

Radiology Informatics and Imaging Laboratory
Past Journal Articles and Book Chapters By ANSIR Personnel

2015

- Murea M(1), Hsu FC(2), Cox AJ(3), Hugenschmidt CE(4), Xu J(3), Adams JN(5), Raffield LM(6), Whitlow CT(7), [Maldjian JA\(7\)](#), Bowden DW(3), Freedman BI(8).
- Structural and functional assessment of the brain in European Americans with mild-to-moderate kidney disease: Diabetes Heart Study-MIND.
- Nephrol Dial Transplant. 2015 Feb 26. pii: gfv030. [Epub ahead of print]
- [PubMed ID: 25722384](#)

- [Urban JE\(1\)](#), Weaver AA, Lillie EM, [Maldjian JA](#), [Whitlow CT](#), [Stitzel JD](#).
- Evaluation of morphological changes in the adult skull with age and sex.
- J Anat. 2014 Nov 18. doi: 10.1111/joa.12247. [Epub ahead of print]
- [PubMed ID: 25406956](#)

- Palmer ND(1), Sink KM, Smith SC, Xu J, [Bowden DW](#), [Hugenschmidt CE](#), [Whitlow CT](#), Williamson JD, [Maldjian JA](#), Divers J, [Freedman BI](#).
- Kidney disease and cognitive function: african american-diabetes heart study MIND.
- Am J Nephrol. 2014;40(3):200-7. doi: 10.1159/000367669. Epub 2014 Oct 10.
- [PubMed ID: 25323981](#)

- Sink KM(1), Divers J(2), Whitlow CT(3), Palmer ND(4), Smith SC(5), Xu J(5), Hugenschmidt CE(1), [Wagner BC\(3\)](#), Williamson JD(1), Bowden DW(4), [Maldjian JA\(3\)](#), Freedman BI(6).
- Cerebral Structural Changes in Diabetic Kidney Disease: African American-Diabetes Heart Study MIND.
- Diabetes Care. 2015 Feb;38(2):206-12. doi: 10.2337/dc14-1231. Epub 2014 Sep 9.
- [PubMed ID: 25205141](#)

2014

- [Davenport EM\(1\)](#), [Whitlow CT](#), [Urban JE](#), [Espeland MA](#), [Jung Y](#), Rosenbaum DA, Gioia GA, [Powers AK](#), [Stitzel JD](#), [Maldjian JA](#).
- Abnormal white matter integrity related to head impact exposure in a season of high school varsity football.
- J Neurotrauma. 2014 Oct 1;31(19):1617-24. doi: 10.1089/neu.2013.3233. Epub 2014 Jul 14.
- [PubMed ID: 24786802](#)

- [Maldjian JA\(1\)](#), Daunais JB, Friedman DP, [Whitlow CT](#).
- Vervet MRI atlas and label map for fully automated morphometric analyses.
- Neuroinformatics. 2014 Oct;12(4):543-50. doi: 10.1007/s12021-014-9231-8.
- [PubMed ID: 24850577](#)
- [Maldjian JA\(1\)](#), [Davenport EM\(2\)](#), Whitlow CT(3).
- Graph theoretical analysis of resting-state MEG data: Identifying interhemispheric connectivity and the default mode.
- Neuroimage. 2014 Aug 1;96:88-94. doi: 10.1016/j.neuroimage.2014.03.065. Epub 2014 Mar 31.
- [PubMed ID: 24699016](#)
- Oblak AL(1), Hagen MC, Sweadner KJ, Haq I, [Whitlow CT](#), [Maldjian JA](#), Epperson F, Cook JF, Stacy M, Murrell JR, Ozellus LJ, Brashear A, Ghetti B.
- Rapid-onset dystonia-parkinsonism associated with the I758S mutation of the ATP1A3 gene: a neuropathologic and neuroanatomical study of four siblings.
- Acta Neuropathol. 2014 Jul;128(1):81-98. doi: 10.1007/s00401-014-1279-x. Epub 2014 May 7.
- [PubMed ID: 24803225](#)

