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Andrew Jahn
January 2024

PROFESSIONAL EXPERIENCE

Assistant Research Scientist
2023-present   Department of Radiology, University of Michigan, Ann Arbor

Lecturer
2023-present   Department of Psychology, University of Michigan, Ann Arbor

Research Lab Specialist
2018-2023   fMRI Laboratory, University of Michigan, Ann Arbor

Postdoctoral Fellow
2015-2018   Haskins Laboratories, Yale University

Neuroimaging Consultant
2021-2022   Harvard University
2020-present   Louisiana State University
2019-2020   Houston Methodist Medical Center
2019-2022   University of Connecticut
2019   University of Georgia
2017-2019   UC Irvine
2016-2017   University of Antwerp
2015-2017   University of Illinois at Urbana-Champaign
2014   McLean Hospital, Harvard Medical School
2014-present   Ohio State University
2013   Michigan State University

Lab Technician
2008-2010   Ohio State University

EDUCATION

2015   PhD, Cognitive Neuroscience: Indiana University
2008   BA, Psychology: Carleton College

GRANT SUPPORT

Active Support

09/01/2022 – 08/31/2027   NIH NIDCD R01 DC020717, Brang (PI), Jahn (co-PI) Characterizing the recovery of

$2,811,800 spectral, temporal, and phonemic speech information from visual cues

Pending Support

1/1/2025 – 12/31/2029   RFA-EY-21-003, **Jahn** (PI). Advanced Training in $1,151,933
Functional Magnetic Resonance Imaging Analysis and Reproducibility

PUBLICATIONS

1. Poldrack et al., **Jahn** A (in press). The Past, Present, and Future of the Brain Imaging Data Structure (BIDS). *Imaging Neuroscience*

2. Clement P, Petr J, Dijsselhof M, Padrela B, Pasternak M, Dolui S, Jarutyte L, Pinter N, Hernandez-Garcia L, **Jahn A**, Kuijer J, Barkhof F, Mutsaerts H, Keil V (2022). A beginner's guide to arterial spin labeling (ASL) image processing. *Frontiers in Neuroscience*

3. Woo JH, Azab H, **Jahn A**, Hayden B, Brown JW (2022). The PRO model accounts for the anterior cingulate cortex role in risky decision-making and monitoring. *Cognitive, Affective, & Behavioral Neuroscience*

4. Demidenko MI, Weigard AS, Ganesan K, Jang H, **Jahn A**, Huntley ED, Keating DP (2021). Interactions between methodological and interindividual variability: How monetary incentive delay (MID) task contrast maps vary and impact associations with behavior. *Brain & Behavior* 11(5)

5. Weiss B, **Jahn A**, Hyatt CS, Carter NT, Sweet LH, Miller JD, Haas BW (2021). Investigating the neural substrates of antagonistic externalizing symptoms and social-cognitive Theory of Mind: An fMRI examination of functional activity and synchrony. *Personality Neuroscience* 4, 1-10

6. Botvinik-Nezer et al., **Jahn A** (2020). Variability in the analysis of a single neuroimaging dataset by many teams. *Nature* 582:84-88

7. Koscik TR, Man V, **Jahn A**, Lee CH, Cunningham WA (2020). Decomposing the neural pathways in a simple, value-based choice. *Neuroimage* 214:116764

8. Demidenko MI, Huntley ED, **Jahn A**, Thomason ME, Monk CS, Keating DP (2020). Cortical and subcortical response to the anticipation of reward in high and average/low risk-taking adolescents. *Dev Cogn Neurosci* 44:100798.

9. Schulte E, Yokum S, **Jahn A,** Gearhardt AN (2019). Food cue reactivity in food addiction: A functional magnetic resonance imaging study. *Physiology & Behavior* 208

10. Johns CL, **Jahn A,** Jones HR, Kush D, Molfese PJ, Van Dyke JA, Magnuson JS, Tabor W, Mencl WE, Shankweiler DP, Braze D (2018). Performance differences on reading skill measures are related to differences in cortical grey matter structure in young adults. *Language, Cognition, & Neuroscience*

33:1275-1295

11.   Rajesh A, Cooke GE, Monti JM, **Jahn A,** Daugherty AM, Kramer AF (2017) Differences in brain architecture in remote mild traumatic brain injury. *J Neurotrauma* 34:3280-3287

