

2022 November

## CURRICULUM VITAE

**Jeffrey Robert Binder, M.D.**

Professor of Neurology and Biophysics

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**Birth Place:** Chicago, IL

**Citizenship:** U.S.A

**Education:**

1976-1980 B.A. (Music), 1980; University of Nebraska, Lincoln, NE  
1980-1981 Graduate Studies; Michigan State University, East Lansing, MI  
1982-1986 M.D., 1986; University of Nebraska Medical Center, Omaha, NE

**Postgraduate Training and Fellowship Appointments:**

1986-1987 Resident, Internal Medicine; Northwestern University, Chicago, IL;  
R. Patterson, M.D., Director  
  
1987-1990 Resident, Neurology; The Neurological Institute of New York,  
Presbyterian Hospital, New York, NY; Lewis P. Rowland, M.D., Director  
  
1990-1992 Fellow, Stroke and Behavioral Neurology; The Neurological Institute of  
New York, Presbyterian Hospital; New York, NY; J. P. Mohr, M.D.,  
Director

**Faculty Appointments and Academic Titles:**

1990-1992 Assistant in Clinical Neurology; Presbyterian Hospital; New York, NY  
  
1992-1996 Assistant Professor, Department of Neurology; Medical College of  
Wisconsin; Milwaukee, WI  
  
1996-2002 Associate Professor, Department of Neurology; Medical College of  
Wisconsin; Milwaukee, WI  
  
1996-2002 Associate Professor, Department of Cellular Biology, Neurobiology and  
Anatomy; Medical College of Wisconsin; Milwaukee, WI  
  
2002-present Professor, Department of Neurology; Medical College of Wisconsin;  
Milwaukee, WI

- 2003-present Adjunct Professor, Department of Psychology, University of Wisconsin, Madison, WI
- 2006-present Professor, Department of Biophysics; Medical College of Wisconsin; Milwaukee, WI
- 2007-2009 Interim Director, Functional Imaging Research Center; Medical College of Wisconsin; Milwaukee, WI
- 2011-2012 Interim Chair, Department of Neurology; Medical College of Wisconsin; Milwaukee, WI
- 2012-present Vice Chair for Research, Department of Neurology; Medical College of Wisconsin; Milwaukee, WI

***Clinical Administrative Appointments:***

- 1996-2001 Co-Director, Froedtert Stroke Center, Froedtert Memorial Lutheran Hospital, Milwaukee, WI

***Hospital Staff Privileges:***

- 1992-present Froedtert Memorial Lutheran Hospital, Milwaukee, WI
- 1992-2003 Veteran's Administration Hospital, Milwaukee, WI
- 1992-present Consultant, Children's Hospital of Wisconsin, Milwaukee, WI
- 1996-1998 Saint Mary's Hospital, Milwaukee, WI

***Specialty Boards and Certification Boards:***

	<i>Eligible/Certified</i>	<i>Issued</i>	<i>Expiration</i>
American Board of Psychiatry and Neurology	Certified	10/1991	none
<i>Licensure</i>			
	<i>Number</i>	<i>Issued</i>	<i>Expiration</i>
Medicine, New York		1987	1992
Medicine, Wisconsin	33709	10/1992	10/2020

***Awards and Honors:***

- 1980 Graduation with High Distinction, University of Nebraska
- 1980 Phi Beta Kappa
- 1983 Regents Scholarship, University of Nebraska Medical Center
- 1985 Michaelson Student Research Grant, University of Nebraska Medical Center
- 1985 Alpha Omega Alpha Medical Honor Society
- 2013 Community of Innovators Faculty Innovator Award, Medical College of Wisconsin
- 2014-present Regional Top Doctor, Castle Connolly
- 2015-present Top Doctor, Milwaukee Magazine
- 2017 Outstanding Graduate School Educator, Medical College of Wisconsin
- 2018 Society for Research Excellence, Medical College of Wisconsin
- 2019 MCW Neuroscience Research Center 2018 most-cited faculty publication
- 2019 Distinguished Career Award, Society for the Neurobiology of Language
- 2022 Outstanding Graduate School Educator, Medical College of Wisconsin

***Membership in Professional Societies:***

*Member*

1987-present	American Academy of Neurology
1993-present	American Association for the Advancement of Science
1994-1996	International Society for Magnetic Resonance in Medicine
1995-present	Society for Neuroscience
1995-present	Organization for Human Brain Mapping
1996-present	World Federation of Neurology, Research Group on Aphasia and Cognitive Disorders
1996-2017	American Heart Association
1997-present	Cognitive Neuroscience Society
2005-2015	Central Society for Neurological Research
2007-present	Academy of Aphasia
2010-present	Society for the Neurobiology of Language (founding member)
2014-present	American Epilepsy Society
2014-present	Midwest Neuropsychology Group

***Editorial Boards:***

A. Journal Editorial Boards

1997-2001	Neuroscience News
1999-2007	Epilepsy and Behavior
2004-present	<b>Journal of Cognitive Neuroscience, Associate Editor, 2007 – present</b>
2005-present	Brain and Language
2006-present	Brain Imaging and Behavior
2007-present	Neuropsychology
2007-2012	Brain Topography
2009-present	Reports in Medical Imaging
2010-present	<b>Frontiers in Auditory Cognitive Neuroscience, Associate Editor, 2010 – present</b>
2014-present	Language, Cognition, and Neuroscience
2015-present	Journal of Neuroimaging
2019-present	<b>Neurobiology of Language, Senior Editor</b>
2022-present	Faculty Opinions, Neuroimaging Section Co-Head

B. Ad Hoc Reviewer

Annals of Neurology  
Annals of the New York Academy of Sciences  
Bilingualism  
Brain  
Brain Research  
Cerebral Cortex  
Cognition  
Cortex  
Current Biology  
Epilepsia  
Epilepsy and Behavior  
Human Brain Mapping  
Journal of the Acoustical Society of America

Journal of Experimental Psychology  
Journal of the International Neuropsychological Society  
Journal of Memory and Language  
Journal of Neuroimaging  
Journal of Neurology  
Journal of Neurology, Neurosurgery, and Psychiatry  
Journal of Neurolinguistics  
Journal of Neurophysiology  
Journal of Neuroscience  
Language and Cognitive Processes  
Language Disorders  
Mind and Language  
Nature Neuroscience  
Neurocase  
Neuroimage  
Neurology  
Neuron  
Neuropsychologia  
Neuroscience  
The Neuroscientist  
PLOS Biology  
Proceedings of the National Academy of Sciences  
Proceedings of the Royal Society of London  
Psychological Bulletin  
Psychological Science  
Psychonomic Bulletin and Review  
Public Library of Science Online  
Schizophrenia Research  
Science  
Trends in Cognitive Sciences  
Trends in Neurosciences  
Annual Meetings: American Academy of Neurology (1999-2002)  
International Society for Magnetic Resonance in Medicine (1999-2000)  
Society for Human Brain Mapping (1998-2001)  
Society for the Neurobiology of Language (2009-2017)  
Academy of Aphasia (2013-2018)

***National and International Committee Positions:***

**A. Societies**

2009-2011	Neurobiology of Language Conference (NLC) Organizing Committee
2009-2010	Treasurer, Society for the Neurobiology of Language
2012-2013	Chair, Society for the Neurobiology of Language
2009-2014	Board of Directors, Society for the Neurobiology of Language
2013-2016	Program Committee, Academy of Aphasia

**B. Examination Committees**

1994	Examiner, American Board of Psychiatry and Neurology
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C. Scientific Review Panels

- 1995 NIDCD Communication Disorders Review Committee site visit team, application P60 DC02763-01; W. Brownell, Chair
- 1995 NIA NBSA-A site visit team, application PO1 AG09466-06; R. Petersen, Chair
- 1995 Invited Reviewer, NIH Study Section SRC-01; B. Shaywitz, Chair
- 1996 NIDCD Special Emphasis Panel, applications to RFA DC-96-003; W. Brownell, Chair
- 1997 Invited Reviewer, NIDCD Communication Disorders Review Committee
- 1997-present Ad hoc reviewer, *Wellcome Trust*, London, UK
- 1998-99 Invited Reviewer, NIDCD Special Emphasis Panel; M. Shelhamer, Chair
- 1999 Invited Reviewer, V.A. Merit Review Board
- 1999 *Action Research Foundation*, West Sussex, UK
- 1999 Invited Reviewer, NIH Study Section for Behavioral and Biobehavioral Processes (BBBP-3); S. Blumstein, Chair
- 2001-2005 Member, NIH Study Section on Integrative and Functional Cognitive Neuroscience (IFCN-8, COG); D. Tranel, Chair
- 2006-2020 Member, Charles A. Dana Foundation Brain and Immuno-Imaging Review Panel
- 2008 Invited Reviewer, NSF Science of Learning Centers (SLC) site visit for the Visual Language and Visual Learning Center (SBE-0541953), Gallaudet University, Washington, DC
- 2016 Invited Reviewer, NIH BRAIN Initiative Special Emphasis Panel ZNS1 SRB-E on "Recording and Modulation in the Human CNS"
- 2019 Invited Reviewer, NIDCD ZDC1 SRB-Y Clinical Research Center grant (P50) study section; N. Dronkers, Chair
- 2020 Invited Reviewer, NIDCD ZDC1 SRB-Y58 Clinical Research Center grant (P50) study section; N. Dronkers, Chair
- 2020 Invited Reviewer, NSF Cognitive Neuroscience Program study section; J. Fritz, Program Director
- 2021 Invited Reviewer, NIH study section ZRG1 F01B-J (20) L: Fellowships in Learning, Memory, Language, Communication, and Related Neuroscience; S. McClure, Chair
- 2022 Invited Reviewer, NIMH Special Emphasis Panel ZMH1 ERB-E (03): BRAIN F32; J.H. Reynolds, Chair

