

Danny J. J. Wang, Ph.D., M.S.C.E.Curriculum VitaeRevised Date: Sept 2016

- Full Contact: Professor of Neurology
 Director of Imaging Technology Innovation
 Mark & Mary Stevens Neuroimaging and Informatics Institute
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 University of Southern California
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 Email: jj.wang@loni.usc.edu
- Education: 1989-1993 B.S. Fu Dan University, Shanghai, China (Biophysics)
 1993-1998 Ph.D. University of Science and Technology of China, Beijing, China (Biophysics)
 2007-2010 M.S.C.E. (Master of Science in Clinical Epidemiology)
 University of Pennsylvania, School of Medicine, Philadelphia, PA
- Fellowship: 3/99-11/00 Postdoc Research Fellow, Department of Diagnostic Therapeutics, University of Connecticut Health Center, Farmington, CT (Advisor: Song Lai, Ph.D.)
 11/00-11/01 Postdoc Research Fellow, Departments of Neurology and Radiology, University of Pennsylvania School of Medicine, Philadelphia, PA (Advisor: John Detre, M.D.)
 11/01-9/03 Research Associate, Departments of Neurology and Radiology, University of Pennsylvania School of Medicine, Philadelphia, PA
- Professional Experience: 9/03-2/10 Research Assistant Professor, Department of Radiology, University of Pennsylvania School of Medicine, Philadelphia, PA
 1/06-2/10 Research Assistant Professor, Department of Neurology, University of Pennsylvania School of Medicine, Philadelphia, PA
 2/11-2/13 Adjunct Associate Professor, Department of Radiology, University of Pennsylvania School of Medicine, Philadelphia, PA
 2/10-6/15 Associate Professor-in-Residence, Department of Neurology, UCLA David Geffen School of Medicine, Los Angeles, CA
 2/11-6/15 Associate Professor-in-Residence (secondary), Department of Radiology, UCLA David Geffen School of Medicine, Los Angeles, CA
 7/15-6/16 Professor-in-Residence, Department of Neurology, UCLA David Geffen School of Medicine, Los Angeles, CA
 7/15-6/16 Professor-in-Residence (secondary), Department of Radiology, UCLA David Geffen School of Medicine, Los Angeles, CA

- 6/12-present Executive Director, UCLA-Beijing Joint Center for Advanced Brain Imaging
- 6/16-present Adjunct Professor, Department of Neurology, UCLA David Geffen School of Medicine, Los Angeles, CA
- 6/16-present Professor, Department of Neurology, Keck School of Medicine, University of Southern California, Los Angeles, CA
- 6/16-present Director of Imaging Technology Innovation, Mark & Mary Stevens Neuroimaging and Informatics Institute, Keck School of Medicine, University of Southern California, Los Angeles, CA

Professional Activities:

- 2004-present External reviewer for Hong Kong RGC (Research Grants Council)
- 2006 NICHD/NIH Special Emphasis Panel/Initial Review Group
2006 CHHD-C
- 2008 NSF Cognitive Neuroscience Advisory Panel
- 2008 External reviewer for Strategic Grant, MRC UK
- 2009 External reviewer for BBSRC fellowship grant, BBSRC, UK
- 2010 Consultant for Pfizer, Inc. Groton, CT
- 2011-2012 NIH Special Emphasis Panel ZRG1 OTC-K, ZDA1 GXM-A
- 2010-2012 UCLA Department of Neurology Graduate Education Committee
- 2011-present Legislative Assembly Member | UCLA Academic Senate
- 2013 NIH Study Section MEDI
- 2013-present UCLA Department of Neurology Appoint & Promotion committee
- 2015 Graduate Summer Research Mentorship (GSRM) Program Fellowship Review Committee
- 2015 NIH Study Section NOIT
- 2015 Consultant for Novartis, Inc. Basel, Switzerland

Awards, Honors and Membership in Honorary Societies:

- 1990-93 People's Scholarship
- 1997 HongKong Dong's Scholarship
- 2012-present Outstanding Reviewer for MRM and JMRI – ISMRM
- 2014 ISMRM Junior Fellow (Mentor)
- 2015 OHBM Merit Abstract Award (Mentor)

International Society of Magnetic Resonance in Medicine (Member 1998-present)
 Organization of Human Brain Mapping (Member 1999-present)
 American Association of Physicist in Medicine (Member 2015-present)

Editorial Positions:

