

Dear Colleagues,

Here is the ASL Newsletter No. 38.

Kind regards, Ina

Recent publications January 2014, (e-publications might have been earlier):

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Animal studies

[Early detection of antiangiogenic treatment responses in a mouse xenograft tumor model using quantitative perfusion MRI.](#)

Rajendran R, Huang W, Tang AM, