

Dear Colleagues,

Just before getting ready for the ISMRM you can find the latest publications on ASL in this ASL Newsletter No. 64.

It's a perfect entertainment for long flights ;-)) Hope to see you in Singapore!

Save travels & kind regards,

Klaus

Recent publications: March & April 2016, (Epub & Print)

Note: The '*new*-flag' is assigned to articles which haven't been in earlier newsletters (e.g. as e-publications). Additionally you will find titles printed in bold letters which indicates that they are listed for the first time in this particular newsletter. For articles listed multiple times in different sections the bold letters disappear in the later sections.

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Animal Studies

new

Glial fibrillary acidic protein (GFAP) immunoreactivity correlates with cortical perfusion parameters determined by bolus tracking arterial spin labelling (bt-ASL) magnetic resonance (MR) imaging in the Wistar Kyoto rat.

Gormley S, Rouine J, McIntosh A, Kerskens C, Harkin A.

Physiol Behav. 2016 Jun 1;160:66-79. doi: 10.1016/j.physbeh.2016.04.007. Epub 2016 Apr 9.

new

Myocardial arterial spin labeling.

Kober F, Jao T, Troalen T, Nayak KS.

J Cardiovasc Magn Reson. 2016 Apr 12;18:22. doi: 10.1186/s12968-016-0235-4. Review.

[Free PMC Article](#)

new

Acute changes in liver tumour perfusion measured non-invasively with arterial spin labelling.

Johnson SP, Ramasawmy R, Campbell-Washburn AE, Wells JA, Robson M, Rajkumar V, Lythgoe MF, Pedley RB, Walker-Samuel S.

Br J Cancer. 2016 Apr 12;114(8):897-904. doi: 10.1038/bjc.2016.51. Epub 2016 Mar 31.

new

Quantitative arterial spin labelling perfusion measurements in rat models of renal transplantation and acute kidney injury at 3T.

Zimmer F, Klotz S, Hoeger S, Yard BA, Krämer BK, Schad LR, Zöllner FG.

Z Med Phys. 2016 Mar 23. pii: S0939-3889(16)00035-0. doi: 10.1016/j.zemedi.2016.02.004.

[Epub ahead of print]

new

Magnetic Resonance Imaging of Cerebral Blood Flow in Animal Stroke Models.

Shen Q, Duong TQ.

Brain Circ. 2016 Jan;2(1):20-27. Epub 2016 Mar 11.

[Free PMC Article](#)

new

In vivo evidence for long-term vascular remodeling resulting from chronic cerebral hypoperfusion in mice.

Struys T, Govaerts K, Oosterlinck W, Casteels C, Bronckaers A, Koole M, Van Laere K, Herijgers P, Lambrechts I, Himmelreich U, Dresselaers T.

J Cereb Blood Flow Metab. 2016 Mar 18. pii: 0271678X16638349. [Epub ahead of print]

Effects of stroke severity and treatment duration in normobaric hyperoxia treatment of ischemic stroke.

Tiwari YV, Jiang Z, Sun Y, Du F, Rodriguez P, Shen Q, Duong TQ.

Brain Res. 2016 Mar 15;1635:121-9. doi: 10.1016/j.brainres.2016.01.030. Epub 2016 Jan 26.

Pharmacological / Drug Studies / Studies on the Effects of Therapies

new

Neural correlates of the LSD experience revealed by multimodal neuroimaging.

Carhart-Harris RL, Muthukumaraswamy S, Roseman L, Kaelen M, Droog W, Murphy K, Tagliazucchi E, Schenberg EE, Nest T, Orban C, Leech R, Williams LT, Williams TM, Bolstridge M, Sessa B, McGonigle J, Sereno MI, Nichols D, Hellyer PJ, Hobden P, Evans J, Singh KD, Wise RG, Curran HV, Feilding A, Nutt DJ.

Proc Natl Acad Sci U S A. 2016 Apr 26;113(17):4853-8. doi: 10.1073/pnas.1518377113. Epub 2016 Apr 11.

[Free Article](#)

new

Effects of antipsychotics on cortisol, interleukin-6 and hippocampal perfusion in healthy volunteers.

Handley R, Mondelli V, Zelaya F, Marques T, Taylor H, Reinders AA, Chaddock C, McQueen G, Hubbard K, Papadopoulos A, Williams S, McGuire P, Pariante C, Dazzan P.

