

Jeanette A Mumford

Poldrack Lab
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Education

Ph.D in Biostatistics, University of Michigan, Ann Arbor, 2006.
Thesis title: Advances in fMRI data analysis.
Advisor: Thomas E Nichols.

M.S. in Biostatistics, University of Michigan, Ann Arbor, 2002.

M.S. in Mathematics, Western Illinois University, 2000.

B.S. in Mathematics (minor Physics), Western Illinois University, 1998.

Employment

Research Scientist. Poldrack Lab, Department of Psychology, Stanford University, Stanford, CA. 2020-present

Associate Scientist. Center for Investigating Healthy Minds work unit at the Waisman Center, University of Wisconsin-Madison. 2014-2020

Research Assistant Professor. Department of Psychology, University of Texas at Austin. 2009-2014

Assistant Research Professor. Poldrack Lab, Department of Psychology, University of California, Los Angeles. 2008-2009

Postdoctoral Scholar. Poldrack Lab, Department of Psychology, University of California, Los Angeles. 2006-2008

Consultant. Adviser on statistical methodology for fMRI working under Dr. Luis Hernandez-Garcia of the biomedical engineering and MRI research facility at the University of Michigan, Ann Arbor. 2004-2006

Consultant. Adviser on statistical methodology for analyses involving pulmonary disease for Dr. Fernando Martinez of pulmonary and critical care medicine, in the department of internal medicine at the University of Michigan hospital. 2001-2005

Teaching Experience

Creator. Mumford Brain Stats. Free, online imaging analysis and statistics tutorials (mumfordbrainstats.tumblr.com/, www.youtube.com/c/mumfordbrainstats)

Instructor. BMI/CS 567 Medical Image Analysis, University of Wisconsin-Madison Spring 2017, 2018, 2019

Co-Instructor. BMI/CS 567 Medical Image Analysis Spring 2015, 2016

Instructor. University of Michigan Training Course in fMRI. Presented 14 hours of statistics lectures. Summer 2016, 2017, 2018, 2019

Instructor. University of North Carolina fMRI workshop. Taught 3 days of statistics lectures. Fall 2018

Instructor. PSY 394U/ SSC 385 Methods for fMRI: From design to data analysis, University of Texas at Austin. Fall 2010-2013

Instructor. PSY184R Data analysis with R, University of Texas at Austin. Fall 2013

Instructor. UCLA NITP summer course. Gave multiple statistics lectures. 2008, 2009, 2010, 2011

Teaching Assistant. Introduction to fMRI, Biostatistics, University of Michigan, Ann Arbor. 2004, 2005

Teaching Assistant. Applied Biostatistics, Department of Biostatistics at the University of Michigan, Ann Arbor. 2000

Instructor. Intermediate algebra and college algebra, Department of Mathematics, Western Illinois University. 1998-2000

Teaching Assistant. Sets and Logic, Department of Mathematics, Western Illinois University. 1999-2000

Invited Talks

NeuroHackAdemy. Hackathon for members of the neuroimaging community. Machine learning lecture and worked with students on their projects for 2 days, August 2019

NeuroHackWeek. Hackathon for members of the neuroimaging community. Gave two tutorials and worked with students, September 2017

Online Brain Intensive. Lecture for online course, "Efficiency in fMRI: Increasing power for a fixed sample size", September 2017

OHBM Educational Course, "Practicalities for reproducible neuro-imaging 2.0". Talk title: "Statistical Power in Neuroimaging", June 2017

Psychology Department University of Miami. Research talk and statistics workshop, November 2016

Invited session at the Joint Statistical Meeting, 2016: Power and Meta-Analysis in Neuroimaging: Contributing to Reproducible Science. Power Analysis for fMRI Studies: Demands and Difficulties

Images of the mind: new frontiers in brain imaging. Advanced fMRI statistical methods and their applications, 2015. Power analysis in neuroimaging.

The Science of Large Data Sets: Spikes, Fields, and Voxels, JSM Educational Course, 2013. The analysis of BOLD fMRI data, from mean activation differences to pattern analyses.