2013

- Johnston ME(1), Zheng Z, [Maldjian JA](#), [Whitlow CT](#), Morykwas MJ, [Jung Y](#).
- Cerebral blood flow quantification in swine using pseudo-continuous arterial spin labeling.
- J Magn Reson Imaging. 2013 Nov;38(5):1111-8. doi: 10.1002/jmri.24066. Epub 2013 Sep 16.
- [PubMed ID: 24105693](#)
- Cobb BR, [Urban JE](#), [Davenport EM](#), Rowson S, Duma SM, [Maldjian JA](#), [Whitlow CT](#), [Powers AK](#), [Stitzel JD](#).
- Head Impact Exposure in Youth Football: Elementary School Ages 9-12 Years and the Effect of Practice Structure.
- Ann Biomed Eng. 2013 Jul 24. [Epub ahead of print]
- [PubMed ID: 23881111](#)
- [Urban JE](#), [Davenport EM](#), Golman AJ, [Maldjian JA](#), [Whitlow CT](#), [Powers AK](#), [Stitzel JD](#).
- Head Impact Exposure in Youth Football: High School Ages 14 to 18 Years and Cumulative Impact Analysis.
- Ann Biomed Eng. 2013 Jul 18. [Epub ahead of print]
- [PubMed ID: 23864337](#)
- [Maldjian JA](#), [Whitlow CT](#), [Saha BN](#), Kota G, Vandergriff C, [Davenport EM](#), Divers J, [Freedman BI](#), [Bowden DW](#).
- Automated White Matter Total Lesion Volume Segmentation in Diabetes.
- AJNR Am J Neuroradiol. 2013 Jul 18. [Epub ahead of print]
- [PubMed ID: 23868156](#)
- Watts JM, [Whitlow CT](#), [Maldjian JA](#).

- Clinical applications of arterial spin labeling.
- NMR Biomed. 2013 Aug;26(8):892-900. doi: 10.1002/nbm.2904. Epub 2013 Feb 3.
- [PubMed ID: 23378178](#)
- [Johnston ME](#), Zhang Z, [Maldjian JA](#), [Whitlow CT](#), Morykwas MJ, [Jung Y](#).
- Cerebral Blood Flow Quantification in Swine using Pseudo-Continuous Arterial Spin Labeling
- JMRI
- [Natarajan S](#), [Saha BN](#), Joshi S, Edwards A., Khot T, [Moody EA](#), Kersting K., [Whitlow CT](#), [Maldjian JA](#).
- Can Relational Learning help in Three-way Classification of Alzheimer Patients from Structural Magnetic Resonance Images of the Brain?
- International Journal of Machine Learning and Computing

2012

- [Urban JE](#), [Whitlow CT](#), Edgerton CA, [Powers AK](#), [Maldjian JA](#), [Stitzel JD](#).
- Motor vehicle crash-related subdural hematoma from real-world head impact data.
- J Neurotrauma. 2012 Dec 10;29(18):2774-81. doi: 10.1089/neu.2012.2373.
- [PubMed ID: 22928543](#)
- [Maldjian JA](#), Whitlow CT; Alzheimer's Disease Neuroimaging Initiative.
- Whither the hippocampus? FDG-PET hippocampal hypometabolism in Alzheimer disease revisited.
- AJNR Am J Neuroradiol. 2012 Nov;33(10):1975-82. doi: 10.3174/ajnr.A3113. Epub 2012 Jun 14.
- [PubMed ID: 22700745](#)
- Divers J, Hugenschmidt C, Sink KM, Williamson JD, Ge Y, Smith SC, [Bowden DW](#), [Whitlow CT](#), L Yders E, [Maldjian JA](#), [Freedman BI](#).
- Cerebral White Matter Hyperintensity in African Americans and European Americans with Type 2 Diabetes.
- J Stroke Cerebrovasc Dis
- [PubMed ID: 22608346](#)
- Singh J, Baker MD, Morris PP, [Whitlow CT](#).
- Percutaneous pediculoplasty for traumatic pedicle fracture. A technical case report.
- Interv Neuroradiology
- [PubMed ID: 22681740](#)
- [Whitlow CT](#), Chan MD, Wagner JS, Sauer RN, Lesser GJ, Bennett M, Tatter SB, Ellis TL, Paulsson AK, Johnson AJ.
- Glioblastoma multiforme progression or treatment-related pseudoprogression? A direct comparison of common MRI diffusion and perfusion sequences at the neuroradiology clinical workstation.
- American Society of Functional Neuroradiology 6th Annual Meeting, 2012, Orlando, Florida.

