

CURRICULUM VITAE

Yu-Chien Wu, MD, PhD, DABMP

CONTACT INFORMATION

Address: Department of Radiology and Imaging Sciences
Indiana University School of Medicine
Goodman Hall, Rm 4326
355 West 16th Street, Suite 4100
Indianapolis, IN 46202

Phone: (317) 963-1697

Fax: (317) 963-7547

Email: yucwu@iu.edu

EDUCATION

POSTDOCTORAL

University of Wisconsin-Madison, USA	Dept. of Radiology	2006-2007
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GRADUATE

University of Wisconsin-Madison, USA	PhD in Medical Physics	2001-2006
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School of Medicine, Kaohsiung Medical University, Taiwan	MD	1995-2000
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UNDERGRADUATE

National Taiwan University, Taipei, Taiwan	BS in Physics	1990-1994
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APPOINTMENTS

Academic

*Dept. of Radiology and Imaging Sciences, Indiana University School of Medicine	Associate Professor, tenured	2019-present
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Dept. of Radiology and Imaging Sciences, Indiana University School of Medicine	Assistant Professor	2013-2019
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Dept. of Psychological and Brain Sciences & Dartmouth Brain Imaging Center, Dartmouth College, NH, USA	Research Assistant Professor	2009-2013
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Dept. of Radiology & Dept. of Medical Physics, University of Wisconsin - Madison, USA	Assistant Scientist	2007-2009
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Administrative positions

*Indiana Alzheimer's Disease Research Center Indiana University School of Medicine	Co-director, Neuroimaging Core	2023-present
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*In-Vivo Imaging Core	Scientific Director	2019-present
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Indiana Institute for Biomedical Imaging Sciences

*Roberts Translational Imaging Facility Stark Neuroscience Research Initiative	Director	2019-present
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Adjunct appointments

*Weldon School of Biomedical Engineering Purdue University	Adjunct Associate Professor	2023-present
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Non-academic

Dept. of Radiology, Chang-Gung Memorial Medical Center, Linkou, Taiwan	Medical Resident	2000-2001
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Chung-Ho Memorial Hospital, Kaohsiung, Taiwan	Medical Intern	1999-2000
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* in rank activity

LICENSURE, CERTIFICATION, SPECIALTY BOARD STATUS

National Physician License, Taiwan	No 032444	2000
DABMP, Diplomat, American Board of Medical Physics		2016, renewed 2021

PROFESSIONAL ORGANIZATION MEMBERSHIPS

National Multiple Sclerosis Society (NMSS)	2006-2009
Organization for Human Brain Mapping (OHBM)	2008-2011
American Association of Physicists in Medicine (AAPM)	2013-2017
*International Society for Magnetic Resonance in Medicine (ISMRM)	2003-present
*International Society to Advance Alzheimer's Research and Treatment (ISTAART)	2016-present

HONORS AND AWARDS

Dr. Samuel Ting's Fellowship	Dr. Samuel Ting's Foundation	1990, 1992, 1993
Graduate School Fellowship (declined)	Dept. of Physics, National Taiwan University Taipei, Taiwan	1994
Vilas Travel Fellowship	Graduate Student Collaborative of University of Wisconsin-Madison	2006
Educational Stipend	International Society for Magnetic Resonance in Medicine (ISMRM)	2003, 2005, 2007
Summa cum laude , oral presentation with student	International Society for Magnetic Resonance in Medicine (ISMRM)	2016
Magna cum laude , oral presentation with student	International Society for Magnetic Resonance in Medicine (ISMRM)	2017
* Magna Cum Laude , oral presentation with student	International Society for Magnetic Resonance in Medicine (ISMRM)	2019

*3 rd place, poster presentations with student, Diffusion Study Group	International Society for Magnetic Resonance in Medicine (ISMRM)	2019
*Showalter Scholar	Indiana University School of Medicine	2021-2024

PROFESSIONAL DEVELOPMENT

5 th Bi-annual High Field Imaging & Spectroscopy Workshop	University of Minnesota, USA	October 2005
Educational Program	International Society for Magnetic Resonance in Medicine (ISMRM)	May 2003, May 2007
Sequence Development Course for MRI	Philips Healthcare	August 2009
Pulse Programming Course MRI	Philips Healthcare	September 2009
IDEA Sequence Programming for MRI	Siemens Healthcare	January 2014
Imaging Calculation Environments for MRI	Siemens Healthcare	February 2014
American English for International Professionals Program	Indiana University School of Medicine (IUSM)	August – October 2014
Scientific Writing from the Reader's Perspective	IUPUI-OFAPD [†]	August 2014
Writing Winning Grants Proposals	IUPUI-OFAPD [†]	September 2015
Promotion & Tenure Information Session: Excellence in Research	IUPUI-OFAPD [†]	February 2016
Dossier Preparation Workshop	IUPUI-OFAPD [†]	November 2016
Negotiating the Divide: The Trend of Men Earning More than Women: Earn What You Deserve	IUPUI-OFAPD [†]	April 2017
*Unlocking your Inner Mentor Series	IUPUI-OFAPD [†]	October 2020
*Leading at IU	IU Human Resources	February – October, 2023

[†] Indiana University-Purdue University Indianapolis (IUPUI), Office of Faculty Affairs and Professional Development (OFAPD)

TEACHING

GRADUATE

<i>Course #</i>	<i>Title</i>	<i>Role</i>	<i>Contact hours</i>	<i>Term/Date</i>	<i>Enrollment</i>
MP710	Advances in MRI, Diffusion MRI	Guest Lecturer	2	F2007	5
MP710	Advances in MRI, Diffusion MRI	Guest Lecturer	2	F2008	5
MRI Journal Club [†]	Short Axis EPI sequence	Guest Lecturer	1	2014 May	10

CfN Roundtable [†]	Diffusion MRI Q&A	Guest Lecturer	1	2015 May	10
MRI Journal Club [†]	NODDI technique	Guest Co-Lecturer	1	2015 Jan	10
CfN Roundtable [†]	Fieldmap correction	Guest Lecturer	1	2015 Jan	10
MRI Journal Club [†]	MUSE sequence	Guest Co-Lecturer	1	2015 May	10
N715	Neuroanatomy Module, Diffusion MRI	Guest Lecturer	1	F2016 Dec.	7
D527	Neuroanatomy, MRI of the Brain	Guest Lecturer	1	S2017 Feb.	16
D527	Neuroanatomy, MRI of the Brain	Guest Lecturer	1	S2018 Jan.	20
MRI 101 [†]	MRI 101	Organizer and Lecturer	9	F2017- S2018	28
*D527	Neuroanatomy, MRI of the Brain	Guest Lecturer	1	S2019 Jan.	20
*D527	Neuroanatomy, MRI of the Brain	Guest Lecturer	1	S2020 Feb.	20
*D527	Neuroanatomy, MRI of the Brain	Guest Lecturer	1	S2021 Feb.	25
*D527	Neuroanatomy, MRI of the Brain	Guest Lecturer	1	S2022 Feb.	20

Acronyms: **CfN:** Center for Neuroimaging; **EPI:** echo planar imaging; **MRI:** magnetic resonance imaging; **NODDI:** neurite orientation dispersion and density imaging.

[†] Unofficial courses organized by a faculty member(s) at Indiana University School of Medicine (IUSM). These courses provided ad hoc education to faculty members, staff, postdoctoral fellows, data analysts, research assistants, graduate students, and undergraduate students from IUSM, Indiana University Bloomington, and Purdue University.

MENTORING

VISITING SCHOLAR

Xuehua Li	Radiologist	2019-2020	Mentor
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ROTATING RESIDENTS

Xuandong Zhao	Medical Physics, MRI Neuroimaging	2016 Sep.-Oct.	Mentor
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POSTDOCTORAL FELLOWS

Ameer P. Hosseinbor	Medical Physics	2013-2015	Graduate research advisor
Chandana Kodiweera	MRI Physics and Imaging Analysis	2012-2015	Mentor
Sourajit M. Mustafi	Imaging Analysis	2014-2018	Mentor
*Qiuting Wen	MRI Physics and Imaging Analysis	2015-2020	Mentor
*Nahla Elsaid	MRI Physics and Imaging Analysis	2017-2019	Mentor
*Salman Shahid	MRI Physics in Animal Imaging and Image Analysis	2020-present	Mentor
*Ho-Ching (Shawn) Yang	Image analysis	2020-present	Mentor

*Ghina Zia	Image analysis	2021-present	Mentor
*Tayyebah (Tina) Ebrahimi	MRI Physics and Imaging Analysis	2022-present	Mentor
*Yomna Takieldean	Image analysis	2023 July	Mentor

GRADUATE STUDENTS

Pouria Mossahebi	Medical Physics, UW-Madison	2007-2009	Graduate research advisor
Ameer P. Hosseinbor	Medical Physics, UW-Madison	2008-2013	Graduate research advisor
Justin Kim	Psychological and Brain Sciences, Dartmouth College	2009-2011	Graduate research advisor
D. Katharine Andrews	Medical Scientist Training Program, SNRI	2015-2019	Graduate research advisor
Cecily Gwinn Swinford	Medical Neuroscience Program, SNRI	2018-2022	Graduate research advisor
Lauren Price	Medical Neuroscience Program, SNRI	2019-2023	Graduate research advisor
Fiona JinXia Yao	Biomedical engineering, Purdue Univ.	2020-2022	CTSI Mentor
Kaitlyn Dybing	Medical Neuroscience Program, SNRI	2023-present	Graduate research advisor
Vidhya Vijayakrishnan Nair	Biomedical Engineering, Purdue University	2022-present	Graduate research advisor

MD-PhD STUDENTS

Adam Wright	MRI Neuroimaging	2022 Apr- present	Graduate research advisor
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MEDICAL STUDENTS

*Billy Chien	Medicine, IUSM	2020-2021	IMPRS Summer intern mentor
*Zack Hall	Medicine, IUSM	2020-2021	IMPRS Summer intern mentor
*Clayton Taylor	Medicine, IUSM	2020	Research rotation mentor
*Bradley Atoa	Medicine, IUSM	2021	Research rotation mentor
*Casey Wendorff	Medicine, IUSM	2021	Research experience
*Michael McGill	Medicine, IUSM	2021	IMPRS Summer intern mentor
*Luis A. Ramirez	Medicine, IUSM	2022	IMPRS Summer intern mentor
*Camilo Aguilar	Medicine, IUSM	2022	Research experience
*Jackson Sawyer	Medicine, IUSM	2023	IMPRS Summer intern mentor
*Haadi Shakir	Medicine, Arkansas College of Osteopathic Medicine	2023	Summer intern