Single-Subject Neuroimaging, ISMRM Educational Course, 2013. From Group Analysis to Individual Studies: Statistical Considerations.

Two day educational course, Beijing Normal University, Beijing, China, 2012. Lectures on Modeling and inference, single subject and group fMRI data analysis, multiple comparisons in fMRI, percent change calculation in fMRI, and power calculation in group fMRI.

Lecturer at Conference on Inference and Imaging at the Institute for Mathematical Behavioral Sciences, UC Irvine, 2009. Power analysis for Group fMRI.

Semel Institute for Neuroscience and Human Behavior, NeuroImaging Training Program, University of California, Los Angeles, 2007-2010 Lectures on Modeling and inference, single subject and group fMRI data analysis, multiple comparisons in fMRI, percent change calculation in fMRI, and power calculation in group fMRI.

Educational Course, Organization for Human Brain Mapping, Chicago, IL, 2007. Classical Statistical Inference and Mixed Effects Models.

International Committee Membership

Education Chair for the Organization for Human Brain Mapping, 2021 Three year position, chair elect/chair/past chair.

Chair Elect and Chair of Communications Committee for the Organization for Human Brain Mapping, 2017-2019. Three year position.

Head of web development team for Communications Committee for the Organization for Human Brain Mapping, 2016.

Treasurer for the Organization for Human Brain Mapping, 2013. Three year position as treasurer.

Editorial Duties

Handling Editor for Nature Communications Biology. 2021-2022

Handling Editor for NeuroImage. 2015-2018

Editorial Board for NeuroImage. 2014-2105

Associate Editorial Board for Frontiers in Neuroscience. 2014-2018

Reviewing

Ad hoc reviewer. NeuroImage, American Statistician, Human Brain Mapping, IEEE Journal of selected topics in signal processing, PLOS one, Computer Methods and Programs in Biomedicine, MIS Quarterly.

Abstract reviewer. Organization of Human Brain Mapping.

Awards

Education in Neuroimaging Award, Organization for Human Brain Mapping 2019

Organization for Human Brain Mapping Travel Fellow 2007

Organization for Human Brain Mapping Travel Fellow 2006

Organization for Human Brain Mapping Travel Fellow 2005

Organization for Human Brain Mapping Travel Fellow 2004

IPAM Summer School Travel Grant 2004

Grants

Active

Co-I, NIH, R01, Data-driven validation of cognitive RDoC dimensions using deep phenotyping (PI, Manish Saggarr). 2022-2027

Completed

Consultant, NIH, R01, An Experimental Test of Regular Caloric and Non-Caloric Sweetened Beverage Intake(PI, Kyle Burger). 2017-2022

Consultant, NIH/NINDS, R01, MRI markers of functional outcome after severe pediatric TBI (PI, Peter Ferrazzano). 2016-2021

Key Personnel, NIH/NIA, U19, Integrative Pathways to Health and Illness (PI, Carol Ryff). 2016-2021

Consultant, NIH, R01, Neural Substrates of Affective Style and Emotion Regulation (PI, Richard Davidson). 2017-2020

Consultant, NIH/NIA, R21, Neural and facial EMG correlates of the temporal dynamics of emotion in preclinical AD (PI, Stacey Schaefer). 2017-2019

Consultant, NIH, R21, Sugar Sweetened Beverages: Impact on reward, satiety, and metabolism in children (PI, Jaimie Davis). 2014-2016

Consultant, NIH, R01, Texas Center for Learning Disabilities (PI, JM Fletcher). 12/2011-11/2016

Co-Investigator, NIH, R01, Overcoming the persistence of first-learned habits to maintain behavior change (PI, Russell Poldrack). 09/2011-06/2015

Co-Investigator, NIH, R01, Neural consequences of metabolic syndrome (PI, Andreeana Haley). 09/2011-06/2014

Principal Investigator, NIH, R03, Extending and enhancing an fMRI power analysis tool. 4/2009-3/2011

Principal Investigator, Consortium for Neuropsychiatric Phenomics proof of concept pilot project funding. 12/2008-3/2009

Research Statistician, NIMH, R01, The Cognitive Atlas: Developing an interdisciplinary knowledge base through social collaboration. (PI, Russell A. Poldrack) 09/2008-06/2009

Research Statistician, NIMH, R01, Center for Neuropsychiatric Phenomics: Human Translational Applications Core. (PI, Robert Bilder) 09/2007-06/2012

Books and Book Chapters

Mumford JA, 2021. "Statistical Approaches to Neuroimaging Analysis", Chapter 5 in *Advanced Neuro MR Techniques and Applications*, Eds. Choi I and Jezzard P. Elsevier.

