

Dear Colleagues,

The time for summer vacations seems to be the time to publish. Please find below an overview of the published articles in June and July regarding ASL.

The different categories in the *ASL Newsletter No. 66* list various highlights presented during ISMRM.

Happy browsing!

Kind regards,  
Klaus

## Recent publications June & July 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*

### **Effects of Xiaoshuan enteric-coated capsule on neurovascular functions assessed by quantitative multiparametric MRI in a rat model of permanent cerebral ischemia.**

Zhang J, Zou H, Zhang Q, Wang L, Lei J, Wang Y, Ouyang J, Zhang Y, Zhao H.  
BMC Complement Altern Med. 2016 Jul 8;16(1):198. doi: 10.1186/s12906-016-1184-z.  
[Free PMC Article](#)

### **MRI of cerebral blood flow under hyperbaric conditions in rats.**

Cardenas DP, Muir ER, Duong TQ.  
NMR Biomed. 2016 Jul;29(7):961-8. doi: 10.1002/nbm.3555. Epub 2016 May 18.

### **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.

### **High fat diet-induced diabetes in mice exacerbates cognitive deficit due to chronic hypoperfusion.**

Zuloaga KL, Johnson LA, Roese NE, Marzulla T, Zhang W, Nie X, Alkayed FN, Hong C, Grafe MR, Pike MM, Raber J, Alkayed NJ.  
J Cereb Blood Flow Metab. 2016 Jul;36(7):1257-70. doi: 10.1177/0271678X15616400. Epub 2015 Nov 11.

### **Targeted overexpression of endothelial nitric oxide synthase in endothelial cells improves cerebrovascular reactivity in Ins2Akita-type-1 diabetic mice.**

Chandra SB, Mohan S, Ford BM, Huang L, Janardhanan P, Deo KS, Cong L, Muir ER, Duong TQ.  
J Cereb Blood Flow Metab. 2016 Jun;36(6):1135-42. doi: 10.1177/0271678X15612098. Epub 2015 Oct 26.

*new*

**Using intravoxel incoherent motion MR imaging to study the renal pathophysiological process of contrast-induced acute kidney injury in rats: Comparison with conventional DWI and arterial spin labelling.**

Liang L, Chen WB, Chan KW, Li YG, Zhang B, Liang CH, Liu GS, Zhang SX.  
Eur Radiol. 2016 Jun;26(6):1597-605. doi: 10.1007/s00330-015-3990-y. Epub 2015 Sep 15.

**Repeatability and variability of myocardial perfusion imaging techniques in mice: Comparison of arterial spin labeling and first-pass contrast-enhanced MRI.**

Naresh NK, Chen X, Moran E, Tian Y, French BA, Epstein FH.  
Magn Reson Med. 2016 Jun;75(6):2394-405. doi: 10.1002/mrm.25769. Epub 2015 Jul 20.

## **Pharmacological / Drug Studies / Studies on the Effects of Therapies**

*new*

**Baseline Perfusion Alterations Due to Acute Application of Quetiapine and Pramipexole in Healthy Adults.**

Michels L, Scherpriet S, Stämpfli P, Herwig U, Brühl AB.  
Int J Neuropsychopharmacol. 2016 Jul 27. pii: pyw067. doi: 10.1093/ijnp/pyw067. [Epub ahead of print]  
[Free Article](#)

*new*

**Aerobic fitness is associated with greater hippocampal cerebral blood flow in children.**

Chaddock-Heyman L, Erickson KI, Chappell MA, Johnson CL, Kienzler C, Knecht A, Drollette ES, Raine LB, Scudder MR, Kao SC, Hillman CH, Kramer AF.  
Dev Cogn Neurosci. 2016 Jul 4;20:52-58. doi: 10.1016/j.dcn.2016.07.001. [Epub ahead of print]

*new*

**Cerebral blood flow MRI in the nondemented elderly is not predictive of post-operative delirium but is correlated with cognitive performance.**

Hshieh TT, Dai W, Cavallari M, Guttmann CR, Meier DS, Schmitt EM, Dickerson BC, Press DZ, Marcantonio ER, Jones RN, Gou YR, Trivison TG, Fong TG, Ngo L, Inouye SK, Alsop DC; SAGES Study Group.  
J Cereb Blood Flow Metab. 2016 Jul 11. pii: 0271678X16656014. [Epub ahead of print]

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**Effects of Xiaoshuan enteric-coated capsule on neurovascular functions assessed by quantitative multiparametric MRI in a rat model of permanent cerebral ischemia.**

Zhang J, Zou H, Zhang Q, Wang L, Lei J, Wang Y, Ouyang J, Zhang Y, Zhao H.  
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*new*

**Atomoxetine restores the response inhibition network in Parkinson's disease.**

Rae CL, Nombela C, Rodríguez PV, Ye Z, Hughes LE, Jones PS, Ham T, Rittman T, Coyle-Gilchrist I, Regenthal R, Sahakian BJ, Barker RA, Robbins TW, Rowe JB.  
Brain. 2016 Jun 24. pii: aww138. [Epub ahead of print]

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**Differentiation between recurrent gliomas and radiation necrosis using arterial spin labeling perfusion imaging.**

Ye J, Bhagat SK, Li H, Luo X, Wang B, Liu L, Yang G.  
Exp Ther Med. 2016 Jun;11(6):2432-2436. Epub 2016 Apr 4  
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**MRI of cerebral blood flow under hyperbaric conditions in rats.**

Cardenas DP, Muir ER, Duong TQ.  
NMR Biomed. 2016 Jul;29(7):961-8. doi: 10.1002/nbm.3555. Epub 2016 May 18.

**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 Jul;174(1-3):99-105. doi: 10.1016/j.schres.2016.03.039. Epub 2016 Apr 22.  
[Free Article](#)

## Cerebral Blood Flow Studies

### CBF Regional Comparison / Regional ASL

*new*

**Implication of cerebral circulation time in intracranial stenosis measured by digital subtraction angiography on cerebral blood flow estimation measured by arterial spin labeling.**

Jann K, Hauf M, Kellner Weldon F, El Koussy M, Kiefer C, Federspiel A, Schroth G.  
Diagn Interv Radiol. 2016 Jul 13. doi: 10.5152/dir.2016.15204. [Epub ahead of print]

*new*

**Arterial spin labeling perfusion predicts longitudinal decline in semantic variant primary progressive aphasia.**

Olm CA, Kandel BM, Avants BB, Detre JA, Gee JC, Grossman M, McMillan CT.  
J Neurol. 2016 Jul 5. [Epub ahead of print]

## Studies on Special Disease

*new*

### **Misinterpretation of ischaemic infarct location in relationship to the cerebrovascular territories.**

Hartkamp NS, Hendrikse J, De Cocker LJ, de Borst GJ, Kappelle LJ, Bokkers RP.  
J Neurol Neurosurg Psychiatry. 2016 Jul 27. pii: jnnp-2015-312906. doi: 10.1136/jnnp-2015-312906. [Epub ahead of print]

[Free Article](#)

*new*

### **Serial arterial spin labeling MRI in autonomic status epilepticus due to anti-LGI1 encephalitis.**

Espinosa-Jovel C, Toledano R, García-Morales I, Álvarez-Linera J, Gil-Nagel A.  
Neurology. 2016 Jul 26;87(4):443-4. doi: 10.1212/WNL.0000000000002903. No abstract available.