D. Advisory Boards

- 2013-2019 External Advisory Board (Fachbeirat), Max Planck Institute for Psycholinguistics; Nijmegen, Netherlands
- 2019 New York University NeLLab Advisory Board (Alec Marantz, Liina Pilkkannen, PIs)
- 2019 Peer Review Committee, Donders Institute for Brain, Cognition and Behaviour; Radboud University; Nijmegen, Netherlands

**Research Grants and Contracts:**

A. Current

Title: Concept Representation in the Human Brain  
Source: NIDCD – R01 DC016622  
Role: Principal Investigator  
Dates: 07/01/18 - 06/30/23  
Total Award: \$3,627,335

Title: Cognitive Neuroscience Research Program  
Source: Advancing a Healthier Wisconsin Foundation, Project #5520462  
Role: Principal Investigator, Program Director  
Dates: 02/01/18 - 01/31/23  
Total Award: \$2,000,000

Title: Neural Correlates of Recovery from Aphasia After Stroke (Wilson, PI)  
Source: NIDCD – 2R01 DC013270  
Role: Co-Investigator  
Dates: 06/10/20 - 05/31/25  
Total Award: \$625,893

Title: Ischemic Conditioning and Improved Motor Function Post Stroke  
(Durand, Hyngstrom, PIs)  
Source: NICHD –R01 HD099340  
Role: Co-Investigator  
Dates: 07/01/19 - 06/31/24  
Total Award: \$2,144,615

Title: Enhancing Neural Plasticity in Aphasia (Binder, Pillay, Shah, Co-PIs)  
Source: Advancing a Healthier Wisconsin Foundation, Project #5520630  
Role: Co-Principal Investigator  
Dates: 07/01/21- 06/30/24  
Total Award: \$283,737

Title: Center for Aphasia Research (CARE)  
Source: WE Energies Foundation  
Role: Principal Investigator  
Dates: 09/01/19 - 08/31/21  
Total Award: \$100,000

Title: Dynamics and Causal Functions of Large-Scale Cortical and Subcortical  
Networks (Schalk, PI)  
Source: NINDS – U01 NS108916  
Role: Co-Investigator  
Dates: 09/01/18 - 08/31/22  
Total Award: \$81,614 (Year 4 subaward)

Title: Epilepsy Connectome Study  
Source: GE Medical  
Role: Principal Investigator  
Dates: 12/01/21 – 11/31/22

Total Award: \$219,765  
Title: Harnessing Electrophysiology in Aphasia Research (Shah-Basak, PI)  
Source: Clinical & Translational Science Institute of Southeast Wisconsin  
Role: Co-Investigator  
Dates: 04/01/22 – 03/31/23  
Total Award: \$50,000

## B. Previous

Title: Exogenous Tuning of Neural Oscillations as a Mode of Treatment in Post-Stroke Subacute Aphasia (Shah-Basak, PI)  
Source: MCW Neuroscience Research Center “Imagine More” Pilot Award  
Role: Co-Investigator  
Dates: 07/01/20 – 06/31/21  
Total Award: \$25,000

Title: High-Definition Transcranial Direct Current Stimulation (HD-tDCS) in Logopenic Variant Primary Progressive Aphasia (lvPPA): Effects on Language and Neural Mechanisms (Granadillo, PI)  
Source: MCW Neuroscience Research Center “Imagine More” Pilot Award  
Role: Co-Investigator  
Dates: 07/01/19 – 06/31/21  
Total Award: \$25,000

Title: The Epilepsy Connectome Project  
Source: NINDS – 1 U01 NS093650  
Role: Principal Investigator  
Dates: 08/01/15 - 06/31/20  
Total Award: \$5,113,925

Title: Integrative Functions of the Planum Temporale (Hickok, PI)  
Source: NIDCD – R01 DC009659  
Role: Co-Investigator  
Dates: 12/01/15 - 11/30/20  
Total Award: \$77,979 (Year 5 subaward)

Title: Presurgical Applications of Functional MRI in Epilepsy  
Source: NINDS – R01 NS35929  
Role: Principal Investigator  
Dates: 09/01/97 - 05/31/17  
Total Award: \$3,127,520

Title: Neurobiology of Auditory Language Perception (Hickok, PI)  
Source: NIDCD – 2 R01 DC003681  
Role: Co-Investigator  
Dates: 12/01/10 - 11/30/15  
Total Award: \$82,039 (Year 5 subaward)

Title: Neuroimaging of Anesthetic Modulation of Human Consciousness  
(Hudetz and Li, Co-PIs)  
Source: NIGM – R01 GM103894  
Role: Co-Investigator  
Dates: 07/01/13 - 06/30/17  
Total Award: \$1,175,232

Title: Knowledge Representation in Neural Systems (Aguilar, PI)  
Source: IARPA - FA8650-14-C-7357  
Role: Co-Investigator  
Dates: 10/01/13 - 1/14/15  
Total Award: \$2,649,860

Title: Neurophysiology of Speech Perception (Liebenthal, PI)  
Source: NIDCD – R01 DC006287  
Role: Co-Investigator  
Dates: 07/01/03 - 06/30/14  
Total Award: \$1,875,000

Title: Sensory-Motor Systems and Conceptual Processing in the Healthy and  
Impaired Brain (Desai, PI)  
Source: NIDCD – R01 DC10783  
Role: Co-Investigator  
Dates: 07/01/10 - 06/30/15  
Total Award: \$1,294,935

Title: Functional Neuroanatomy of Human Fear Conditioning (Helmstetter, PI)  
Source: NIMH – R01 MH060668  
Role: Co-Investigator  
Dates: 09/20/07 - 08/31/12  
Total Award: \$1,330,084

Title: Mapping the Effects of the KIAA0319 Dyslexia Susceptibility Gene on  
the Neural Substrates of Reading (Conant, PI)  
Source: Clinical and Translational Science Institute, MCW  
Role: Co-Investigator  
Dates: 02/01/10 - 01/31/12  
Total Award: \$45,000

Title: Functional MRI of Human Brain Language Systems  
Source: NINDS – R01 NS33576  
Role: Principal Investigator  
Dates: 12/01/94 - 12/31/11  
Total Award: \$1,868,750

Title: fMRI of Phonemic Perception in Children with Developmental Dyslexia  
(Conant, PI)  
Source: NICHD – R21 HD054824



Role: Co-Investigator  
Dates: 04/01/08 - 03/31/11  
Total Award: \$416,625

Title: Neural Mechanisms of Auditory Attention (Sabri, PI)  
Source: NIDCD – R03 DC008399  
Role: Co-Investigator  
Dates: 04/01/07-03/31/09  
Total Award: \$151,500

Title: Functional MRI of Sensory-Motor Metaphor Processing (Desai, PI)  
Source: NIDCD – R03 DC008416  
Role: Co-Investigator  
Dates: 09/01/06-08/31/09  
Total Award: \$151,500

Title: Functional MRI of Recovery in Fluent Aphasia  
Source: NINDS – R03 NS054958  
Role: Principal Investigator  
Dates: 04/01/06 - 03/31/08  
Total Award: \$151,500

Title: Specific Phonological Therapy in Fluent Aphasia  
Source: MCW Endowment for Advancing a Healthier Wisconsin – AHW 5520064  
Role: Principal Investigator  
Dates: 03/01/07-02/28/09  
Total Award: \$149,874

Title: Learning Beyond Criterion in Aphasia Rehabilitation (Friedman, PI)  
Source: NIDCD – R01 DC007169  
Role: Co-Investigator  
Dates: 07/01/06 - 06/30/09  
Total Award: \$991,350

Title: Structural and Functional Neuroanatomy of Language Laterality (Eckert, PI)  
Source: National Science Foundation  
Role: Co-Investigator  
Dates: 03/01/03-02/28/05  
Total Award: \$11,000

Title: Functional Magnetic Resonance Imaging of the Brain (Hyde, PI)  
Source: NIMH – P01 MH51358  
Role: Co-Investigator and Project Leader  
Dates: 04/01/95 - 03/31/04  
Total Award: \$8,794,937

Title: Simultaneous fMRI/ERP Measures of Speech Perception (Liebenthal, PI)  
Source: NIDCD – R21 DC04880

Role: Co-Investigator  
Dates: 05/01/01 - 04/30/03  
Total Award: \$100,000

Title: Clomethiazole Acute Stroke Study (CLASS-I, II, III)  
Source: Astra Pharmaceuticals, Inc.  
Role: Local Co-Investigator  
Dates: 1998-1999  
Site Award: \$29,000

Title: Phase II/III Multicenter, Double-Blind, Placebo-Controlled, Parallel Group Study to Evaluate the Efficacy, Safety, Tolerability and Pharmacokinetics of Two Doses of Intravenous Aptiganel Hydrochloride versus Placebo in Patients with Acute Ischemic Stroke  
Source: Boehringer Ingelheim, Inc.  
Role: Local Principal Investigator  
Dates: 1996-1997  
Site Award: \$121,865