- 2007-present Editorial Board Member The Open Medical Imaging Journal
- 2011-present Editorial Board Member The Scientific World JOURNAL (Radiology Domain)
- 2011 Guest Editor, Special issue of Journal of Cognitive Science
- 2014-present Editorial Board Member JSM Alzheimer's Disease and Related Dementia
- 2014 Guest Editor, Special issue of BioMed Research International

“Resting Brain Networks and Function”

2015-present Editorial Board Member Frontiers in Neuroscience and Neurology

Ad hoc Reviewer:

2002-present Magnetic Resonance in Medicine, NMR in Biomed.
 2004-present American Journal of Respiratory and Critical Care Medicine, Neuroscience Letters
 2005-present Journal of Cerebral Blood Flow and Metabolism, IEEE Transaction on Medical Imaging, Journal of the International Neuropsychological
 2007-present NeuroImage, Stroke, Neuropsychopharmacology, Journal of Magnetic Resonance Imaging
 2008-present Psychoneuroendocrinology, American Journal of Neuroradiology
 2010-present Medical Physics; American Journal of Psychiatry, Human Brain Mapping, American Journal of Psychiatry
 2011-present European Neurology, Journal of Neuroscience, Translational Stroke Research, MAGMA, PNAS
 2012-present Brain Connectivity, Psychopharmacology, Frontiers Psychology, Psychiatric Research: Neuroimaging
 2013-present PLoS One, Neuroradiology
 2015-present Biological Psychiatry, Brain Imaging and Behavior, PeerJ, Journal of Neurology, Neurosurgery, & Psychiatry
 2016-present Brain Stimulation, International Journal of Imaging Systems and Technology, Brain and Behavior, Lupus, Science in China, Scientific Report, Journal of Neurosci Method, Scientific Reports, Nature Communications

Teaching:

Faculty in UCLA Bioengineering Graduate Program 2010-2016
 Faculty in UCLA Biomedical Physics Graduate (BMP) Program 2011-2016
 Faculty in UCLA Neuroscience Inter-Department Graduate Program (IDP) 2012-2016

Courses:

1.	ISMRM annual meeting weekend education courses	2008-present
2.	UCLA, Advanced topics in MRI (resident course)	2010-2012
3.	UCLA Advances in MRI: Clinical MRS & Fast MRI Techniques (BMP222)	2011-2014
4.	UCLA Quantitative MRI and Contrast Agents (BMP225)	2012-2014
5.	UCLA Human Diseases: Current and Future Role of Biomedical Physics (BMP227)	2014-2016
6.	UCLA Advanced Topics in MRI (BMP229)	2014
7.	UCLA CTSI short course on translational neuroimaging	2013-2014
8.	Ethics and Accountability in Biomedical Research (C234)	2015-2016
9.	Neuroimaging and Neuromodulation (BE298)	2015-2016
10.	Principles of Neuroimaging (M284)	2016-2016

Research Grants and Fellowships Received:

Active:

UH2NS100614 Wang/Ringman/Kashani (PI) 10/1/16-9/30/21
 NINDS Imaging Cerebral and Retinal Microvasculature in Cerebral Small Vessel Disease
 This project aims to develop and evaluate MRI and OCTA markers of small vessel diseases
 Role: Principal Investigator

U01MH110008 Narr/Wang/Espinoza (PI) 9/2/16-5/31/20
 Perturbation of the Treatment Resistant Depression Connectome by Fast-acting Therapies
 This project aims to investigate connectome changes in patients with treatment resistant depression using the HCP protocol.
 Role: Co-Principal Investigator

R01 EB014922-01A1 Wang (PI) 4/1/13-3/31/17
 NIBIB Non-contrast 4D dynamic MRA in arteriovenous malformation
 This project will develop and validate a non-contrast 4D dynamic MRA technique for the evaluation of arteriovenous malformation.
 Role: Principal Investigator

R01NR015038 Kumar (PI) 4/1/15-1/31/19
 NINR Blood-Brain Barrier Deficit and Brain Injury in Obstructive Sleep
 To investigate BBB injury in obstructive sleep using diffusion weighted perfusion MRI and diffusion MRI.
 Role: Co-Investigator

R01NR014669 Woo/Kumar (PI) 9/12/14-6/30/18
 NINR Blood-Brain Barrier Dysfunction and Brain Injury in Heart Failure
 To investigate BBB injury in heart failure using diffusion weighted perfusion MRI and diffusion MRI.
 Role: Co-Investigator