*new*

### **Neurovascular unit impairment in early Alzheimer's disease measured with magnetic resonance imaging.**

van de Haar HJ, Jansen JF, van Osch MJ, van Buchem MA, Muller M, Wong SM, Hofman PA, Burgmans S, Verhey FR, Backes WH.  
Neurobiol Aging. 2016 Jun 17;45:190-196. doi: 10.1016/j.neurobiolaging.2016.06.006. [Epub ahead of print]

*new*

### **Higher Brain Perfusion May Not Support Memory Functions in Cognitively Normal Carriers of the ApoE $\epsilon$ 4 Allele Compared to Non-Carriers.**

Zlatar ZZ, Bischoff-Grethe A, Hays CC, Liu TT, Meloy MJ, Rissman RA, Bondi MW, Wierenga CE.  
Front Aging Neurosci. 2016 Jun 24;8:151. doi: 10.3389/fnagi.2016.00151. eCollection 2016.

*new*

### **Altered Cerebral Blood Flow Covariance Network in Schizophrenia.**

Liu F, Zhuo C, Yu C.  
Front Neurosci. 2016 Jun 30;10:308. doi: 10.3389/fnins.2016.00308. eCollection 2016.

*new*

### **Recurrent Glioblastoma: Combination of High Cerebral Blood Flow with MGMT Promoter Methylation Is Associated with Benefit from Low-Dose Temozolomide Rechallenge at First Recurrence.**

Kim C, Kim HS, Shim WH, Choi CG, Kim SJ, Kim JH.  
Radiology. 2016 Jul 18:152152. [Epub ahead of print]

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### **Implication of cerebral circulation time in intracranial stenosis measured by digital subtraction angiography on cerebral blood flow estimation measured by arterial spin labeling.**

Jann K, Hauf M, Kellner Weldon F, El Koussy M, Kiefer C, Federspiel A, Schroth G.  
Diagn Interv Radiol. 2016 Jul 13. doi: 10.5152/dir.2016.15204. [Epub ahead of print]

*new*

**Brain perfusion in dementia with Lewy bodies and Alzheimer's disease: an arterial spin labeling MRI study on prodromal and mild dementia stages.**

Roquet D, Sourty M, Botzung A, Armspach JP, Blanc F.

Alzheimers Res Ther. 2016 Jul 12;8:29. doi: 10.1186/s13195-016-0196-8.

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**Effects of Xiaoshuan enteric-coated capsule on neurovascular functions assessed by quantitative multiparametric MRI in a rat model of permanent cerebral ischemia.**

Zhang J, Zou H, Zhang Q, Wang L, Lei J, Wang Y, Ouyang J, Zhang Y, Zhao H.

BMC Complement Altern Med. 2016 Jul 8;16(1):198. doi: 10.1186/s12906-016-1184-z.

[Free PMC Article](#)

*new*

**Cerebral blood flow response to hypoglycemia is altered in patients with type 1 diabetes and impaired awareness of hypoglycemia.**

Wiegers EC, Becker KM, Rooijackers HM, von Samson-Himmelstjerna FC, Tack CJ, Heerschap A, de Galan BE, van der Graaf M.

J Cereb Blood Flow Metab. 2016 Jul 7. pii: 0271678X16658914. [Epub ahead of print]

*new*

**Detection of Retinal Hemangioblastomas in von Hippel-Lindau Disease Using Three-Dimensional Arterial Spin Labeling MR Imaging at 3T.**

Nomura JI, Beppu T, Sasaki M, Fujiwara S, Ogasawara K.

Magn Reson Med Sci. 2016 Jul 5. [Epub ahead of print] No abstract available.

[Free Article](#)

*new*

**Arterial spin labeling perfusion predicts longitudinal decline in semantic variant primary progressive aphasia.**

Olm CA, Kandel BM, Avants BB, Detre JA, Gee JC, Grossman M, McMillan CT.

J Neurol. 2016 Jul 5. [Epub ahead of print]

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**Patterns of postictal cerebral perfusion in idiopathic generalized epilepsy: a multi-delay multi-parametric arterial spin labelling perfusion MRI study.**

Chen G, Lei D, Ren J, Zuo P, Suo X, Wang DJ, Wang M, Zhou D, Gong Q.

Sci Rep. 2016 Jul 4;6:28867. doi: 10.1038/srep28867.

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*new*

**Perfusion magnetic resonance imaging provides additional information as compared to anatomical imaging for decision-making in vestibular schwannoma.**

Kleijwegt MC, van der Mey AG, Wiggers-deBruine FT, Malessy MJ, van Osch MJ.

Eur J Radiol Open. 2016 Jun 15;3:127-33. doi: 10.1016/j.ejro.2016.05.005. eCollection 2016.

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*new*

**Non-parametric intravoxel incoherent motion analysis in patients with intracranial lesions: Test-retest reliability and correlation with arterial spin labeling.**

Stieb S, Boss A, Wurnig MC, Özbay PS, Weiss T, Guckenberger M, Riesterer O, Rossi C. Neuroimage Clin. 2016 Jun 2;11:780-8. doi: 10.1016/j.nicl.2016.05.022. eCollection 2016. [Free PMC Article](#)

*new*

**Differential diagnosis of mitochondrial encephalopathy with lactic acidosis and stroke-like episodes (MELAS) and ischemic stroke using 3D pseudocontinuous arterial spin labeling.**

Li R, Xiao HF, Lyu JH, J J Wang D, Ma L, Lou X. J Magn Reson Imaging. 2016 Jun 27. doi: 10.1002/jmri.25354. [Epub ahead of print]

*new*

**Application of 3.0T magnetic resonance arterial spin labeling (ASL) technology in mild and moderate intracranial atherosclerotic stenosis.**

Li Z, Li N, Qu Y, Gai F, Zhang G, Zhang G. Exp Ther Med. 2016 Jul;12(1):297-301. Epub 2016 May 9. [Free PMC Article](#)