Title: A Multicenter, Double-Blind, Placebo-Controlled, Dose-Finding Efficacy Study of CNS 1102 in Patients with Acute Cerebral Ischemia  
Source: Cambridge Neuroscience, Inc.  
Role: Local Principal Investigator  
Dates: 1995-1996  
Site Award: \$38,880

Title: Warfarin-Aspirin Recurrent Stroke Study (Mohr, PI)  
Source: NINDS  
Role: Co-Investigator  
Dates: 09/01/94 - 06/30/99  
Site Award: \$324,000

Title: Natural History of Neurobehavioral Dysfunction in MS  
Source: National Multiple Sclerosis Society Grant  
Role: Co-Investigator  
Dates: 09/01/94 - 08/31/97  
Total Award: \$251,958

Title: Pre-surgical Localization of Language and Memory Cortex with FMRI  
Source: Charles A. Dana Foundation  
Role: Principal Investigator  
Dates: 09/01/94 - 08/31/97  
Total Award: \$100,000

Title: Effects of Stimulus Rate, Intensity, and Duration on Functional Magnetic Resonance Signal Response  
Source: Medical College of Wisconsin Research Affairs Committee  
Role: Principal Investigator  
Dates: 09/01/93 - 08/31/95

Total Award: \$7,470  
Title: Functional Magnetic Resonance Imaging of Auditory Language Processing  
Source: McDonnell-Pew Program in Cognitive Neuroscience  
Role: Principal Investigator  
Dates: 01/01/93 - 12/31/95  
Total Award: \$60,000

C. Mentored NIH Fellowship (F32), K Series, and Other Training Grants

Title: Enhancing Neural Plasticity for Recovery from Aphasia (S. Pillay, PI)  
Source: NIH/NICHD Neurorehabilitation and Restorative Neuroscience Training Network K12 Scholar Grant K12HD093427  
Role: Mentor  
Dates: 07/01/21 - 06/30/23

Title: Defining the Neural Dynamics of Concept Retrieval Using Electroencephalography (W. Gross, PI)  
Source: NIH Clinical Translational Science Institute of Southeast Wisconsin – KL2 Mentored Career Development Scholar Award  
Role: Mentor  
Dates: 11/01/20 - 10/31/22

Title: Gastroenterology Postdoctoral Research Training Grant (R. Shaker, PI)  
Source: NIDDK – T32 DK061923  
Role: Mentor  
Dates: 7/1/2015-06/30/2021

Title: Graph Theory Analysis of the Epilepsy Connectome (S. Ayer, PI)  
Source: American Academy of Neurology Summer Research Award  
Role: Mentor  
Dates: 06/01/17 - 08/15/17

Title: Phonological Processing in Aphasia (S. Berentsen, PI)  
Source: American Heart Association – 13PRE14230025  
Role: Mentor  
Dates: 07/01/13 - 06/30/15

Title: Neural Systems for Word Recognition in Space and Time (W. Graves, PI)  
Source: NICHD – K99/00 HD065839  
Role: Mentor  
Dates: 07/01/10 - 06/30/12

Title: Hemispheric Lateralization and Interlimb Transfer of Motor Learning (J. Wang, PI)  
Source: NICHD – K01 HD050245  
Role: Co-Mentor (with J. McGuire)  
Dates: 01/01/07 - 12/31/12

Title: Artificial Neural Network Models and FMRI in the Study of Brain Function (W. Graves, PI)  
Source: NIDCD – F32 HD056767  
Role: Mentor  
Dates: 04/01/08 - 03/31/10

Title: FMRI of Anterior Temporal Lobe Function (C. Humphries, PI)  
Source: NIDCD – F32 DC007024  
Role: Mentor  
Dates: 04/01/05 - 03/31/07

Title: Simultaneous fMRI/ERP of Auditory Change Detection (M. Sabri, PI)  
Source: NIDCD – F32 DC007030  
Role: Co-Mentor (with E. Liebenthal)  
Dates: 07/01/04 - 06/30/06

Title: Functional MRI of Human Memory Systems (P. Bellgowan, PI)  
Source: NIMH – F32 MH11921  
Role: Mentor  
Dates: 09/01/97 - 08/31/99

***Invited Lectures, Workshops and Site Visits:***

A. International and National

Date: 1993  
Title: "Functional MRI: New Frontiers in Behavioral Neurology"  
Meeting/Event: 61st Annual Postgraduate Assembly, Omaha Mid-West Clinical Society  
Location: Omaha, NE

Date: 1994  
Title: "Mapping the Human Cortex with Functional MRI"; Course 263, Cortical Localization  
Meeting/Event: Annual Meeting, American Academy of Neurology  
Location: Washington, D.C.

Date: 1995  
Title: "Functional MRI of Auditory and Language Cortex"; Course 130, Cortical Localization  
Meeting/Event: Annual Meeting, American Academy of Neurology  
Location: Washington, D.C.

Date: 1995  
Title: "Language Mapping with Functional MRI"  
Meeting/Event: Neurology Grand Rounds, Medical College of Georgia  
Location: Medical College of Georgia, Augusta, GA

Date: 1995  
Title: "Functional Imaging of Auditory Perception"; Satellite Symposium on Perception and Attention

Meeting/Event: Annual Meeting, American EEG Society  
Location: Washington, D.C.

Date: 1995  
Title: "Language Mapping with Functional MRI"  
Meeting/Event: Annual Alumni Meeting, Neurological Institute of New York  
Location: Columbia-Presbyterian Medical Center, New York, NY

Date: 1996  
Title: "fMRI of the Semantic Language System"  
Meeting/Event: Annual Meeting, World Federation of Neurology Research Group on  
Aphasia and Cognitive Disorders  
Location: Lake Tahoe, CA

Date: 1997  
Title: "fMRI Studies of Brain Language Systems"; Presidential Symposium on  
Optical and Magnetic Resonance Imaging of Neural Activity  
Meeting/Event: Association for Research in Otolaryngology Midwinter Meeting  
Location: St. Petersburg, FL

Date: 1997  
Title: "Organizing an Acute Stroke Trial"  
Meeting/Event: Workshop for Cerestat Investigators, Pharmaceutical Research Associates  
Location: Anaheim, CA

Date: 1997  
Title: "Functional MRI Studies of Language Processing"  
Meeting/Event: Center for Cognitive Neuroscience Neuroimaging Symposium  
Location: University of Alabama, Birmingham, AL

Date: 1997  
Title: "fMRI Language Studies"  
Meeting/Event: Workshop on Magnetic Resonance Imaging of Brain Function  
Location: University of Minnesota Medical School, Minneapolis, MN

Date: 1997  
Title: "Applications of Functional MRI to Human Brain Mapping, Functional  
MRI Studies of Language Processing"  
Meeting/Event: First Norwegian Symposium on Functional MRI of the Brain  
Location: Bergen, Norway

Date: 1997  
Title: "Thought and Language Processing at Rest"  
Meeting/Event: University of Jena Biomed Meeting  
Location: University of Jena, Jena, Germany

Date: 1998  
Title: "fMRI, From Parameters to Populations"  
Meeting/Event: 26th Annual Meeting of the International Neuropsychological Society

Location: Honolulu, HI

Date: 1998  
Title: "fMRI of Language Processing"  
Meeting/Event: Banff Annual Seminar in Cognitive Science  
Location: Banff, Alberta, Canada

Date: 1998  
Title: "fMRI of Language Processes"  
Meeting/Event: Neuroscience Lecture Series, Michigan State University  
Location: Michigan State University, East Lansing, MI

Date: 1998  
Title: "fMRI Methodology: Cognitive Function Mapping"  
Meeting/Event: Emory University Symposium on Neuroimaging in the Epilepsies  
Location: Emory University, Atlanta, GA

Date: 1998  
Title: "fMRI of Language and Memory Processes"  
Meeting/Event: Neurology Grand Rounds, University of Chicago  
Location: University of Chicago, Chicago, IL

Date: 1999  
Title: "Modulation of Human Auditory Cortex Activation: Acoustic, Linguistic and Attentional Variables"  
Meeting/Event: The Organization of Hearing, Speech and Music in the Human Auditory System; Wellcome Trust Frontier meeting  
Location: Cambridge, UK

Date: 1999  
Title: "Functional MRI"; American Academy of Neurology Half-Day Course (Course Director)  
Meeting/Event: Annual Meeting, American Academy of Neurology  
Location: Toronto, Ontario, Canada

Date: 1999  
Title: "Speech and Nonspeech Processing in the Human Temporal Lobe"  
Meeting/Event: Grand Rounds, New Jersey Neuroscience Institute  
Location: JFK Medical Center, Edison, NJ

Date: 1999  
Title: "Functional MRI of Human Auditory Cortex"  
Meeting/Event: Annual Meeting, American Speech-Language Hearing Association  
Location: San Francisco, CA

Date: 2000  
Title: "Human Brain Processing of Speech and Nonspeech Sounds"  
Meeting/Event: Neuroscience Seminar Series, University of Florida  
Location: University of Florida, Gainesville, FL

Date: 2000  
Title: "Functional MRI of Language Processing"  
Meeting/Event: Behavioral Neurology Seminar Series, University of Florida  
Location: University of Florida, Gainesville, FL

Date: 2000  
Title: "Functional MRI"; American Academy of Neurology Half-Day Course (Course Director)  
Meeting/Event: Annual Meeting, American Academy of Neurology  
Location: San Diego, CA