THESIS COMMITTEES FOR GRADUATE STUDENTS

D. Katharine Andrews	Medical Scientist Training Program	2015-2019	Committee member
*Cecily Gwinn Swinford	Medical Neuroscience Program	2018-2022	Committee member
*Lauren Price	Medical Neuroscience Program	2020-2023	Committee member

*Ho-Ching Yang	Biomedical Engineering, Purdue University	2020-2021	Committee member
*Kaitlyn Dybing	Medical Neuroscience Program	2023-present	Committee member

B.S. RESEARCH ASSISTANTS

Brian D. Stirling	Dartmouth Brain Imaging Center	2012-2014	Mentor
Long Sha	Dartmouth Brain Imaging Center	2013	Research advisor
Leah Moravec	Indiana University, Center for Neuroimaging	2014-2015	Research advisor
Gandhi K. Pratik	Indiana University, Center for Neuroimaging	2015-2016	Research advisor
Scott Persohn	Indiana Institute for Biomedical Imaging Sciences	2016-2017	Research advisor
*Rhea Thukral	Indiana University School of Medicine	2019-2021	Mentor

UNDERGRADUATE STUDENTS

Callen R. Gordon	Electrical Engineering	2006-2007	Undergraduate research advisor
Matthew J. Scharrer	Biomedical Engineering	2006-2007	Undergraduate research advisor
Yuan Shangguan	Dartmouth College, Thayer School of Engineering	2012	undergraduate summer research advisor
Kaitlyn Stickel	Women in Science Internship, Neuroscience	2014	Undergraduate summer research advisor

TEACHING ADMINISTRATION AND CURRICULUM DEVELOPMENT

2018 Stark Neurosciences Research Institute, Medical Neurosciences Graduate Program restructuring working group.

GRANTS

ACTIVE

<i>Title</i>	<i>Agency</i>	<i>Role</i>	<i>Dates</i>
*R01 NS112303-01 Comprehensive White-Matter Microstructure-Informed Analytical Methods to Elucidate Neurobiological Mechanisms of Sports-Related Concussion	NIH-NINDS	PI	4/15/20-3/31/25
*R01 NS112303-03S1 Elucidating Pathophysiological Mechanisms of Alzheimer's Disease Using White-Matter Microstructure-Informed Subject-Specific Analytical Methods	NIH-NINDS/NIA	PI	4/1/22-3/31/23

*R01 AG053993 Modeling Axonal Density and Inflammation-Associated Cellularity in Alzheimer's Disease Using Hybrid Diffusion Imaging	NIH-NIA	PI	NCE 8/15/16- 5/31/24
*Identifying Microstructural Imaging Biomarkers that Predict Post-Traumatic Headache	Indiana State Department of Health	PI	7/1/21- 6/30/23
*R21AG068962 (PI: Tong, Purdue University) Image-Based Modeling of Biomechanical Factors for Risk Assessment of Developing Periventricular White Matter Hyperintensities	NIH-R21	Site-PI	5/15/21- 4/30/23
*2R44AG060861-02 (PI: Matthews at ADM Diagnostics, Inc.) Multi-modal Machine Learning Detection and Tracking of Traumatic Brain Injury Neurodegeneration and Its Differentiation from Alzheimer's Disease	NINDS through ADM Diagnostics, Inc	Site-PI	9/30/22- 11/30/24
* U54AG054345 (PI: Bruce Lamb) IU/JAX/PITT MODEL-AD Center	NIH-NIA	Co-I	12/1/22 – 11/30/27
*R01AG022304-15S1 (PI: Rao, Cleveland Clinic; PI: Lamb, IUSM) Immune Mechanisms Underlying the Neuroprotective Effects of Physical Activity in Human and Mouse Models of Genetic Risk for Alzheimer's Disease	NIH-NIA	Co-I	7/15/21 – 5/31/22
*P30 AG072976 (PI: Saykin) Indiana Alzheimer Disease Research Center	NIH	Co-I	7/1/21- 6/30/26
*R56 AG047992-07A1 (PI: Newhouse, Vanderbilt University; Site PI: Saykin) Long-Term Nicotine Treatment of Mild Cognitive Impairment	NIH	Co-I	2/17/22 – 1/31/23
*R01 AG019771 (PI: Saykin) Memory Circuitry in MCI and Early Alzheimer's Disease Prodrome: Molecular Drivers	NIH	Co-I	NCE 6/1/17- 5/31/23
*W81XWH1820047 and HU001-18-2008 (PI: McAllister (IUSM), Broglio (Michigan University), McCrea (Medical College of Wisconsin)) Characterizing Potential Chronic Brain Health Effects of Concussion and Repetitive Head Impact Exposure: The CARE-SALTOS Integrated (CSI) Study	U.S. ARMY MTEC & NCAA	Co-I	9/15/21- 6/30/26
*R01 RF1NS128961 (PI: Dams-O'Connor (Mount Saini); Site PI: Hammond) Clinical & biological signatures of post-traumatic neurodegeneration: Leveraging the TBI Model Systems of Care to accelerate in vivo diagnosis of the late effects of TBI (LETBI)	NIH	Co-I	07/01/22 – 06/30/27
*R01AG061788 (PI: Risacher)	NIH	Co-I	2/15/19- 11/30/23

Effects of opioid use disorder in pregnancy on long-term maternal and child outcomes			
*ARRS Scholarship (PI: Radhakrishnan) Predicting neurodevelopmental outcomes in neonatal abstinence syndrome	ARRS	Co-I	4/1/18- 3/31/20
*Improving functional ability in chronic TBI with intensive rehabilitation robotic gait training (PI: Massie)	Indiana Spinal Cord & Traumatic Brain Injury Research Fund	Co-I	7/1/17- 6/30/19
*Data Research/Pilot Study Project Effects of an 8-day advanced meditation, Samyama on physical, psychological and spiritual wellbeing, and associated neural mechanisms (PI: Sadhasivam)	IU-Health	Co-I	3/1/18- 2/28/19
CTR (PI: Wu) Microstructure Modulated White Matter Connectivity for Mild Traumatic Brain Injury	CTSI	PI	7/1/16- 6/30/18
R21 NS075791 (PI: McAllister & Wu) HYBRID Diffusion Imaging to Detect Acute White Matter Injury After Mild TBI	NIH/NINDS-Dartmouth	MPI	9/1/11- 8/31/15
High Angular Resolution Diffusion Imaging (HARDI) with novel HYPR image reconstruction (PI: Wu)	Dartmouth SYNERGY	PI	8/1/12- 7/31/15
Hybrid Diffusion Imaging (HYDI) of the Kidney (PI: Wu)	IUPUI-RITDP	PI	7/1/15- 6/30/16
Microstructure Imaging of the Human Brain with TBI (PI: Wu)	IUPUI-ITDP	PI	1/1/15- 10/31/16
Measuring Axonal Diameters and Density with a Novel ActiveAx and Fast RSA-EPI Sequence (PI: Wu)	IADC, Pilot Project	PI	7/1/14- 6/30/16
UH3TR000955-S1 (PI: Breier) The Efficacy and Safety of a Selective Estrogen Receptor Beta agonist (LY500307) for Negative Symptoms and Cognitive Impairment Associated with Schizophrenia	NIH	Co-I	6/1/16- 5/31/18
R21 AG051932 (PI: Callahan) Angiogenesis and Alzheimer's Disease	NIH	Co-I	5/1/16- 4/30/18
W81XWH-14-2-0151 (PI: McAllister) Concussion Assessment, Research and Education Consortium (CARE)	NCAA-DoD	Co-I	9/15/14- 9/14/18
R01 MH080716-04S1 (PI: Whalen) Prefrontal-Amygdala Interactions in Social Learning	NIH	Co-I	9/27/10- 5/31/11
Advancing the Understanding of Biomechanical Parameters Associated with Mild Traumatic Brain Injury (PI: McAllister)	NOCSAE	Co-I	6/1/11- 2/30/13
R01 MH091100-A1 (PI: Holzheimer)	NIH	Co-I	9/1/11- 11/30/13

Investigating Biomarkers of TRD Using Neuroimaging			
R01 MH080716 (PI: Whalen) Prefrontal-Amygdala Interactions in Social Learning	NIH	Co-I	2/1/12-11/30/13
Advanced MRI Evaluation of Cerebral Blood Flow and Brain Connectivity Biomarkers in Adolescent Subacute Sports-related Concussion (PI: McDonald)	Ninesigma, Inc.	Co-I	5/1/14-4/30/15
UH3TR000955 (PI: Breier) The Efficacy and Safety of a Selective Estrogen Receptor Beta agonist (LY500307) for Negative Symptoms and Cognitive Impairment Associated with Schizophrenia	NIH	Co-I	10/1/14-5/31/16
Improved accuracy for anatomical mapping and network structure of the Alzheimer's brain. (PI: Pestilli)	CTSI-GLUE	Co-I	9/1/15-8/31/17
Dissection of Cholestatic Itch in Primary Biliary Cirrhosis (PI: Chalasani)	Intercept Pharmaceuticals	Co-I	11/01/15-10/19/17
Evaluation of Resting State fMRI in Neonates with Hypoxic-Ischemic Injury (PI: Kralik)	radPDT	Co-I	12/01/16-11/30/17

INVITED PRESENTATIONS

LOCAL

<i>Title</i>	<i>Organization</i>	<i>Date</i>
Quantitative Analysis of Diffusion Tensor Orientation	Dept. of Biostatistics & Medical Informatics, UW-Madison	March 2004
Hybrid Diffusion Imaging	Waisman Laboratory for Brain Imaging and Behavior	August 2005
Diffusion MRI: Tensors and Beyond	Dept. Medical Physics, UW-Madison	April 2006
32 Channel Head Coil	Dartmouth Brain Imaging Center	December 2010
RSA	Indiana Institute for Biomedical Imaging Sciences – AirTD program [†]	January 2015
Diffusion MRI: Applications in Neuroimaging	Suds & Science, Dept. Radiology and Imaging Sciences	January 2018
*rsfMRI in primary biliary cholangitis (PBC) using the MELODIC ICA approach	Gastroenterology Seminar	November 2019
*Association Patterns between Tau Depositions and White-Matter Microstructural Metrics	Dept. Neurology mini symposium: Untangling the Tauopathy of	March 2019

	Alzheimer's Disease: Focus on Molecular Imaging	
*MR Neuroimaging	Stark Neuroscience Research Institute	Nov. 19, 2020
*Tau PET imaging: partial volume correction	Center of Neuroimaging	July 10, 2020
*Imaging Synaptic density	BRTC Seminar	April 13, 2021
*In-Vivo Imaging Core	IU President Whitten's tour	Sept. 16, 2021
*MRI neuroimaging in AD	SNRI P01 committee	Nov. 10, 2021