Poldrack RA, **Mumford JA**, Nichols TE, 2011. *Handbook of Functional MRI Data Analysis*. Cambridge University Press.

Poldrack RA & **Mumford JA**, 2010. "On the proper role of nonindependent ROI analysis: A commentary on Vul and Kanwisher", Chapter 7 in *Foundational Issues in Human Brain Mapping*, Eds. Hanson SJ & Bunzl M. MIT Press.

Mumford JA and Poline JB, 2015. Contrasts and Inference. *Brain mapping: An encyclopedic reference*; section 318: Elsevier.

Software

fMRIpower: A Matlab based power analysis tool for fMRI data. fmripower.org

Publications

Mumford JA, Demidenko MI, Bjork JM, Chaarani B, Feczko EJ, Garavan HP, Hagler DJ, Nelson SM, Wager TD, Poldrack RA, 2025. Unintended bias in the pursuit of collinearity solutions in fMRI analysis. *bioRxiv*; doi: 10.1101/2025.01.14.633053.

Kiar G, **Mumford JA**, Xu T, Vogelstein JT, Glatard T, Milham MP, 2024. Why experimental variation in neuroimaging should be embraced. *Nature Communications*. Oct 31; 15(1):9411. doi: 10.1038/s41467-024-53743-y

Madsen SJ, Uddin LQ, **Mumford JA**, Barch DM, Fair DA, Gotlib IH, Poldrack RA, Kuceyeski A, Saggar M, 2024. Predicting Task Activation Maps from Resting-State Functional Connectivity using Deep Learning. *bioRxiv*; doi: 10.1101/2024.09.10.612309.

Bissett PG, Eisenberg IW, Shim S, Rios JAH, Jones HM, Hagen MP, Enkavi AZ, Li JK, **Mumford JA**, MacKinnon DP, Marsch LA, Poldrack RA, 2024. Cognitive tasks, anatomical MRI, and functional MRI data evaluating the construct of self-regulation. *Scientific Data*, Jul 20; 11(1):809, doi: 10.1038/s41597-024-03636-y.

Quah SKL, Jo B, Geniesse C, Uddin LQ, **Mumford JA**, Barch DM, Fair DA, Gotlib IH, Poldrack RA, Saggar M, 2024. A Data-Driven Latent Variable Approach to Validating the Research Domain Criteria Framework. *bioRxiv*; doi: 10.1101/2024.01.31.577486.

Demidenko MI, **Mumford JA**, Ram N, Poldrack RA, 2024. A multi-sample evaluation of the measurement structure and function of the modified monetary incentive delay task in adolescents. *Developmental Cognitive Neuroscience*. Feb; 65:101337. doi: 10.1016/j.dcn.2023.101337.

Mumford JA, Bissett PG, Jones HM, Shim S, Rios JAH, Poldrack RA, 2024. The response time paradox in functional magnetic resonance imaging analyses. *Nature Human Behavior*. Feb;8(2):349-360. doi: 10.1038/s41562-023-01760-0.

Bissett PG, Jones HM, Hagen MP, Bui TT, Li JK, Rios JAH, **Mumford JA**, Shine JM, Poldrack RA, 2022. A dual-task approach to inform the taxonomy of inhibition-related processes. *Journal of Experimental Psychology: Human Perception and Performance*.

Vaghi MM, Hagen MP, Jones HM, **Mumford JA**, Bissett PG, Poldrack RA, 2022. Relating psychiatric symptoms and self-regulation during the COVID-19 crisis. *Transl Psychiatry*.