*new*

**Atomoxetine restores the response inhibition network in Parkinson's disease.**

Rae CL, Nombela C, Rodríguez PV, Ye Z, Hughes LE, Jones PS, Ham T, Rittman T, Coyle-Gilchrist I, Regenthal R, Sahakian BJ, Barker RA, Robbins TW, Rowe JB. Brain. 2016 Jun 24. pii: aww138. [Epub ahead of print]

*new*

**Lower cerebral blood flow is associated with faster cognitive decline in Alzheimer's disease.**

Benedictus MR, Leeuwis AE, Binnewijzend MA, Kuijjer JP, Scheltens P, Barkhof F, van der Flier WM, Prins ND. Eur Radiol. 2016 Jun 22. [Epub ahead of print]

*new*

**[Multi-parameter arterial spin labeling versus dynamic magnetic-sensitive enhanced cerebral perfusion imaging for diagnosis of transient cerebral ischemic attack].**

Xu Y, Lv JH, Ma L, Chen WJ, Lou X. Nan Fang Yi Ke Da Xue Xue Bao. 2016 Jun 20;36(6):768-74. Chinese.

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**Cerebral blood flow modulation insufficiency in brain networks in multiple sclerosis: A hypercapnia MRI study.**

Marshall O, Chawla S, Lu H, Pape L, Ge Y. J Cereb Blood Flow Metab. 2016 Jun 15. pii: 0271678X16654922. [Epub ahead of print]

*new*

**Quantitative assessment of flow reduction after feeder embolization in meningioma by using pseudocontinuous arterial spin labeling.**

Wanibuchi M, Komatsu K, Akiyama Y, Mikami T, Iihoshi S, Miyata K, Mikuni N.

World Neurosurg. 2016 Jun 10. pii: S1878-8750(16)30376-X. doi: 10.1016/j.wneu.2016.06.004.

[Epub ahead of print] No abstract available.

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**Differentiation between recurrent gliomas and radiation necrosis using arterial spin labeling perfusion imaging.**

Ye J, Bhagat SK, Li H, Luo X, Wang B, Liu L, Yang G.

Exp Ther Med. 2016 Jun;11(6):2432-2436. Epub 2016 Apr 4

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*new*

**Decreased Regional Cerebral Perfusion at Resting State in Acute Posttraumatic Stress Disorder Resulting From a Single, Prolonged Stress Event.**

Zhe X, Liu K, Mu YF, Qi S, Xi YB, Du P, Huan Y, Tan QR, Yin H, Zhao HT, Ge YL, Chang YJ.

Acad Radiol. 2016 Jun 6. pii: S1076-6332(16)30074-5. doi: 10.1016/j.acra.2016.05.002. [Epub

ahead of print]

*new*

**Arterial Transit Time Mapping Obtained by Pulsed Continuous 3D ASL Imaging with Multiple Post-Label Delay Acquisitions: Comparative Study with PET-CBF in Patients with Chronic Occlusive Cerebrovascular Disease.**

Tsujikawa T, Kimura H, Matsuda T, Fujiwara Y, Isozaki M, Kikuta K, Okazawa H.

PLoS One. 2016 Jun 8;11(6):e0156005. doi: 10.1371/journal.pone.0156005. eCollection 2016.

Erratum in: [PLoS One. 2016;11\(7\):e0159894.](#)

[Free PMC Article](#)

*new*

**Arterial Spin Labeling to Predict Brain Tumor Grading in Children: Correlations between Histopathologic Vascular Density and Perfusion MR Imaging.**

Dangouloff-Ros V, Deroulers C, Foissac F, Badoual M, Shotar E, Grévent D, Calmon R, Pagès M, Grill J, Dufour C, Blauwblomme T, Puget S, Zerah M, Sainte-Rose C, Brunelle F, Varlet P, Boddaert N.

Radiology. 2016 Jun 3:152228. [Epub ahead of print]

*new*

**Baseline collateral status and infarct topography in post-ischaemic perilesional hyperperfusion: An arterial spin labelling study.**

Bhaskar S, Bivard A, Stanwell P, Parsons M, Attia JR, Nilsson M, Levi C.

J Cereb Blood Flow Metab. 2016 Jun 2. pii: 0271678X16653133. [Epub ahead of print]



*new*

**Concurrent white and gray matter degeneration of disease-specific networks in early-stage Alzheimer's disease and behavioral variant frontotemporal dementia.**

Steketee RM, Meijboom R, de Groot M, Bron EE, Niessen WJ, van der Lugt A, van Swieten JC, Smits M.

Neurobiol Aging. 2016 Jul;43:119-28. doi: 10.1016/j.neurobiolaging.2016.03.031. Epub 2016 Apr 7.

*new*

**Capability of arterial spin labeling MR imaging in localizing seizure focus in clinical seizure activity.**

Kim BS, Lee ST, Yun TJ, Lee SK, Paeng JC, Jun J, Kang KM, Choi SH, Kim JH, Sohn CH.

Eur J Radiol. 2016 Jul;85(7):1295-303. doi: 10.1016/j.ejrad.2016.04.015. Epub 2016 Apr 29.

**Altered hippocampal function in major depression despite intact structure and resting perfusion.**

Finkelmeyer A, Nilsson J, He J, Stevens L, Maller JJ, Moss RA, Small S, Gallagher P, Coventry K, Ferrier IN, McAllister-Williams RH.

Psychol Med. 2016 Jul;46(10):2157-68. doi: 10.1017/S0033291716000702. Epub 2016 May 19.

**Arterial Spin Labeling Perfusion Magnetic Resonance Imaging Performed in Acute Perinatal Stroke Reveals Hyperperfusion Associated With Ischemic Injury.**

Watson CG, Dehaes M, Gagoski BA, Grant PE, Rivkin MJ.

Stroke. 2016 Jun;47(6):1514-9. doi: 10.1161/STROKEAHA.115.011936. Epub 2016 May 3.

**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 Jul;25(7):1807-12. doi:

10.1016/j.jstrokecerebrovasdis.2016.03.035. Epub 2016 Apr 22.

**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 Jul;207(1):163-9. doi: 10.2214/AJR.15.15171. Epub 2016 Apr 15.

**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 Jun;37(6):1132-8. doi: 10.3174/ajnr.A4758. Epub 2016 Apr 7.

**A case of acute onset succinic semialdehyde dehydrogenase deficiency: neuroimaging findings and literature review.**

Wang KY, Barker PB, Lin DD.

Childs Nerv Syst. 2016 Jul;32(7):1305-9. doi: 10.1007/s00381-015-2942-9. Epub 2015 Oct 24.