Schizophr Res. 2016 Apr 21. pii: S0920-9964(16)30131-1. doi: 10.1016/j.schres.2016.03.039.

[Epub ahead of print]

[Free Article](#)

Effects of stroke severity and treatment duration in normobaric hyperoxia treatment of ischemic stroke.

Tiwari YV, Jiang Z, Sun Y, Du F, Rodriguez P, Shen Q, Duong TQ.

Brain Res. 2016 Mar 15;1635:121-9. doi: 10.1016/j.brainres.2016.01.030. Epub 2016 Jan 26.

Cerebral Perfusion and Gray Matter Changes Associated With Chemotherapy-Induced Peripheral Neuropathy.

Nudelman KN, McDonald BC, Wang Y, Smith DJ, West JD, O'Neill DP, Zanville NR, Champion VL, Schneider BP, Saykin AJ.

J Clin Oncol. 2016 Mar 1;34(7):677-83. doi: 10.1200/JCO.2015.62.1276. Epub 2015 Nov 2.

Changes in the regional cerebral blood flow detected by arterial spin labeling after 6-week escitalopram treatment for major depressive disorder.

Kaichi Y, Okada G, Takamura M, Toki S, Akiyama Y, Higaki T, Matsubara Y, Okamoto Y, Yamawaki S, Awai K.

J Affect Disord. 2016 Apr;194:135-43. doi: 10.1016/j.jad.2015.12.062. Epub 2016 Jan 21.

Cerebral Blood Flow Improvement after Indirect Revascularization for Pediatric Moyamoya Disease: A Statistical Analysis of Arterial Spin-Labeling MRI.

Blauwblomme T, Lemaitre H, Naggara O, Calmon R, Kossorotoff M, Bourgeois M, Mathon B, Puget S, Zerah M, Brunelle F, Sainte-Rose C, Boddaert N.

AJNR Am J Neuroradiol. 2016 Apr;37(4):706-12. doi: 10.3174/ajnr.A4592. Epub 2015 Nov 19.

Cerebral Blood Flow Studies

CBF Regional Comparison / Regional ASL

new

[MR Angiography at 7T to Visualize Cerebrovascular Territories.](#)

Neumann JO, Giese H, Nagel AM, Biller A, Unterberg A, Meinzer HP.
J Neuroimaging. 2016 Apr 14. doi: 10.1111/jon.12348. [Epub ahead of print]

new

[Absolute and regional cerebral perfusion assessment feasibility in head-down position with arterialsin-labeling magnetic resonance. A preliminary report on healthy subjects.](#)

Pavilla A, Arrigo A, Colombani S, Mejdoubi M.
J Neuroradiol. 2016 Apr 25. pii: S0150-9861(16)30003-7. doi: 10.1016/j.neurad.2016.03.003.
[Epub ahead of print]

new

[Quantifying the changes in oxygen extraction fraction and cerebral activity caused by caffeine and acetazolamide.](#)

Buch S, Ye Y, Haacke EM.
J Cereb Blood Flow Metab. 2016 Mar 30. pii: 0271678X16641129. [Epub ahead of print]

new

[Bladder Distension Increases Blood Flow in Pain-Related Brain Structures in Subjects With Interstitial Cystitis.](#)

Deutsch G, Deshpande H, Frölich MA, Lai HH, Ness TJ.
J Urol. 2016 Mar 23. pii: S0022-5347(16)03685-5. doi: 10.1016/j.juro.2016.03.135. [Epub ahead of print]

new

[Arterial spin labeling magnetic resonance perfusion study to evaluate the effects of age and gender on normal cerebral blood flow.](#)

Soni N, Jain A, Kumar S, Pandey CM, Awasthi A.
Neurol India. 2016 Mar-Apr;64 Suppl:S32-8. doi: 10.4103/0028-3886.178037.
[Free Article](#)

new

[Microstructure and Cerebral Blood Flow within White Matter of the Human Brain: A TBSS Analysis.](#)

Giezendanner S, Fisler MS, Soravia LM, Andreotti J, Walther S, Wiest R, Dierks T, Federspiel A.
PLoS One. 2016 Mar 4;11(3):e0150657. doi: 10.1371/journal.pone.0150657. eCollection 2016.
[Free PMC Article](#)

[Reduced perfusion in normal-appearing white matter in mild to moderate hypertension as revealed by 3D pseudocontinuous arterial spin labeling.](#)

Wang T, Li Y, Guo X, Huang D, Ma L, Wang DJ, Lou X.
J Magn Reson Imaging. 2016 Mar;43(3):635-43. doi: 10.1002/jmri.25023. Epub 2015 Aug 10.