Wielgosz J, Kral TRA, Perlman DM, **Mumford JA**, Wager TD, Lutz A, Davidson RJ, 2022. Neural Signatures of Pain Modulation in Short-Term and Long-Term Mindfulness Training: A Randomized Active-Control Trial. *Am J Psychiatry*.

Urban-Wojcik EJ, **Mumford JA**, Almeida DM, Lachman ME, Ryff CD, Davidson RJ, Schaefer SM, 2022. Emodiversity, health, and well-being in the Midlife in the United States (MIDUS) daily diary study. *Emotion*. Jun;22(4):603-615

Pedersen WS, Dean DC, Adluru N, Gresham LK, Lee SD, Kelly MP, **Mumford JA**, Davidson RJ, Schaefer SM, 2022. Individual variation in white matter microstructure is related to better recovery from negative stimuli. *Emotion*. Mar;22(2):244-257

Grupe DW, Stoller JL, Alonso C, McGehee C, Smith C, **Mumford JA**, Rosenkranz MA, Davidson RJ, 2021. The Impact of Mindfulness Training on Police Officer Stress, Mental Health, and Salivary Cortisol Levels. *Front Psychol*. 12:720753

Grupe DW, McGehee C, Smith C, Francis AD, **Mumford JA**, Davidson RJ, 2021. Mindfulness training reduces PTSD symptoms and improves stress-related health outcomes in police officers. *J Police Crim Psychol*. Mar;36(1):72-85

Botvinik-Nezer R, Holzmeister F, Camerer CF, Dreber A, Huber J, Johannesson M, Kirchler M, Iwanir R, **Mumford JA**, . . . , Nichols TE, Poldrack RA, Schonberg T, 2020. Variability in the analysis of a single neuroimaging dataset by many teams. *Nature*; epub.

Kral TRA, Imhoff-Smith T, Dean DC, Grupe D, Adluru N, Patsenko E, **Mumford JA**, Goldman R, Rosenkranz MA, Davidson, RJ, 2019. Mindfulness-Based Stress Reduction-related changes in posterior cingulate resting brain connectivity. *SCAN*; 14(7):777-787.

Kral TRA, Stodola DE, Birn RM, **Mumford JA**, Solis E, Flook L, Patsenko EG, Anderson CG, Steinkuehler C, Davidson RJ, 2019. Neural correlates of video game empathy training in adolescents: a randomized trial. *NPJ Science of Learning*; 3:13.

Heyn SA, Keding TJ, Ross MC, Cisler JM, **Mumford JA**, Herringa RJ, 2019. Abnormal Prefrontal Development in Pediatric Posttraumatic Stress Disorder: A Longitudinal Structural and Functional Magnetic Resonance Imaging Study. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*; 4(2):171-179.

Roe MA, Martinez JE, **Mumford JA**, Taylor WP, Cirino PT, Fletcher JM, Juranek J, Church JA, 2018. Control Engagement During Sentence and Inhibition fMRI Tasks in Children With Reading Difficulties. *Cerebral Cortex*; 28(10):3697-3710.

Westbrook C, Patsenko EG, **Mumford JA**, Abramson LY, Davidson RJ, 2018. Frontoparietal processing of stress-relevant information differs in individuals with a negative cognitive style. *Journal of Abnormal Psychology*; 127(5):437-447.

Kral TRA, Schuyler BS, **Mumford JA**, Rosenkranz MA, Lutz A, Davidson RJ, 2018. Impact of short- and long-term mindfulness meditation training on amygdala reactivity to emotional stimuli. *NeuroImage*; 181: 301-313.

Grupe DW, Schaefer SM, Lapate RC, Schoen AJ, Gresham LK, **Mumford JA**, Davidson RJ, 2018. Behavioral and neural indices of affective coloring for neutral social stimuli. *Social Cognitive Affective Neuroscience*; doi: 10.1093/scan/nsy011.

Kral TRA, Solis E, **Mumford JA**, Schuyler BS, Flook L, Rifken K, Patsenko EG, Davidson RJ, 2017. Neural correlates of empathic accuracy in adolescence. *Social Cognitive Affective Neuroscience*; 12(11):1701-1710.