Date: 2000  
Title: "Human Brain Processing of Speech and Nonspeech Sounds"  
Meeting/Event: Neuroscience Colloquium, University of Wisconsin  
Location: University of Wisconsin, Madison, WI

Date: 2000  
Title: "Functional MRI of Language Processing"  
Meeting/Event: Department of Psychology Seminar Series, University of Chicago  
Location: University of Chicago, Chicago, IL

Date: 2000  
Title: "In the Blink of an ISI: How the Brain Works at Rest"; Workshop on fMRI Methodology  
Meeting/Event: Annual Meeting of the Organization for Human Brain Mapping  
Location: San Antonio, TX

Date: 2000  
Title: "Presurgical Applications of fMRI"; Symposium on Clinical Applications of fMRI  
Meeting/Event: Annual Meeting of the Organization for Human Brain Mapping  
Location: San Antonio, TX

Date: 2000  
Title: "Language Mapping with Functional MRI"  
Meeting/Event: Third International Magnetic Resonance & Epilepsy Symposium  
Location: University of Alabama, Birmingham, AL

Date: 2000  
Title: "Functional Imaging of Language Processes"; Satellite Symposium on Functional Brain Imaging  
Meeting/Event: Annual Meeting of the Society for Neuroscience  
Location: New Orleans, LA

Date: 2001  
Title: "Foundations of a Neural Model of Language"  
Meeting/Event: 2001 Steer Lecture, Purdue University  
Location: Purdue University, West Lafayette, IN

Date: 2001  
Title: "fMRI Studies of Language Processing"; Behavioral Neurology,  
American Academy of Neurology Full Day Course  
Meeting/Event: Annual Meeting, American Academy of Neurology  
Location: Philadelphia, PA

Date: 2001  
Title: "Clinical Applications of fMRI"; Functional MRI, American Academy of  
Neurology After Dinner Seminar  
Meeting/Event: Annual Meeting, American Academy of Neurology  
Location: Philadelphia, PA

Date: 2001  
Title: "Some Neural Correlates of Speech and Nonspeech Perception"; Special  
Session on "Exploring the Dynamics of Auditory Perception Through  
Neuroimaging"  
Meeting/Event: Annual Meeting, Acoustical Society of America  
Location: Chicago, IL

Date: 2001  
Title: "Functional Imaging Studies of Speech Perception"  
Meeting/Event: Neuroscience Lecture Series, University of California, Davis  
Location: University of California, Davis, CA

Date: 2001  
Title: "Functional Imaging Studies of Speech Perception"  
Meeting/Event: Boston University Cognitive and Neural Systems Colloquium  
Location: Boston University, Boston, MA

Date: 2002  
Title: "fMRI Studies of Language Processing"; Behavioral Neurology,  
American Academy of Neurology Full Day Course  
Meeting/Event: Annual Meeting, American Academy of Neurology  
Location: Denver, CO

Date: 2002  
Title: "Clinical Applications of fMRI"; Functional MRI, American Academy of  
Neurology After Dinner Seminar  
Meeting/Event: Annual Meeting, American Academy of Neurology  
Location: Denver, CO

Date: 2002  
Title: "Overview of Functional Imaging Methods"  
Meeting/Event: Workshop on Functional Imaging of Recovery in Aphasia  
Location: NIH, Bethesda, MD

Date: 2002  
Title: "Neural Correlates of Lexical Access During Reading"



Meeting/Event: World Federation of Neurology Research Group on Aphasia and  
Cognitive Disorders  
Location: Nice, France  
Date: 2002  
Title: Group discussion leader  
Meeting/Event: Workshop on Functional Imaging of Recovery from Brain Injury  
Location: University of Pennsylvania, Philadelphia, PA  
Date: 2002  
Title: Group discussant  
Meeting/Event: Workshop on Cortical Mechanisms of Complex Sound Processing  
Location: Wellcome Trust Genome Campus, Hinxton, UK  
Date: 2002  
Title: "fMRI of Hippocampal Memory Systems"  
Meeting/Event: Symposium on fMRI in Epilepsy, Annual Meeting of the American  
Epilepsy Society  
Location: Seattle, WA  
Date: 2003  
Title: "Neural Correlates of Visual Word Recognition"  
Meeting/Event: Rotman Research Institute Lecture Series  
Location: Toronto, Canada  
Date: 2004  
Title: "Keynote Address: fMRI in Epilepsy"  
Meeting/Event: 29<sup>th</sup> Annual Brazil Congress on Epilepsy  
Location: Riberão Preto, Brazil  
Date: 2005  
Title: "Presurgical Brain Mapping with fMRI"; Behavioral Neurology,  
American Academy of Neurology Half-Day Course  
Meeting/Event: Annual Meeting, American Academy of Neurology  
Location: Miami Beach, FL  
Date: 2005  
Title: "Language Processing in the Human Temporal Lobe"  
Meeting/Event: Neuroscience Seminar Series  
Location: University of Cincinnati, Cincinnati, OH  
Date: 2005  
Title: "Functional MRI of Language Processing"  
Meeting/Event: Annual Meeting, Central Society for Neurological Research  
Location: P re Marquette Lodge, Grafton, IL  
Date: 2006  
Title: "Functional MRI of Semantic Processing"  
Meeting/Event: Northwestern University Neuroscience Seminar Series

Location: Northwestern University Medical Center, Chicago, IL

Date: 2006  
Title: "Functional MRI of Semantic Processing"  
Meeting/Event: University of Rochester Neuroscience Seminar Series  
Location: University of Rochester, Rochester, NY

Date: 2006  
Title: "Functional MRI of Semantic Processing"  
Meeting/Event: NIDCD Neuroscience Seminar Series  
Location: NIH, Bethesda, MD

Date: 2006  
Title: "Neural Organization of Semantic Memory"  
Meeting/Event: Behavioral Neurology Seminar Series  
Location: Harvard Medical School, Boston, MA

Date: 2007  
Title: "Neural Organization of Semantic Memory"  
Meeting/Event: Institute for Cognitive Science Seminar Series  
Location: University of Pennsylvania, Philadelphia, PA

Date: 2007  
Title: "Presurgical Mapping of Language and Memory Using FMRI"  
Meeting/Event: Department of Neurology Grand Rounds  
Location: University of Pennsylvania, Philadelphia, PA

Date: 2007  
Title: "Functional Neuroanatomy of Language and Aphasia"; Behavioral Neurology, American Academy of Neurology Half Day Course  
Meeting/Event: Annual Meeting, American Academy of Neurology  
Location: Boston, MA

Date: 2007  
Title: "Neural Organization of Semantic Memory"  
Meeting/Event: MNI Killam Lecture Series  
Location: Montreal Neurological Institute, Montreal, Canada

Date: 2008  
Title: "Functional Neuroanatomy of Language and Aphasia"; Behavioral Neurology, American Academy of Neurology Half Day Course  
Meeting/Event: Annual Meeting, American Academy of Neurology  
Location: Chicago, IL

Date: 2008  
Title: "Presurgical Mapping of Language and Memory Using FMRI"  
Meeting/Event: Neuroscience Center Grand Rounds  
Location: Cleveland Clinic Foundation, Cleveland, OH

Date: 2008

Title: "The Neural Bases of Communication: Evidence from Neuroimaging"  
Meeting/Event: American Speech-Language-Hearing Association (ASHA), Annual Meeting

Location: Chicago, IL

Date: 2008

Title: "Neural Organization of Semantic Memory"

Meeting/Event: UC Irvine Neuroscience Lecture Series

Location: Irvine, CA

Date: 2009

Title: "New Concepts in Language and Aphasia"

Meeting/Event: Emory University Neurology Grand Rounds

Location: Atlanta, GA

Date: 2009

Title: "New Concepts in Language and Aphasia"

Meeting/Event: Keynote Speaker, Midwest Neuropsychology Group

Location: Milwaukee, WI

Date: 2009

Title: "Presurgical Mapping with FMRI"

Meeting/Event: Neurology Grand Rounds, University of Wisconsin

Location: Madison, WI

Date: 2009

Title: "Heschl's Gyrus as an Evolutionary Adaptation for Speech Perception"

Meeting/Event: 3<sup>rd</sup> International Conference on the Auditory Cortex

Location: Magdeburg, Germany

Date: 2009

Title: "The Wada Test: Time to Ditch It?"

Meeting/Event: American Epilepsy Society Annual Meeting

Location: Boston, MA

Date: 2009

Title: "fMRI As a Tool to Map Cortical Function: Is it Ready for Prime-time?"