**Cerebral Blood Flow Alterations in Acute Sport-Related Concussion.**

Wang Y, Nelson LD, LaRoche AA, Pfaller AY, Nencka AS, Koch KM, McCrea MA.  
J Neurotrauma. 2016 Jul 1;33(13):1227-36. doi: 10.1089/neu.2015.4072. Epub 2015 Nov 12.

*new*

**Basal Ganglia Perfusion in Fibromyalgia is Related to Pain Disability and Disease Impact: An Arterial Spin Labeling Study.**

Shokouhi M, Davis KD, Moulin DE, Morley-Forster P, Nielson WR, Bureau Y, St Lawrence K.  
Clin J Pain. 2016 Jun;32(6):495-505. doi: 10.1097/AJP.0000000000000295.

**Alterations in default-mode network connectivity may be influenced by cerebrovascular changes within 1 week of sports related concussion in college varsity athletes: a pilot study.**

Militana AR, Donahue MJ, Sills AK, Solomon GS, Gregory AJ, Strother MK, Morgan VL.  
Brain Imaging Behav. 2016 Jun;10(2):559-68. doi: 10.1007/s11682-015-9407-3.

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

*new*

**MRI of cerebral micro-vascular flow patterns: A multi-direction diffusion-weighted ASL approach.**

Wells JA, Thomas DL, Saga T, Kershaw J, Aoki I.  
J Cereb Blood Flow Metab. 2016 Jul 26. pii: 0271678X16660985. [Epub ahead of print]

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**Differential diagnosis of mitochondrial encephalopathy with lactic acidosis and stroke-like episodes (MELAS) and ischemic stroke using 3D pseudocontinuous arterial spin labeling.**

Li R, Xiao HF, Lyu JH, J J Wang D, Ma L, Lou X.  
J Magn Reson Imaging. 2016 Jun 27. doi: 10.1002/jmri.25354. [Epub ahead of print]

*new*

**A linear mixed perfusion model for tissue partial volume correction of perfusion estimates in dynamic susceptibility contrast MRI: Impact on absolute quantification, repeatability, and agreement with pseudo-continuous arterial spin labeling.**

Ahlgren A, Wirestam R, Lind E, Ståhlberg F, Knutsson L.  
Magn Reson Med. 2016 Jun 20. doi: 10.1002/mrm.26305. [Epub ahead of print]

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**[Multi-parameter arterial spin labeling versus dynamic magnetic-sensitive enhanced cerebral perfusion imaging for diagnosis of transient cerebral ischemic attack].**

Xu Y, Lv JH, Ma L, Chen WJ, Lou X.  
Nan Fang Yi Ke Da Xue Xue Bao. 2016 Jun 20;36(6):768-74. Chinese.

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**Dynamic susceptibility contrast perfusion MRI using phase-based venous output functions: comparison with pseudo-continuous arterial spin labelling and assessment of contrast agent concentration in large veins.**

Wirestam R, Lind E, Ahlgren A, Ståhlberg F, Knutsson L.  
MAGMA. 2016 Jun 13. [Epub ahead of print]

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Erratum in: [PLoS One. 2016;11\(7\):e0159894.](#)  
[Free PMC Article](#)

*new*

[Comparison of cerebral blood flow and structural penumbras in relation to white matter hyperintensities: A multi-modal magnetic resonance imaging study.](#)

Promjunyakul NO, Lahna DL, Kaye JA, Dodge HH, Erten-Lyons D, Rooney WD, Silbert LC.  
J Cereb Blood Flow Metab. 2016 Jun 7. pii: 0271678X16651268. [Epub ahead of print]

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[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 Jun;89(1062):20150624. doi: 10.1259/bjr.20150624. Epub 2016 Mar 15.

## Functional Imaging / BOLD

*new*

[Optimization of simultaneous multislice EPI for concurrent functional perfusion and BOLD signal measurements at 7T.](#)

Ivanov D, Poser BA, Huber L, Pfeuffer J, Uludağ K.  
Magn Reson Med. 2016 Jul 28. doi: 10.1002/mrm.26351. [Epub ahead of print]

*new*

[Modulating transcallosal and intrahemispheric brain connectivity with tDCS: Implications for interventions in Aphasia.](#)

Zheng X, Dai W, Alsop DC, Schlaug G.  
Restor Neurol Neurosci. 2016 Jul 25. [Epub ahead of print]

*new*

**The neurobiology of addiction: the perspective from magnetic resonance imaging present and future.**

Suckling J, Nestor LJ.

Addiction. 2016 Jul 25. doi: 10.1111/add.13474. [Epub ahead of print] Review

*new*

**Cerebral blood flow modulation insufficiency in brain networks in multiple sclerosis: A hypercapnia MRI study.**

Marshall O, Chawla S, Lu H, Pape L, Ge Y.

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Radiology. 2016 Jun 3:152228. [Epub ahead of print]

**Altered hippocampal function in major depression despite intact structure and resting perfusion.**

Finkelmeyer A, Nilsson J, He J, Stevens L, Maller JJ, Moss RA, Small S, Gallagher P, Coventry K, Ferrier IN, McAllister-Williams RH.

Psychol Med. 2016 Jul;46(10):2157-68. doi: 10.1017/S0033291716000702. Epub 2016 May 19.

**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 Jul 1;134:587-96. doi: 10.1016/j.neuroimage.2016.04.035. Epub 2016 Apr 18.

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

Demeter E, Woldorff MG.

J Cogn Neurosci. 2016 Jul;28(7):935-47. doi: 10.1162/jocn\_a\_00949. Epub 2016 Mar 11.

**Alterations in default-mode network connectivity may be influenced by cerebrovascular changes within 1 week of sports related concussion in college varsity athletes: a pilot study.**

Militana AR, Donahue MJ, Sills AK, Solomon GS, Gregory AJ, Strother MK, Morgan VL.

Brain Imaging Behav. 2016 Jun;10(2):559-68. doi: 10.1007/s11682-015-9407-3.

## Others CBF Related

*new*

### [Aerobic fitness is associated with greater hippocampal cerebral blood flow in children.](#)

Chaddock-Heyman L, Erickson KI, Chappell MA, Johnson CL, Kienzler C, Knecht A, Drollette ES, Raine LB, Scudder MR, Kao SC, Hillman CH, Kramer AF.

Dev Cogn Neurosci. 2016 Jul 4;20:52-58. doi: 10.1016/j.dcn.2016.07.001. [Epub ahead of print]

### [Mapping blood flow directionality in the human brain.](#)

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

Magn Reson Imaging. 2016 Jul;34(6):754-64. doi: 10.1016/j.mri.2016.03.005. Epub 2016 Mar 8.