U01 HD087221 Devaskar, Janzen, Sung (PI) 10/1/15-9/30/20
 NICHD Imaging Innovations for Placental Assessment in Response to Environmental Pollution
 This project will develop and evaluate noninvasive MRI of placenta throughout pregnancy.
 Role: Co-Investigator

U01-AG051218 Ringman (PI) 9/1/15-8/31/19
 NIA The structural and functional connectome across Alzheimer's disease subtypes
 This Connectome in Human Disease project investigates structural and functional connectome across Alzheimer's disease subtypes
 Role: Co-Investigator

Past:

R01NS081077 Wang (PI) 9/1/12-8/31/16
 NINDS Arterial spin labeling in acute ischemic stroke
 To evaluate ASL perfusion MRI in the diagnosis of acute ischemic stroke (AIS).
 Role: Principal Investigator

CDPH 13-12008 Ringman/Wang (PI) 05/01/13-4/30/16
 CDPH ASL perfusion and resting state fMRI in FAD

This California state funded project will evaluate ASL perfusion and resting state fMRI in familial AD

Role: Co-Principal Investigator

R01 MH080892 Wang (PI) 4/15/09-6/30/15
 NIMH Pediatric template of brain perfusion
 To develop a functional template or atlas of the normal pediatric brain using arterial spin labeling perfusion MRI.
 Role: Principal Investigator

Wang (PI) 05/01/13-04/30/15
 Biogen Idec Development and Optimization of Renal MRI in Lupus Nephritis
 This industry sponsored project will develop and optimize diffusion, perfusion, BOLD and T1rho MRI for kidney imaging in Lupus Nephritis and healthy controls.
 Role: Principal Investigator

Restrepo (PI) 05/01/14-04/30/15
 Pfizer Inc A PHASE 2 R DB PC TRAIL TO EVALUATE THE SAFETY, TOLERABILITY, PHARMACOKINETICS & EFFICACY OF PF-04360
 This industry sponsored project will evaluate a novel agent for cerebral amyloid angiopathy using MRI.
 Role: Co-Investigator

Wang (PI) 11/01/12-10/31/14
 Siemens Healthcare Development and Evaluation of 3D GRASE pCASL
 This industry sponsored project will develop and evaluate 3D GRASE based pCASL on the new Skyra system.
 Role: Principal Investigator

Wang (PI) 7/1/13-6/30/14
 UCLA CART Pilot grant NIH Perfusion and Connectivity in ASD
 This pilot project will explore ASL perfusion MRI and functional connectivity analysis in autism spectrum disorder.

HHSN275200900018C Holland/Toga (PI) 1/1/11-12/31/13
 NICHD Pediatric Functional Neuroimaging Research Network
 This project attempts to acquire and develop a database for resting state fMRI and ASL perfusion MRI in children 1mo to 17years old.
 Role: Co-Investigator

US-China Biomedical Collaboration Project
 R01 MH080892-04S1 Wang (PI) 7/1/12-6/30/13
 NIMH Pediatric template of brain perfusion and connectivity
 To investigate the relationship between CBF and structural and functional connectivity of pediatric brain using perfusion, diffusion, structural and functional MRI.
 Role: Principal Investigator

Wang (PI) 05/01/12-04/30/13
 Biogen Idec Development and Optimization of Renal MRI

This industry sponsored project will develop and optimize diffusion, perfusion, BOLD and T1rho MRI for kidney imaging.

Role: Principal Investigator

R01 MH080892-S1 (ARRA) Wang (PI) 10/1/09-9/30/12

NIMH Pediatric template of brain perfusion

To develop an integrated structural and functional template or atlas of pediatric brain using perfusion, diffusion, structural and functional MRI.

Role: Principal Investigator

Wang (PI) 06/01/09-05/30/12

Thrasher Research Fund Noninvasive Perfusion MRI in Pediatric Brain Tumor

This project explores the feasibility for the use of ASL as a biomarker of pediatric brain tumor.

Role: Principal Investigator (currently serve as consultant due to transfer to UCLA)

P50 AG016570-11A Wang (PI) 05/01/10-04/30/12

UCLA ADRC Pilot Quantitative Perfusion and Oxygenation MRI in MCI and AD

This project attempts to validate quantitative perfusion and oxygenation MRI with 15O-water and FDG PET in MCI and AD subjects.