Meeting/Event: American Epilepsy Society Annual Meeting

Location: Boston, MA

Date: 2010

Title: "Application of Resting-State fMRI to Functional Parcellation of the Superior Temporal Sulcus"

Meeting/Event: 2nd Annual International Resting-State fMRI Conference

Location: Milwaukee, WI

Date: 2011

Title: Presidential Invited Keynote Address: "Evolutionary and Biological Perspectives on Semantic Processing"

Meeting/Event: Annual Meeting, British Neuropsychological Society  
Location: London, UK

Date: 2011  
Title: Symposium Lecture: "Role of the Angular Gyrus in Semantic Processing"  
Meeting/Event: Annual Meeting of the Cognitive Neuroscience Society  
Location: San Francisco, CA

Date: 2011  
Title: "Role of the Angular Gyrus in Semantic Processing"  
Meeting/Event: Brain and Cognitive Sciences Lecture Series  
Location: University of Rochester, Rochester, NY

Date: 2012  
Title: Keynote Lecture: "The Neurobiology of Semantic Processing"  
Meeting/Event: Annual Meeting of the Southern California Cognitive Neuroscience Society  
Location: San Diego, CA

Date: 2012  
Title: "How Can We Use Imaging to Assess Cognitive and Memory Function? Current & Future Directions"  
Meeting/Event: 21st Annual International Epilepsy Symposia  
Location: Cleveland Clinic, Cleveland, OH

Date: 2012  
Title: Debate: "The Role of the Angular Gyrus in Semantic Processing: Jeffrey Binder vs. Matthew Lambon Ralph"  
Meeting/Event: Annual Meeting of the Society for the Neurobiology of Language  
Location: San Sebastian, Spain

Date: 2013  
Title: "The Neurobiology of Semantic Memory"  
Meeting/Event: Donders Center for Cognitive Neuroscience Lecture Series  
Location: Radboud University, Nijmegen, Netherlands

Date: 2013  
Title: "The Neurobiology of Semantic Memory"  
Meeting/Event: Psychology Graduate School Lecture Series  
Location: Harvard University, Boston, MA

Date: 2013  
Title: "fMRI in Epilepsy"  
Meeting/Event: Epilepsy Grand Rounds, George Washington University  
Location: Washington, DC

Date: 2014  
Title: "The Neurobiology of Reading"  
Meeting/Event: European Society for Cognitive Psychology (ESCOP) Summer School

Location: Basque Center on Cognition, Brain and Language; San Sebastian, Spain

Date: 2014

Title: "The Neurobiology of Reading"

Meeting/Event: 4<sup>th</sup> Annual Arnold Starr Lecture

Location: University of California-Irvine; Irvine, CA

Date: 2014

Title: "Presurgical fMRI in Epilepsy"

Meeting/Event: Neurology Grand Rounds, University of California-Irvine

Location: Irvine, CA

Date: 2015

Title: "Concept Representation in the Brain"

Meeting/Event: Neuroscience Seminar Series, New York University

Location: New York, NY

Date: 2016

Title: "fMRI of Memory in Epilepsy"

Meeting/Event: Merritt-Putnam Symposium, American Epilepsy Society Annual Meeting

Location: Houston, TX

Date: 2017

Title: "fMRI of Language and Memory in Epilepsy"

Meeting/Event: NYU Comprehensive Epilepsy Center Rounds

Location: New York, NY

Date: 2017

Title: "Presurgical Applications of Language fMRI in Epilepsy"

Meeting/Event: 34<sup>th</sup> Annual Edwin Boldrey Lecture, Department of Neurosurgery,  
University of California - San Francisco

Location: San Francisco, CA

Date: 2017

Title: "Language and Semantic Systems in the Left Temporal Lobe"

Meeting/Event: Invited Lecture, 69<sup>th</sup> Annual Meeting of the San Francisco Neurological  
Society

Location: Monterey, CA

Date: 2018

Title: "Lexical Concept Representation in the Human Brain"

Meeting/Event: Center for Brain Plasticity and Recovery

Location: Georgetown University Medical Center, Washington DC

Date: 2018

Title: "Lexical Concept Representation in the Human Brain"

Meeting/Event: Plenary Speaker, Interdisciplinary Approaches to the Language Sciences

Location: Max-Planck Institute for Psycholinguistics, Nijmegen, The Netherlands

Date: 2018  
Title: "Lexical Concept Representation in the Human Brain"  
Meeting/Event: Invited Lecture, Summer Institute in Cognitive Neuroscience  
Location: Lake Tahoe, CA

Date: 2018  
Title: "Panel Discussion on the Future of the Neurobiology of Language"  
Meeting/Event: Invited Panelist, Society for the Neurobiology of Language  
Location: Quebec City, Canada

Date: 2018  
Title: "Presurgical Language Mapping with fMRI"  
Meeting/Event: Invited Lecture, Symposium on Language: Methods for Preoperative Mapping and Prediction of Postoperative Outcome; Neuropsychology Special Interest Group, American Epilepsy Society Annual Meeting  
Location: New Orleans, LA

Date: 2019  
Title: "Concept Representation in the Brain"  
Meeting/Event: Invited Lecture, NeuroLang-AD 2019  
Location: Abu Dhabi, UAE

Date: 2019  
Title: "Task Design for Clinical fMRI Language Mapping"  
Meeting/Event: Workshop on Presurgical Mapping, Annual Meeting of the Organization for Human Brain Mapping  
Location: Rome, Italy

Date: 2019  
Title: "Language Neuroscience in the Modern Age: A Personal Perspective"  
Meeting/Event: Distinguished Career Award, Society for the Neurobiology of Language  
Location: Helsinki, Finland

Date: 2019  
Title: "Concept Representation"  
Meeting/Event: Seminar on Theories in Language Neurobiology  
Location: Donders Institute, Radboud University, Nijmegen, The Netherlands

Date: 2019  
Title: "The Epilepsy Connectome Project"  
Meeting/Event: Investigator Workshop on Using Big Data Sources in Epilepsy, Annual Meeting of the American Epilepsy Society  
Location: Baltimore, MD

Date: 2021  
Title: "Predicting Cognitive Risk in Temporal Lobe Epilepsy Surgery"  
Meeting/Event: Epilepsy Grand Rounds, Cleveland Clinic  
Location: Cleveland, OH

Date: 2021  
Title: "The Epilepsy Connectome Project"  
Meeting/Event: Neuroimaging Special Interest Group, Annual Meeting of the American Epilepsy Society  
Location: Chicago, IL

Date: 2022  
Title: "Understanding Wernicke's Area and the Posterior Aphasia Syndromes"  
Meeting/Event: Neurology Grand Rounds, University of Massachusetts  
Location: Worcester, MA

#### B. Regional and Local

Date: 1992-1995  
Title: Applications of SPECT in Stroke  
Meeting/Event: SPECT Brain Imaging Fellowship  
Location: Medical College of Wisconsin, Milwaukee, WI

Date: 1993  
Title: Functional MRI of Auditory and Language Cortex  
Meeting/Event: First Midwest Course on Functional MR Imaging  
Location: Medical College of Wisconsin, Milwaukee, WI

Date: 1993  
Title: Functional MRI  
Meeting/Event: Milwaukee Neuropsychiatric Society  
Location: Milwaukee, WI

Date: 1994  
Title: fMRI During Auditory Stimulation and Language Processing  
Meeting/Event: 1st Conference/Workshop on Applications of 3-Axis Local Gradient Coils  
Location: Milwaukee, WI

Date: 1995  
Title: Determining the Hemisphere Dominant for Language  
Meeting/Event: Clinical Applications of fMRI and Spectroscopy in Neurologic Diagnosis  
Location: Medical College of Wisconsin, Milwaukee, WI

Date: 1999-2003  
Title: Resting and Thinking: Baseline Considerations in fMRI Experiments  
Meeting/Event: MCW Three-Day Course on Functional MRI  
Location: Medical College of Wisconsin, Milwaukee, WI

Date: 2006  
Title: fMRI Mapping of Language and Memory Systems  
Meeting/Event: Presurgical Mapping Using Functional MRI & Diffusion Tensor Imaging, Workshop Presented by the MCW Functional Imaging Research Center  
Location: Chicago, IL

Date: 2008  
Title: Update on Language and Aphasia  
Meeting/Event: Selected Advances in Neurology,  
Symposium Presented by the MCW Department of Neurology  
Location: Medical College of Wisconsin, Milwaukee, WI

Date: 2009  
Title: "New Concepts in Language and Aphasia"  
Meeting/Event: Invited Speaker, Wisconsin Neurological Society Annual Meeting  
Location: Wisconsin Dells, WI

Date: 2013  
Title: "Functional Brain Imaging: What Good Is It?"  
Meeting/Event: MCW Neuroscience Research Center Seminar Series  
Location: Medical College of Wisconsin, Milwaukee, WI

Date: 2015  
Title: "Wernicke's Area: What Is It?"  
Meeting/Event: MCW Neurology Grand Rounds  
Location: Medical College of Wisconsin, Milwaukee, WI

Date: 2015  
Title: "Wernicke's Area: Modern Evidence and a Reinterpretation"  
Meeting/Event: MCW Radiology Research Lecture Series  
Location: Medical College of Wisconsin, Milwaukee, WI

Date: 2016  
Title: "Functional Imaging of Memory in Epilepsy"  
Meeting/Event: MCW Neurology Grand Rounds  
Location: Medical College of Wisconsin, Milwaukee, WI

***Medical College of Wisconsin Administrative Activities:***

1992-present Director, Stroke and Neurobehavior Programs, Department of Neurology  
1994-1999 Director, Froedtert and Medical College Stroke Center  
1994-present Director, Language Imaging Laboratory, Department of Neurology  
2007-2009 Director, Functional Imaging Research Center  
2011-2012 Interim Chair, Department of Neurology  
2012-present Vice Chair for Research, Department of Neurology  
2018-present Director, Cognitive Neuroscience Research Program  
2019-present Director, WE Energies Center for Aphasia Research and Recovery