## Physiological Parameters besides CBF

*new*

### [T2-prepared velocity selective labelling: A novel idea for full-brain mapping of oxygen saturation.](#)

Alderliesten T, De Vis JB, Lemmers PM, van Bel F, Benders MJ, Hendrikse J, Petersen ET.

Neuroimage. 2016 Jun 9;139:65-73. doi: 10.1016/j.neuroimage.2016.06.012. [Epub ahead of print]

*new*

### [White Matter Hyperintensity Volume and Cerebral Perfusion in Older Individuals with Hypertension Using Arterial Spin-Labeling.](#)

van Dalen JW, Mutsaerts HJ, Nederveen AJ, Vrenken H, Steenwijk MD, Caan MW, Majoie CB, van Gool WA, Richard E.

AJNR Am J Neuroradiol. 2016 Jun 9. [Epub ahead of print]

## ASL for Angiography

*new*

### [Acceleration-selective arterial spin labeling for intracranial MR angiography with improved visualization of cortical arteries and suppression of cortical veins.](#)

Obara M, Togao O, Yoneyama M, Okuaki T, Shibukawa S, Honda H, Van Cauteren M.

Magn Reson Med. 2016 Jul 15. doi: 10.1002/mrm.26275. [Epub ahead of print]

*new*

### [Planning-free cerebral blood flow territory mapping in patients with intracranial arterial stenosis.](#)

Arteaga DF, Strother MK, Davis LT, Fusco MR, Faraco CC, Roach BA, Scott AO, Donahue MJ.

J Cereb Blood Flow Metab. 2016 Jul 7. pii: 0271678X16657573. [Epub ahead of print]

*new*

### [Accelerated visualization of selected intracranial arteries by cycled super-selective arterial spin labeling.](#)

Lindner T, Larsen N, Jansen O, Helle M.

MAGMA. 2016 Jun 29. [Epub ahead of print]

*new*

**Arterial Spin-Labeling Magnetic Resonance Perfusion Imaging with Dual Postlabeling Delay in Internal Carotid Artery Steno-occlusion: Validation with Digital Subtraction Angiography.**

Akiyama T, Morioka T, Shimogawa T, Haga S, Sayama T, Kanazawa Y, Murao K, Arakawa S. J Stroke Cerebrovasc Dis. 2016 Jun 21. pii: S1052-3057(16)30122-7. doi: 10.1016/j.jstrokecerebrovasdis.2016.06.005. [Epub ahead of print]

**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 Jun;29(6):776-86. doi: 10.1002/nbm.3515. Epub 2016 Apr 13. [Free PMC Article](#)

Comment: [noninversive angiography, alternative to ASL](#)

**Optimized 4D time-of-flight MR angiography using saturation pulse.**

Shibukawa S, Nishio H, Niwa T, Obara M, Miyati T, Hara T, Imai Y, Muro I. J Magn Reson Imaging. 2016 Jun;43(6):1320-6. doi: 10.1002/jmri.25118. Epub 2015 Dec 15.

## ASL in the Liver

*new*

**Non-invasive assessment of Portal Hypertension Using Quantitative Magnetic Resonance Imaging.**

Palaniyappan N, Cox E, Bradley C, Scott R, Austin A, O'Neill R, Ramjas G, Travis S, White H, Singh R, Thurley P, Guha IN, Francis S, Aithal GP. J Hepatol. 2016 Jul 27. pii: S0168-8278(16)30348-8. doi: 10.1016/j.jhep.2016.07.021. [Epub ahead of print]

## ASL in Kidneys

*new*

**Non-Contrast Renal Magnetic Resonance Imaging to Assess Perfusion and Corticomedullary Differentiation in Health and Chronic Kidney Disease.**

Gillis KA, McComb C, Patel RK, Stevens KK, Schneider MP, Radjenovic A, Morris ST, Roditi GH, Delles C, Mark PB. Nephron. 2016 Jul 1. [Epub ahead of print]

*new*

**Using intravoxel incoherent motion MR imaging to study the renal pathophysiological process of contrast-induced acute kidney injury in rats: Comparison with conventional DWI and arterial spin labelling.**

Liang L, Chen WB, Chan KW, Li YG, Zhang B, Liang CH, Liu GS, Zhang SX. Eur Radiol. 2016 Jun;26(6):1597-605. doi: 10.1007/s00330-015-3990-y. Epub 2015 Sep 15.

## Perfusion Studies (others as listed before)

[Repeatability and variability of myocardial perfusion imaging techniques in mice: Comparison of arterial spin labeling and first-pass contrast-enhanced MRI.](#)

Naresh NK, Chen X, Moran E, Tian Y, French BA, Epstein FH.

Magn Reson Med. 2016 Jun;75(6):2394-405. doi: 10.1002/mrm.25769. Epub 2015 Jul 20.

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

*new*

[Accelerated visualization of selected intracranial arteries by cycled super-selective arterial spin labeling.](#)

Lindner T, Larsen N, Jansen O, Helle M.

MAGMA. 2016 Jun 29. [Epub ahead of print]

*new*

[A linear mixed perfusion model for tissue partial volume correction of perfusion estimates in dynamic susceptibility contrast MRI: Impact on absolute quantification, repeatability, and agreement with pseudo-continuous arterial spin labeling.](#)

Ahlgren A, Wirestam R, Lind E, Ståhlberg F, Knutsson L.

Magn Reson Med. 2016 Jun 20. doi: 10.1002/mrm.26305. [Epub ahead of print]

*new*

[T2-prepared velocity selective labelling: A novel idea for full-brain mapping of oxygen saturation.](#)

Alderliesten T, De Vis JB, Lemmers PM, van Bel F, Benders MJ, Hendrikse J, Petersen ET.

Neuroimage. 2016 Jun 9;139:65-73. doi: 10.1016/j.neuroimage.2016.06.012. [Epub ahead of print]

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Liang L, Chen WB, Chan KW, Li YG, Zhang B, Liang CH, Liu GS, Zhang SX.

Eur Radiol. 2016 Jun;26(6):1597-605. doi: 10.1007/s00330-015-3990-y. Epub 2015 Sep 15.