Mumford JA, 2017. A comprehensive review of group level model performance in the presence of heteroscedasticity: Can a single model control Type I errors in the presence of outliers? *NeuroImage*; 147:658-668.

Worthy DA, Davis T, Gorlick MA, Cooper JA, Bakkour A, **Mumford JA**, Poldrack RA, Todd Maddox W, 2016. Neural Correlates of State-Based Decision-Making in Younger and Older Adults. *NeuroImage*; 130:13-23.

Poldrack RA, Laumann TO, Koyejo O, Gregory B, Hover A, Chen MY, Gorgolewski KJ, Luci J, Joo SJ, Boyd RL, Hunicke-Smith S, Simpson ZB, Caven T, Sochat V, Shine JM, Gordon E, Snyder AZ, Adeyemo B, Petersen SE, Glahn DC, McKay R, Curran JE, Gring HH, Carless MA, Blangero J, Dougherty R, Leemans A, Handwerker DA, Frick L, Marcotte EM, **Mumford JA**, 2015. Long-term neural and physiological phenotyping of a single human. *Nature Communications*; 6:8885.

Poldrack RA, Congdon E, Triplett W, Gorgolewski KJ, Karlsgodt KH, **Mumford JA**, Sabb FW, Freimer NB, London ED, Cannon TD, Bilder RM, 2016. A phenome-wide examination of neural and cognitive function. *Scientific Data*; 3:160110.

Schlichting ML, **Mumford JA**, Preston AR, 2015. Learning-related representational changes reveal dissociable integration and separation signatures in the hippocampus and prefrontal cortex. *Nature Communications*; 6:8151.

Laumann TO, Gordon EM, Adeyemo B, Snyder AZ, Joo SJ, Chen MY, Gilmore AW, McDermott KB, Nelson SM, Dosenbach NU, Schlaggar BL, **Mumford JA**, Poldrack RA, Petersen SE, 2015. Functional System and Areal Organization of a Highly Sampled Individual Human Brain. *Neuron*;87(3):657-70.

Sherman SM, **Mumford JA**, Schnyer DM, 2015. Hippocampal activity mediates the relationship between circadian activity rhythms and memory in older adults. *Neuropsychologia*; 75: 617-25.

Mumford JA, Poline JB, Poldrack RA, 2015. Orthogonalization of regressors in fMRI models. *PLoS One*; 10(4): e0126255.

Mumford JA, Davis T, Poldrack RA, 2014. The impact of study design on pattern estimation for single-trial multivariate pattern analysis. *NeuroImage*; 103:130-8.

Yi HG, Maddox WT, **Mumford JA**, Chandrasekaran B, 2014. The role of corticostriatal systems in speech category learning. *Cerebral Cortex*; epub.

Davis T, LaRocque KF, **Mumford JA**, Norman KA, Wagner AD, Poldrack RA, 2014. What do differences between multi-voxel and univariate analysis mean? How subject-voxel- and trial-level variance impact fMRI analysis. *NeuroImage*; 97: 271-83.

Schonberg T, Bakkour A, Hover AM, **Mumford JA**, Nagar L, Perez J, Poldrack RA, 2014. Changing value through cued approach: An automatic mechanism of behavior change. *Nature Neuroscience*; 17(4): 625-630.

Congdon E, Altshuler LL, **Mumford JA**, Karlsgodt KH, Sabb FW, Ventura J, McGough JJ, London ED, Cannon TD, Bilder RM, Poldrack RA., 2014. Neural activation during response inhibition in adult attention-deficit/hyperactivity disorder: preliminary findings on the effects of medication and symptom severity. *Psychiatry Research: Neuroimaging*; 222(1-2):17-28.

White CN, Congdon E, **Mumford JA**, Karlsgodt KH, Sabb FW, Freimer NB, London ED, Cannon TD, Bilder RM, Poldrack RA, 2014. Decomposing decision components in the stop-signal task: A model-based approach to individual differences in inhibitory control. *Journal of Cognitive Neuroscience*; 26(8):1601-14.