***Medical College of Wisconsin Committees:***

1995-2005 Project and Core Leaders Committee, Program Project on Functional MRI of the Brain  
1996-present Research Committee, Department of Neurology  
2001-2007 MCW Neuroscience Research Initiative Committee  
2006-2018 Core Research Facilities Committee  
2007-2009 General Clinical Research Center Advisory Committee



2008-2018	Neuroscience Graduate Program Advisory Committee
2009-present	MEG Program Advisory Committee
2010	Chair, Department of Neurology Internal Review Committee
2011	Medical College Physicians Executive Committee
2011-2012	Pediatric Neurology Chief Search Committee
2012-present	Department of Neurology Executive Leadership Committee
2012	Department of Neurology Rapid Improvement Committee
2012-present	Department of Neurology Research Committee
2015-present	Southeast Wisconsin Stroke Research Center Committee
2016-present	Information Technology Committee
2017-present	Department of Neurology Mentoring Committee
2017-2019	Ophthalmology Chair Search Committee
2018-2019	Advancing a Healthier Wisconsin (AHW) 5-year planning committee
2019-present	Cognitive Neuroscience Research Program Pilot Grant Review Committee
2020-	Southeast Wisconsin Clinical and Translation Sciences Institute (CTSI) Council of Collaboration (COC) committee
2021	MCW Research Strategic Plan Steering Committee Neuroscience Research Workgroup
2021-2022	Biophysics Chair Search Committee
2021	Neuroscience Institute Director Search Committee

***Medical College of Wisconsin Teaching Activities:***

**A. Medical Student Education**

1992-present	Neurology inpatient teaching rounds (12 weeks per year)
1993-present	"Classic Findings, Neurology" and "Neurologic Examination" - M2 Medical Student Physical Diagnosis course
1993-1999	"Basics of Stroke" - M3 Medical Student Clinical Lecture Series
1994-2008	"Structural Components of the Human Cerebral Circulation" - M2 Medical Student Curriculum Lecture, Neuroscience
2001-present	Neurology rotation outpatient clinic teaching for M3 Students

**Mentored medical student research:**

<i>Name</i>	<i>Year</i>	<i>Project</i>
Carl Robinson	1993	FMRI studies of voice and phoneme perception
Brian Matysiak	2004	Asymmetry of the superior temporal sulcus as a predictor of language lateralization
Shawn Chambers	2008	Connectionist modeling of semantic memory
Katelin Engerer	2008	Lesion correlates of phonological aphasia
Michael Austin	2009	Connectivity-based parcellation of the temporal lobe
Patrick Bauer	2010	Hippocampal volumetry as a predictor of verbal memory outcome in temporal lobe surgery
Michael Liu	2011	FMRI studies of aphasia
Ying Qiu Zhou	2011	Multivoxel pattern analysis of fMRI reading data
Sidhant Varma	2016	Lesion correlates of reduced articulatory speed
Shankar Iyer	2017	Graph analysis of fMRI connectivity in epilepsy
Rasika Viswanathan	2022	Meta-analysis of phonological imaging studies

B. Neurology Resident and Fellow Education

- 1992 - present Neurology inpatient teaching rounds (12 weeks per year)
- 1992 - present Neurology Clinic resident supervision (8-12 clinics per year)
- 1993 - present "Stroke" - Neurology Resident Clinical Lecture Series
- 1993 - present "Cortical Localization" - Neurology Resident Clinical Lecture Series
- 1993 - present Mock board exam - Neurology Residents
- 1994 - present "Speech Perception" - Advanced Systems Neuroscience graduate course
- 1994 - present "Language" - Neurology Resident Behavioral Neuroscience Lecture Series
- 1995 - present "Auditory System" - Neurology Resident Behavioral Neuroscience Lecture Series
- 1995 - present Stroke Clinic cerebrovascular fellow supervision

C. Graduate/Postgraduate Education

- 1997 - 2005 "Language Systems" - Advanced Systems Neuroscience
- 1999 - 2009 "Cortical Anatomy" - Advanced Systems Neuroscience
- 2000 - 2006 "Computational Models of Language" - Advanced Systems Neuroscience
- 2006 - 2009 "Methods in Cognitive Research" - Advanced Systems Neuroscience
- 2011 - 2019 "Speech Perception" – Fundamentals of Neuroscience
- 2011 - 2019 "Neurobiology of Language" – Fundamentals of Neuroscience
- 2011 Spring Course Director, Biophysics Journal Club
- 2012 - 2020 "Clinical Applications of Language fMRI" – FMRI Methods
- 2018 Spring Course Director, Biophysics Journal Club
- 2021 Spring Course Director, Cognitive Neuroscience (INBS 16277)
- 2022 Spring Course Director, Biophysics Journal Club (Course 03-297)

Mentored PhD graduate students:

<i>Name</i>	<i>Degree</i>
Aimee Arnoldusson	Ph.D., UW-Madison
Benjamin D'Angelo	Ph.D., Marquette University
Michael L. Ellingson	Ph.D., Marquette University
Julie A. Frost	M.S., UW-Milwaukee
William Gross	Ph.D., Medical Scientist Training Program, MCW
Alexander Helfand	Ph.D., Medical Scientist Training Program, MCW
Jacqueline Kaufman	M.S., UW-Milwaukee
James Keidel	Ph.D., UW-Madison
Jill Kelderman.	M.S., UW-Milwaukee
Jane Kucera-Thompson	Ph.D., UW-Milwaukee
Cindy Li	M.S. (pending), Translational Science, MCW
Quintino Mano	Ph.D., UW-Milwaukee
Stephen Mazurchuk	Ph.D. (pending), Medical Scientist Training Program, MCW
Benjamin Stengel	Ph.D., Neuroscience Doctoral Program, MCW
Suzanne Pendl	Ph.D., Neuroscience Doctoral Program, MCW
Sara Pillay (Berentsen)	Ph.D., Rosalind Franklin U.
David S. Sabsevitz	Ph.D., Chicago Medical School
Jia-Qing Tong	Ph.D., Neuroscience Doctoral Program, MCW

MCW Graduate Student PhD Thesis Committees:

William Gross	Ph.D., Medical Scientist Training Program, MCW
Benjamin Stengel	Ph.D., Neuroscience Graduate Program, MCW
Suzanne Pendl	Ph.D., Neuroscience Graduate Program, MCW
Alexander Helfand	Ph.D., Medical Scientist Training Program, MCW
Ethan Duwell	Ph.D., Neuroscience Graduate Program, MCW
Jia-Qing Tong	Ph.D., Neuroscience Graduate Program, MCW
Stephen Mazurchuk	(pending) Medical Scientist Training Program, MCW

Mentored postdoctoral fellows:

<i>Name</i>	<i>Current Position</i>
Patrick Bauer, M.D.	Assistant Professor, Neurology, MCW
Patrick Bellgowan, Ph.D.	Program Director, Repair and Plasticity, NINDS
Diane S. Book, M.D.	Associate Professor, Neurology, MCW
Annabel Chen, Ph.D.	Professor, Nanyang Technical University, Singapore
Rutvik H. Desai, Ph.D.	Associate Professor, Psychology, University of South Carolina
Matthew Euler, Ph.D.	Assistant Professor, Neurology, University of Utah
Leonardo Fernandino, Ph.D.	Assistant Professor, Neurology, MCW
Gwen Frishkoff, Ph.D.	Assistant Professor, Psychology, Georgia State University
William W. Graves, Ph.D.	Assistant Professor, Psychology, Rutgers University
Bill Gross, M.D., Ph.D.	Assistant Professor, Anesthesiology, MCW
Ann Helms, M.D.	Associate Professor, Neurology, MCW
Colin J. Humphries, Ph.D.	Assistant Professor, Neurology, MCW
Julie Janecek, Ph.D.	Assistant Professor, Neurology, MCW
James W. Lewis, Ph.D.	Associate Professor, Neuroscience, University of West Virginia
Songhee Kim, Ph.D.	Postdoctoral Fellow, MCW
Einat Liebenthal, D.Sc.	Assistant Professor, Psychiatry, Harvard Medical School
Kristen McKiernan, Ph.D.	Senior Research Scientist, Yale University
Sara Pillay, Ph.D.	Assistant Professor, Neurology, MCW
David S. Sabsevitz, Ph.D.	Associate Professor, Neurology, Mayo Clinic Jacksonville
Merav Sabri, Ph.D.	Program Officer, NIH
David Soltysik, Ph.D.	Research Scientist, Northstar Neuroscience
Stephanie Spitzer, Ph.D.	Research Scientist, Arizona State University
Jane A. Springer, Ph.D.	Private practice neuropsychology
Christopher Stewart, Ph.D.	Associate Professor, Neurology, Rush University
Ben Stengel, Ph.D.	Epic Corporation, Madison, WI

D. Junior Faculty Mentored

<i>Name</i>	<i>Affiliation While Mentored</i>	<i>Years Mentored</i>
Diane Book, M.D.	Neurology, MCW	1994-2000
Marek Cierny, M.D.	Neurology, MCW	2022-present