## ASL Data Analysis/ Comparison of ASL Evaluation Methods/ Kinetic Models/ Data Corrections

*new*

[Planning-free cerebral blood flow territory mapping in patients with intracranial arterial stenosis.](#)

Arteaga DF, Strother MK, Davis LT, Fusco MR, Faraco CC, Roach BA, Scott AO, Donahue MJ. J Cereb Blood Flow Metab. 2016 Jul 7. pii: 0271678X16657573. [Epub ahead of print]

*new*

[Application of Machine Learning to Arterial Spin Labeling in Mild Cognitive Impairment and Alzheimer Disease.](#)

Collij LE, Heeman F, Kuijjer JP, Ossenkoppele R, Benedictus MR, Möller C, Verfaillie SC, Sanz-Arigita EJ, van Berckel BN, van der Flier WM, Scheltens P, Barkhof F, Wink AM. Radiology. 2016 Jul 6:152703. [Epub ahead of print]

*new*

[Non-parametric intravoxel incoherent motion analysis in patients with intracranial lesions: Test-retest reliability and correlation with arterial spin labeling.](#)

Stieb S, Boss A, Wurnig MC, Özbay PS, Weiss T, Guckenberger M, Riesterer O, Rossi C. Neuroimage Clin. 2016 Jun 2;11:780-8. doi: 10.1016/j.nicl.2016.05.022. eCollection 2016. [Free PMC Article](#)

*new*

[Lower cerebral blood flow is associated with faster cognitive decline in Alzheimer's disease.](#)

Benedictus MR, Leeuwis AE, Binnewijzend MA, Kuijjer JP, Scheltens P, Barkhof F, van der Flier WM, Prins ND. Eur Radiol. 2016 Jun 22. [Epub ahead of print]

*new*

[Quantitative assessment of flow reduction after feeder embolization in meningioma by using pseudocontinuous arterial spin labeling.](#)

Wanibuchi M, Komatsu K, Akiyama Y, Mikami T, Iihoshi S, Miyata K, Mikuni N. World Neurosurg. 2016 Jun 10. pii: S1878-8750(16)30376-X. doi: 10.1016/j.wneu.2016.06.004. [Epub ahead of print] No abstract available.

*new*

[Arterial Transit Time Mapping Obtained by Pulsed Continuous 3D ASL Imaging with Multiple Post-Label Delay Acquisitions: Comparative Study with PET-CBF in Patients with Chronic Occlusive Cerebrovascular Disease.](#)

Tsujikawa T, Kimura H, Matsuda T, Fujiwara Y, Isozaki M, Kikuta K, Okazawa H. PLoS One. 2016 Jun 8;11(6):e0156005. doi: 10.1371/journal.pone.0156005. eCollection 2016. Erratum in: [PLoS One. 2016;11\(7\):e0159894.](#)  
[Free PMC Article](#)



*new*

**Feasibility of Quantifying Arterial Cerebral Blood Volume Using Multiphase Alternate Ascending/Descending Directional Navigation (ALADDIN).**

Kim KH, Choi SH, Park SH.

PLoS One. 2016 Jun 3;11(6):e0156687. doi: 10.1371/journal.pone.0156687. eCollection 2016.

[Free PMC Article](#)

**An a contrario approach for the detection of patient-specific brain perfusion abnormalities with arterial spin labelling.**

Maumet C, Maurel P, Ferré JC, Barillot C.

Neuroimage. 2016 Jul 1;134:424-33. doi: 10.1016/j.neuroimage.2016.03.054. Epub 2016 Mar 31.

**Correction for Susceptibility Distortions Increases the Performance of Arterial Spin Labeling in Patients with Cerebrovascular Disease.**

Madaï VI, Martin SZ, von Samson-Himmelstjerna FC, Herzig CX, Mutke MA, Wood CN, Thamm T, Zweynert S, Bauer M, Hetzer S, Günther M, Sobesky J.

J Neuroimaging. 2016 Jul;26(4):436-44. doi: 10.1111/jon.12331. Epub 2016 Jan 27.

## **Technical Improvement / Parameter Optimization**

*new*

**Optimization of simultaneous multislice EPI for concurrent functional perfusion and BOLD signal measurements at 7T.**

Ivanov D, Poser BA, Huber L, Pfeuffer J, Uludağ K.

Magn Reson Med. 2016 Jul 28. doi: 10.1002/mrm.26351. [Epub ahead of print]

*new*

**MRI of cerebral micro-vascular flow patterns: A multi-direction diffusion-weighted ASL approach.**

Wells JA, Thomas DL, Saga T, Kershaw J, Aoki I.

J Cereb Blood Flow Metab. 2016 Jul 26. pii: 0271678X16660985. [Epub ahead of print]

*new*

**Acceleration-selective arterial spin labeling for intracranial MR angiography with improved visualization of cortical arteries and suppression of cortical veins.**

Obara M, Togao O, Yoneyama M, Okuaki T, Shibukawa S, Honda H, Van Cauteren M.

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J Cereb Blood Flow Metab. 2016 Jul 7. pii: 0271678X16657573. [Epub ahead of print]

*new*

[Effects of arterial transit delay on cerebral blood flow quantification using arterial spin labeling in an elderly cohort.](#)

Dai W, Fong T, Jones RN, Marcantonio E, Schmitt E, Inouye SK, Alsop DC.  
J Magn Reson Imaging. 2016 Jul 7. doi: 10.1002/jmri.25367. [Epub ahead of print]

*new*

[Application of Machine Learning to Arterial Spin Labeling in Mild Cognitive Impairment and Alzheimer Disease.](#)

Collij LE, Heeman F, Kuijjer JP, Ossenkuppele R, Benedictus MR, Möller C, Verfaillie SC, Sanz-Arigitia EJ, van Berckel BN, van der Flier WM, Scheltens P, Barkhof F, Wink AM.  
Radiology. 2016 Jul 6:152703. [Epub ahead of print]

*new*

[Patterns of postictal cerebral perfusion in idiopathic generalized epilepsy: a multi-delay multi-parametric arterial spin labelling perfusion MRI study.](#)

Chen G, Lei D, Ren J, Zuo P, Suo X, Wang DJ, Wang M, Zhou D, Gong Q.  
Sci Rep. 2016 Jul 4;6:28867. doi: 10.1038/srep28867.  
[Free PMC Article](#)

*new*

[Accelerated visualization of selected intracranial arteries by cycled super-selective arterial spin labeling.](#)

Lindner T, Larsen N, Jansen O, Helle M.  
MAGMA. 2016 Jun 29. [Epub ahead of print]

*new*

[Arterial Spin-Labeling Magnetic Resonance Perfusion Imaging with Dual Postlabeling Delay in Internal Carotid Artery Steno-occlusion: Validation with Digital Subtraction Angiography.](#)

Akiyama T, Morioka T, Shimogawa T, Haga S, Sayama T, Kanazawa Y, Murao K, Arakawa S.  
J Stroke Cerebrovasc Dis. 2016 Jun 21. pii: S1052-3057(16)30122-7. doi:  
10.1016/j.jstrokecerebrovasdis.2016.06.005. [Epub ahead of print]

*new*

[Feasibility of Quantifying Arterial Cerebral Blood Volume Using Multiphase Alternate Ascending/Descending Directional Navigation \(ALADDIN\).](#)

Kim KH, Choi SH, Park SH.  
PLoS One. 2016 Jun 3;11(6):e0156687. doi: 10.1371/journal.pone.0156687. eCollection 2016.  
[Free PMC Article](#)

[Mapping blood flow directionality in the human brain.](#)

Park SH, Do WJ, Choi SH, Zhao T, Bae KT.  
Magn Reson Imaging. 2016 Jul;34(6):754-64. doi: 10.1016/j.mri.2016.03.005. Epub 2016 Mar 8.

