

## Jeanette A Mumford

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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**

*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 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**

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

**Completed**

*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](http://fmripower.org)

## **Publications**

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. *Neuropsychologica*; 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**, Karsgodt 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. *NeuroImage*; 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**, Kohno 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 transients. *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, Mohsenifar 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, Cannon 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).

Mumford JA, Oldham MC, Geschwind DH, Langfelder P, Horvath S, Poldrack RA, 2010. Weighted voxel coactivation network analysis: Reliability and comparison with ICA. 16th annual meeting of the Organization for Human Brain Mapping (poster presentation).

Mumford JA, Oldham MC, Geschwind DH, Langfelder P, Horvath S, Poldrack RA, 2009. Functional Connectivity Using Weighted Voxel Coexpression Network Analysis. *NeuroImage*, 47(S1), S169.

Kenner NM, Mumford JA, Lenartowicz A, Hommer RE, Skup M, Leibenluft E, Poldrack RA, 2009. Comparing networks involved in stopping and changing motor responses. *NeuroImage*, 47(S1), S190.

Barkley-Levenson EE, Tom SM, Mumford JA, Fox CR, Poldrack RA, 2009. An fMRI Study of Decision and Experienced Utility in Risky Decision-Making. *NeuroImage*, 47(S1), S95.

Rizk-Jackson AM, Aron AR, Mumford JA, Poldrack RA, 2008. How powerful are fMRI biomarkers for detecting change over time? *Society for Neuroscience Abstracts*, 497.7.

Poldrack RA, Mumford JA, Oldham MC, Geschwind DH, 2008. Detecting voxel coac-

tivation networks in fMRI data using topological overlap measures. Society for Neuroscience Abstracts,497.11.

Kenner NM, Mumford JA, Hoommer RE, Skup M, Liebenluft E, Poldrack RA, 2008. Stopping and changing motor responses engages partially overlapping networks. Society for Neuroscience Abstracts, 871.4 .

Mumford JA, 2008. Type I error rate with simple group fMRI models. Joint Statistical Meeting, Denver, CO.

Mumford JA, 2008. Sample Size Recalculation Using Internal Pilot Studies For Group fMRI. Human Brain Mapping Abstracts, #532.

Rizk-Jackson A, Mumford JA, Poldrack RA, 2008. Classification analysis of rapid event-related fMRI studies. Human Brain Mapping Abstracts, #484.

Mumford JA, Poldrack, RA, Nichols TE, 2007. FMRIpower: A Power Calculation Tool for 2-Stage fMRI models. Human Brain Mapping Abstracts, #328.

Mumford JA, Nichols TE, 2006. Power Calculation for Group fMRI Studies Accounting for Arbitrary Design and Temporal Autocorrelation. Joint Statistical Meeting, Seattle, WA.

Mumford JA, Nichols TE, 2006. Power Calculations for Group fMRI Studies Accounting for Arbitrary Design and Temporal Autocorrelation. Human Brain Mapping Abstracts, #150.

Mumford JA, Hernandez-Garcia L, Lee GR, Nichols TE, 2006. Estimation Efficiency and Statistical Power in Arterial Spin Labeling fMRI. ENAR Spring Meeting Tampa, FL.

Mumford JA, Hernandez-Garcia L, Nichols TE, 2005. Maximizing Power with Arterial Spin Labeling fMRI. Joint Statistical Meeting , Minneapolis, MN.

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