

Dear Colleagues,

Here is the ASL Newsletter No. 37.

Kind regards, Ina

Recent publications December 2013, (e-publications might have been earlier):

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Animal studies

[Chronic metabotropic glutamate receptor 5 inhibition corrects local alterations of brain activity and improves cognitive performance in fragile x mice.](#)

Michalon A, Bruns A, Risterucci C, Honer M, Ballard TM, Ozmen L, Jaeschke G, Wettstein JG, von Kienlin M, Künnecke B, Lindemann L.

Biol Psychiatry. 2014 Feb 1;75(3):189-97. doi: 10.1016/j.biopsych.2013.05.038. Epub 2013 Jul 30.

[Acute kidney injury: arterial spin labeling to monitor renal perfusion impairment in mice-comparison with histopathologic results and renal function.](#)

Hueper K, Gutberlet M, Rong S, Hartung D, Mengel M, Lu X, Haller H, Wacker F, Meier M, Gueler F.

Radiology. 2014 Jan;270(1):117-24. doi: 10.1148/radiol.13130367. Epub 2013 Oct 28.

[Blood oxygenation level dependent, blood volume, and blood flow responses to carbogen and hypoxic hypoxia in 9L rat gliomas as measured by MRI.](#)

Jerome NP, Hekmatyar SK, Kauppinen RA.

J Magn Reson Imaging. 2014 Jan;39(1):110-9. doi: 10.1002/jmri.24097. Epub 2013 Apr 1.

Pharmacological / Drug studies / Studies on the effects of therapies

[Arterial Spin-Labeling Evaluation of Cerebrovascular Reactivity to Acetazolamide in Healthy Subjects.](#)

Inoue Y, Tanaka Y, Hata H, Hara T.

AJNR Am J Neuroradiol. 2013 Dec 26. [Epub ahead of print]

[Dietary nitrate facilitates an acetazolamide-induced increase in cerebral blood flow during visual stimulation.](#)

Aamand R, Ho YC, Dalsgaard T, Roepstorff A, Lund TE.

J Appl Physiol (1985). 2013 Dec 12. [Epub ahead of print]

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[Effects of acute alcohol intoxication on saccadic conflict and error processing.](#)

Marinkovic K, Rickenbacher E, Azma S, Artsy E, Lee AK.

Psychopharmacology (Berl). 2013 Dec;230(3):487-97. doi: 10.1007/s00213-013-3173-y. Epub 2013 Jun 28.

Perfusion studies other than on the brain

[The effect of supine exercise on the distribution of regional pulmonary blood flow measured using proton MRI.](#)

Hall ET, Sá RC, Holverda S, Arai TJ, Dubowitz DJ, Theilmann RJ, Prisk GK, Hopkins SR. J Appl Physiol (1985). 2013 Dec 19. [Epub ahead of print]

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[Is it possible to do without the study of myocardial perfusion in 2013?](#)

Dacher JN, Lefebvre V, Dubourg B, Deux JF, Caudron J. Diagn Interv Imaging. 2013 Dec;94(12):1337-44. doi: 10.1016/j.diii.2013.06.008. Epub 2013 Jul 9.

[Estimation of single-kidney glomerular filtration rate without exogenous contrast agent.](#)

He X, Aghayev A, Gumus S, Ty Bae K. Magn Reson Med. 2014 Jan;71(1):257-66. doi: 10.1002/mrm.24668. Epub 2013 Mar 6.

[Noncontrast skeletal muscle oximetry.](#)

Zheng J, An H, Coggan AR, Zhang X, Bashir A, Muccigrosso D, Peterson LR, Gropler RJ. Magn Reson Med. 2014 Jan;71(1):318-25. doi: 10.1002/mrm.24669. Epub 2013 Feb 19.