Arterial spin-labeling perfusion imaging of childhood meningitis: a case series.

Wong AM, Yeh CH, Liu HL, Lin KL, Wang HS, Toh CH.

Childs Nerv Syst. 2016 Mar;32(3):563-7. doi: 10.1007/s00381-015-2858-4. Epub 2015 Aug 7.

Changes in the regional cerebral blood flow detected by arterial spin labeling after 6-week escitalopram treatment for major depressive disorder.

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Resting Hyperperfusion of the Hippocampus, Midbrain, and Basal Ganglia in People at High Risk for Psychosis.

Allen P, Chaddock CA, Egerton A, Howes OD, Bonoldi I, Zelaya F, Bhattacharyya S, Murray R, McGuire P.

Am J Psychiatry. 2016 Apr 1;173(4):392-9. doi: 10.1176/appi.ajp.2015.15040485. Epub 2015 Dec 18.

Studies on Special Disease

new

Brain imaging of neurovascular dysfunction in Alzheimer's disease.

Montagne A, Nation DA, Pa J, Sweeney MD, Toga AW, Zlokovic BV.

Acta Neuropathol. 2016 May;131(5):687-707. doi: 10.1007/s00401-016-1570-0. Epub 2016 Apr 1. Review.

new

Lesional perfusion abnormalities in Leigh disease demonstrated by arterial spin labeling correlate with disease activity.

Whitehead MT, Lee B, Gropman A.

Pediatr Radiol. 2016 Apr 4. [Epub ahead of print]

new

Interrogating the Functional Correlates of Collateralization in Patients with Intracranial Stenosis Using Multimodal Hemodynamic Imaging.

Roach BA, Donahue MJ, Davis LT, Faraco CC, Arteaga D, Chen SC, Ladner TR, Scott AO, Strother MK.

AJNR Am J Neuroradiol. 2016 Apr 7. [Epub ahead of print]

new

Magnetic resonance imaging arterial-spin-labelling perfusion alterations in childhood migraine with atypical aura: a case-control study.

Boulouis G, Shotar E, Dangouloff-Ros V, Grévent D, Calmon R, Brunelle F, Naggara O, Kossorotoff M, Boddaert N.

Dev Med Child Neurol. 2016 Apr 6. doi: 10.1111/dmcn.13123. [Epub ahead of print]

new

Detection of Cortical Venous Drainage and Determination of the Borden Type of Dural Arteriovenous Fistula by Means of 3D Pseudocontinuous Arterial Spin-Labeling MRI.

Amukotuwa SA, Heit JJ, Marks MP, Fischbein N, Bammer R.

AJR Am J Roentgenol. 2016 Apr 15:1-7. [Epub ahead of print]

new

Distinctive Patterns of Three-Dimensional Arterial Spin-Labeled Perfusion Magnetic Resonance Imaging in Subtypes of Acute Ischemic Stroke.

Kohno N, Okada K, Yamagata S, Takayoshi H, Yamaguchi S.
J Stroke Cerebrovasc Dis. 2016 Apr 21. pii: S1052-3057(16)00188-9. doi:
10.1016/j.jstrokecerebrovasdis.2016.03.035. [Epub ahead of print]

new

Arterial Spin-labeling in Central Nervous System Infection.

Noguchi T, Yakushiji Y, Nishihara M, Togao O, Yamashita K, Kikuchi K, Matsuo M, Azama S, Irie H.

Magn Reson Med Sci. 2016 Mar 21. [Epub ahead of print]

[Free Article](#)

new

In vivo evidence for long-term vascular remodeling resulting from chronic cerebral hypoperfusion in mice.

Struys T, Govaerts K, Oosterlinck W, Casteels C, Bronckaers A, Koole M, Van Laere K, Herijgers P, Lambrechts I, Himmelreich U, Dresselaers T.