Role: Principal Investigator

R01DA022807 Gee (PI) 05/1/08-04/30/11

NIMH Advanced neuroimaging registration methods: effects of prenatal cocaine exposure

To develop advanced image registration methods for analysis of perfusion, diffusion and structural MRI of adolescents with prenatal cocaine exposure.

Role: Co-Investigator

P30NS045839 Detre (PI) 04/01/03-11/30/13

NINDS Neuroscience Neuroimaging Center

This Center Core Grant provides infrastructure support for neuroimaging research.

Role: Co-Investigator

R01 MH080729 Detre (PI) 12/01/07-11/30/10

NIH Perfusion MRI for Multisite Studies of Brain Function

This project will develop and validate scalable 3D MRI pulse sequences for imaging cerebral blood flow on multiple scanner platforms.

Role: Co-Investigator

P41RR002305-20 Reddy (PI) 06/01/05-05/31/10

NIH A Resource for Magnetic Resonance and Optical Imaging

To develop innovative MR and optical technologies for biomedical research.

Role: Co-Investigator

R01 DA014129 Hurt (PI) 5/1/07 – 4/30/12

NIDA In Utero Cocaine Use: Adolescent and Young Adult

Neurocognitive Outcome Understanding long-term effects of in-utero cocaine use using neuroimaging and behavioral methods.

Role: Co-Investigator

R01 NS057400 Cucchiara (PI) 10/1/07 – 9/30/11
 NIH Circle of Willis variability and migraine
 To test the hypothesis that Circle of Willis variability is associated with migraine pathophysiology.
 Role: Co-Investigator

R01AT004921 Cohen (PI) 5/1/09-4/30/14
 NIH Lifestyle Modification and blood Pressure Study (LIMBS)
 RCT to test the effect of a structured 24 week yoga program on hypertension
 Role: Co-Investigator

R21MH72576 Wang (PI) 01/01/05-11/30/07
 NIMH Pediatric Template of Brain Perfusion
 To explore the development a functional template or atlas of the normal pediatric brain using arterial spin labeling perfusion MRI.
 Role: Principal Investigator

R21 HD049893 Wang (PI) 09/15/05-09/14/08
 NICDH Hemodynamic Neuroimaging of Pediatric Stroke
 To evaluate perfusion and diffusion MRI in the diagnosis and prognosis of pediatric stroke.
 Role: Principal Investigator

Wang (PI) 02/01/04-1/31/06
 Thrasher Research Fund ASL Perfusion MRI in Pediatric Brain Stroke
 Role: Principal Investigator

Lectures by Invitation:

- Aug 30, 2016 “Noncontrast perfusion MRI and dynamic MRA in cerebrovascular disorders” – Invited talk at Huntington Memorial Research Institute, Pasadena, CA
- May 14, 2016 “ASL perfusion MRI in stroke and cerebrovascular disorders” – Invited talk at Qianjian Radiology Workshop, Zhejiang University, Hangzhou, China
- Nov 23, 2015 “Quantitative perfusion and functional MRI in the era of connectome” – Invited talk at Biomedical Research Imaging Center (BRIC), University of North Carolina at Chapel Hill, Chapel Hill, NC
- Nov 22, 2015 “Quantitative perfusion and functional MRI in the era of connectome” – Invited talk at Department of Radiology, John Hopkins University, Baltimore, MD
- Nov 21, 2015 “ASL perfusion MRI and dynamic MRA” – Invited talk at Department of Radiology, John Hopkins University, Baltimore, MD
- July 22, 2015 “Overview of SMS in arterial spin labeling – the battle between 3D and 2D SMS” – Invited talk at ISMRM simultaneous multi-slice (SMS) workshop, Pacific Grove, CA
- June 3, 2015 “Assessing relationship between intracranial vascular compliance and aortic pulse wave velocity” – Oral presentation at 23rd ISMRM conference educational session “Quantitative Physiology”, Toronto, Canada
- June 1, 2015 “Postischemic hyperperfusion is related to hemorrhagic transformation in patients with acute ischemic stroke” – Oral presentation at 23rd ISMRM conference educational session “Quantitative Physiology”, Toronto, Canada
- May 30, 2015 “Vascular permeability imaging and quantitative ASL” – Invited talk at 23rd ISMRM conference educational session “Quantitative Physiology”, Toronto, Canada