Cerebral blood flow studies

CBF correlation with age

[Arterial Spin Labeling Perfusion MRI in Children and Young Adults with Previous Ischemic Stroke and Unilateral Intracranial Arteriopathy.](#)

Bulder MM, Bokkers RP, Hendrikse J, Kappelle LJ, Braun KP, Klijn CJ. Cerebrovasc Dis. 2013 Dec 17;37(1):14-21. [Epub ahead of print]

[Quantitative Cerebral Perfusion Imaging in Children and Young Adults with Moyamoya Disease: Comparison of Arterial Spin-Labeling-MRI and H2\[15O\]-PET.](#)

Goetti R, Warnock G, Kuhn FP, Guggenberger R, O'Gorman R, Buck A, Khan N, Scheer I. AJNR Am J Neuroradiol. 2013 Dec 12. [Epub ahead of print]

[Intrinsic connectivity network mapping in young children during natural sleep.](#)

Manning JH, Courchesne E, Fox PT. Neuroimage. 2013 Dec;83:288-93. doi: 10.1016/j.neuroimage.2013.05.020. Epub 2013 May 29.

CBF regional comparison/ Regional ASL

[Arterial spin-labeling MR imaging in Moyamoya disease compared with clinical assessments and other MR imaging findings.](#)

Noguchi T, Kawashima M, Nishihara M, Hirai T, Matsushima T, Irie H.
Eur J Radiol. 2013 Dec;82(12):e840-7. doi: 10.1016/j.ejrad.2013.08.040. Epub 2013 Sep 1.

[Regional correlation between resting state FDG PET and pCASL perfusion MRI.](#)

Cha YH, Jog MA, Kim YC, Chakrapani S, Kraman SM, Wang DJ.
J Cereb Blood Flow Metab. 2013 Dec;33(12):1909-14. doi: 10.1038/jcbfm.2013.147. Epub 2013 Aug 21.

[In vivo visualization of the PICA perfusion territory with super-selective pseudo-continuous arterial spin labeling MRI.](#)

Hartkamp NS, De Cocker LJ, Helle M, van Osch MJ, Kappelle LJ, Bokkers RP, Hendrikse J.
Neuroimage. 2013 Dec;83:58-65. doi: 10.1016/j.neuroimage.2013.06.070. Epub 2013 Jun 29.

Studies on special disease

[Transcranial electrical stimulation modifies the neuronal response to psychosocial stress exposure.](#)

Antal A, Fischer T, Saiote C, Miller R, Chaieb L, Wang DJ, Plessow F, Paulus W, Kirschbaum C.
Hum Brain Mapp. 2013 Dec 31. doi: 10.1002/hbm.22434. [Epub ahead of print]

[Gray matter contamination in arterial spin labeling white matter perfusion measurements in patients with dementia.](#)

Mutsaerts HJ, Richard E, Heijtel DF, van Osch MJ, Majoie CB, Nederveen AJ.
Neuroimage Clin. 2013 Nov 15;4:139-44. doi: 10.1016/j.nicl.2013.11.003.

[Imaging Findings of Patients with Metastatic Neuroblastoma to the Brain.](#)

Nabavizadeh SA, Feygin T, Harding BN, Bilaniuk LT, Zimmerman RA, Vossough A.
Acad Radiol. 2013 Dec 20. pii: S1076-6332(13)00507-2. doi: 10.1016/j.acra.2013.10.016. [Epub ahead of print]

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[Static and Dynamic Characteristics of Cerebral Blood Flow During the Resting State in Schizophrenia.](#)

Kindler J, Jann K, Homan P, Hauf M, Walther S, Strik W, Dierks T, Hubl D.
Schizophr Bull. 2013 Dec 18. [Epub ahead of print]

[Arterial spin labeling versus bolus-tracking perfusion in hyperacute stroke.](#)

Bivard A, Krishnamurthy V, Stanwell P, Levi C, Spratt NJ, Davis S, Parsons M.
Stroke. 2014 Jan;45(1):127-33. doi: 10.1161/STROKEAHA.113.003218. Epub 2013 Dec 3.

[Arterial spin labeling magnetic resonance perfusion imaging in cerebral ischemia.](#)

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Curr Opin Neurol. 2014 Feb;27(1):42-53. doi: 10.1097/WCO.0000000000000051.

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[Near-infrared spectroscopy versus magnetic resonance imaging to study brain perfusion in newborns with hypoxic-ischemic encephalopathy treated with hypothermia.](#)

Wintermark P, Hansen A, Warfield SK, Dukhovny D, Soul JS.
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[Comparison of three different MR perfusion techniques and MR spectroscopy for multiparametric assessment in distinguishing recurrent high-grade gliomas from stable disease.](#)

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[Brain's Reward Circuits Mediate Itch Relief. A Functional MRI Study of Active Scratching.](#)

Papoiu AD, Nattkemper LA, Sanders KM, Kraft RA, Chan YH, Coghill RC, Yosipovitch G. PLoS One. 2013 Dec 6;8(12):e82389. doi: 10.1371/journal.pone.0082389.

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[Dynamic and static contributions of the cerebrovasculature to the resting-state BOLD signal.](#)

Tak S, Wang DJ, Polimeni JR, Yan L, Chen JJ. Neuroimage. 2014 Jan;84:672-80. doi: 10.1016/j.neuroimage.2013.09.057. Epub 2013 Oct 4.

[Functional imaging of cerebral perfusion.](#)

Krainik A, Villien M, Troprès I, Attyé A, Lamalle L, Bouvier J, Pietras J, Grand S, Le Bas JF, Warnking J. Diagn Interv Imaging. 2013 Dec;94(12):1259-78. doi: 10.1016/j.diii.2013.08.004. Epub 2013 Sep 5.

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Magn Reson Med. 2014 Jan;71(1):318-25. doi: 10.1002/mrm.24669. Epub 2013 Feb 19.

Physiological Parameters besides CBF

[Measurement of Cerebral White Matter Perfusion Using Pseudocontinuous Arterial Spin Labeling 3T Magnetic Resonance Imaging - an Experimental and Theoretical Investigation of Feasibility.](#)

Wu WC, Lin SC, Wang DJ, Chen KL, Li YD.

PLoS One. 2013 Dec 6;8(12):e82679. doi: 10.1371/journal.pone.0082679.

[Clinical Feasibility of Noninvasive Visualization of Lymphatic Flow with Principles of Spin Labeling MR Imaging: Implications for Lymphedema Assessment.](#)

Rane S, Donahue PM, Towse T, Ridner S, Chappell M, Jordi J, Gore J, Donahue MJ.

Radiology. 2013 Dec;269(3):893-902. doi: 10.1148/radiol.13120145. Epub 2013 Oct 28.

[Estimation of single-kidney glomerular filtration rate without exogenous contrast agent.](#)

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PLoS One. 2013 Dec 6;8(12):e82679. doi: 10.1371/journal.pone.0082679.

[Arterial spin labeling with simultaneous multi-slice echo planar imaging.](#)

Feinberg DA, Beckett A, Chen L.

Magn Reson Med. 2013 Dec;70(6):1500-6. doi: 10.1002/mrm.24994. Epub 2013 Oct 15.

[Whole brain perfusion measurements using arterial spin labeling with multiband acquisition.](#)

Kim T, Shin W, Zhao T, Beall EB, Lowe MJ, Bae KT.

Magn Reson Med. 2013 Dec;70(6):1653-61. doi: 10.1002/mrm.24880. Epub 2013 Jul 22.

[A theoretical framework for quantifying blood volume flow rate from dynamic angiographic data and application to vessel-encoded arterial spin labeling MRI.](#)

Okell TW, Chappell MA, Jezzard P.

Med Image Anal. 2013 Dec;17(8):1025-36. doi: 10.1016/j.media.2013.06.005. Epub 2013 Jul 4.

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[Partial volume correction in arterial spin labeling using a Look-Locker sequence.](#)

Petr J, Schramm G, Hofheinz F, Langner J, van den Hoff J.

Magn Reson Med. 2013 Dec;70(6):1535-43. doi: 10.1002/mrm.24601. Epub 2012 Dec 27.

Review Paper/ Historical Review

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[Arterial spin labeling \(ASL\) perfusion: Techniques and clinical use.](#)

Ferré JC, Bannier E, Raoult H, Mineur G, Carsin-Nicol B, Gauvrit JY.

Diagn Interv Imaging. 2013 Dec;94(12):1211-23. doi: 10.1016/j.diii.2013.06.010. Epub 2013 Jul 11.

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Job offerings

If you have any vacancies please send them to jobs@asl-network.org

Feature articles

If you would like to write a comment on an interesting article mail it to editor@asl-network.org