Helfinstein SM, Schonberg T, Congdon E, Karlsgodt KH, **Mumford JA**, Sabb FW, Cannon T, London ED, Bilder T, Poldrack, 2014. Predicting risky choices from brain activity patterns. *Proceedings of the National Academy of Sciences*; 111(7):2470-5.

Gonzales M, Tarumi T, **Mumford JA**, Ellis RC, Hungate JR, Pyron M, Tanaka H, Haley AP, 2014. Greater BOLD Response to Working Memory in Endurance-Trained Adults Revealed By Breath-Hold Calibration. *Human Brain Mapping*; 35(7):2898-910.

Mumford JA and Ramsey JD, 2014. Bayesian Networks for fMRI: A Primer. *NeuroIm-*

age; 86: 573-82.

Clasen PC, Beevers CG, **Mumford JA** and Schnyer DM, 2014. Cognitive control network connectivity in adolescent women with and without a parental history of depression. *Developmental Cognitive Neuroscience*; 7: 13-22.

Schonberg T, Bakkour A, Hover AM, **Mumford JA**, Poldrack RA, 2014. Influencing food choices by training: evidence for modulation of frontoparietal control signals. *Journal of Cognitive Neuroscience*; 26(2): 247-68.

Congdon E, Bato AA, Schonberg T, **Mumford JA**, Karlsgodt KH, Sabb FW, London ED, Cannon TD, Bilder RM, Poldrack RA, 2013. Differences in Neural Activation as a Function of Risk-taking Task Parameters. *Frontiers in Decision Neuroscience*; 7:173.

Galvan A, Schonberg T, **Mumford JA**, Kohn M, Poldrack RA, London ED, 2013. Greater risk sensitivity of dorsolateral prefrontal cortex in young smokers than in non-smokers. *Psychopharmacology*; 229(2) 345-55.

Xue G, Dong Q, Chen C, Lu Z, **Mumford JA**, Poldrack RA, 2013. Complementary role of frontoparietal activity and cortical pattern similarity in successful episodic memory encoding. *Cerebral Cortex*; 23(7):1562-71.

White CN, **Mumford JA**, Poldrack RA, 2012. Perceptual criteria in the human brain. *Journal of Neuroscience*; 32(47):16716-24.

Schonberg T, Fox C, **Mumford JA**, Congdon E, Trepel C, Poldrack RA, 2012. Decreasing ventromedial prefrontal cortex activity during sequential risk-taking: An fMRI investigation of the Balloon Analogue Risk Task. *Frontiers in Decision Neuroscience*; Jun 4; 6:80.

Turner B, **Mumford JA**, Poldrack RA, Ashby FG, 2012. Spatiotemporal activity estimation for multivoxel pattern analysis with rapid event-related designs. *NeuroImage*; 62(3):1429-38.

Mumford JA, 2012. A power calculation guide for fMRI studies. *Social, Cognitive, and Affective Neuroscience*; 7(6):738-42.

Poldrack RA, **Mumford JA**, Schonberg T, Kalar D, Barman B, Yarkoni T, 2012. Discovering relations between mind, brain, and mental disorders using topic mapping. *PLoS Computational Biology*, 8(10):e1002707.

Satpute AB, **Mumford JA**, Naliboff BD, Poldrack RA, 2012. Human anterior and posterior hippocampus respond distinctly to state and trait anxiety. *Emotion*; 12(1):56-68.

Congdon E, **Mumford JA**, Cohen JR, Galvan A, Canli T, Poldrack RA, 2012. Measurement and reliability of response inhibition. *Frontiers in Quantitative Psychology and Measurement*; 3:37.

Mumford JA, Turner BO, Asby FG, Poldrack RA, 2012. Deconvolving BOLD activation in event-related designs for multivoxel pattern classification analyses. *NeuroImage*; 59(3):2636-43.

Stern JM, Caporro M, Haneef Z, Hsiang J, Yeh BS, Buttinelli C, Lenartowicz A, **Mumford JA**, Parvizi J, Poldrack RA, 2011. Functional imaging of sleep vertex sharp tran-

sients. *Journal of clinical neurophysiology*; 122: 1382-1386.