- [Casanova R, Whitlow CT, Wagner B, Espeland MA, Maldjian JA.](#)
- Combining graph and machine learning methods to analyze differences in functional connectivity across sex.
- Open Neuroimag J. 2012;6:1-9. Epub 2012 Jan 26.
- [PubMed ID: 22312418](#)
- Shin DD, Liu TT, Wong EC, Shankaranarayanan A, [Jung Y.](#)
- Pseudocontinuous arterial spin labeling with optimized tagging efficiency.
- [PubMed ID: 22234782](#)
- [Urban JE, Maldjian JA, Whitlow CT, Stitzel JD.](#)
- A method to investigate the size and shape variation of the lateral ventricles with age.
- Biomed Sci Instrum. 2012;48:447-53.
- [PubMed ID: 22846318](#)

2011

- [Casanova R, Whitlow CT, Wagner B, Williamson J, Shumaker SA, Maldjian JA, Espeland MA.](#)
- High dimensional classification of structural MRI Alzheimer's disease data based on large scale regularization.
- Front Neuroinform. 2011;5:22. Epub 2011 Oct 14.
- [PubMed ID: 22016732](#)

Research Projects: [ADNI](#)

- Weaver AA, [Moody EA](#), Armstrong EG, [Stitzel JD.](#)
- Image segmentation and registration algorithm to collect homologous landmarks for age-related thoracic morphometric analysis - biomed 2011.
- Biomed Sci Instrum. 2011;47:70-5.
- [PubMed ID: 21525599](#)

Research Projects: [SIMON](#)

- Buračas GT, [Jung Y](#), Lee J, Buxton RB, Wong EC, Liu TT.
- On multiple alternating steady states induced by periodic spin phase perturbation waveforms.
- eforms.
- [PubMed ID: 21826730](#)
- [Whitlow CT, Casanova R, Maldjian JA.](#)
- Effect of Resting-State Functional MR Imaging Duration on Stability of Graph Theory Metrics of Brain Network Connectivity.
- Radiology. 2011 Mar 15; [Epub ahead of print]
- [PubMed ID: 21406628](#)

- Simonds JS, [Whitlow CT](#), [Chen MY](#), Williams DW 3rd.
- Isolated fractures of the posterior maxillary sinus: CT appearance and proposed mechanism.
- AJNR Am J Neuroradiol. 2011 Mar;32(3):468-70. Epub 2011 Feb 3.
- [PubMed ID: 21292798](#)

2010

- [Jung Y](#), Wong EC, Liu TT.
- Multiphase pseudocontinuous arterial spin labeling (MP-PCASL) for robust quantification of cerebral blood flow.
- Magn Reson Med. 2010 Sep;64(3):799-810.
- [PubMed ID: 20578056](#)

Research Projects: [PCASL](#)