J Cereb Blood Flow Metab. 2016 Mar 18. pii: 0271678X16638349. [Epub ahead of print]

new

Identifying Dysfunctional Cortex: Dissociable Effects of Stroke and Aging on Resting State Dynamics in MEG and fMRI.

Kielar A, Deschamps T, Chu RK, Jokel R, Khatamian YB, Chen JJ, Meltzer JA.

Front Aging Neurosci. 2016 Mar 3;8:40. doi: 10.3389/fnagi.2016.00040. eCollection 2016.

[Free PMC Article](#)

new

Chronic kidney disease, cerebral blood flow, and white matter volume in hypertensive adults.

Kurella Tamura M, Pajewski NM, Bryan RN, Weiner DE, Diamond M, Van Buren P, Taylor A, Beddhu S, Rosendorff C, Jahanian H, Zaharchuk G; SPRINT Study Research Group.

Neurology. 2016 Mar 29;86(13):1208-16. doi: 10.1212/WNL.0000000000002527. Epub 2016 Feb 26.

new

Arterial spin labeling imaging reveals widespread and A β -independent reductions in cerebral blood flow in elderly apolipoprotein epsilon-4 carriers.

Michels L, Warnock G, Buck A, Macaudo G, Leh SE, Kaelin AM, Riese F, Meyer R, O'Gorman R, Hock C, Kollias S, Gietl AF.

J Cereb Blood Flow Metab. 2016 Mar;36(3):581-95. doi: 10.1177/0271678X15605847. Epub 2015 Sep 30.

The Utility of Cerebral Blood Flow as a Biomarker of Preclinical Alzheimer's Disease.

Hays CC, Zlatar ZZ, Wierenga CE.

Cell Mol Neurobiol. 2016 Mar;36(2):167-79. doi: 10.1007/s10571-015-0261-z. Epub 2016 Feb 22. Review.

Non-invasive imaging of oxygen extraction fraction in adults with sickle cell anaemia.

Jordan LC, Gindville MC, Scott AO, Juttukonda MR, Strother MK, Kassim AA, Chen SC, Lu H, Pruthi S, Shyr Y, Donahue MJ.

Brain. 2016 Mar;139(Pt 3):738-50. doi: 10.1093/brain/awv397. Epub 2016 Jan 27.

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Nudelman KN, McDonald BC, Wang Y, Smith DJ, West JD, O'Neill DP, Zanville NR, Champion VL, Schneider BP, Saykin AJ.

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Cerebral Hypoperfusion and Hypometabolism Detected by Arterial Spin Labeling MRI and FDG-PET in Early-Onset Alzheimer's Disease.

Verclytte S, Lopes R, Lenfant P, Rollin A, Semah F, Leclerc X, Pasquier F, Delmaire C.

J Neuroimaging. 2016 Mar;26(2):207-12. doi: 10.1111/jon.12264. Epub 2015 May 29.

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Comparison of ASL Techniques / ASL Compared with Other Imaging Methods / ASL Combined with Other Imaging Methods

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[Detection of Cortical Venous Drainage and Determination of the Borden Type of Dural Arteriovenous Fistula by Means of 3D Pseudocontinuous Arterial Spin-Labeling MRI.](#)

Amukotuwa SA, Heit JJ, Marks MP, Fischbein N, Bammer R.

AJR Am J Roentgenol. 2016 Apr 15:1-7. [Epub ahead of print]

new

[Cerebral metabolic rate of oxygen \(CMRO₂\) mapping with hyperventilation challenge using quantitative susceptibility mapping \(QSM\).](#)

Zhang J, Zhou D, Nguyen TD, Spincemaille P, Gupta A, Wang Y.

Magn Reson Med. 2016 Apr 27. doi: 10.1002/mrm.26253. [Epub ahead of print]

new

[In vivo evidence for long-term vascular remodeling resulting from chronic cerebral hypoperfusion in mice.](#)

Struys T, Govaerts K, Oosterlinck W, Casteels C, Bronckaers A, Koole M, Van Laere K, Herijgers P, Lambrechts I, Himmelreich U, Dresselaers T.

J Cereb Blood Flow Metab. 2016 Mar 18. pii: 0271678X16638349. [Epub ahead of print]

new

[Quantitative measurement of blood flow in paediatric brain tumours-a comparative study of dynamic susceptibility contrast and multi time-point arterial spin labelled MRI.](#)

Vidyasagar R, Abernethy L, Pizer B, Avula S, Parkes LM.

