Image Analysis, Computational Anatomy and Imaging Genetics.* Springer, Cham, 2017:3–11.
- 16. Mokrov, N, Panov, M, Gutman, BA, **Faskowitz, JI**, Jahanshad, N, Thompson, PM, Simultaneous Matrix Diagonalization for Structural Brain Networks Classification. In: *International Conference on Complex Networks and their Applications*. Springer, Cham. 2017:1261–70.
- 15. Petrov, D, Gutman, B, Ivanov, A, **Faskowitz, J**, Jahanshad, N, Belyaev, M, Thompson, P, Structural connectome validation using pairwise classification. In: *2017 IEEE 14th International Symposium on Biomedical Imaging (ISBI 2017)*. IEEE. 2017:451–5.
- 14. Petrov, D, Ivanov, A, **Faskowitz, J**, Gutman, B, Moyer, D, Villalon, J, Jahanshad, N, Thompson, P, Evaluating 35 methods to generate structural connectomes using pairwise classification. In: *International Conference on medical Image Computing and Computer-Assisted Intervention*. Springer, Cham. 2017:515–22.
- 13. Pizzagalli, F, Auzias, G, Kochunov, P, **Faskowitz, JI**, Thompson, PM, Jahanshad, N, The core genetic network underlying sulcal morphometry. In: *12th International Symposium on Medical Information Processing and Analysis*. Vol. 10160. International Society for Optics and Photonics. 2017:101600C.
- 12. Belyaev, M, Dodonova, Y, Belyaeva, D, Krivov, E, Gutman, B, **Faskowitz, J**, Jahanshad, N, Thompson, P, Using Geometry of the Set of Symmetric Positive Semidefinite Matrices to Classify Structural Brain Networks. In: *International Conference on Network Analysis*. Springer, Cham. 2016:257–67.
- II. Dennis, EL, Rashid, F, Villalon-Reina, J, Prasad, G, Faskowitz, J, Babikian, T, Mink, R, Babbitt, C, Johnson, J, Giza, CC, Multi-modal registration improves group discrimination in pediatric traumatic brain injury. In: *International Workshop on Brainlesion: Glioma, Multiple Sclerosis, Stroke and Traumatic Brain Injuries*. Springer, Cham. 2016:32–42.

- 10. Faskowitz, J, Zubicaray, GI, McMahon, KL, Wright, MJ, Thompson, PM, Jahanshad, N, Comparison of template registration methods for multi-site meta-analysis of brain morphometry. In: *Medical Imaging 2016: Biomedical Applications in Molecular, Structural, and Functional Imaging*. Vol. 9788. International Society for Optics and Photonics. 2016:978822.
- 9. Hafzalla, GW, Prasad, G, Baboyan, VG, **Faskowitz, J**, Jahanshad, N, McMahon, KL, Zubicaray, GI, Wright, MJ, Braskie, MN, Thompson, PM, The heritability of the functional connectome is robust to common nonlinear registration methods. In: *Medical Imaging 2016: Image Processing*. Vol. 9784. International Society for Optics and Photonics. 2016:97841R.
- 8. Kurmukov, A, Dodonova, Y, Burova, M, Mussabayeva, A, Petrov, D, **Faskowitz, J**, Zhukov, LE, Topological Modules of Human Brain Networks Are Anatomically Embedded: Evidence from Modularity Analysis at Multiple Scales. In: *International Conference on Network Analysis*. Springer, Cham. 2016:299–308.
- 7. Moyer, D, Gutman, BA, **Faskowitz**, J, Jahanshad, N, Thompson, PM, A continuous model of cortical connectivity. In: *International Conference on Medical Image Computing and Computer-Assisted Intervention*. Springer. 2016:157–65.
- 6. Pizzagalli, F, Auzias, G, Kochunov, P, **Faskowitz, JI**, McMahon, KL, De Zubicaray, GI, Martin, NG, Wright, MJ, Jahanshad, N, Thompson, PM, Genetic analysis of cortical sulci in 1,009 adults. In: *2016 IEEE 13th International Symposium on Biomedical Imaging (ISBI)*. IEEE. 2016:833–7.
- 5. Zhu, D, Jahanshad, N, Riedel, BC, Zhan, L, **Faskowitz, J**, Prasad, G, Thompson, PM, Population learning of structural connectivity by white matter encoding and decoding. In: *2016 IEEE 13th International Symposium on Biomedical Imaging (ISBI)*. IEEE. 2016:554–8.
- 4. Zhu, D, Lin, B, **Faskowitz, J**, Ye, J, Thompson, PM, Embedded sparse representation of fMRI data via group-wise dictionary optimization. In: *Medical Imaging 2016: Image Processing*. Vol. 9784. International Society for Optics and Photonics. 2016:97841K.
- 3. Moyer, D, Gutman, B, Prasad, G, **Faskowitz, J**, Ver Steeg, G, Thompson, P, Blockmodels for connectome analysis. In: *11th International Symposium on Medical Information Processing and Analysis*. Vol. 9681. International Society for Optics and Photonics. 2015:96810A.
- 2. Zhan, L, Jahanshad, N, **Faskowitz, J**, Zhu, D, Prasad, G, Martin, NG, Zubicaray, GI, McMahon, KL, Wright, MJ, Thompson, PM, Heritability of brain network topology in 853 twins and siblings. In: *2015 IEEE 12th International Symposium on Biomedical Imaging (ISBI)*. IEEE. 2015:449–53.
- 1. Zhu, D, Zhan, L, **Faskowitz, J**, Daianu, M, Jahanshad, N, De Zubicaray, GI, McMahon, KL, Martin, NG, Wright, MJ, Thompson, PM, Genetic analysis of structural brain connectivity using DICCCOL models of diffusion MRI in 522 twins. In: *2015 IEEE 12th International Symposium on Biomedical Imaging (ISBI)*. IEEE. 2015:1167–71.