Rutvik H. Desai, Ph.D.	Neurology, MCW	2008-2016
Matthew J. Durand, Ph.D.	Physical Medicine & Rehabilitation	2018-present
Leonardo Fernandez, Ph.D.	Neurology, MCW	2016-present
Elias Granadillo, M.D.	Neurology, MCW	2018-present
Bill Gross, M.D., Ph.D.	Anesthesiology, MCW	2014-present
Colin Humphries, Ph.D.	Neurology, MCW	2007-2020
Einat Liebenthal, D.Sc.	Neurology, MCW	2004-2012
David Medler, Ph.D.	Neurology, MCW	2001-2009
Ahmed Obeidat, M.D.	Neurology, MCW	2019-present
Sara Pillay, Ph.D.	Neurology, MCW	2019-present
Manoj Raghavan, M.D., Ph.D.	Neurology, MCW	2004-2010
Merav Sabri, Ph.D.	Neurology, MCW	2008-2012
David S. Sabsevitz, Ph.D.	Neurology, MCW	2006-2018
Priyanka Shah-Basak, Ph.D.	Neurology, MCW	2019-present
Marianna Spanaki, M.D., Ph.D.	Neurology, MCW	2001-2004
Serena Thompson, M.D., Ph.D.	Neurology, MCW	2019-2021
Charles Welzig, M.D.	Neurology, MCW	2016-2019
Vahab Youssofzadeh, Ph.D.	Neurology, MCW	2019-present

***External PhD Committees:***

2003	David Sabsevitz	Ph.D., Psychology, Chicago Medical School
2007	Aimee Arnoldusson	Ph.D., Psychology, UW-Madison
2008	James Keidel	Ph.D., Psychology, UW-Madison
2009	Quintino Mano	Ph.D., Psychology, UW-Milwaukee
2009	Daniel Acheson	Ph.D., Psychology, UW-Madison
2010	Elizabeth Lacey	Ph.D., Psychology, Georgetown University
2012	Michael Bonner	Ph.D., Psychology, University of Pennsylvania
2016	Sara Pillay	Ph.D., Psychology, Rosalind Franklin Medical School, Chicago
2018	Gabriella Liuzzi	Ph.D., Biomedical Sciences, Katholieke Universiteit Leuven, Belgium
2019	Srikanth R. Damera	M.D./Ph.D., Georgetown University School of Medicine, Washington, DC
2020	Kaleb Vinehout	Ph.D., Biomedical Engineering, Marquette University

***PUBLICATIONS***

***Google Scholar statistics as of November 1, 2022:***

Total citations: 36,266  
H-index: 82  
i10 index: 155

**ORCID:** 0000-0002-2233-5640

A. Peer Reviewed Articles:

1. Sun SF, **Binder JR**, Streib E, Goodlin RC. Myotonic dystrophy: Obstetric and neonatal complications. *Southern Medical Journal*, 1985; 787: 823-826.
2. Chamorro A, Sacco RL, Ciecierski K, **Binder JR**, Tatemichi TK, Mohr JP. Visual hemineglect and hemihallucinations in a patient with subcortical infarction. *Neurology*, 1990; 40: 1463-1464.
3. **Binder JR**, Lazar RM, Tatemichi TK, Mohr JP, Desmond DW, Ciecierski KA. Left hemiparalexia. *Neurology*, 1992; 42: 562-569.
4. **Binder JR**, Marshall RS, Lazar RM, Benjamin JL, Mohr JP. Distinct syndromes of hemineglect. *Archives of Neurology*, 1992; 49: 1187-1194.
5. **Binder JR**, Mohr JP. The topography of callosal reading pathways: A case-control analysis. *Brain*, 1992; 115: 1807-1826.
6. Rao SM, **Binder JR**, Bandettini PA, Hammeke TA, Yetkin FZ, Jesmanowicz A, Lisk LM, Morris GL, Mueller WM, Estkowski LD, Wong EC, Haughton VM, Hyde JS. Functional magnetic resonance imaging of complex human movements. *Neurology*, 1993, 43: 2311-2318.
7. **Binder JR**, Rao SM, Hammeke TA, Yetkin FZ, Jesmanowicz A, Bandettini PA, Wong EC, Estkowski LD, Goldstein MD, Haughton VM, Hyde JS. Functional magnetic resonance imaging of human auditory cortex. *Annals of Neurology*, 1994; 35: 662-672.
8. **Binder JR**, Rao SM, Hammeke TA, Bandettini PA, Frost JA, Hyde JS. Effects of stimulus rate on signal response during functional magnetic resonance imaging of auditory cortex. *Cognitive Brain Research*, 1994; 2: 31-38.
9. Marshall RS, Lazar RM, **Binder JR**, Desmond DW, Drucker PM, Mohr JP. Intrahemispheric localization of drawing dysfunction. *Neuropsychologia*, 1994; 32: 493-501.
10. Hammeke TA, Yetkin FZ, Mueller WM, Morris GL, Haughton VM, Rao SM, **Binder JR**. Functional magnetic resonance imaging of somatosensory stimulation. *Neurosurgery*. 1994; 35: 677-681.
11. **Binder JR**, Rao SM, Hammeke TA, Frost JA, Bandettini PA, Jesmanowicz A, Hyde JS. Lateralized human brain language systems demonstrated with task subtraction functional magnetic resonance imaging. *Archives of Neurology*, 1995; 52: 593-601.
12. **Binder JR**. Functional magnetic resonance imaging of language cortex. *International Journal of Imaging Systems and Technology*, 1995; 6: 280-288.
13. Rao SM, **Binder JR**, Hammeke TA, Bandettini PA, Bobholz JA, Frost JA, Myklebust BM, Jacobson RD, Hyde JS. Somatotopic mapping of the human primary motor cortex with functional magnetic resonance imaging. *Neurology*, 1995; 45: 919-924.
14. **Binder JR**, Swanson SJ, Hammeke TA, Morris GL, Mueller WM, Fischer M, Benbadis S, Frost JA, Rao SM, Haughton VM. Determination of language dominance using functional magnetic resonance imaging: A comparison with the Wada test. *Neurology*, 1996; 46: 978-984.
15. Rao SM, Bandettini PA, **Binder JR**, Bobholz JA, Hammeke TA, Stein EA, Hyde JS. Relationship between movement rate and functional magnetic resonance signal change in

- human primary motor cortex. *Journal of Cerebral Blood Flow and Metabolism*, 1996; 16: 1250-1254.
16. **Binder JR**, Frost JA, Hammeke TA, Rao SM, Cox RW. Function of the left planum temporale in auditory and linguistic processing. *Brain*, 1996; 119: 1239-1247.
  17. **Binder JR**, Frost JA, Hammeke TA, Cox RW, Rao SM, Prieto T. Human brain language areas identified by functional magnetic resonance imaging. *Journal of Neuroscience*, 1997; 17: 353-362.
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216. Korthauer LE, Sabsevitz D, Mahoney EJ, Bauer P, Quasney EE, Glass L, Swanson S, **Binder J** (2017) Regional subcortical volumes are associated with pre-operative memory performance in left anterior temporal lobectomy (ATL) patients. *45th Annual Meeting of the International Neuropsychological Society* in New Orleans, LA.
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219. Hwang G, McMillan TM, Mathis J, Nair VA, Kawsar K, Mohanty R, *et al.* (2017). Characterizing cognitive alterations in temporal lobe epilepsy using machine learning. *International Neuropsychological Society 45<sup>rd</sup> annual meeting*, New Orleans, LA.
220. Pillay SB, Book D, **Binder JR** (2017). Where is Wernicke's area? A voxel-based lesion-symptom mapping study of spoken language comprehension in chronic aphasia. *International Neuropsychological Society 45<sup>rd</sup> annual meeting*, New Orleans, LA.
221. **Binder JR**, Conant L, Anderson C, Birn R, Carlson C, DeYoe EA, *et al.* (2017). Cortical thickness correlates of social cognition abilities in temporal lobe epilepsy. *American Academy of Neurology Annual Meeting*, Boston, MA.
222. Pillay SB, **Binder JR**, Fernandino L, Humphries C, Book D, Desai R (2017). Examining the relationship between motor system function and verb processing in aphasia using voxel-based symptom-lesion mapping. *International Neuropsychological Society 45<sup>rd</sup> annual meeting*, New Orleans, LA.
223. Liu X, Lauer KK, Douglas Ward B, Roberts C, Liu S, Gollapudy S, Rohloff R, Gross W, **Binder JR**, Li SJ, Hudetz AG (2017). Differential reduction of repertoire of functional patterns in sensory and cognitive neuronal systems in propofol anesthesia. *Proc. of the 25th Annual Meeting of ISMRM*, 4786, Honolulu, USA.
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228. Liu X, Lauer KK, Ward BD, Roberts C, Liu S, Gollapudy S, Rohloff R, Gross W, **Binder JR**, Hudetz AG, Li SJ (2017). Dorsal thalamus: A common site with above-baseline sensory/memory connections in anesthesia recovery. *23rd Annual Meeting of the Organization for Human Brain Mapping*, 3531, Vancouver, Canada.
229. Zhao G, Mathis J, Nair VA, Nencka A, Hwang G, Rozman M, *et al.* (2017). The Epilepsy Connectome Project: Resting-state connectivity dynamics in temporal lobe epilepsy. *23rd Annual Meeting of the Organization for Human Brain Mapping*, Vancouver, Canada.
230. **Binder JR**, Pillay SB, Humphries CJ, Kraegel P, Book DS (2017). Phoneme perception deficits from unilateral left hemisphere stroke: A voxel-based lesion correlation study. *2017 Annual Meeting of the Society for the Neurobiology of Language*. Baltimore, USA (poster).
231. Pillay SB, Kraegel P, Book DS, **Binder JR** (2017). Lesion localization of a shared phonologic representation deficit on reading, rhyming, repetition, and short-term memory tasks. *2017 Annual Meeting of the Society for the Neurobiology of Language*. Baltimore, USA (poster).
232. **Binder JR**, Meyerand ME, Birn R, Conant LL, DeYoe EA, Hermann B, *et al.* (2017). The Epilepsy Connectome Project. *American Epilepsy Society 2017 Annual Meeting*, Washington, DC.
233. Helfand AI, **Binder JR**, Swanson SJ, Sabsevitz DS, Humphries CJ, Anderson CT, Carlson C, Raghavan M (2017). Regional reductions in grey matter volume with longer disease duration in left temporal lobe epilepsy. *Annual Meeting of the American Epilepsy Society*. Washington D.C.
234. Swanson SJ, Sabsevitz DS, Quasney EE, Rozman ME, Gross WL, Raghavan M, Mueller WM, **Binder JR** (2017). The role of fMRI language lateralization in predicting naming decline after left anterior temporal lobectomy. *Annual Meeting of the American Epilepsy Society*, Washington D.C.
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239. Rivera Bonet CN, Cook CJ, Hwang G, Nair VA, Mathis J, Allen L, *et al.* (2018). Diffusion tensor imaging in temporal lobe epilepsy. *Radiological Society of North America 2018 Annual Meeting*, Chicago, IL.
240. Cook C, Hwang G, Tellapragada N, Rivera-Bonet C, Nwoke O, Nair VA, Mathis J, Rozman M, Almane D, Forseth C, Nencka A, Birn R, Ward BD, Maganti R, Conant C, Hermann B, Humphries C, DeYoe EA, Raghavan M, Prabhakaran V, **Binder JR**, Meyerand ME (2018). Effective connectivity of the default mode network in left temporal lobe epilepsy. *24th Annual Meeting of the Organization for Human Brain Mapping*, Singapore.
241. Fernandino J, Humphries CJ, Conant LL, **Binder JR** (2018). Using fMRI to evaluate embodied, taxonomic and distributional models of word meaning (poster). *24th Annual Meeting of the Organization for Human Brain Mapping*, Singapore.
242. Anderson A, Lalor E, **Binder JR**, Fernandino L, Kiela , Raizada R (2018). An integrated neural decoder of experiential and linguistic meaning. *Annual Meeting of the Society for the Neurobiology of Language*, Quebec City, Canada.
243. Kalmus T, Conant L, Humphries C, **Binder J**, Fernandino L (2018). Do experiential semantic features predict automatic semantic priming of verbs? *Annual Meeting of the Society for the Neurobiology of Language*, Quebec City, Canada.
244. Fernandino L, Conant L, Humphries C, **Binder J** (2018). Evaluating experiential models of word semantics relative to distributional and taxonomic models. *Annual Meeting of the Society for the Neurobiology of Language*, Quebec City, Canada.
245. Varma S, Pillay S, Ivory A, Humphries C, **Binder JR** (2018). Identifying neural correlates of speech articulation speed in chronic stroke patients. *American Neurological Association annual meeting*.
246. Elverman KH, Resch ZJ, Quasney EE, Sabsevitz DS, **Binder JR**, Swanson SJ (2018). A cluster analytic approach to exploring cognitive phenotypes in temporal lobe epilepsy. *46th Annual Meeting of the International Neuropsychological Society*, Washington, D.C.
247. Quasney EE, Elverman KH, Sabsevitz D, **Binder JR**, Umfleet LG, Raghavan M, Mueller WM, Swanson SJ (2018). Wada language lateralization index and Wada memory asymmetry scores as predictors of verbal memory decline after left temporal lobectomy. *46th Annual Meeting of the International Neuropsychological Society*, Washington, D.C.
248. Raicu A, Sabsevitz D, Swanson SJ, Quasney E, **Binder JR**, Raghavan M, Mueller M (2018). Is quality of life only about seizure freedom? Impact of memory decline on perceived cognitive functioning in a sample of left ATL patients with well controlled

- seizures. *46<sup>th</sup> Annual Meeting of the International Neuropsychological Society*, Washington, D.C.
249. Swanson SJ, Conant LL, Rozman M, Raghavan M, Mueller WM, Allen L, Gross WL, Anderson CT, Carlson C, Humphries CJ, Schwartz L, Busch RM, Lowe M, Langfitt JT, Tivarus M, Drane DL, Loring DW, Jacobs M, Morgan V, Szaflarski J, Bonilha L, **Binder JR**, for the FMRI in Anterior Temporal Epilepsy Surgery (FATES) study (2018). Changes in definition naming for common and proper nouns after left anterior temporal lobectomy. *72nd Annual Meeting of the American Epilepsy Society*, New Orleans.
250. Bauer PM, Swanson SJ, Sabsevitz DS, Humphries CJ, Rozman R, Raghavan M, Mueller WM, Allen L, Conant LL, Gross WL, Christopher T. Anderson CT, Carlson C, Schwartz L, Busch RM, Lowe M, Langfitt JT, Tivarus M, Drane DL, Loring DW, Jacobs M, Morgan V, Szaflarski J, Bonilha L, **Binder JR**, for the FMRI in Anterior Temporal Epilepsy Surgery (FATES) study (2018). Hippocampal volume is predictive of story memory but not word list memory decline following left anterior temporal lobe surgery. *Annual Meeting of the American Epilepsy Society*, New Orleans.
251. Cole Cook, Guy Hwang, Veena Nair, Jed Mathis, Andrew Nencka, Edgar DeYoe, Vivek Prabhakaran, **Jeffrey Binder**, Beth Meyerand (2019). Effects of temporal filtering on spectral dynamic causal modeling. *25th Annual Meeting of the Organization for Human Brain Mapping*, Rome.
252. Gyujoon Hwang, Bruce Hermann, Veena A. Nair, Jed Mathis, Cole J. Cook, Neelima Tellapragada, Charlene Rivera-Bonet, Rosaleena Mohanty, Gengyan Zhao, Dace N. Almane, Courtney Foreseth, Andrew Nencka, Elizabeth Felton, Aaron Struck, Rasmus Birn, Rama Maganti, Lisa Conant, Colin Humphries, Manoj Raghavan, Edgar A. DeYoe, Barbara B. Bendlin, Vivek Prabhakaran, Jeffrey R. Binder, Beth Meyerand (2019). Accelerated brain aging in temporal lobe epilepsy. *25th Annual Meeting of the Organization for Human Brain Mapping*, Rome.
253. **Jeffrey R. Binder**, Sara J. Swanson, Manoj Raghavan, Wade M. Mueller, Linda Allen, Christopher T. Anderson, Chad E. Carlson, Lisa L. Conant, William L. Gross, Colin J. Humphries, David S. Sabsevitz, Lisa Schwartz, Robyn M. Busch, Mark Lowe, John T. Langfitt, Madalina Tivarus, Daniel L. Drane, David W. Loring, Monica Jacobs, Victoria Morgan, Jerzy Szaflarski, Leonardo Bonilha, Susan Bookheimer, Thomas Grabowski, Jennifer Vannest for the FMRI in Anterior Temporal Epilepsy Surgery (FATES) study (2019). Preoperative language fMRI predicts naming outcome after left temporal lobe epilepsy surgery: A multicenter study. *25th Annual Meeting of the Organization for Human Brain Mapping*, Rome.
254. Charlene N. Rivera Bonet, Bruce Hermann, Cole J. Cook, Courtney Forseth, Gyujoon Hwang, Kevin Dabbs, Veena Nair, Jedidiah Mathis, Linda Allen, Dace N. Almane, Rasmus Birn, Lisa L. Conant, Edgar A. DeYoe, Elizabeth Felton, Colin J. Humphries, Peter Kraegel, Rama Maganti, Andrew Nencka, Onyekachi Nwoke, Manoj Raghavan, Megan Rozman, Aaron Struck, Neelima Tellapragada, Candida Ustine, B. Douglas Ward, Vivek Prabhakaran, **Jeffrey R. Binder**, Mary E. Meyerand (2019). Epilepsy connectome project: neuroanatomical correlates of personality traits in temporal lobe epilepsy. *25th Annual Meeting of the Organization for Human Brain Mapping*, Rome.



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256. Fernandino L, Tong J-Q, Humphries CJ, Conant LL, **Binder JR** (2019). fMRI representational similarity analysis reveals the information structure underlying word semantics. *11th Annual Meeting of the Society for the Neurobiology of Language*, Helsinki, Finland.
257. Sara Pillay, Jia-Qing Tong, William L. Gross, Wade M. Mueller, Manoj Raghavan, Sara J. Swanson, Lisa L. Conant, Linda Allen, Christopher T. Anderson, Chad Carlson, Leo Fernandino, Colin J. Humphries, Lisa Schwartz, Robyn M. Busch, Mark Lowe, John T. Langfitt, Madalina Tivarus, Daniel L. Drane, David W. Loring, Monica Jacobs, Victoria Morgan, Jerzy Szaflarski, Leonardo Bonilha, and **Jeffrey R. Binder** for the FMRI in Anterior Temporal Epilepsy Surgery (FATES) study (2019). Anterior temporal lobe regions critical for picture naming: Voxel-based lesion-symptom mapping in patients undergoing left temporal lobe resections. *11th Annual Meeting of the Society for the Neurobiology of Language*, Helsinki, Finland.
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Signed 

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