Br J Radiol. 2016 Apr 12:20150624. [Epub ahead of print]

new

[Identifying Dysfunctional Cortex: Dissociable Effects of Stroke and Aging on Resting State Dynamics in MEG and fMRI.](#)

Kielar A, Deschamps T, Chu RK, Jokel R, Khatamian YB, Chen JJ, Meltzer JA.

Front Aging Neurosci. 2016 Mar 3;8:40. doi: 10.3389/fnagi.2016.00040. eCollection 2016.

[Free PMC Article](#)

new

[Comparison of cerebral blood flow measurement with \[15O\]-water positron emission tomography and arterial spin labeling magnetic resonance imaging: A systematic review.](#)

Fan AP, Jahanian H, Holdsworth SJ, Zaharchuk G.

J Cereb Blood Flow Metab. 2016 May;36(5):842-61. doi: 10.1177/0271678X16636393. Epub 2016 Mar 4. Review.

[Cerebral Hypoperfusion and Hypometabolism Detected by Arterial Spin Labeling MRI and FDG-PET in Early-Onset Alzheimer's Disease.](#)

Vercluyte S, Lopes R, Lenfant P, Rollin A, Semah F, Leclerc X, Pasquier F, Delmaire C.

J Neuroimaging. 2016 Mar;26(2):207-12. doi: 10.1111/jon.12264. Epub 2015 May 29.

Sex-dependent alterations in resting-state cerebral blood flow, amplitude of low-frequency fluctuations and their coupling relationship in schizophrenia.

Ma X, Wang D, Zhou Y, Zhuo C, Qin W, Zhu J, Yu C.

Aust N Z J Psychiatry. 2016 Apr;50(4):334-44. doi: 10.1177/0004867415601728. Epub 2015 Sep 17.

Modified triexponential analysis of intravoxel incoherent motion for brain perfusion and diffusion.

Ohno N, Miyati T, Kobayashi S, Gabata T.

J Magn Reson Imaging. 2016 Apr;43(4):818-23. doi: 10.1002/jmri.25048. Epub 2015 Sep 18.

Functional Imaging / BOLD

new

Developmental trajectories of cerebral blood flow and oxidative metabolism at baseline and during working memory tasks.

Jog MA, Yan L, Kilroy E, Krasileva K, Jann K, LeClair H, Elashoff D, Wang DJ.

Neuroimage. 2016 Apr 18;134:587-596. doi: 10.1016/j.neuroimage.2016.04.035. [Epub ahead of print]

new

Transient Distraction and Attentional Control during a Sustained Selective Attention Task.

Demeter E, Woldorff MG.

J Cogn Neurosci. 2016 Mar 11:1-13. [Epub ahead of print]

new

Quantifying fluctuations of resting state networks using arterial spin labeling perfusion MRI.

Dai W, Varma G, Scheidegger R, Alsop DC.

J Cereb Blood Flow Metab. 2016 Mar;36(3):463-73. doi: 10.1177/0271678X15615339. Epub 2015 Nov 5.

Quantitative and functional pulsed arterial spin labeling in the human brain at 9.4 t.

Bause J, Ehses P, Mirkes C, Shajan G, Scheffler K, Pohmann R.

Magn Reson Med. 2016 Mar;75(3):1054-63. doi: 10.1002/mrm.25671. Epub 2015 May 2.

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Aust N Z J Psychiatry. 2016 Apr;50(4):334-44. doi: 10.1177/0004867415601728. Epub 2015 Sep 17.

Others CBF Related

new

Mapping Blood Flow Directionality in the Human Brain.

Park SH, Do WJ, Choi SH, Zhao T, Bae KT.

Magn Reson Imaging. 2016 Mar 8. pii: S0730-725X(16)00027-8. doi: 10.1016/j.mri.2016.03.005. [Epub ahead of print]

Effects of stroke severity and treatment duration in normobaric hyperoxia treatment of ischemic stroke.

Tiwari YV, Jiang Z, Sun Y, Du F, Rodriguez P, Shen Q, Duong TQ.

Brain Res. 2016 Mar 15;1635:121-9. doi: 10.1016/j.brainres.2016.01.030. Epub 2016 Jan 26.