- April 28, 2015 “Utility of imaging outcome in multi-center SLE trial” – Invited talk at Novartis Biomarker Summit, Boston, MA
- April 27, 2015 “Multi-modal renal fMRI in lupus nephritis” – Invited talk at Biogen IDEC, Boston, MA
- Mar 8, 2015 “Intracranial vascular compliance and perfusion in aging and dementia” – Invited talk at 2015 Congress of the Society of Brain Mapping & Therapeutics (SBMT), Los Angeles, CA
- Mar 7, 2015 “Arterial spin labeling based noncontrast dynamic MR angiography” – Invited talk at ISMRM workshop on noncontrast MRA, Long Beach, CA
- Aug 26, 2014 “Arterial spin labeling perfusion MRI and dynamic MR angiography” – Invited talk at Wayne State University, Detroit, MI
- June 30, 2014 “Characterization of resting and behavioral states using perfusion and BOLD fMRI” – Invited talk at Multimodal Neuroimaging Training Program (MNTP), University of Pittsburgh, PA
- March 1, 2014 “Characterization of resting and behavioral states using perfusion and BOLD fMRI” – Invited talk at Hangzhou Normal University, Hangzhou, China
- Oct 22, 2013 “Arterial spin labeling perfusion MRI and dynamic MR angiography” – Invited talk at University of Southern California, Los Angeles, CA
- April 22, 2013 “Multi-Delay Multi-Parametric Arterial Spin-Labeled Perfusion MRI in Acute Ischemic Stroke – Comparison with Dynamic Susceptibility Contrast Enhanced Perfusion Imaging” – Oral presentation at 21th ISMRM annual meeting, Salt Lake City, Utah
- March 14, 2013 “Characterization of resting and behavioral states using perfusion and BOLD fMRI” – Invited talk at Indiana University Center for Neuroimaging, Indianapolis, IN
- March 13, 2013 “Translation of arterial spin labeling perfusion MRI and angiography in neurologic disorders” – Invited talk at Indiana University Center for Neuroimaging, Indianapolis, IN
- March 4, 2013 “Complexity of resting state fMRI in aging and dementia” – Invited talk at 3rd Pacific Rim Neuroimaging Conference, Oahu, HI
- Dec 16, 2012 “ASL perfusion fMRI” – Invited talk at OCSMRM/CSMRM and ISMRM International Outreach Workshop, Xiamen, China
- Sept 10, 2012 “Multi-delay multi-parametric ASL perfusion MRI in acute ischemic stroke – comparison with dynamic susceptibility contrast (DSC) enhanced MRI” – Proffered talk at ISMRM perfusion workshop, Amsterdam, Netherland
- June 8, 2012 “Arterial spin labeling perfusion MRI” – Invited talk at Cedars-Sinai Hospital, Los Angeles, CA
- May 10, 2012 “Non-contrast dMRA with dynamic golden angle radial acquisition and k-space weighted imaging contrast (KWIC)” – Oral presentation at 20th ISMRM annual meeting, Melbourne, Australia
- May 8, 2012 “Arterial spin labeling perfusion MRI in CNS drug development and applications” – Invited kiosk talk at ISMRM MRI in drug development study group, Melbourne, Australia
- Sept 8, 2011 “Arterial spin labeling perfusion MRI - present and future” “Non-contrast 4D dynamic MRA and flow imaging” – Invited talks at Biomedical institute, National Polytechnic Institute, Mexico City, Mexico
- May 12, 2011 “Arterial Spin-Labeled Perfusion Imaging in Acute Ischemic Stroke – Comparison with Dynamic Susceptibility Contrast Enhanced MRI.” Presentation at 19th Annual Meeting ISMRM, Montréal, Canada