## **Conference Posters (first-author only)**

- 16. **Faskowitz, J**, Tanner, J, Misic, B, Betzel, R, An edge-centric model for harmonizing multi-relational network datasets. Poster presented virtually at OHBM. 2021.
- 15. **Faskowitz, J**, Varley, T, Betzel, R, Sporns, O, Edge community structure of functional MRI and meta-analytic activation. Poster presented virtually at OHBM. 2021.
- 14. **Faskowitz, J**, Esfahlani, FZ, Jo, Y, Sporns, O, Betzel, RF, Edge functional connectivity reveals overlapping community structure. Poster presented virtually at OHBM, Montreal, CA. 2020.
- 13. **Faskowitz, J**, Jo, Y, Esfahlani, FZ, Sporns, O, Betzel, RF, The edge-centric representation of functional brain networks. Poster presented virtually at OHBM, Montreal, CA. 2020.

- 12. **Faskowitz, J**, Victroy, C, Hunt, D, Delogu, F, Hayashi, S, Betzel, R, Pestilli, F, The brainlife.io cloud-services for functional network neuroscience. Poster presented virtually at OHBM, Montreal, CA. 2020.
- 11. **Faskowitz, J**, Sporns, O, Analyzing the Structure of Brain Networks using Stochastic Block Models. Poster presented at NetSci and Network Neuroscience satellite, Burlington, U.S.A. 2019.
- 10. **Faskowitz, J**, Sporns, O, Mapping the Community Structure of the Connectome with Weighted Stochastic Block Modeling. Poster presented at OHBM, Rome, IT. 2019.
- 9. **Faskowitz, J**, Yan, X, Zuo, XN, Sporns, O, Weighted stochastic blockmodels of the human connectome across the life span. Poster presented at SfN, San Diego, U.S.A. 2018.
- 8. **Faskowitz, J**, Yan, X, Zuo, XN, Sporns, O, Development of Community Structure in the Human Connectome across the Life Span: An Application of Weighted Stochastic Blockmodels. Poster presented at NetSci and Network Neuroscience satellite, Indianapolis, U.S.A. 2017.
- 7. **Faskowitz, J**, Pizzagalli, F, Jahanshad, N, Ching, C, Mwangi, B, Soares, JC, Thompson, PM, Cortical investigation of bipolar disorder reveals inferior frontal gyral and sulcal abnormalities. Poster presented at OHBM, Geneva, CH. 2016.
- 6. **Faskowitz, J**, Pizzagalli, F, Mwangi, B, Kochunov, P, Thompson, PM, Soares, JC, N. J, Cortical abnormalities in patients with bipolar disorder more localized than in those with schizophrenia. Poster presented at SfN, San Diego, U.S.A. 2016.
- 5. **Faskowitz, J**, McMahon, K, Zubicaray, G, Thompson, PM, Wright, M, Jahanshad, N, Cortical investigation of bipolar disorder reveals inferior frontal gyral and sulcal abnormalities. Poster presented at OHBM, Geneva, CH. 2016.
- 4. **Faskowitz, J**, Hibar, H, Thompson, PM, Jahanshad, N, Test-retest reliability of cortical parcellations in 165 healthy adults for multi-site analyses in the ENIGMA consortium. Poster presented at SfN, Chicago, U.S.A. 2015.
- 3. **Faskowitz, J**, Ching, C, Soares, JC, Thompson, PM, Jahanshad, N, Brain white matter integrity in bipolar disorder subtypes assessed with diffusion tensor imaging. Poster presented at Cognitive Neuroscience Society, San Francisco, U.S.A. 2015.
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