Brain imaging demonstrates a reduced neural impact of eating in obesity.

Puzziferri N, Zigman JM, Thomas BP, Mihalakos P, Gallagher R, Lutter M, Carmody T, Lu H, Tamminga CA.

Obesity (Silver Spring). 2016 Apr;24(4):829-36. doi: 10.1002/oby.21424. Epub 2016 Feb 19.

Physiological Parameters besides CBF

new

Blood Brain Barrier Permeability is altered in patients with Systemic Lupus Erythematosus: A Novel Imaging Approach.

Gulati G, Jones JT, Lee G, Altaye M, Beebe DW, Meyers-Eaton J, Wiley K, Brunner HI, DiFrancesco MW.

Arthritis Care Res (Hoboken). 2016 Apr 25. doi: 10.1002/acr.22923. [Epub ahead of print]

new

Arterial spin labeling imaging reveals widespread and A β -independent reductions in cerebral blood flow in elderly apolipoprotein epsilon-4 carriers.

Michels L, Warnock G, Buck A, Macauda G, Leh SE, Kaelin AM, Riese F, Meyer R, O'Gorman R, Hock C, Kollias S, Gietl AF.

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Liu Z, Li Y.

AJNR Am J Neuroradiol. 2016 Apr;37(4):607-14. doi: 10.3174/ajnr.A4624. Epub 2015 Dec 17.

Perfusion Studies Other than on the Brain

new

Measurement of skeletal muscle perfusion dynamics with pseudo-continuous arterial spin labeling(pCASL): Assessment of relative labeling efficiency at rest and during hyperemia, and comparison to pulsed arterial spin labeling (PASL).

Englund EK, Rodgers ZB, Langham MC, Mohler ER 3rd, Floyd TF, Wehrli FW.

J Magn Reson Imaging. 2016 Apr 4. doi: 10.1002/jmri.25247. [Epub ahead of print]

new

Application of Arterial Spin Labelling in the Assessment of Ocular Tissues.

Vaghefi E, Pontré B.

Biomed Res Int. 2016;2016:6240504. doi: 10.1155/2016/6240504. Epub 2016 Mar 15. Review.

[Free PMC Article](#)

new

Acute changes in liver tumour perfusion measured non-invasively with arterial spin labelling.

Johnson SP, Ramasawmy R, Campbell-Washburn AE, Wells JA, Robson M, Rajkumar V, Lythgoe MF, Pedley RB, Walker-Samuel S.

Br J Cancer. 2016 Apr 12;114(8):897-904. doi: 10.1038/bjc.2016.51. Epub 2016 Mar 31.

new

Arterial Spin Labeling Imaging for the Parotid Glands of Patients with Sjögren's Syndrome.

Kami YN, Sumi M, Takagi Y, Sasaki M, Uetani M, Nakamura T.

PLoS One. 2016 Mar 9;11(3):e0150680. doi: 10.1371/journal.pone.0150680. eCollection 2016.

[Free PMC Article](#)

Feasibility of measuring thermoregulation during RF heating of the human calf muscle using MR based methods.

Simonis FF, Petersen ET, Lagendijk JJ, van den Berg CA.

Magn Reson Med. 2016 Apr;75(4):1743-51. doi: 10.1002/mrm.25710. Epub 2015 May 14.

ASL for Angiography

new

Optimization of 4D vessel-selective arterial spin labeling angiography using balanced steady-state free precession and vessel-encoding.

Okell TW, Schmitt P, Bi X, Chappell MA, Tijssen RH, Sheerin F, Miller KL, Jezzard P.

NMR Biomed. 2016 Apr 13. doi: 10.1002/nbm.3515. [Epub ahead of print]

new

MR Angiography at 7T to Visualize Cerebrovascular Territories.

Neumann JO, Giese H, Nagel AM, Biller A, Unterberg A, Meinzer HP.

J Neuroimaging. 2016 Apr 14. doi: 10.1111/jon.12348. [Epub ahead of print]

new

Utility of noncontrast-enhanced time-resolved four-dimensional MR angiography with a vessel-selective technique for intracranial arteriovenous malformations.

Fujima N, Osanai T, Shimizu Y, Yoshida A, Harada T, Nakayama N, Kudo K, Houkin K, Shirato H.