- May 5, 2011 “Recent developments of arterial spin labeling” – Invited talk at Siemens workshop on ASL, Erlangen, Germany
- Sept 15, 2010 “Perfusion fMRI using arterial spin labeling” – Invited talk at University of California Berkeley, Berkeley, CA
- Sept 15, 2010 “Pediatric perfusion MRI using arterial spin labeling” – Invited talk at Children’s Hospital of Los Angeles (CHLA), Los Angeles, CA
- Aug 18, 2010 “Characterizing stress states using perfusion and resting fMRI” – Invited talk at The 7th International Conference on Cognitive Science (ICCS2010), Beijing, China
- Jun 11, 2010 “Translation of arterial spin labeling perfusion MRI” – Invited talk at Center for Applied Medical Research, University of Navarra, Pamplona, Spain
- Jun 7, 2010 “Translation of arterial spin labeling perfusion MRI” – Invited talk at Karolinska Institute, Stockholm, Sweden
- Jan 11, 2010 “Latest technical development and clinical applications of ASL” – Invited talk at University of Texas Health Center at San Antonio, San Antonio, TX
- Nov 13, 2009 “Latest technical development and clinical applications of ASL” – Invited talk at Washington University, St Louis, MO
- Oct 19, 2009 “Latest technical development and clinical applications of ASL” – Invited talk at Tsinghua University, Beijing, China
- Oct 17, 2009 “Latest technical development and clinical applications of ASL” – Invited talk at National Seoul University, Seoul, Korea.
- July 1, 2009 “Arterial spin labeling - perfusion and beyond” – Invited talk at Ahmanson Lovelace Brain Mapping Center of UCLA, Los Angeles, CA
- May 27, 2009 “Arterial spin labeling - perfusion and beyond” – Invited talk at Neuroimaging lab, NIDA, Baltimore, MD
- May 8, 2009 “Technical development and applications of ASL perfusion MRI” – Invited talk at University of Kentucky, Lexington, KY
- April 20, 2009 “When perfusion meets diffusion – in vivo measurement of water permeability” – Invited talk at perfusion and diffusion study group, 17th ISMRM annual conferences, Honolulu, Hawaii
- April 18, 2009 “Can we measure perfusion in patients?” – Invited educational talk at 17th ISMRM annual conferences, Honolulu, Hawaii
- Oct 23, 2008 “Updates on latest development in ASL perfusion MRI” – Invited talk at Oxford centre for functional magnetic resonance imaging of the brain, Oxford university, Oxford, UK
- July 9, 2008 “Noninvasive perfusion MRI – from bench to bedside” – Invited talk at Brain Imaging Analysis Center, Duke Medical Center, Durham, NC
- July 2, 2008 “Noninvasive perfusion MRI – from bench to bedside and biomarker for drug discovery” – Invited talk at biomedical imaging consortium, Singapore
- May 3, 2008 “Applications of ASL perfusion MRI” – Invited educational talk at 16th ISMRM annual conferences, Toronto, Canada
- Oct 15, 2007 “ASL perfusion MRI in neuroimaging of stroke and stress” – Invited talk at University of Pittsburgh Medical Center, Pittsburgh, PA
- July 29, 2007 “Dynamic time course of water exchange across the blood-brain barrier revealed by diffusion weighted perfusion MRI” – Proffered talk at ISMRM workshop of perfusion and brain function, Salvador, Brazil
- July 31, 2007 “ASL perfusion MRI in cerebrovascular diseases” – Invited lecture at ISMRM workshop of perfusion and brain function, Salvador, Brazil
- May 16, 2007 “New frontiers in perfusion fMRI” – Invited lecture at University Hospital of Clinical Psychiatry, University of Bern, Switzerland

- Nov 16, 2006 “New frontiers in perfusion fMRI” – Invited lecture at Rochester Center for Brain Imaging, University of Rochester, Rochester NY
- Aug 8, 2006 “New advances in arterial spin labeling perfusion fMRI” – Invited lecture at Institute of Neuroscience, Chinese Academy of Sciences, Shanghai.
- May 4, 2006 “Perfusion fMRI of psychological stress” – Invited lecture at Rockefeller University, New York.
- Feb. 7, 2006 “Pediatric perfusion MRI using arterial spin labeling” – Invited lecture at Lawson Health Research Institute, London ON, Canada
- Jun. 29, 2005 “Perfusion fMRI in Cognitive Neuroscience” – Invited lecture at Singapore General Hospital, Singapore
- Jun. 12, 2005 “Perfusion fMRI in Cognitive Neuroscience” – Invited lecture at State Key Laboratory of Cognitive Brain Imaging, Chinese Academy of Science, Beijing, China
- May 18, 2005 “Perfusion fMRI reveals cerebral blood flow pattern under psychological stress” – 13th International Society of Magnetic Resonance in Medicine meeting, Miami.
- Apr. 29, 2005 “New frontiers in perfusion fMRI” – Invited lecture at Medical College of Wisconsin, Milwaukee, WI
- Sept 9, 2004 “New frontiers in perfusion fMRI” – Invited lecture at Emory University, Atlanta, GA
- June 20, 2004 “To spoil or not to spoil the labeling – transit time imaging in pulsed arterial spin labeling” – 12th International Society of Magnetic Resonance in Medicine meeting, Kyoto, Japan
- June 19, 2003 “Application of perfusion fMRI” – 10th Annual Conference of the Organization of Human Brain Mapping, New York
- July, 14, 2003 “Pediatric perfusion imaging using pulsed arterial spin labeling” – 11th International Society of Magnetic Resonance in Medicine meeting, Toronto
- July, 15, 2003 “Transit time imaging with flow encoding arterial spin tagging (FEAST)” – 11th International Society of Magnetic Resonance in Medicine meeting, Toronto.
- June, 11, 2002 “Comparison of Quantitative Perfusion Imaging using Arterial Spin Labeling at 1.5 and 4.0 Tesla” – 10th International Society of Magnetic Resonance in Medicine meeting, Hawaii.