Scott-Van Zeeland AA, Abrahams BS, Alvarez-Retuerto AI, Sonnenblick LI, Rudie JD, Ghahremani D, **Mumford JA**, Poldrack RA, Dapretto M, Geschwind DH, Bookheimer SY, 2010. Altered functional connectivity associated with variation in CNTNAP2. *Science Translational Medicine*; 2: 56ra80.

Xue G, Dong Q, Chen C, Lu Z, **Mumford JA**, Poldrack RA, 2010. Greater neural pattern similarity across repetitions is associated with better memory. *Science*; 330: 97-101.

Congdon E, **Mumford JA**, Cohen JR, Galvan A, Aron AR, Xue G, Miller E, Poldrack RA, 2010. Engagement of large-scale networks is related to individual differences in inhibitory control. *NeuroImage*; 53: 653-663.

Mumford JA, Horvath S, Oldham MC, Langfelder P, Geschwind DH, Poldrack RA, 2010. Detecting network modules in fMRI time series: A weighted network analysis approach. *NeuroImage*; 52:1465-1476.

Kenner NK, **Mumford JA**, Hommer RE, Skup M, Leibenluft E, Poldrack RA, 2010. Inhibitory motor control in response stopping and response switching. *Journal of Neuroscience*; 85:12-8.

Han MK, Martinez FJ, **Mumford JA**, Sciruba F, Criner GJ, Curtis JL, Murray SK, Sternberg A, Weinman G, Kazerooni E, Fishman AP, Make B, Hoffman EA, Mosenifar Z, Wise R. Prevalence and Clinical Correlates of Bronchoreversibility in Severe Emphysema, 2010. *European Respiratory Journal*; 35:1048-56.

Cho, S, Moody T, Fernandino, L, **Mumford JA**, Poldrack RA, Cannon T, Knowlton B, Holyoak K, 2010. Common and Dissociable Prefrontal Loci Associated With Component Mechanisms of Analogical Reasoning. *Cerebral Cortex*; 20(3): 524-33.

Lee B, London E, Poldrack R, Farahi J, Nacca A, Monterosso J, **Mumford JA**, Bokarius A, Dahlbom M, Mukherjee J, Bilder R, Brody A, and Mandelkern M, 2009. Striatal Dopamine D2/D3 Receptor Availability is Reduced in Methamphetamine Dependence and is Linked to Impulsivity. *Journal of Neuroscience*; 29:14734-40.

Harley EM, Pope WB, Villablanca, JP, **Mumford JA**, Suh R, Mazziotta JC, Enzmann D, Engel SA, 2009. Engagement of Fusiform Cortex and Disengagement of Lateral Occipital Cortex in the Acquisition of Radiological Expertise. *Cerebral Cortex*; 19(11): 2746-54.

Mumford JA & Nichols TE, 2009. Simple Group fMRI Modeling and Inference. *NeuroImage*; 47(4):1469-1475.

Poldrack RA & **Mumford JA**, 2009. Independence in ROI Analysis: Where is the Voodoo. *Social, Cognitive, and Affective Neuroscience*; 4(2):208-213.

Mumford JA and Nichols TE, 2008. Power Calculation for Group fMRI Studies Accounting for Arbitrary Design and Temporal Autocorrelation. *NeuroImage*; 39:261-268.

Martinez FJ, Curtis JL, Sciruba F, **Mumford JA**, Giardino ND, Weinmann G, Kazerooni E, Murray S, Criner GJ, Sin DD, Hogg J, Ries AL, Han M, Fishman AP, Make B, Hoffman EA, Mosenifar Z, Wise R and for the National Emphysema Treatment Trial

Research Group, 2007. Sex Differences in Severe Pulmonary Emphysema. *American Journal of Respiratory and Critical Care Medicine*; 176(3):243-252.

Mumford JA and Poldrack RA, 2007. Modeling Group fMRI Data. *Social Cognitive and Affective Neuroscience*; 2: 251-257.

Mumford JA, Hernandez-Garcia L, Lee GR, Nichols TE, 2006. Estimation Efficiency and Statistical Power in Arterial Spin Labeling fMRI. *NeuroImage*; 33: 103-114.