†**AirTD**: Advanced Imaging Research & Technology Development Program

REGIONAL

<i>Title</i>	<i>Organization</i>	<i>Date</i>
Diffusion MRI: Fundamentals and Applications in Neuroimaging	Dept. PBS, IU-Bloomington	April 2014
Microstructural Imaging	Hackathon, Dept. PBS, IU-Bloomington	November 2015
High resolution diffusion magnetic resonance imaging	4 th Indiana Neuroimaging Symposium	November 2016
*Diffusion MRI in Alzheimer's Disease	IADC Research Symposium	October 2018
*Multimodal analysis of tau distribution on AV1451 PET and white-matter fiber tracts	IU Network Institute, Multiomics Retreat	December 2018
*Positron Emission Tomography (PET) for Molecular Imaging	CTSI Access Technology Program Seminar Series	May 28, 2021
*Roberts Translational Imaging Facility	SNRI Summer Cores Seminar Series	July 29, 2021
*Diffusion MRI: Fundamentals and Applications in Neuroimaging	Dept. Biomedical Engineering, Purdue University	March, 2022
*In-Vivo Imaging Core	CTSI Access Technology Program Seminar Series	March, 2022

NATIONAL

Invited Talks

<i>Title</i>	<i>Organization</i>	<i>Date</i>
Acute White Matter Abnormalities in Sport-related Concussion: A DTI Study	NCAA-DoD Concussion Assessment, Research and Education (CARE) Consortium Investigator meeting	November 2016
Diffusion MRI: Fundamentals and Applications in Neuroimaging	University of Illinois at Chicago	March 2017
Diffusion MRI: Fundamentals and Applications in Neuroimaging	Duke University	November 2017
Longitudinal and Sex Effects in Sports-Related Concussion	CARE consortium, Advanced Research Core (ARC) MRI Core Planning Meeting	February 2018
*Effects of White-Matter Tract Length in Acute Sports-Related Concussion	CARE consortium investigator meeting	February 2019

*Association Between Acute MRI, Recovery, and RTP	CARE consortium investigator meeting	February 2020
*Longitudinal white-matter abnormalities in sports-related concussion	Michigan Concussion Center Journal Club	September 2020
*Diffusion MRI: Fundamentals and Applications in Neuroimaging	Mayo Clinic	March 2022
*Diffusion tensor imaging of concussion: A longitudinal analysis.	Fifth Annual NCAA-DoD Grand Alliance Concussion Conference	April 2022
*Diffusion MRI in Alzheimer's Disease and Mild Traumatic Brain Injury	University of Wisconsin-Madison, celebrating 50 th anniversary of Waisman Center	April, 2023

INTERNATIONAL

Invited Talks

<i>Title</i>	<i>Organization</i>	<i>Date</i>
MR Diffusion Imaging	Taipei Veterans General Hospital, Taipei, Taiwan	December 2005
MR Diffusion Imaging	Dept. of Medical Imaging and Radiology Science, Chang Gung University, Taiwan	January 2006
Diffusion MRI and Fiber Orientation Function	The 2 nd International Neural Computation Workshop, Dartmouth, NH USA	August 2012
Diffusion MRI: Fundamentals and Applications in Neuroimaging	The 2017 IISA International Conference on Statistics Hyderabad, India	December 2017
*Diffusion MRI Applications in Neuroimaging	University College London (ranked #22)	November 2022
*Preclinical neuroimaging in Alzheimer's and neurodegenerative diseases	Bruker event at ISMRM	June 2023

The acceptance rate for oral presentations at the annual conference of International Society of Magnetic Resonance in Medicine (ISMRM) is approximately 15%; The poster acceptance rate is approximately 55% out of approximately 8000 submitted abstracts.

Oral Presentation (first author)

<i>Title</i>	<i>Organization</i>	<i>Date</i>
Hybrid Diffusion Imaging (HYDI) in a Brain Model of Dysmyelination	International Society of Magnetic Resonance in Medicine Hawaii, USA	April 2009
Rotating Short-Axis EPI "blades" as veering diffusion gradient directions with composite reconstruction (RSA)	International Society of Magnetic Resonance in Medicine Milano, Italy	May 2014
"Windowed" Composite Reconstruction Improves Rotating Short-Axis High Resolution DWI (RSA-DWI) in both Simulation and Human data	International Society of Magnetic Resonance in Medicine Singapore	May 2016

Axonal Density Associated with Cognitive Change Index in Older Adults with Subjective Cognitive Decline (SCD)	Alzheimer's Association International Conference (AAIC) London, UK	July 2017
Acute white matter abnormalities in sport-related concussion: A DTI study	Military Health System Research Symposium Orlando, FL. USA	August 2017
Characterizing Axonal Density and Tract-Specific Changes Shortly after Mild Traumatic Brain Injury Using Diffusion MRI	21th Symposium Neuroradiologicum, Neuroradiological Society of Taiwan	March 2018
*Longitudinal associations between blood biomarkers and white-matter MRI in sport-related concussion: A study of the NCAA-DoD CARE Consortium	International Society of Magnetic Resonance in Medicine London, UK	May 2022

Oral Presentation (last author)

<i>Title</i>	<i>Organization</i>	<i>Date</i>
Improving angular resolution in multi-shot turbo spin-echo imaging using rotating single-shot acquisition (RoSA)	International Society of Magnetic Resonance in Medicine Hawaii, USA	April 2017
Acute white matter abnormalities in sport-related concussion: A DTI study	International Society of Magnetic Resonance in Medicine Hawaii, USA	April 2017
White matter changes and correlations with cognitive functions in semi-acute mild traumatic brain injury (mTBI): A hybrid diffusion imaging study	International Society of Magnetic Resonance in Medicine Hawaii, USA	April 2017
*Tau Propagation Pattern Is Evidenced Through Associations with Structural Tract Alterations: A Data Driven Approach	International Society of Magnetic Resonance in Medicine Montreal, Canada	May 2019
*Diffusion Tensor Imaging Biomarkers for Chronic Pain Following Mild Traumatic Injury	International Society of Magnetic Resonance in Medicine London, UK	May 2022
*Assessment of Pulsatile Cerebrospinal Fluid Dynamics of the Human Brain using Cardiac-cycle Resolved Diffusion-weighted Imaging (CARDI)	International Society of Magnetic Resonance in Medicine London, UK	May 2022

Poster presentations (first author)

<i>Title</i>	<i>Organization</i>	<i>Date</i>
Age and Gender Related Changes of Human Brains Using Magnetic Resonance Hybrid Diffusion Imaging (HYDI)	International Society of Magnetic Resonance in Medicine Hawaii, USA	April 2009
High Angular Resolution Diffusion Imaging (HARDI) with Highly Constrained Back Projection Reconstruction (HYPR)	International Society of Magnetic Resonance in Medicine Stockholm, Sweden	May 2010
Quantitative Evaluation of Rotating Short-Axis (RSA) EPI for High Spatial Resolution Diffusion MRI	International Society of Magnetic Resonance in Medicine Toronto, Canada	June 2015

*White-Matter Abnormalities in Sport-Related Concussion: A Longitudinal Study of Diffusion Magnetic Resonance Imaging from the NCAA-DoD CARE Consortium	Military Health System Research Symposium Orlando, FL. USA	August 2018
*Longitudinal White-Matter Abnormalities in Sports-Related Concussion: A Study of Diffusion Magnetic Resonance Imaging from the NCAA-DoD CARE Consortium	International Society of Magnetic Resonance in Medicine Montreal, Canada	May 2019
*Effects of Tract Length in White Matter Alterations After Sports-Related Concussion: A Diffusion MRI Study from the NCAA-DoD CARE Consortium	International Society of Magnetic Resonance in Medicine Montreal, Canada	May 2019
*Effects of Track Length on White-Matter Abnormalities in Mild Traumatic Brain Injury	Organization for Human Brain Mapping Rome, Italy	June 2019
Poster Presentation (last author)		
<i>Title</i>	<i>Organization</i>	<i>Date</i>
Hybrid Diffusion Imaging (HYDI) of Acute Mild Traumatic Brain Injuries (mTBI): A Comparison of Diffusion Measures between DTI, PDF and NODDI	International Society of Magnetic Resonance in Medicine, Diffusion Workshop. Podstrana, Croatia	October 2013
Age and Gender - Related Changes in the Normal Human Brain Using Hybrid Diffusion Imaging (HYDI) with Neurite Orientation Dispersion and Density Imaging (NODDI) Analysis	International Society of Magnetic Resonance in Medicine Milano, Italy	May 2014
Automated Segmentation of the Human Amygdala using High Angular Diffusion Imaging (HARDI) and Spectral k-means Clustering	International Society of Magnetic Resonance in Medicine Milano, Italy	May 2014
Neurite orientation dispersion and density Imaging (NODDI) in Multiple Sclerosis	International Society of Magnetic Resonance in Medicine Toronto, Canada	June 2015
NODDI Measures Appear to be Sensitive to Both Age and Gender	International Society of Magnetic Resonance in Medicine Toronto, Canada	June 2015
HYbrid Diffusion Imaging to Detect Acute White Matter Injury After Mild TBI	International Society of Magnetic Resonance in Medicine Singapore	May 2016
Magnetic Resonance Diffusion Tensor and q-space imaging in an Animal Model of Chronic Kidney Disease	International Society of Magnetic Resonance in Medicine Singapore	May 2016
Comparing the LPCA and MPPCA denoise approaches for diffusion MRI using human data simulation	International Society of Magnetic Resonance in Medicine Hawaii, USA	April 2017
Rotating Single-shot Acquisition (RoSA) combined with parallel imaging for fast high-resolution diffusion imaging	International Society of Magnetic Resonance in Medicine. Hawaii, USA	April 2017
*Intravoxel Incoherent Motion (IVIM) Fingerprinting	International Society of Magnetic Resonance in Medicine. Paris, France	June 2018
*Effects of Track Length on White Matter Alterations in Mild Traumatic Brain Injury	International Society of Magnetic Resonance in Medicine.	June 2018