Meeting session moderated:

- Mar 8, 2015 Neurovascular Imaging in Stroke and Dementia – Congress of the Society of Brain Mapping & Therapeutics (SBMT), Los Angeles, CA
- Aug 18, 2010 Symposium on arterial spin labeling perfusion MRI - The 7th International Conference on Cognitive Science (ICCS2010), Beijing, China
- April 23, 2009 Arterial spin labeling techniques session - 17th ISMRM annual conferences, Honolulu, Hawaii
- July 31, 2007 Clinical applications of perfusion MRI – ISMRM workshop of perfusion and brain function, Salvador, Brazil

Publication/Bibliography:

Google Scholar *H*-index = 49

<http://scholar.google.com/citations?user=10iNskYAAAAJ&hl=en>

Research Publications, peer reviewed:

1. **J. Wang**, Y. Jin, F. Xiao, S. Fan and L. Chen. (1999) Attention-Sensitive Event-Related Potentials Elicited by Kinetic Forms. *Clin. Neurophysio.* **110**: 329-341.
2. **J. Wang**, T. Zhou, M. Qiu, A. Du, K. Cai, Z. Wang, C. Zhou, M. Meng, Y. Zhuo, S. Fan and L. Chen. (1999) Relationship between Ventral Stream for Object Vision and Dorsal Stream for Spatial Vision: an fMRI+ERP Study. *Human Brain Mapping* **8**(4): 170-181.
3. S. Lai, **J. Wang**, G.H. Jahng. (2001) FAIR exempting separate T1 measurement (FAIREST): a novel technique for online quantitative perfusion imaging and multi-contrast fMRI. *NMR in Biomed.* **14**:507-516.
4. R.L. Wolf, D.C. Alsop, M.L. McGarvey, J.A. Maldjian, **J. Wang**, J.A. Detre (2003) Susceptibility Contrast and Arterial Spin Labeled Perfusion MRI in Cerebrovascular Disease. *J. Neuroimage* **13**(1): 17-27.
5. **J. Wang**, D.C. Alsop, L. Li, J. Listerud, J.B. Gonzalez-At, M.D. Schnall and J.A. Detre (2002) Comparison of Quantitative Perfusion Imaging using Arterial Spin Labeling at 1.5 and 4.0 Tesla. *Magn. Reson. Med.* **48**:242-254.
6. T.F. Floyd, S.J. Ratcliffe, **J. Wang**, B. Resch, J.A. Detre. (2003) Precision of the CASL-perfusion MRI technique: global and regional cerebral blood flow within vascular territories at one hour and one week. *J. Mag. Reson. Imag.* **18**:649-655.
7. **J. Wang**, G.K. Aguirre, D.Y. Kimberg, J.A. Detre (2003) Empirical analyses of null-hypothesis perfusion fMRI data at 1.5 and 4.0 Tesla. *Neuroimage.* **19**(4):1449-1462.
8. **J. Wang**, D.C. Alsop, H.K. Song, J.A. Maldjian, K. Tang, A.E. Salvucci, J.A. Detre. (2003) Transit time imaging with flow encoding arterial spin tagging (FEAST). *Magn. Reson. Med.* **50**(3):599-607.
9. **J. Wang**, G.K. Aguirre, D.Y. Kimberg, A.C. Roc, L. Li, J.A. Detre (2003) Arterial spin labeling perfusion fMRI with very low task frequency. *Magn. Reson. Med.* **49**: 796-802.
10. Y. Zhuo, T. Zhou, H. Rao, **J. Wang**, M. Meng, M. Chen, C. Zhou, L. Chen (2003) Contributions of the visual ventral pathway to long range apparent motion. *Science* **299** (17): 417-420.
11. **J. Wang**, L. Li, A.C. Roc, D.C. Alsop, K. Tang, N. Butler, M.D. Schnall and J.A. Detre (2004) Reduced susceptibility effect in perfusion fMRI using single-shot spin-echo EPI acquisitions. *Magn. Reson. Imag.* **22**:1-7.
12. T. Durduran, G. Yu, M.G. Burnett, J.A. Detre, J.H. Greenberg, **J. Wang**, C. Zhou, A.G. Yodh (2004) Diffuse optical measurement of blood flow, blood oxygenation and metabolism in a human brain during sensorimotor cortex activation. *Optics Letters*, **29**(15): 1766-1768
13. **J. Wang**, D.J. Licht, G.H. Jahng, C.S. Liu, J.T. Rabin, J. Haselgrove, R.A. Zimmerman and J.A. Detre (2004) Pediatric perfusion imaging using pulsed arterial spin labeling. *J. Magn. Reson. Img.* **18**(4):404-413.