- Liu J, Wieben O, [Jung Y](#), Samsonov AA, Reeder SB, Block WF.
- Single breathhold cardiac CINE imaging with multi-echo three-dimensional hybrid radial SSFP acquisition.
- J Magn Reson Imaging. 2010 Aug;32(2):434-40.
- [PubMed ID: 20677274](#)
- Samsonov AA, Velikina J, [Jung Y](#), Kholmovski EG, Johnson CR, Block WF.
- POCS-enhanced correction of motion artifacts in parallel MRI.
- Magn Reson Med. 2010 Apr;63(4):1104-10.
- [PubMed ID: 20373413](#)

Research Projects: [ASL PCASL](#)

- Lyders EM, [Whitlow CT](#), Baker MD, Morris PP.
- Imaging and treatment of sacral insufficiency fractures.
- AJNR Am J Neuroradiol. 2010 Feb;31(2):201-10. Epub 2009 Sep 17.
- [PubMed ID: 19762463](#)
- Klaers J, Jashnani Y, [Jung Y](#), Brodsky E, Jacobson J, Kijowski R, Block WF.
- Dual half-echo phase correction for implementation of 3D radial SSFP at 3.0 T.
- Magn Reson Med. 2010 Feb;63(2):282-9.
- [PubMed ID: 20099322](#)
- Frank LR, [Jung Y](#), Inati S, Tyszka JM, Wong EC.
- High efficiency, low distortion 3D diffusion tensor imaging with variable density spiral fast spin echoes (3D DW VDS RARE).
- Neuroimage. 2010 Jan 15;49(2):1510-23. Epub 2009 Sep 22.
- [PubMed ID: 19778618](#)

2009

- Moran CJ, Kelcz F, [Jung Y](#), Brodsky EK, Fain SB, Block WF.
- Pilot study of improved lesion characterization in breast MRI using a 3D radial balanced SSFP technique with isotropic resolution and efficient fat-water separation.
- J Magn Reson Imaging. 2009 Jul;30(1):135-44.
- [PubMed ID: 19557728](#)

- [Pollock JM](#), [Tan H](#), [Kraft RA](#), [Whitlow CT](#), [Burdette JH](#), [Maldjian JA](#).
- Arterial spin-labeled MR perfusion imaging: clinical applications.
- Magn Reson Imaging Clin N Am. 2009 May;17(2):315-38.
- [PubMed ID: 19406361](#)

Research Projects: [ASL](#)

- [Jung Y](#), Samsonov AA, Block WF, Lazar M, Lu A, Liu J, Alexander AL.
- 3D diffusion tensor MRI with isotropic resolution using a steady-state radial acquisition.
- J Magn Reson Imaging. 2009 May;29(5):1175-84.
- [PubMed ID: 19388107](#)

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- [Pollock JM](#), [Whitlow CT](#), [Tan H](#), [Kraft RA](#), [Burdette JH](#), [Maldjian JA](#).
- Pulsed arterial spin-labeled MR imaging evaluation of tuberous sclerosis.
- AJNR Am J Neuroradiol. 2009 Apr;30(4):815-20. Epub 2009 Jan 15.
- [PubMed ID: 19147711](#)

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- [Pollock JM](#), [Deibler AR](#), [Whitlow CT](#), [Tan H](#), [Kraft RA](#), [Burdette JH](#), [Maldjian JA](#).
- Hypercapnia-Induced Cerebral Hyperperfusion: An Underrecognized Clinical Entity.
- AJNR Am J Neuroradiol. 2009 Feb;30(2):378-85. Epub 2008 Oct 14.
- [PubMed ID: 18854443](#)

Research Projects: [ASL](#)

- [Whitlow CT](#), Geer CP, Mattern CW, Mussat-Whitlow BJ, Yazdani SK, Berry JL, Lalli JH, Claus RO, Challa VR, Morris PP.
- Endovascular histologic effects of ultrathin gold- or vitronectin-coated platinum aneurysm coils in a rodent arterial occlusion model: a preliminary investigation.
- AJNR Am J Neuroradiol. 2009 Jan;30(1):85-90. Epub 2008 Oct 22.
- [PubMed ID: 18945793](#)