12.   **Jahn A,** Nee DE, Alexander WH, Brown JW (2016) Distinct regions in medial prefrontal cortex process pain and cognition. *J Neurosci* 36:12385-92

13.   de Mendizabal NV, Jones DR, **Jahn A,** Bies RR, Brown JW (2015). Nicotine and cotinine exposure from electronic cigarettes: A population approach. *Clinical Pharmacokinetics* 54:615-626

14.   **Jahn A,** Nee DE, Alexander WH, Brown JW (2014) Distinct regions of anterior cingulate cortex signal prediction and outcome evaluation. *Neuroimage* 95:80-89

15.   Nee DE, **Jahn A,** Brown JW (2014) Prefrontal Cortex Organization: Dissociating Effects of Temporal Abstraction, Relational Abstraction, and Integration with fMRI. *Cerebral Cortex* 24:2377-87

16.   **Jahn A,** Nee DE, Brown JW (2011) The neural basis of predicting the outcomes of imagined actions. *Frontiers in Decision Neuroscience* 5:128

17.   Cunningham WA, Johnsen IR, **Jahn A** (2011) Attitudes. In J. Decety & J. Cacioppo (Eds.), The Handbook of Social Neuroscience. Oxford, UK: Oxford University Press

18.   Mowrer SM, **Jahn A,** Cunningham WA, Abduljalil AM (2011) The value of success: Acquiring gains, avoiding losses, and simply being successful. *PLoS One* 6:9

19.   Cunningham WA, Arbuckle NL, **Jahn A,** Mowrer SM, Abduljalil AM (2010) Aspects of neuroticism and the amygdala: Chronic tuning from motivational styles. *Neuropsychologia* 49:657-662

20.   **Jahn A,** Matsuki K, Molfese PJ, Van Dyke JA (under revision at *JEP: General*) Individual differences in white matter tractography: A random forests analysis

PRESENTATIONS

Invited Talks

2023   **Jahn A.** Trends in best practices for neuroimaging research. University of Connecticut, Storrs CT

2023   **Jahn A.** Learning to use visualization tools. University of South Carolina, Columbia SC

2021   **Jahn A.** Cluster correction. Georgia State University, Atlanta GA

2019   **Jahn A.** Teaching neuroimaging methods: Challenges and future directions. Indiana University, Bloomington IN

2018	**Jahn A.** Understanding and teaching neuroimaging analysis: Common difficulties and the search for answers. University of Michigan, Ann Arbor MI
2017	**Jahn A.** Distinct regions within medial prefrontal cortex process pain and cognition. National Institutes of Health, Bethesda MD
2013	**Jahn A.** Empirical comparison of computational models of mPFC function. University of Rochester, Rochester NY

Posters

2022	**Novick AM,** Duffy KA, Stoddard J, Lazorwitz A, Jahn A, Costa V, Norton A, Belyavskaya A, Santoro N, Tregellas J, Sammel M, and Epperson CN. Neurobiology of the oral contraceptive pill: a placebo-controlled fMRI study measuring reward function**.** *Annual Poster Session, Department of Psychiatry, University of Colorado Anschutz Medical Campus.*
2019	Purcell J, **Jahn A,** Brown JW. Neural correlates of risk and reward evidence accumulation during decision-making. *The Annual Meeting of The Society for Neuroscience*, Chicago IL
2019	Purcell J, **Jahn A,** Brown JW. Differential salience network activation during visual attention to risky and certain outcomes. *Organization for Human Brain Mapping*, Rome IT
2017	**Jahn A,** Kush D, Lewis A, Van Dyke J. Prediction-related activity in the medial prefrontal cortex reflects processing of cataphor cues. *Annual Meeting of Society for the Neurobiology of Language*, Baltimore MD
2016	**Jahn A,** Nee DE, Alexander WH, Brown JW. Distinct regions within medial prefrontal cortex process pain and cognition. *Annual Meeting of The Society for Neuroscience*, San Diego CA
2015	**Jahn A,** Jones H, Johns CL, Kush D, Bontrager ML, Frost SJ, Van Dyke JA. Neural basis of conflict resolution in encoding and retrieval interference. *Annual Meeting of Society for Neurobiology of Language*, Chicago IL
2014	**Jahn A,** Strait C, Brown JW, Hayden B. Testing computational models of anterior cingulate cortex with monkey neurons. *Annual Meeting of The Society for Neuroscience*, Washington D.C.
2014	**Jahn A,** Nee DE, Alexander WH, Brown JW. Medial prefrontal cortex signals prediction errors across multiple domains of pain and cognitive control. *Annual Meeting of The Society for Neuroscience*, Washington D.C.
2013	**Jahn A,** Nee DE, Alexander W, Brown JW. Distinct regions of anterior cingulate cortex signal prediction and outcome. *Annual Meeting of The Society for Neuroscience*, San Diego CA