14. **J.Wang**, Z. Wang, G.K. Aguirre, J.A. Detre (2004) To smooth or not to smooth? – ROC analysis of perfusion fMRI data. *Magn. Reson. Imag.* **23**: 75-81
15. D.J. Licht, **J. Wang**, D.W. Silvestre, S.C. Nicolson, L.M. Montenegro, S. Tabbutt, S.M. Durning, M. Shabbout, D.M. Shera, J.W. Gaynor, T.L. Spray, R.R. Clancy, R.A. Zimmerman, J.A. Detre (2004) Preoperative Cerebral Blood Flow is Diminished in Neonates with Severe Congenital Heart Defects. *J. Thoracic & Cardiovascular Surgery.* **128**: 841-849
16. **J. Wang**, H. Rao, G.S. Wetmore, P.M. Furlan, M. Korczykowski, D.F. Dinges, J.A. Detre (2005) Perfusion functional MRI reveals cerebral blood flow pattern under psychological stress. *Proceedings of the National Academy of Sciences of U.S.A.* **102**:17804-17809.
17. A. Newberg, **J. Wang**, H. Rao, R.L. Swanson, J.S. Karp, A. Alavi, J.H. Greenberg, N. Wintering, J.A. Detre (2005) Concurrent CBF and CMRGlc Changes During Human Brain Activation by Combined fMRI-PET Scanning. *Neuroimage* **28**: 500-506
18. M. Fernández-Seara, Z. Wang, **J.Wang**, H. Rao, M. Guenther, D.A. Feinberg, J.A. Detre (2005) Continuous arterial spin labelling perfusion measurements using single shot 3D GRASE at 3T *Magn. Reson. Med.* **54**: 1241-1247
19. R.L. Wolf, **J. Wang**, S. Wang, E.R. Melhem, D.M. O'Rourke, K.D., Judy, J.A. Detre (2005) Grading of CNS neoplasms using continuous arterial spin labeled perfusion MRI at 3 Tesla. *J. Magn. Reson. Imag.* **22**: 475-482
20. Z. Wang, **J.Wang**, J.A. Detre (2005) An improved data reconstruction method for GRAPPA. *Magn. Reson. Med.* **54**: 738-742
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16. Chen JJ, Jann K, **Wang DJ**. Characterizing Resting-State Brain Function using Arterial-Spin Labeling. *Brain Connectivity.* 2015;5(9):527-42.

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1. Noninvasive Perfusion MRI on the Horizon **J. Wang**, D.J. Licht, R.L. Wolf *Medical Imaging* 2007 May.

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1. Smith RX, Jann K, Depratto M, **Wang DJ**. Wavelet based multi-scale entropy analysis of resting state fMRI in autism spectrum disorder
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Patents:

1. An fMRI Method to Assess Individual Reactivity to Psychological Stress (US2007/008065)
2. Improved methods for non-contrast 4D dynamic MRA (PCT/US2013/071590 pending)
3. Reducing radiation dose for dynamic CT scans (pending)

* Founded perfusion fMRI website (www.cfn.upenn.edu/perfusion) and (www.loft-lab.org).
Written and disseminated (through agreement with Siemens and UPenn/UCLA Technology Transfer Center) ASL code to approximately 150 neuroimaging sites in North America, Europe, Asia and Pacific

* Developed software package for complexity of resting state fMRI
(<http://www.fil.ion.ucl.ac.uk/spm/ext/#Complexity>)

* Co-Founder of Translational MRI, LLC to facilitate the translation of cutting-edge imaging technologies in clinical trials.