Mumford JA and Nichols TE, 2005. Modeling and Inference of Multisubject fMRI Data: Using Mixed-Effects Analysis for Joint Analysis. *IEEE Engineering in Medicine and Biology Magazine*; 25(2):42-51.

Lama VN, Murray SK, **Mumford JA**, Flaherty KR, Chang A, Toews GB, Peters-Golden M, Martinez FJ, 2005. Prognostic Value of Bronchiolitis Obliterans Syndrome Stage 0-p in Single Lung Transplant Recipients. *American Journal of Respiratory and Critical Care Medicine*; 172: 379-383.

Flaherty KR, Thwaite EL, Kazerooni EA, Gross BH, Toews GB, Colby TV, Travis WD, **Mumford JA**, Murray S, Flint A, Lynch JP, Martinez FJ, 2003. Radiological Versus Histological Diagnosis in UIP and NSIP: Survival Implications. *Thorax*; 58:143-148.

Flaherty KR, **Mumford JA**, Murray S, Kazerooni EA, Gross BH, Colby TV, Travis WD, Flint A, Toews GB, Lynch III JP, Martinez FJ, 2003. Prognostic Implications of Physiologic and Radiographic Changes in Idiopathic Interstitial Pneumonia. *American Journal of Respiratory and Critical Care Medicine*; 168:543-548.

Flaherty KR, Colby TV, Travis WD, Toews GB, **Mumford JA**, Murray S, Thannickal VJ, Kazerooni EA, Gross BH, Lynch III JP, Martinez FJ, 2003. Fibroblastic Foci in Usual Interstitial Pneumonia: Idiopathic Versus Collagen Vascular Disease. *American Journal of Respiratory and Critical Care Medicine*; 167:1410-1415.

Presentations & Abstracts

Mumford JA and Davidson RJ, 2016. Inflated type I errors using robust regression with small sample sizes. 22nd annual meeting for the Organization for Human Brain Mapping (poster presentation).

Mumford JA and Poldrack RA, 2014. Adjusting mean activation for reaction time effects in BOLD fMRI. 21st annual meeting for the Organization for Human Brain Mapping (poster presentation).

Mumford JA and Davis T, 2013. Biases when using single trial activation estimates in representational similarity analyses. 19th annual meeting for the Organization for Human Brain Mapping (poster presentation).

Schonberg, T, Bakkour A, Hover A, Nagar L, Mumford J, Poldrack R, 2013. A novel go-signal task induces preference change between food items and modulates vmPFC activity. 19th annual meeting for the Organization for Human Brain Mapping (poster presentation).

Bakkour A, Schonberg T, Hover A, Mumford J, Poldrack R, 2013. Self-control circuitry engagement decreases during overtraining to induce behavioral change. 19th annual meeting for the Organization for Human Brain Mapping (poster presentation).

White C, Congdon E, Mumford J, Karlsgodt K, Sabb F, Freimer N, London E, Can-

non T, Bilder R, Bato A, Poldrack R, 2013. Individual differences in the stop-signal task: relating decision processes with inhibitory control. 19th annual meeting for the Organization for Human Brain Mapping (poster presentation).

Poldrack R, Mumford J, Schonberg T, Barman B, Kalar D, Yarkoni T, 2012. Discovering the relations between mind, brain, and mental disorders using topic mapping. 18th annual meeting for the Organization for Human Brain Mapping (poster presentation).

Mumford JA, Ashby FG, Turner BO, Poldrack RA, 2011. Comparison of methods for trial-specific activation estimation. 17th annual meeting of the Organization for Human Brain Mapping (poster presentation).

Congdon E, Cohen J, Galvan A, Bakkour A, Mumford J, London E, Poldrack R, 2011. The relationship between structural brain features and train impulsivity in healthy individuals. 17th annual meeting of the Organization for Human Brain Mapping (poster presentation).

Kenner N, Mumford J, Poldrack R, 2011. Associative learning in striatal subregions using high resolution fMRI. 17th annual meeting of the Organization for Human Brain Mapping (poster presentation).

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