Paris, France

*White-Matter Microstructure in Early Stage Alzheimer's Disease	Alzheimer's Association International Conference (AAIC) Chicago, USA	July 2018
*Alterations in White-Matter Diffusion Metrics in Preclinical Alzheimer's Disease: A Subject-Specific Analysis	Alzheimer's Association International Conference (AAIC) Chicago, USA	July 2018
*Super-Resolution Hybrid Diffusion Imaging (SR-HYDI)	International Society of Magnetic Resonance in Medicine Montreal, Canada	May 2019
*Super-Resolution Diffusion Imaging using Deep Learning: A Feasibility Study	International Society of Magnetic Resonance in Medicine Montreal, Canada	May 2019
*Golden-Angle Rotating Single-Shot Acquisition (GA-RoSA) for Simultaneous High-Resolution DTI and IVIM	International Society of Magnetic Resonance in Medicine Montreal, Canada	May 2019
*Diffusion magnetic resonance imaging in the human hippocampal subfields using super-resolution HYDI	International Society of Magnetic Resonance in Medicine Montreal, Canada	May 2019
*Genetic and Structural Network Contributions to The Regional Vulnerability of Tauopathy	Alzheimer's Association International Conference (AAIC) San Diego, USA	July 2022
*Role of neurochemistry in amyloid pathology using 5xFAD transgenic mouse model of AD: A single-voxel Magnetic Resonance Spectroscopy (MRS) study	Alzheimer's Association International Conference (AAIC) San Diego, USA	July 2022
*Differential vulnerability of hippocampal microstructure in the 5xFAD mouse model: A dMRI study	Alzheimer's Association International Conference (AAIC) San Diego, USA	July 2022

SERVICE

DEPARTMENT

<i>Organization</i>	<i>Activity (times)</i>	<i>Role</i>	<i>Dates</i>
Center for Neuroimaging	Data analyst/specialist recruitment (5x)	Interviewer	2017
*Dept. of Radiology and Imaging Sciences	Faculty recruitment (3x)	Interviewer	2016, 2017, 2020
*Dept. of Radiology and Imaging Sciences	monthly faculty meeting	Faculty member	2013-present
*Diagnostic Medical Physics team	Bi-weekly meeting	Member	2017-2022
*Medical Physics Residence Program	Commission on Accreditation of Medical Physics Education Programs (CAMPEP)	Faculty member	2016-present
*Dept. of Radiology and Imaging Sciences	Medical Physics resident recruitment (12x)	Interviewer	2018, 2019

*Dept. of Radiology and Imaging Sciences, Dr. Yoder	Research Scientist recruitment	Member of the search committee	2018
*Center for Neuroimaging	Postdoctoral fellow recruitment	Interviewer	2018
*Dept. of Radiology and Imaging Sciences	Faculty recruitment (high field MRI physicist)	Member of the search committee	2019
*Dept. of Radiology and Imaging Sciences	Data Integrity Committee	Committee member	2019-2020
*Dept. of Radiology and Imaging Sciences	Imaging sciences operation committee	Committee member	2019-present
*Dept. of Radiology and Imaging Sciences	Data analysis committee	Committee member	2020-2021
*Dept. of Radiology and Imaging Sciences	Research financial and business operation meeting	Committee member	2019-2022
*Dept. of Radiology and Imaging Sciences	Faculty annual review	Co-Reviewer	2020-2022

SCHOOL

<i>Organization</i>	<i>Activity (times)</i>	<i>Role</i>	<i>Dates</i>
Dept. of Radiology and Imaging Sciences	Chair recruitment (3x)	Interviewer in a group setting	2014
Dept. of Psychiatry, Dr. McAllister (Department Chair)	Faculty recruitment (2x)	Interviewer	2015, 2016
Dept. of Radiology and Imaging Sciences	Vice Chair for Clinical Research recruitment	Interviewer in a group setting	2017
Dept. of Neurology, Dr. Apostolova	Postdoctoral fellow recruitment	Interviewer	2017
Dept. of Psychiatry, Dr. Oberlin	Postdoctoral fellow recruitment	Member of the search committee	2018
*Center for Neuroimaging	MRI physics service	MRI Physicist	2013-present
*IUSM	Indiana Medical Student Program for Research and Scholarship (IMPRS)	Judge	2018, 2019
*Roberts Translational Imaging Facility, IIBIS & SNRI	Manager recruitment	Member of the search committee	2019
*Roberts Translational Imaging Facility, IIBIS & SNRI	Staff recruitment, Veterinarian Technician (2X)	Chair, search committee	2019, 2021
*In-Vivo Imaging Core, IIBIS	Staff recruitment, Technologist (2X)	Member of the search committee	2020
*Dept. of Neurology, Dr. Apostolova (Director, Clinical core IADRC)	Faculty recruitment (2X)	Interviewer	2020, 2021
*Stark Neurosciences Research Institute	Core operation committee	Committee member	2020-present
*Cardiovascular Institute, Dr. Raman (Director, IUH/IUSM Cardiovascular Institute)	Faculty recruitment (4X)	Interviewer	2020, 2021, 2022
*Dept. of Neurology, Dr. Gutmann (Department Chair)	Faculty recruitment (5X)	Interviewer	2021

*Neurosciences Research Institute	Director of Neurodegeneration diseases Center (3x)	Interviewer, lead tour to imaging facility	2022
*Neurosciences Research Institute	Director of Cardiovascular disease Center (3x)	Interviewer, lead tour to imaging facility	2022
*Neurosurgery	Faculty recruitment (2x)	Interviewer	2022
*Stark Neurosciences Research Institute	Executive committee	Committee member	2023-present
*Indiana Alzheimer's Disease Research Center	Executive committee	Committee member	2023-present

CAMPUS

Organization	Activity (times)	Role	Dates
Indiana Institute for Biomedical Imaging Sciences (IIBIS)	Committee for MRI system purchase (4x)	Ad-hoc member	2013, 2016, 2017
Dept. of Intelligent Systems Engineering	Faculty recruitment	Interviewer	2016
Diversity Council	Committee meeting	Member	2016
*Indiana Alzheimer Disease Research Center	MRI Physics & Neuroimaging processing/analyses support	MRI Physicist	2013-present

UNIVERSITY

Organization	Activity (times)	Role	Dates
Indiana Institute for Biomedical Imaging Sciences (IIBIS)	MRI Physics support	Member	2013-2019
Purdue University, Purdue Life Sciences MRI Center	MRI Physicist recruitment	Interviewer	2017
*Purdue University, School of Health Sciences	Faculty recruitment (3x)	Interviewer	2021, 2022
*In-Vivo Imaging Core, IIBIS	Leadership, Administrative	Scientific Director	2019-present
*Roberts Translational Imaging Facility, Stark Neuroscience Research Institute	Leadership, Administrative	Scientific Director	2019-present
*IADRC	Data request committee, quarterly	Committee member	2022-present
*IADRC	Executive committee meeting, monthly	Co-core director	2023-present
*Indiana University School of Medicine Dean's office	Chair of the Department of Radiology and Imaging Sciences	Search Committee member	2022-2023

PROFESSIONAL SERVICE - LOCAL

Organization	Activity (times)	Role	Dates
Dartmouth Hitchcock Foundation	Grant review panel	Reviewer	2011
IU School of Medicine and IU-Bloomington	DiPY workshop (2x)	Co-organizer	2017
Indiana University Bloomington, Dept. of Psychological and Brain Sciences	4 th Indiana Neuroimaging Symposium	Co-organizer	2016

Purdue University, Dept. of Health and Human Sciences	5 th Indiana Neuroimaging Symposium	Co-organizer	2017
*IUSM	6 th Indiana Neuroimaging Symposium	Organizer, Chair	2019
*Indiana Clinical and Translational Sciences Institute (CTSI), Pilot Funding for Research Use of Core Facilities	Grant review panel (4x)	Reviewer	2015-present
*Biomedical Research Committee	Grant review panel (8x)	Reviewer	2016-2023
*IADRC pilot project	Grant review panel	Reviewer	2020, 2023

PROFESSIONAL SERVICE – NATIONAL/INTERNATIONAL

Grant reviewer

<i>Organization</i>	<i>Times</i>	<i>Dates</i>
Parkinson's UK	1	2016
*UC Davis Alzheimer's Disease Research Center pilot grant	1	2021
*NIH Study Sections (ad hoc)	7	2021 Feb. Oct. 2022 June, July, Oct. 2023 Feb16/17, Feb24
*NIH Study Section standing member invitation for nomination	2 (accepted one, declined one)	2022 Dec.
*NIH EITN Study Section standing member		2023 July – 2027 June
*Pennsylvania Department of Health	1	2022 May
* Alzheimer's Association International Research Grant Program (IRGP) Council	3	2022 June, 2023 Feb14, 2023 July
*Alzheimer's Association	8	2016-present
*NIH Mock review: Enhanced Grant Writing Coaching Intervention for a Diverse Biomedical Workforce (U01 GM132366)	1	2022 Dec.

Conference paper/abstract reviewer

<i>Organization</i>	<i>Times</i>	<i>Dates</i>
Organization for Human Brain Mapping (OHBM) annual conference	1	2009
International Society of Magnetic Resonance in Medicine (ISMRM) annual conference	3	2007, 2009, 2016
Medical Image Computing and Computer Assisted Intervention (MICCAI)	2	2014, 2015
Chinese Neurotrauma Association Meeting	1	2015
*Alzheimer's Association International Conference (AAIC)	1	2021, 2023

Manuscript reviewer

<i>Journal</i>	<i>Impact factor</i>	<i>Times</i>	<i>Dates</i>
<i>BioMed Central</i>	2.27	2	2009
<i>Nuclear Magnetic Resonance in Biomedicine</i>	2.87	7	2010-2017

<i>Neuropsychologia</i>	3.57	1	2011
<i>Journal of Magnetic Resonance Imaging</i>	3.08	3	2011-2014
<i>American Journal of Neuroradiology</i>	3.60	1	2012
<i>Magnetic Resonance Imaging</i>	2.67	1	2013
<i>Social Cognitive and Affective Neuroscience</i>	3.94	1	2015
Neural Regeneration Research	2.23	1	2015
<i>Medical Image Analysis</i>	13.83	2	2016, 2023
<i>Natural Communications</i>	12.12	2	2017
*Psychiatry research	2.39	1	2018
* <i>Scientific Reports</i>	5.00	3	2016-present
* <i>Magnetic Resonance in Medicine</i>	3.92	18	2006-2021
* <i>NeuroImage</i>	7.40	95	2009-present
* <i>Brain Imaging and Behavior</i>	3.23	19	2013-2021
*Alzheimer's & Dementia	21.57	10	2018-present
*Human Brain Mapping	4.93	3	2019-2020
*Journal of Neurotrauma	5.27	3	2021-present
*Alzheimer's & Dementia: Diagnosis, Assessment and Disease Monitoring	5.33	2	2019
*Neurology	11.80	1	2021
*Journal of Neuroscience	6.17	2	2021
*Network Neuroscience	4.64	2	2021
*Neurobiology of Aging	4.67	1	2022
*IEEE-TMI	10.05	1	2022
*NeuroImage Clinical	4.88	1	2022
*Brain	15.26	2	2022
*Journal of Neurology, Neurosurgery, and Psychiatry by British Medical Journal	10.15	1	2022
*Journal of Alzheimer's Disease	4.47	1	2023