2013   **Jahn A,** Nee DE, Alexander W, Brown JW. Pain, congruency, and surprise: Prediction violation across domains in the anterior cingulate cortex. *Annual Meeting Cognitive Neuroscience Society*, San Francisco CA

2012   **Jahn A,** Nee DE, Alexander W, Brown JW. Distinct regions of anterior cingulate cortex signal prediction and outcome evaluation. *Annual Meeting of The Cognitive Neuroscience Society*, Chicago IL

2011   **Jahn A,** Nee DE, Brown JW. The neural basis of predicting the outcomes of planned actions. *The Annual Meeting of The Society for Neuroscience*, Washington D.C.

2010   Mowrer SM, **Jahn A,** Cunningham WA, Abduljalil AM. Separable effects of stimulus and outcome and their interaction. *Annual Meeting of Social and Affective Neuroscience*, Chicago IL

TEACHING

Online

2012 -   Creator of Andy's Brain Blog (www.andysbrainblog.com)
             fMRI data analysis in AFNI, SPM, and FSL; computational modeling; statistics; FreeSurfer; experimental design with E-Prime. Over 16,000 subscribers and over 4 million views.

2019 -   Creator and Editor of Andy's Brain Book (https://andysbrainbook.readthedocs.io)
             Tutorials on imaging analysis with FSL, AFNI, SPM, MRtrix, and FreeSurfer

Workshops (Primary Instructor)

2023   *Basic and Advanced Machine Learning*. University of Wisconsin-Milwaukee
2023   *Analysis of Animal Brain Data with AFNI.* University of Florida
2023   *Basic and Advanced Functional Connectivity.* University of Washington
2022   *Introduction to AFNI*. Michigan State University
2021   *Introduction to FSL.* Harvard University
2021   *Introduction to AFNI and FreeSurfer.* University of Wisconsin-Milwaukee
2020   *fMRI Pitfalls and Functional Connectivity*. Ohio State University
2019   *Introduction to AFNI and Surface Mapping*. Indiana University
2018   *Introduction to Diffusion Imaging and MRtrix.* University of Michigan
2018   *Introduction to Graph Theory and the CONN Toolbox.* U. of Massachusetts Amherst
2018   *Introduction to fMRI Analysis and MVPA*. University of Wisconsin-Milwaukee
2018   *Introduction to FSL*. University of Massachusetts Amherst
2017   *Introduction to FreeSurfer.* Haskins Laboratories
2016   *Advanced connectivity analysis with AFNI.* Yale University
2014   *Introduction to FSL*. Indiana University
2013   *Single-subject analysis with AFNI*. University of Rochester

University Courses (Primary Instructor)

2022-present	*Functional MRI Analysis and Advances.* University of Michigan
2013-2015	*Introductory Statistics*. Indiana University
2013-2015	*Introductory Psychology*. Indiana University

Lab Instructor

2012	*Methods of Experimental Psychology*. Indiana University
2011	*Introduction to Neuroimaging Methods*. Indiana University

PROFESSIONAL SKILLS

Neuroimaging Software	AFNI, SPM, FSL, FreeSurfer, TORTOISE, MRtrix, fASL
Statistical Software	Matlab, R, SPSS
Stimulus Presentation	E-Prime, Presentation
Programming Languages	Unix, AWK, C
Image and Video Editing	Adobe Photoshop, Premiere Pro, Camtasia

PROFESSIONAL SERVICE

Ad hoc **reviewer**
Neuroimage
Cognitive, Affective, and Behavioral Neuroscience
Frontiers in Human Neuroscience
Journal of Cognitive Neuroscience

DISSERTATION COMMITTEES

Karthikeyan Ganesan (2022), Department of Psychology, University of Michigan, *ad hoc* committee member

MEMBERSHIPS

Cognitive Neuroscience Society
Society for Neuroscience