[Correction for Susceptibility Distortions Increases the Performance of Arterial Spin Labeling in Patients with Cerebrovascular Disease.](#)

Madai VI, Martin SZ, von Samson-Himmelstjerna FC, Herzig CX, Mutke MA, Wood CN, Thamm T, Zweynert S, Bauer M, Hetzer S, Günther M, Sobesky J.  
J Neuroimaging. 2016 Jul;26(4):436-44. doi: 10.1111/jon.12331. Epub 2016 Jan 27.

*new*

**Image reconstruction using a gradient impulse response model for trajectory prediction.**

Vannesjo SJ, Graedel NN, Kasper L, Gross S, Busch J, Haeberlin M, Barmet C, Pruessmann KP. Magn Reson Med. 2016 Jul;76(1):45-58. doi: 10.1002/mrm.25841. Epub 2015 Jul 27.

## **ASL at Field Strength > 3T**

*new*

**Optimization of simultaneous multislice EPI for concurrent functional perfusion and BOLD signal measurements at 7T.**

Ivanov D, Poser BA, Huber L, Pfeuffer J, Uludağ K.

Magn Reson Med. 2016 Jul 28. doi: 10.1002/mrm.26351. [Epub ahead of print]

**Pulsed arterial spin labelling at ultra-high field with a B 1 (+) -optimised adiabatic labelling pulse.**

Zimmer F, O'Brien K, Bollmann S, Pfeuffer J, Heberlein K, Barth M.

MAGMA. 2016 Jun;29(3):463-73. doi: 10.1007/s10334-016-0555-2. Epub 2016 Apr 15.

**7 T renal MRI: challenges and promises.**

de Boer A, Hoogduin JM, Blankestijn PJ, Li X, Luijten PR, Metzger GJ, Raaijmakers AJ, Umutlu L, Visser F, Leiner T.

MAGMA. 2016 Jun;29(3):417-33. doi: 10.1007/s10334-016-0538-3. Epub 2016 Mar 23. Review.

[Free PMC Article](#)

## **Reproducibility Studies**

*new*

**Brain perfusion in dementia with Lewy bodies and Alzheimer's disease: an arterial spin labeling MRI study on prodromal and mild dementia stages.**

Roquet D, Sourty M, Botzung A, Armspach JP, Blanc F.

Alzheimers Res Ther. 2016 Jul 12;8:29. doi: 10.1186/s13195-016-0196-8.

[Free PMC Article](#)

*new*

**Non-parametric intravoxel incoherent motion analysis in patients with intracranial lesions: Test-retest reliability and correlation with arterial spin labeling.**

Stieb S, Boss A, Wurnig MC, Özbay PS, Weiss T, Guckenberger M, Riesterer O, Rossi C.

Neuroimage Clin. 2016 Jun 2;11:780-8. doi: 10.1016/j.nicl.2016.05.022. eCollection 2016.

[Free PMC Article](#)

## Cohort Studies / Gender- and Age Dependencies

*new*

[Recurrent Glioblastoma: Combination of High Cerebral Blood Flow with MGMT Promoter Methylation Is Associated with Benefit from Low-Dose Temozolomide Rechallenge at First Recurrence.](#)

Kim C, Kim HS, Shim WH, Choi CG, Kim SJ, Kim JH.  
Radiology. 2016 Jul 18:152152. [Epub ahead of print]

*new*

[Aerobic fitness is associated with greater hippocampal cerebral blood flow in children.](#)

Chaddock-Heyman L, Erickson KI, Chappell MA, Johnson CL, Kienzler C, Knecht A, Drollette ES, Raine LB, Scudder MR, Kao SC, Hillman CH, Kramer AF.  
Dev Cogn Neurosci. 2016 Jul 4;20:52-58. doi: 10.1016/j.dcn.2016.07.001. [Epub ahead of print]

*new*

[Cerebral blood flow MRI in the nondemented elderly is not predictive of post-operative delirium but is correlated with cognitive performance.](#)

Hshieh TT, Dai W, Cavallari M, Guttmann CR, Meier DS, Schmitt EM, Dickerson BC, Press DZ, Marcantonio ER, Jones RN, Gou YR, Trivison TG, Fong TG, Ngo L, Inouye SK, Alsop DC; SAGES Study Group.  
J Cereb Blood Flow Metab. 2016 Jul 11. pii: 0271678X16656014. [Epub ahead of print]

*new*

[Brain perfusion in dementia with Lewy bodies and Alzheimer's disease: an arterial spin labeling MRI study on prodromal and mild dementia stages.](#)

Roquet D, Sourty M, Botzung A, Armspach JP, Blanc F.  
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[Free PMC Article](#)

*new*

[Effects of arterial transit delay on cerebral blood flow quantification using arterial spin labeling in an elderly cohort.](#)

Dai W, Fong T, Jones RN, Marcantonio E, Schmitt E, Inouye SK, Alsop DC.  
J Magn Reson Imaging. 2016 Jul 7. doi: 10.1002/jmri.25367. [Epub ahead of print]

*new*

[Use of 3D pseudo-continuous arterial spin labeling to characterize sex and age differences in cerebral blood flow.](#)

Liu W, Lou X, Ma L.  
Neuroradiology. 2016 Jul 5. [Epub ahead of print]

*new*

[Arterial spin-labeled perfusion for vascular anomalies in the pediatric head and neck.](#)

Mamlouk MD, Hess CP.  
Clin Imaging. 2016 Jun 22;40(5):1040-1046. doi: 10.1016/j.clinimag.2016.06.009. [Epub ahead of print]

*new*

[White Matter Hyperintensity Volume and Cerebral Perfusion in Older Individuals with Hypertension Using Arterial Spin-Labeling.](#)

van Dalen JW, Mutsaerts HJ, Nederveen AJ, Vrenken H, Steenwijk MD, Caan MW, Majoie CB, van Gool WA, Richard E.

AJNR Am J Neuroradiol. 2016 Jun 9. [Epub ahead of print]

*new*

[Comparison of cerebral blood flow and structural penumbras in relation to white matter hyperintensities: A multi-modal magnetic resonance imaging study.](#)

Promjunyakul NO, Lahna DL, Kaye JA, Dodge HH, Erten-Lyons D, Rooney WD, Silbert LC.