Journal editorial board

Journal	Impact factor	Dates
* <i>NeuroImage</i>	7.40	2018-present
* <i>Frontiers in Neuroscience & Neurology</i>	3.57	2020-2021

Editor

Journal	Impact factor	Dates
* <i>Frontiers in Neuroscience: Special Topic: Brain Imaging Methods</i>	3.88	2019-2020

Organizer/committee member/moderator

Organization	Activity	Role	Dates
Center for Cognitive Neuroscience, Dartmouth College	2 nd International Neural Computation Workshop	Co-organizer	2012

*Reception, International Society of Magnetic Resonance in Medicine (ISMRM)	Welcoming newbie	MR expert	2017, 2018, 2019, 2022
*Publication Committee, ISMRM	Review policy	Committee Member	2017-2020
*Reception, ISMRM	Fun Run	Volunteer	2019
*Annual Meeting Program Committee, ISMRM	Scientific sessions	Moderator	2017, 2021, 2022(2x)
*ISMRM Workshop in Neurofluid	Scientific session	Moderator	2022
*ISMRM annual meeting	Educational session	Moderator	2023
*NINDS	TBI Classification Workshop	Working Group member	2023-2024

PUBLICATIONS - RESEARCH

Book Chapter

***Wu YC**. Microstructural imaging of the human brain with normal and “abnormal” aging using diffusion magnetic resonance imaging. The Neuroscience of Aging, Book 2, Chapter 2.3, Editor Preedy VR, Publisher Elsevier 2021.

Invited Article

*Broxmeyer HE, Yoder KK, **Wu YC**, Hutchins GD, Cooper SH, Farag SS. The Brain: Is it a Next Frontier to Better Understand the Regulation and Control of Hematopoiesis for Future Modulation and Treatment? Stem Cell Reviews and Reports 2021. <https://doi.org/10.1007/s12015-021-10203-0>

*Gatto RG, **Wu YC**. Editorial: Innovative Imaging Techniques in Preclinical Models of Neurodegenerative Diseases. Frontiers in Neuroscience. 2021 doi: 10.3389/fnins.2021.801037

* McCrea MA, Broglio SP, Wu YC, Nencka AS, Koch KM, Saykin AJ, Brett BL, Klein AP, Meier TB, Pasquina P, McAllister TW. Advanced Neuroimaging of Concussion: Findings from the CARE Consortium Brain Injury Professional. 2022 submitted

Peer-Reviewed Publications

1. Field AS, Alexander AL, **Wu YC**, Hasan KM, Witwer B, Badie B. Diffusion Tensor Eigenvector Directional Color Imaging Patterns in the Evaluation of Cerebral White Matter Tracts Altered by Tumor. *J Magn Reson Imaging* 2004;20(4):555-562. (IP=3.08)
2. **Wu YC**, Field AS, Badie B, Alexander AL[†]. Quantitative Analysis of Diffusion Tensor Orientation: Theoretical Framework. *Magnetic Resonance in Medicine* 2004;52(5):1146-1155. (IP=3.92)
3. Field AS, **Wu YC**, Alexander AL. Principal Diffusion Direction in Peritumoral Fiber Tracts: Color Map Patterns and Directional Statistics. *Ann NY Acad Sci* 2005;1064:193-201. (IP=4.71)
4. Alexander AL, **Wu YC**, Venkat PC. Hybrid Diffusion Imaging (HYDI). In proc. IEEE-EMBS, New York City, USA, 2006. p2245-2248.
5. Alexander AL, Lee JE, **Wu YC**, Field AS. Comparison of DTI Measurements at 1.5T and 3.0T with and without Parallel Imaging. *Neuroimaging Clinical N Am*. 2006;16(2):299-309. (IP=4.52)
6. **Wu YC**[†], Alexander AL. A Method for Calibration Diffusion Gradients in Diffusion Tensor Imaging. *J Comput Assist Tomogr* 2007;31(6):984-993. (IP=1.39)
7. **Wu YC**[†], Alexander AL. Hybrid Diffusion Imaging. *NeuroImage* 2007;36(3):617-629. (IP=7.4)

8. Liu H-L, Chen H-M, **Wu YC**, Lim S-N, Huang C-M, Hsu Y-Y, Wu T. False Positive Analysis of Functional MRI during Simulated Deep Brain Stimulation. *J Magn Reson Imaging* 2008;27:1439-1442. (IP=3.08)
9. **Wu YC**[†], Field AS, Alexander AL. Computation of Diffusion Function Measures in q-Space Using Magnetic Resonance Hybrid Diffusion Imaging. *IEEE Trans Med Imaging* 2008;27(6):858-865. (IP=11)
10. Chung M, **Wu YC**, Alexander AL. 3D Eigenfunction Expansion of Sparsely Sampled 2D Cortical Data. International Symposium on Biomedical Imaging (ISBI), 2009. P113-116. DOI: [10.1109/ISBI.2009.5192996](https://doi.org/10.1109/ISBI.2009.5192996)
11. O'Halloran RL, Holmes JH, **Wu YC**, Alexander AL, Fain SB. Helium-3 MR q-Space Imaging with Radial Acquisition and Iterative Highly Constrained Back-Projection. *Magnetic Resonance in Medicine* 2010;63:41-50. (IP=3.92)
doi: [10.1002/mrm.22158](https://doi.org/10.1002/mrm.22158)
12. **Wu YC**[†], Field AS, Whalen PJ, Alexander AL. Age and Gender Related Changes in the Normal Human Brain using Hybrid Diffusion Imaging (HYDI). *NeuroImage* 2011;54:1840-1853. (IP=7.4)
13. **Wu YC**[†], Field AS, Duncan ID, Samsonov AA, Kondo Y, Tudorascu D, Alexander AL. High b-value and diffusion tensor imaging in a canine model of dysmyelination and brain maturation. *NeuroImage* 2011;58:829-837. (IP=7.4)
14. Hosseinbor AP, Chung MK, **Wu YC**, Alexander AL. Bessel Fourier Orientation Reconstruction: An Analytical EAP Reconstruction Using Multiple Shell Acquisitions in Diffusion MRI. In MICCAI (2) 2011;217-225.
15. Hosseinbor AP, Chung MK, **Wu YC**, Fleming JO, Field AS, Alexander AL. Extracting Quantitative Measures from EAP: A Small Clinical Study using BFOR. In MICCAI 2012:280-287.
16. Connolly AC, Guntupalli SJ, Gors J, Hanke M, Halchenko YO, **Wu YC**, Abdi H, Haxby JV. Representation of Biological Classes in the Human Brain. *J. of Neuroscience* 2012;32:2608-2618. (IP=5.92)
17. Samsonov A, Alexander AL, Mossahebi P, **Wu YC**, Duncan ID, Field AS. Quantitative MR imaging of two-pool magnetization transfer model parameters in myelin mutant shaking pup. *Neuroimage* 2012 Sep;62(3):1390-8. (IP=7.4)
18. Hosseinbor AP, Chung MK, **Wu YC**, Alexander AL. Bessel Fourier Orientation Reconstruction (BFOR): An Analytical Diffusion Propagator Reconstruction for Hybrid Diffusion Imaging and Computation of q-Space Indices. *NeuroImage* 2012;64:650-670. (IP=7.4)
19. Liu JV, Kobylarz EJ, Darcey TM, Lu Z, **Wu YC**, Meng M, Jobst BC. Improved mapping of interictal epileptiform activity with EEG-fMRI and voxel-wise functional connectivity analysis. *Epilepsia* 2014;55(9):1380-1388. (IP=4.71)
20. Hosseinbor AP, Chung MK, **Wu YC**, Alexander AL, Bendlin BB. A 4D hyperspherical interpretation of q-space. *Med Image Comput Assist Interv* 2014;16(3):501-509.
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22. Kodiweera C, **Wu YC**[†]. Validation of Hybrid Diffusion Imaging (HYDI) Acquisition Scheme for NODDI Model Computation. *Data in Brief*. 2016;7:1131-1138. (IP=0.21)
23. Kodiweera C, Alexander AL, Jaroslaw H, McAllister TW, **Wu YC**[†]. Age Effects and Sex Differences in Human Brain White Matter of Young to Middle-Aged Adults: A DTI, NODDI, and q-Space Study. *Neuroimage*. 2016; 128:180-192. (IP=7.4)
24. Kim JM, Brown AC, Mattek AM, Chavez SJ, Taylor JM, Palmer AL, **Wu YC**, Whalen PJ. The inverse relationship between the microstructural variability of amygdala-prefrontal pathways and trait anxiety is moderated by sex. *Frontiers in Systems Neuroscience*, 2016;00093. (IP=3.79)
25. Cong S, Rizkalla M, Salama P, Risacher SL, West JD, **Wu YC**, Apostolova L, Tallman E, Saykin AJ, Shen L, ADNI. Building a surface atlas of hippocampal subfields from high resolution T2-weighted MRI scans using landmark-free surface registration. MWSCAS'16: The IEEE 59th International Midwest Symposium on Circuits and Systems, Abu Dhabi, United Arab Emirates, October 16-19, 2016.
26. Wen Q, Stirling BD, Sha L, Shen L, Whalen PJ, **Wu YC**[†]. Parcellation of Human Amygdala Subfields Using Orientation Distribution Function and Spectral K-means Clustering. *Medical Image Computing & Computer Assisted Intervention (MICCAI)*, P.3. Athens, Greece, 2016. Published in Springer 2017 P123-133.