- [Chen MYM](#), [Whitlow CT](#)
- Book Chapter: Scope of Diagnostic Imaging.
- Book Information: [Chen MYM](#), Pope TL Jr., Ott DJ. Basic Radiology, Lange Series, New York, McGraw Hill, 2009: In Press

- [Whitlow CT](#), [O'Shea TM](#)
- Book Chapter: Neonatal Neuroimaging.
- Book Information: Bhatia JS, Mathew OP. Innovations in Neonatal-Perinatal Care: In Press.
- Bydder M, [Jung Y](#).
- A nonlinear regularization strategy for GRAPPA calibration.
- Magn Reson Imaging. 2009 Jan;27(1):137-41. Epub 2008 Jun 25.
- [PubMed ID: 18583080](#)

Research Projects: [ASL](#)

2008

- [Pollock JM](#), [Whitlow CT](#), [Deibler AR](#), [Tan H](#), [Burdette JH](#), [Kraft RA](#), [Maldjian JA](#).
- Anoxic Injury-Associated Cerebral Hyperperfusion Identified with Arterial Spin-Labeled MR Imaging.
- AJNR Am J Neuroradiol. 2008 Aug;29(7):1302-7. Epub 2008 May 1.
- [PubMed ID: 18451089](#)
- Holmes JH, O'Halloran RL, Brodsky EK, [Jung Y](#), Block WF, Fain SB.
- 3D hyperpolarized He-3 MRI of ventilation using a multi-echo projection acquisition.
- Magn Reson Med. 2008 May;59(5):1062-71.
- [PubMed ID: 18429034](#)

2007

- [Whitlow CT](#), [Mussat-Whitlow BJ](#), [Mattern CW](#), [Baker MD](#), [Morris PP](#).
- Sacroplasty versus vertebroplasty: comparable clinical outcomes for the treatment of fracture-related pain.
- AJNR Am J Neuroradiol. 2007 Aug;28(7):1266-70.
- [PubMed ID: 17698526](#)
- [Whitlow CT](#), [Yazdani SK](#), [Reedy ML](#), [Kaminsky SE](#), [Berry JL](#), [Morris PP](#).
- Investigating sacroplasty: technical considerations and finite element analysis of polymethylmethacrylate infusion into cadaveric sacrum.
- AJNR Am J Neuroradiol. 2007 Jun-Jul;28(6):1036-41.
- [PubMed ID: 17569952](#)
- [Jung Y](#), [Jashnani Y](#), [Kijowski R](#), [Block WF](#).

- Consistent non-cartesian off-axis MRI quality: calibrating and removing multiple sources of demodulation phase errors.
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2006

- Perrier ND, Coker LH, Rorie KD, Burbank NS, Kirkland KA, Passmore LV, Tembreull T, Stump DA, [Laurienti PJ](#).
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2005

2004

- [Whitlow CT](#), Liguori A, Livengood LB, Hart SL, Mussat-Whitlow BJ, Lamborn CM, [Laurienti PJ](#), Porrino LJ.
- Long-term heavy marijuana users make costly decisions on a gambling task.
- Drug Alcohol Depend. 2004 Oct 5;76(1):107-11.
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- Patterns of functional activity associated with cocaine self-administration in the rat change over time.
- Psychopharmacology (Berl). 2004 Apr;172(4):384-92. Epub 2003 Dec 11.
- [PubMed ID: 14668974](#)

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- [Whitlow CT](#), Freedland CS, Porrino LJ.
- Functional consequences of the repeated administration of Delta9-tetrahydrocannabinol in the rat.
- Drug Alcohol Depend. 2003 Aug 20;71(2):169-77.
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- Brain Res. 2003 Feb 7;962(1-2):169-79.
- [PubMed ID: 12543468](#)

2002

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- [PubMed ID: 11981592](#)