J Cereb Blood Flow Metab. 2016 Jun 7. pii: 0271678X16651268. [Epub ahead of print]

*new*

[Arterial Spin Labeling to Predict Brain Tumor Grading in Children: Correlations between Histopathologic Vascular Density and Perfusion MR Imaging.](#)

Dangouloff-Ros V, Deroulers C, Foissac F, Badoual M, Shotar E, Grévent D, Calmon R, Pagès M, Grill J, Dufour C, Blauwblomme T, Puget S, Zerah M, Sainte-Rose C, Brunelle F, Varlet P, Boddaert N.

Radiology. 2016 Jun 3:152228. [Epub ahead of print]

*new*

[Baseline collateral status and infarct topography in post-ischaemic perilesional hyperperfusion: An arterial spin labelling study.](#)

Bhaskar S, Bivard A, Stanwell P, Parsons M, Attia JR, Nilsson M, Levi C.

J Cereb Blood Flow Metab. 2016 Jun 2. pii: 0271678X16653133. [Epub ahead of print]

[Arterial Spin Labeling Perfusion Magnetic Resonance Imaging Performed in Acute Perinatal Stroke Reveals Hyperperfusion Associated With Ischemic Injury.](#)

Watson CG, Dehaes M, Gagoski BA, Grant PE, Rivkin MJ.

Stroke. 2016 Jun;47(6):1514-9. doi: 10.1161/STROKEAHA.115.011936. Epub 2016 May 3.

[Comparison of non-invasive MRI measurements of cerebral blood flow in a large multisite cohort.](#)

Dolui S, Wang Z, Wang DJ, Mattay R, Finkel M, Elliott M, Desiderio L, Inglis B, Mueller B, Stafford RB, Launer LJ, Jacobs DR Jr, Bryan RN, Detre JA.

J Cereb Blood Flow Metab. 2016 Jul;36(7):1244-56. doi: 10.1177/0271678X16646124. Epub 2016 May 3.

## Review Paper / Historical Review / Guidelines

*new*

[Misinterpretation of ischaemic infarct location in relationship to the cerebrovascular territories.](#)

Hartkamp NS, Hendrikse J, De Cocker LJ, de Borst GJ, Kappelle LJ, Bokkers RP.

J Neurol Neurosurg Psychiatry. 2016 Jul 27. pii: jnnp-2015-312906. doi: 10.1136/jnnp-2015-312906. [Epub ahead of print]

[Free Article](#)

*new*

[The neurobiology of addiction: the perspective from magnetic resonance imaging present and future.](#)

Suckling J, Nestor LJ.

Addiction. 2016 Jul 25. doi: 10.1111/add.13474. [Epub ahead of print] Review.

*new*

[A Technical Perspective for Understanding Quantitative Arterial Spin-Labeling MR Imaging Using Continuous ASL.](#)

Noguchi T.

Pol J Radiol. 2016 Jul 7;81:317-21. doi: 10.12659/PJR.896795. eCollection 2016. Review.

[Free PMC Article](#)

*new*

[Use of 3D pseudo-continuous arterial spin labeling to characterize sex and age differences in cerebral blood flow.](#)

Liu W, Lou X, Ma L.

Neuroradiology. 2016 Jul 5. [Epub ahead of print]

*new*

[Arterial spin labeling perfusion predicts longitudinal decline in semantic variant primary progressive aphasia.](#)

Olm CA, Kandel BM, Avants BB, Detre JA, Gee JC, Grossman M, McMillan CT.

J Neurol. 2016 Jul 5. [Epub ahead of print]

[The Brain from Within.](#)

di Porzio U.

Front Hum Neurosci. 2016 Jun 8;10:265. doi: 10.3389/fnhum.2016.00265. eCollection 2016. Review.

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*new*

[Pseudo-asymmetry of cerebral blood flow in arterial spin labeling caused by unilateral fetal-type circle of Willis: Technical limitation or a way to better understanding physiological variations of cerebral perfusion and improving arterial spin labeling acquisition?](#)

Law-Ye B, Geerts B, Galanaud D, Dormont D, Pyatigorskaya N.

J Cereb Blood Flow Metab. 2016 Jun 2. pii: 0271678X16653614. [Epub ahead of print]

*new*

**[A Historical Perspective on Sports Concussion: Where We Have Been and Where We Are Going.](#)**

Williams VB, Danan IJ.

Curr Pain Headache Rep. 2016 Jun;20(6):43. doi: 10.1007/s11916-016-0569-5. Review.

**[MRI-based methods for quantification of the cerebral metabolic rate of oxygen.](#)**

Rodgers ZB, Detre JA, Wehrli FW.

J Cereb Blood Flow Metab. 2016 Jul;36(7):1165-85. doi: 10.1177/0271678X16643090. Epub 2016 Apr 18. Review.

**[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.

J Psychiatr Res. 2016 Jul;78:11-23. doi: 10.1016/j.jpsychires.2016.03.001. Epub 2016 Mar 15. Review.

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

de Boer A, Hoogduin JM, Blankestijn PJ, Li X, Luijten PR, Metzger GJ, Raaijmakers AJ, Umutlu L, Visser F, Leiner T.

MAGMA. 2016 Jun;29(3):417-33. doi: 10.1007/s10334-016-0538-3. Epub 2016 Mar 23. Review.

[Free PMC Article](#)

**[A case of acute onset succinic semialdehyde dehydrogenase deficiency: neuroimaging findings and literature review.](#)**

Wang KY, Barker PB, Lin DD.

Childs Nerv Syst. 2016 Jul;32(7):1305-9. doi: 10.1007/s00381-015-2942-9. Epub 2015 Oct 24.

## **Feature articles & off-topic**

*New*

**[Cluster failure: Why fMRI inferences for spatial extent have inflated false-positive rates.](#)**

Eklund A, Nichols TE, Knutsson H.

Proc Natl Acad Sci U S A. 2016 Jul 12;113(28):7900-5. doi: 10.1073/pnas.1602413113. Epub 2016 Jun 28.

[Free Article](#)

**[Letter to the Editor: Arterial spin labeling in evaluation of venous drainage pattern in brain arteriovenous malformations.](#)**

Nabavizadeh SA.

J Neurosurg Pediatr. 2016 Jul;18(1):139-40. doi: 10.3171/2015.11.PEDS15670. Epub 2016 Mar 18. No abstract available.

If you would like to write a comment on an interesting article mail it to [editorATasl-network.org](mailto:editorATasl-network.org)

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- **Postdoctoral research fellow in Functional MRI at the University of Michigan**

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