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28. Wen Q, Kodiweera C, Dale B, Shivraman G, **Wu YC**[†]. Rotating single-shot acquisition (RoSA) with composite reconstruction for fast high-resolution diffusion imaging. *Magnetic Resonance in Medicine*, 2018;79:264-275. doi: [10.1002/mrm.26671](https://doi.org/10.1002/mrm.26671) (IP=3.92)
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37. *Xie L, Amico E, Salama P, **Wu YC**, Fang S, Sporns O, Saykin AJ, Goni J, Yan J, Shen L. Heritability Estimation of Reliable Connectomic Features. *Connectomic in Neuroimaging*. 2018;11083:58–66.
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40. *Ho CY, Deardorff R, Kralik SF, West J, **Wu YC**, Shih CS. Comparison of multi-shot and single shot echo-planar diffusion tensor techniques for the optic pathway in patients with neurofibromatosis type 1. *Neuroradiology*. 2019;61(4):431-441. doi: [10.1007/s00234-019-02164-6](https://doi.org/10.1007/s00234-019-02164-6) (IP=2.35).
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46. *Brett BL, **Wu YC**, Mustafi SM, Saykin AJ, Koch KM, Nencka AS, Giza CC, Goldman J, Guskiewicz KM, Mihalik JP, Duma SM, Broglio SP, McAllister TW, McCrea MA, Meier TB. The association between persistent white-matter abnormalities and risk of repeat injury after sport-related concussion. *Frontier Neurology*. 2020;10:1345. (IP=3.55)
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51. *Ye Z, Gary SE, Sun P, Mustafi SM, Glenn GR, Yeh FC, Merisaari H, Huang GS, Kao HW, Lin CY, **Wu YC**, Jensen JH, Song SK. The Impact of Edema and Fiber Crossing on Diffusion MRI Metrics: DBSI vs. dODF. *NMR in Biomedicine*. 2021;34(1). (IP=3.04)
52. *Grecco GG, Mork B, Haggerty DL, Reeves KC, Gao Y, Hoffman H, Huang JY, Katner S, Engleman EA, Masters AR, Metzger C, Newell EA, Kim J, Allen MR, Yamamoto BK, Sheets PL, **Wu YC**, Lu HC, Atwood BK. Prenatal Methadone Exposure Disrupts Behavioral Development and Alters Motor Neuron Intrinsic Properties and Local Circuitry. *eLife*. 2021 doi: [10.7554/eLife.66230](https://doi.org/10.7554/eLife.66230). (IP= 8.14)
53. *Chumin EJ, Risacher SL, West JD, Apostolova LG, Farlow MR, McDonald BC, **Wu YC**, Saykin AJ, Sporns O. Time-varying ventral attention network stability and cognitive function along the Alzheimer's disease spectrum. *NeuroImage Clinical*. 2021;31:102726. (IP=4.88).
54. *Risacher SL, West JD, Deardorff R, Gao Sujuan, Farlow MR, Brosch J, Apostolova LG, McAllister TW, **Wu YC**, William JJ, Landau SM, Weiner MW, Saykin AJ, for the Alzheimer's Disease Neuroimaging Initiative. Head injury is associated with tau deposition on PET in MCI and AD patients. *Alzheimer's & Dementia: Diagnosis, Assessment and Disease Monitoring*. 2021;24;13(1):e12230. (new journal cite score 5.33)
55. *Hall Z, Chien B, Risacher SL, Saykin AJ, **Wu YC**[†], Wen Q[†]. Tau Deposition and Structural Connectivity Demonstrate Differential Association Patterns with Neurocognitive Tests. *Brain Imaging and Behavior*, 2021;Sep 17. doi: [10.1007/s11682-021-00531-7](https://doi.org/10.1007/s11682-021-00531-7). April. **Featured on the front cover**. (IP=3.23)

56. *Vishnubhotla RV, Radhakrishnan R, Kveraga K, Deardorff R, Ram C, Pawale D, **Wu YC**, Renschler J, Subramaniam B, Sadhasivam S. Advanced Meditation Alters Resting-state Brain Network Connectivity Correlating with Improved Mindfulness. *Frontiers in Psychology*. 2021;18;12:745344. (IP=2.99)
57. *Fadnavis S, Endres S, Wen Q, **Wu YC**, Cheng H, Koudoro S, Rane S, Rokem A, Garyfallidis. Bifurcated Topological Optimization for IVIM. *Frontiers in Neuroscience*. 2021; doi: 10.3389/fnins.2021.779025. (IP=4.5)
58. *Mustafi SM, Harezlak J, Giza CC, Goldman J, Guskiewicz KM, Mihalik JP, LaConte SM, Duma S, Broglio SP, McCrea M, McAllister TW, **Wu YC**[†] Effects of White-Matter Tract Length in Sports-Related Concussion: A Tractography Study from the NCAA-DoD CARE Consortium. *J. Neurotrauma*. 2022Nov;39(21-22):1495-1506. (IP= 5.27)
59. *Shahid SS, Wen Q, Risacher SL, Farlow MR, Unverzagt FW, Apostolova LG, Foroud TM, Zetterberg H, Blennow K, Saykin AJ, **Wu YC**[†]. Hippocampal-subfield microstructures and their relation to plasma biomarkers in Alzheimer's disease. *Brain*. 2022;145(6):2149-2160. [10.1093/brain/awac138](https://doi.org/10.1093/brain/awac138). (IP= 15.26) **featured in the editorial commentary**
60. *Elsaid NMH, Coupé P, Saykin AJ, **Wu YC**. Structural Connectivity Mapping in Human Hippocampal-Subfields Using Super-Resolution HYDI MRI: A Feasibility Study. *Neuroradiology*. 2022;64(10):1989-2000. (IP= 2.84)
61. *Vijayakrishnan Nair V, Kish BR, Inglis B, Yang HC, Wright AM, **Wu YC**, Zhou X, Schwichtenberg AJ, Tong Y. Human CSF movement influenced by vascular low frequency oscillations and respiration. *Frontier in Neuroscience* 2022 accepted (IP = 4.87).
62. *Wen Q, Tong Y, Zhou X, Dzemidzic M, Ho CY, **Wu YC**. Assessing Pulsatile Waveforms of Paravascular Cerebrospinal Fluid Dynamics using CARDiac-cycle Resolved Diffusion-weighted Imaging (CARDI). *NeuroImage* 2022, accepted (IP=7.4).
63. *Grecco GG, Shahid S, Atwood BK, **Wu YC**[†]. Alterations of Brain Microstructures in a Mouse Model of Prenatal Opioid Exposure Detected by Diffusion MRI. *Scientific Reports*, 2022 accepted (IP = 5.00).
64. *Martinez P, Patel H, You Y, Jury N, Perkins A, Lee-Gosselin A, Taylor X, You Y, Di Prisco GV, Huang X, Dutta S, Wijeratne A, Redding-Ochoa J, Shahid SS, Mosley AL, **Wu YC**, McKinzie D, Rochet C, Zhang J, Atwood B, Troncoso J, Lasagna-Reeves CA. Bassoon contributes to tau-seed neurotoxicity and propagation. *Nature neuroscience*. 2022 Accepted (IP=24.88).
65. *Swinford CG, Risacher SL, **Wu YC**, Apostolova LG, Gao S, Bice PJ, and Saykin AJ. Altered Cerebral Blood Flow in Older Adults with Alzheimer's Disease: A Systematic Review. 2022 *Brain Imaging and Behavior*. accepted
66. **Wu YC**[†], Wen Q, Gill JM, Thukral R, Gao S, Lane KA, Meier TB, Riggen LD, Harezlak J, Giza CC, Goldman J, Guskiewicz KM, Mihalik JP, LaConte SM, Duma SM, Broglio SP, Saykin AJ, McAllister TW, McCrea MA. Longitudinal associations between blood biomarkers and white-matter MRI in sport-related concussion: A study of the NCAA-DoD CARE Consortium. *Neurology* 2023, accepted (IP=11.8).
67. *Yoder KK, Chumin EJ, Mustafi SM, Halcomb ME, Hile KL, Plawecki MH, O'Connor SJ, Dzemidzic M, **Wu YC**. Effects of acute alcohol intoxication and chronic alcohol use on neurite orientation dispersion and density imaging (NODDI) parameters. *Psychopharmacology* 2023 accepted. (IP=4.42)
68. Newman CL, Surowiec RK, Swallow EA, Metzger CE, Kim J, Tomaschke AA, Chen NX, Allen MR, Wallace JM, Moe SM, **Wu YC**, Niziolek PJ. Assessing cortical bone porosity with MRI in an animal model of chronic kidney disease. *Bone* 2023, accepted. (IP=4.63)
69. Shahid S, Grecco GG, Atwood BK, **Wu YC**. Perturbed neurochemical and microstructural organization in a mouse model of prenatal opioid exposure: a multi-modal magnetic resonance study. *Plos One*, 2023 accepted. (IP=3.75)
70. Vijayakrishnan Nair V, Kish BR, Chong P, Yang HC, **Wu YC**, Tong Y, Schwichtenberg AJ. Neurofluid coupling during sleep and wake states. 2022 *SLEEP Medicine* accepted. (IP=4.84)
71. *Swinford CG, Risachera SL, Vosmeiera A, Deardorffa R, Chuminb EJ, Dzemidzicb M, **Wu YC**, Gaob S, McDonald BC, Yoder KK, Unverzagt FW, Wang S, Farlowb MR, Broschb JR, Clarkb DG, Apostolovaa LG, Simsa J, Wang DJ, and Saykin AJ. Amyloid and Tau Pathology are Associated with Cerebral Blood Flow in Nondemented Older Adults with and without Vascular Risk Factors for Alzheimer's Disease. 2023 *Neurobiology of Aging*, accepted (IP=5.13)

72. *Karathanasis SF, Fitz SD, Lukkes JL, **Wu YC**, Wade CD, Shekhar A, Molosh AI. Hierarchical brain network regulating mouse courtship behavior and ultrasonic vocal communication. *Nature Neuroscience* 2022 resubmitted a major revision.
73. *Weaver C, Xiao L, Wen Q, **Wu YC**, Harezlak J. Biclustering Multivariate Longitudinal Data with Application to Recovery Trajectories of White Matter After Sport-Related Concussion. *Annals of Applied Statistics*. 2022 submitted.
74. Chumin EJ, Cutts SA, Risacher SL, Apostolova LG, Farlow MR, McDonald BC, **Wu YC**, Betzel R, Saykin AJ, Sporns O. Edge Time Series Components of Functional Connectivity and Cognitive Function in Alzheimer's Disease. *Brain Imaging and Behavior*, 2023 submitted.
75. Yang HC, Nguyen T, White FA, Naugle KM, **Wu YC**[†]. White matter microstructural changes in post-traumatic headache: A diffusion tensor imaging (DTI) study. *Pain*, 2023 submitted.
76. Wright AM, **Wu YC**, Risacher SL, Saykin AJ, Tong Y, Wen Q. Coupled vascular and paravascular fluid dynamics in the human brain reveal age-related changes. *PNAS*, 2023 submitted.
77. Wen Q, Wright A, Tong Y, Zhao Y, Risacher SL, Saykin AJ, **Wu YC**, Riley K, Limaye K. Paravascular Fluid Dynamics Reveal Arterial Stiffness Assessed using Dynamic Diffusion-Weighted Imaging. *NMR*, 2023 submitted.