J Magn Reson Imaging. 2016 Mar 10. doi: 10.1002/jmri.25222. [Epub ahead of print]

Evaluation of Intracranial Arteriovenous Malformations With Four-Dimensional Arterial-Spin-Labeling-Based 3-T Magnetic Resonance Angiography.

Iryo Y, Hirai T, Nakamura M, Kawano T, Kaku Y, Ohmori Y, Kai Y, Azuma M, Nishimura S, Shigematsu Y, Kitajima M, Yamashita Y.

J Comput Assist Tomogr. 2016 Mar-Apr;40(2):290-6. doi: 10.1097/RCT.0000000000000346.

ASL in the Liver

new

Vascular assessment of Liver Disease - towards a new frontier in MR imaging.

Chouhan MD, Lythgoe MF, Mookerjee RP, Taylor SA.

Br J Radiol. 2016 Apr 26;20150675. [Epub ahead of print]

new

Acute changes in liver tumour perfusion measured non-invasively with arterial spin labelling.

Johnson SP, Ramasawmy R, Campbell-Washburn AE, Wells JA, Robson M, Rajkumar V, Lythgoe MF, Pedley RB, Walker-Samuel S.

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ASL in Kidneys

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Evaluation of renal allografts function early after transplantation using intravoxel incoherent motion and arterial spin labeling MRI.

Ren T, Wen CL, Chen LH, Xie SS, Cheng Y, Fu YX, Oesingmann N, de Oliveira A, Zuo PL, Yin JZ, Xia S, Shen W.

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Reproducibility of Kidney Perfusion Measurements With Arterial Spin Labeling at 1.5 Tesla MRI Combined With Semiautomatic Segmentation for Differential Cortical and Medullary Assessment.

Hammon M, Janka R, Siegl C, Seuss H, Grosso R, Martirosian P, Schmieder RE, Uder M, Kistner I.

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Reproducibility Studies

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Arterial spin labeling magnetic resonance perfusion study to evaluate the effects of age and gender on normal cerebral blood flow.

Soni N, Jain A, Kumar S, Pandey CM, Awasthi A.

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Non-CBF specific: Comparison of ASL Methods/ Comparison of ASL with Other Imaging Methods ASL

new

[Brain imaging of neurovascular dysfunction in Alzheimer's disease.](#)

Montagne A, Nation DA, Pa J, Sweeney MD, Toga AW, Zlokovic BV.

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Hammon M, Janka R, Siegl C, Seuss H, Grosso R, Martirosian P, Schmieder RE, Uder M, Kistner I.

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[7 T renal MRI: challenges and promises.](#)

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Cohort Studies / Gender- and Age Dependencies

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Ren T, Wen CL, Chen LH, Xie SS, Cheng Y, Fu YX, Oesingmann N, de Oliveira A, Zuo PL, Yin JZ, Xia S, Shen W.
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[Establishing moderators and biosignatures of antidepressant response in clinical care \(EMBARC\): Rationale and design.](#)

Trivedi MH, McGrath PJ, Fava M, Parsey RV, Kurian BT, Phillips ML, Oquendo MA, Bruder G, Pizzagalli D, Toups M, Cooper C, Adams P, Weyandt S, Morris DW, Grannemann BD, Ogden RT, Buckner R, McInnis M, Kraemer HC, Petkova E, Carmody TJ, Weissman MM.
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Soni N, Jain A, Kumar S, Pandey CM, Awasthi A.

Neurol India. 2016 Mar-Apr;64 Suppl:S32-8. doi: 10.4103/0028-3886.178037.

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Wong AM, Yeh CH, Liu HL, Lin KL, Wang HS, Toh CH.

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[Establishing moderators and biosignatures of antidepressant response in clinical care \(EMBARC\): Rationale and design.](#)

Trivedi MH, McGrath PJ, Fava M, Parsey RV, Kurian BT, Phillips ML, Oquendo MA, Bruder G, Pizzagalli D, Toups M, Cooper C, Adams P, Weyandt S, Morris DW, Grannemann BD, Ogden RT, Buckner R, McInnis M, Kraemer HC, Petkova E, Carmody TJ, Weissman MM.
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[7 T renal MRI: challenges and promises.](#)

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[Arterial Spin-labeling in Central Nervous System Infection.](#)

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