IP: Impact Factor

† Corresponding author

* in rank activity

Peer-Reviewed Conference Abstracts (First Author)

Abstracts for the International Society of Magnetic Resonance in Medicine (ISMRM) are reviewed by 3-5 reviewers, and the acceptance rate is approximately 55% for poster and 15% for oral presentations.

1. **Wu YC** et al. Characteristic MRI findings of spinal angioliipoma, a case report. The 49th Annual Meeting of the Radiological Society of ROC, 2000.
2. **Wu YC**, Field AS, Badie B, Alexander AL. Quantitative analysis of diffusion tensor eigenvectors of white matter infiltration by tumors and edema. ISMRM 11th Annual meeting, Toronto, Canada, 2003. Accepted for poster presentation.
3. **Wu YC**, Field AS, Alexander AL. Quantitative analysis of diffusion tensor orientation: theoretical framework and normal white matter anatomy. ISMRM 11th Annual meeting, Toronto, Canada, 2003. Accepted for poster presentation.
4. **Wu YC**, Alexander AL. The effect of the finite q-space sampling in diffusion spectrum imaging. ISMRM 13th Annual meeting, Miami, USA, 2005. Accepted for oral presentation.
5. **Wu YC**, Alexander AL. Hybrid diffusion imaging for complex diffusion characterization. ISMRM 13th Annual meeting, Miami, USA, 2005. Accepted for oral presentation.
6. **Wu YC**, Thottakara PJ, Alexander AL. Diffusion Gradient Calibration for DTI. ISMRM 13th Annual meeting, Miami, USA, 2005. Accepted for poster presentation.
7. **Wu YC**, Alexander AL, Lee JE, Field AS. Comparison of DTI measurements at 1.5T and 3.0T with and without parallel imaging. ASNR 44th Annual meeting, San Diego, USA, 2006. Accepted for poster presentation.
8. **Wu YC**, Alexander AL. Quantitative comparison between Hybrid Diffusion Imaging and Diffusion Spectrum Imaging. ISMRM 14th Annual meeting, Seattle, USA, 2006. Accepted for poster presentation.
9. **Wu YC**, Samsonov AA, Alexander AL, Duncan ID, Field AS. Quantitative magnetization transfer, and diffusion spectrum imaging in a myelin mutant at 3T. In Proc. ASNA 45th Annual meeting, Chicago, USA, 2007. Accepted for poster presentation.

10. **Wu YC**, Alexander AL, Duncan ID, Field AS. Hybrid diffusion imaging in a brain model of dysmyelination. ISMRM-ESMRMB Joint Annual meeting, Berlin, Germany, 2007. Accepted for oral presentation.
11. **Wu YC**, Field AS, Alexander AL. Computation of diffusion function measures in q-space using Magnetic resonance hybrid diffusion imaging. ISMRM 16th Annual meeting, Toronto, Canada, 2008. Accepted for oral presentation.
12. **Wu YC**, Haeberli FB, Huang YM, Field AS, Alexander AL. Age related changes of the human brain using magnetic resonance hybrid diffusion imaging. OHBM Melbourne, Australia, 2008. Accepted for poster presentation.
13. **Wu YC**, Alexander AL, Duncan ID, Field AS. Hybrid Diffusion Imaging (HYDI) in a Brain Model of Dysmyelination. ISMRM 17th Annual meeting, Honolulu, Hawaii, USA, 2009. Accepted for oral presentation.
14. **Wu YC**, Haeberli FB, Field AS, Alexander AL. Age and Gender Related Changes of Human Brains Using Magnetic Resonance Hybrid Imaging. ISMRM 17th Annual meeting, Honolulu, Hawaii, USA, 2009. Accepted for poster presentation.
15. **Wu YC**, Mistretta CA, Alexander AL, Andrews T, Whalen PJ, Haxby J. High Angular Resolution Diffusion Imaging (HARDI) with Highly Constrained Back Projection Reconstruction (HYPR). ISMRM 18th Annual meeting, Stockholm, Sweden, 2010. Accepted for poster presentation
16. **Wu YC**, Connolly AC, Whalen PJ, Haxby J. Comparison of fMRI Image Quality Using a 32-Channel Head Coil versus an 8-Channel Head Coil. OHBM Quebec City, Canada, 2011. Accepted for poster presentation.
17. **Wu YC**, McAllister TW. Hybrid Diffusion Imaging (HYDI) of Mild Traumatic Brain Injury (MTBI). Poster presentation delivered at the ISMRM 20th Annual meeting, Melbourne, Australia 2012.
18. **Wu YC**, Kodiweera C. Rotating Short-Axis EPI “blades” as veering diffusion gradient directions with composite reconstruction (RSA). ISMRM-ESMRMB Joint Annual meeting, Milan, Italy, 2014. Accepted for oral presentation.
19. **Wu YC**. Quantitative Evaluation of Rotating Short-Axis (RSA) EPI for High Spatial Resolution Diffusion MRI. ISMRM Toronto, Canada, 2015. Accepted for poster presentation.
20. **Wu YC**, Mustafi SM, Harezlak J, Koch KM, Nencka AS, Meier TB, Giza CC, DiFiori JP, Guskiewicz KM, Mihalik JP, LaConte SM, Duma S, West JD, Saykin AJ, McCrea M, McAllister TW. White-Matter Abnormalities in Sport-Related Concussion: A Longitudinal Study of Diffusion Magnetic Resonance Imaging from the NCAA-DoD CARE Consortium. Military Health System Research Symposium (MHSRS). Florida, USA, 2017. Accepted for oral presentation.
21. ***Wu YC**, Mustafi SM, Harezlak J, Koch K, Nencka A, Meier TB, West J, Giza CC, DiFiori J, Guskiewicz K, Mihalik J, LaConte SM, Duma SM, Broglio S, Saykin AJ, McCrea M, McAllister TW. White-Matter Abnormalities in Sport-Related Concussion: A Longitudinal Study of Diffusion Magnetic Resonance Imaging from the NCAA-DoD CARE Consortium. MILITARY HEALTH SYSTEM RESEARCH SYMPOSIUM, MILITARY HEALTH SYSTEM RESEARCH SYMPOSIUM, Gaylord Palms Resort and Convention Center, Kissimmee, FL, United States, Academic, National. August 2018. Accepted for poster presentation.
22. ***Wu YC**, Mustafi SM, Harezlak J, Goni J, Flashman L, McAllister TW. Effects of Track Length on White-Matter Abnormalities in Mild Traumatic Brain Injury. Conference, Organization for Human Brain Mapping, Organization for Human Brain Mapping, Roma Convention Center, Roma, Italy, Academic, International. June 2019. Accepted for poster presentation.
23. ***Wu YC**, Mustafi, SM, Harezlak J, Riggen L, Koch K, Nencka A, Meier TB, Wang Y, Giza CC, DiFiori J, Guskiewicz K, Mihalik J, LaConte SM, Duma SM, Broglio S, McCrea M, Saykin AJ, McAllister TW. Effects of Tract Length in White Matter Alterations After Sports-Related Concussion: A Diffusion MRI Study from the NCAA-DoD CARE Consortium. Conference, International Society for Magnetic Resonance in Medicine, International Society for Magnetic Resonance in Medicine, Montreal Convention Center, Academic, International. May 2019. Accepted for poster presentation.
24. ***Wu YC**, Mustafi SM, Harezlak J, Elsaid NM, Lin Z, Riggen L, Koch K, Nencka A, Meier TB, Wang Y, Giza C, DiFiori J, Guskiewicz K, Mihalik J, LaConte S, Duma S, Broglio S, McCrea M, Saykin AJ, McAllister TW. Longitudinal White-Matter Abnormalities in Sports-Related Concussion: A Study of Diffusion Magnetic Resonance Imaging from the NCAA-DoD CARE Consortium. Conference, International Society for Magnetic Resonance in Medicine, International Society for Magnetic Resonance in Medicine, Montreal Convention Center, Canada, Academic, International. May 2019. Accepted for poster presentation.

25. ***Wu YC**[†], Harezlak J, Mustafi SM, Elsaid NMH, Lin Z, Wen Q, Riggan LD, Koch KM, Nencka AS, Meier TB, Mayer AR, Wang Y, Giza CC, DiFiori JP, Guskiewicz KM, Mihalik JP, LaConte SM, Duma SM, Broglio SP, Saykin AJ, McCrea MA, McAllister TW. Associations Between White-Matter Abnormalities and Clinical Outcomes in Sport-Related Concussion: A Longitudinal Study of Diffusion Magnetic Resonance Imaging from the NCAA-DoD CARE Consortium. MHSRS 2019. Accepted for poster presentation.
26. ***Wu YC**[†], Wen Q, Gill JM, Thukral R, Gao S, Lane KA, Meier TB, Riggan LD, Harezlak J, Giza CC, Goldman J, Guskiewicz KM, Mihalik JP, LaConte SM, Duma SM, Broglio SP, Saykin AJ, McAllister TW, McCrea MA. Longitudinal associations between blood biomarkers and white-matter MRI in sport-related concussion: A study of the NCAA-DoD CARE Consortium. International Society for Magnetic Resonance in Medicine, London, UK. May 2022. Accepted for oral presentation.

Acronyms: **ASNR:** American Society of Neuroradiology; **ESMRMB:** European Society for Magnetic Resonance in Medicine & Biology; **ISMRM:** International Society for Magnetic Resonance in Medicine; **OHBM:** Organization for Human Brain Mapping. **MHSRS:** Military Health System Research Symposium

Peer-Reviewed Conference Abstracts (senior author)

1. Kodiweera C, McAllister TW, **Wu YC**[†]. Hybrid Diffusion Imaging (HYDI) of Acute Mild Traumatic Brain Injuries (mTBI): A Comparison of Diffusion Measures between DTI, PDF and NODDI. 2013 ISMRM Workshop Diffusion as a Probe of Neural Tissue Microstructure, Podstrana, Croatia, 14-18 October 2013. Accepted for poster presentation.
2. Kodiweera C, Alexander AL, **Wu YC**[†]. Age and Gender - Related Changes in the Normal Human Brain Using Hybrid Diffusion Imaging (HYDI) with Neurite Orientation Dispersion and Density Imaging (NODDI) Analysis. ISMRM-ESMRMB Joint Annual meeting, Milan, Italy, 2014. Accepted for poster presentation.
3. Stirling BD, **Wu YC**[†], Sha L, Haxby J, Whalen PJ. Automated Segmentation of the Human Amygdala Using High Angular Diffusion Imaging (HARDI) and Spectral k-Means Clustering. ISMRM-ESMRMB Joint Annual meeting, Milan, Italy, 2014. Accepted for poster presentation.
4. Mustafi SM, Kodiweera C, Randolph JS, Ford JC, Wishart HA, **Wu YC**[†]. Neurite orientation dispersion and density imaging (NODDI) in Multiple Sclerosis. ISMRM Toronto, Canada, 2015. Accepted for poster presentation.
5. Kodiweera C, Alexander AL, **Wu YC**[†]. NODDI Measures Appear to be Sensitive to Both Age and Gender. ISMRM Toronto, Canada, 2015. Accepted for poster presentation.
6. Mustafi SM, Territo PR, McCarthy BP, Riley AA, Lei J, Lin C, Wen Q, Molitoris BA, Hutchins GD, **Wu YC**[†]. Magnetic Resonance Diffusion Tensor and q-space imaging in an Animal Model of Chronic Kidney Disease. ISMRM Singapore, 2016. Accepted for poster presentation.
7. Mustafi SM, Kodiweera C, Flashman LA, McAllister TW, **Wu YC**[†]. HYbrid Diffusion Imaging to Detect Acute White Matter Injury After Mild TBI. ISMRM, Singapore, 2016. Accepted for poster presentation.
8. Mustafi SM, Gandhi PK, Risacher SL, West JD, Tallman EF, O'Neill DP, Farlow MR, Unverzagt FW, Apostolova LG, Saykin AJ, **Wu YC**[†]. Hybrid Diffusion Imaging (HYDI) of White Matter Changes in Older Adults with Subjective Cognitive Decline (SCD): Assessment of Orientation Dispersion and Axonal Density. AAIC 2016, Toronto, Canada; accepted for poster presentation.
9. Wen Q, Kodiweera C, **Wu YC**[†]. "Windowed" Composite Reconstruction Improves Rotating Short-Axis High Resolution DWI (RSA-DWI) in both Simulation and Human data. ISMRM, Singapore, 2016. Accepted for oral presentation.
10. Wen Q, Mustafi SM, Harezlak J, Risacher SL, West JD, Tallman E, Farlow MR, Unverzagt FW, Apostolova LG, Saykin AJ, **Wu YC**[†]. Axonal Density Associated with Cognitive Change Index in Older Adults with Subjective Cognitive Decline (SCD). AAIC 2017, London, UK; accepted for oral presentation.

11. Mustafi SM, Kodiweera C, Harezlak J, Flashman LA, McAllister TW, **Wu YC[†]**. White matter changes and correlations with cognitive functions in semi-acute mild traumatic brain injury (mTBI): A hybrid diffusion imaging study. ISMRM 2017, Hawaii, USA; accepted for oral presentation.
12. Mustafi SM, Harezlak J, Koch KM, Nencka AS, Meier TB, Saykin AJ, McCrea M, McAllister TW, **Wu YC[†]**, for CARE Consortium. Acute white matter abnormalities in sport-related concussion: A DTI study. ISMRM 2017, Hawaii, USA; accepted for oral presentation.
13. Wen Q, Graham MS, Drobnjak I, Zhang H, **Wu YC[†]**. Improving angular resolution in multi-shot turbo spin-echo imaging using rotating single-shot acquisition (RoSA). ISMRM 2017, Hawaii, USA; accepted for oral presentation.
14. Wen Q, Dale BM, Giri S, **Wu YC[†]**. Rotating Single-shot Acquisition (RoSA) combined with parallel imaging for fast high-resolution diffusion imaging. ISMRM 2017, Hawaii, USA; accepted for e-poster presentation.
15. Wen Q[†], Graham MS, Mustafi SM, Zhang H, Drobnjak I, **Wu YC[†]**. Comparing the LPCA and MPPCA denoise approaches for diffusion MRI using human data simulation. ISMRM 2017, Hawaii, USA; accepted for e-poster presentation.
16. *Wen Q, Li F, Zhou K, **Wu YC**. Intravoxel Incoherent Motion (IVIM) Fingerprinting. ISMRM 2018, Paris, France; accepted for poster presentation.
17. *Mustafi SM, Harezlak J, Goni J, Flashman LA, McAllister TW, **Wu YC[†]**. Effects of Track Length on White Matter Alterations in Mild Traumatic Brain Injury. ISMRM 2018, Paris, France; accepted for poster presentation.
18. *Wen Q, Mustafi SM, Harezlak J, Li J, Risacher SL, West JD, Tallman E, Farlow MR, Unverzagt FW, Apostolova LG, Saykin AJ, **Wu YC[†]**. White-Matter Microstructure in Early Stage Alzheimer's Disease. AAIC 2018, Chicago, USA; accepted for poster presentation.
19. *Elsaid NMH, Wen Q, Mustafi SM, Risacher SL, Farlow MR, Apostolova LG, Saykin AJ, Harezlak J, **Wu YC[†]**. Alterations in White-Matter Diffusion Metrics in Preclinical Alzheimer's Disease: A Subject-Specific Analysis. AAIC 2018, Chicago, USA; accepted for poster presentation.
20. *Wen Q, Risacher SL, Mustafi SM, Harezlak J, Xie L, West JD, Farlow MR, Unverzagt FW, Apostolova LG, Saykin AJ, **Wu YC[†]**. Tau Propagation Pattern Is Evidenced Through Associations with Structural Tract Alterations: A Data Driven Approach. ISMRM 2019, Montreal, Canada; accepted for oral presentation.
21. *Wen Q, Li F, Zhou K, Leidecker C, **Wu YC[†]**. Golden-Angle Rotating Single-Shot Acquisition (GA-RoSA) for Simultaneous High-Resolution DTI and IVIM. Conference, International Society for Magnetic Resonance in Medicine, Montreal Convention Center, Canada, Academic, International. May 2019. Accepted for poster presentation.
22. *Elsaid NM, **Wu YC[†]**. Super-Resolution Diffusion Imaging using Deep Learning: A Feasibility Study. International Society for Magnetic Resonance in Medicine. Montreal Convention Center, Canada, Academic, International. May 2019. Accepted for poster presentation.
23. *Elsaid NM, Coupe P, **Wu YC[†]**. Super-Resolution Hybrid Diffusion Imaging (SR-HYDI). International Society for Magnetic Resonance in Medicine, Montreal Convention Center, Canada, Academic, International. May 2019. Accepted for poster presentation.
24. *Elsaid NM, Coupe P, **Wu YC[†]**. Diffusion magnetic resonance imaging in the human hippocampal subfields using superresolution HYDI. International Society for Magnetic Resonance in Medicine. Montreal Convention Center, Canada, Academic, International. May 2019. Accepted for poster presentation.
25. *Wen Q, Risacher SL, Mustafi SM, Harezlak J, Xie L, Li J, West JD, Tallman E, Farlow MR, Unverzagt FW, Apostolova LG, Saykin AJ, **Wu YC[†]**. Spatially Selective Tau-Related White-Matter Pathway Alterations Identified by a Data-Driven Approach. AAIC & AIC 2019, Los Anglos; accepted for poster presentation.
26. *Elsaid NM, Coupe P, Saykin A, **Wu YC[†]**. Structural connectivity mapping in the human hippocampal subfields using super-resolution HYDI. AAIC & AIC 2019, Los Anglos, CA; accepted for poster presentation.
27. *Elsaid NMH, Coupé P, Saykin AJ, **Wu YC**. Diffusion measures and Connectometry in the Human Hippocampal-Subfields Using Super-Resolution HYDI. ISMRM 2020, Sydney, Australia; accepted for power pitch oral presentation

28. *Elsaid NMH, Zhuo J, Prince JL, **Wu YC**, Radhakrishnan R. Application of phase-based motion outlier detection to infant dMRI. ISMRM 2020, Sydney, Australia; accepted for poster presentation.
29. *Wen Q, Tong Y, Zhou X, Dziedzic M, Ho CY, **Wu YC**. Assessing Pulsatile Waveforms of Paravascular Cerebrospinal Fluid Dynamics using Cardiac-cycle Resolved Diffusion-weighted Imaging (CARDI). ISMRM 2022, London, UK: accepted for oral presentation.
30. Yang HC, Naugle K, Wen Q, White FA, **Wu YC**. Diffusion Tensor Imaging Biomarkers for Chronic Pain Following Mild Traumatic Injury. ISMRM 2022, London, UK: accepted for ePoster presentation.
31. *Yang HC, Wen Q, Harezlak J, Dziedzic M, Rikken LD, Giza CC, Goldman J, Guskiewicz KM, Mihalik JP, LaConte SM, Duma SM, Broglio SP, McCrea MA, McAllister TW, **Wu YC**. Using subject-specific analysis to investigate white matter abnormalities in sports-related concussion. MHSRS 2022, Florida, USA: accepted for Poster presentation.
32. Yang HC, Wen Q, Nguyen T, Naugle KM, White FA, **Wu YC**. White matter tract abnormalities and Post-traumatic Headache Following Mild Traumatic Brain Injury. MHSRS 2022, Florida, USA: accepted for Poster presentation.
33. *Shahid SS, Paraiso HC, Yu ICI, and **Wu YC**. Role of neurochemistry in amyloid pathology using 5xFAD transgenic mouse model of AD: A single-voxel Magnetic Resonance Spectroscopy (MRS) study. accepted for Poster presentation AAIC 2022.
34. *Shahid SS, Yen JH, Paraiso HC, **Wu YC**, and Yu ICI. Understanding the role of amyloid to cerebral microvasculature in Alzheimer's disease: A pre-clinical Intra Voxel Incoherent Motion (IVIM) MRI study. accepted for Poster presentation AAIC 2022.
35. Zia G, Shahid SS, Risacher SL, Saykin AJ, **Wu YC**. Longitudinal age effects in microstructures of the hippocampal subfields. Accepted for poster presentation at AAIC 2023.
36. Yang HC, Dziedzic M, Wen Q, Rikken LD, Broglio SP, McCrea MA, McAllister TW, Harezlak J, **Wu YC**. Subject-specific analysis reveals spatially heterogeneous white matter abnormalities in sports-related concussion. Accepted for poster presentation at ISMRM 2023.

Acronyms: **AAIC:** Alzheimer's Association International Conference; **ESMRMB:** European Society for Magnetic Resonance in Medicine & Biology; **ISMRM:** International Society for Magnetic Resonance in Medicine.

Patents & Intellectual Property

1. Title: High-resolution diffusion-weighted magnetic resonance imaging
Inventors: **Yu-Chien Wu** and Paul E. Holtzheimer
Status: Patent Number: WO2015057745 A1
2. Title: A method to improve speed and image quality for diffusion magnetic resonance imaging
Inventors: **Yu-Chien Wu** and Qiuting Wen
Status: Provisional application 2016

Aug. 18, 2023
(Date)



(Signature of Candidate)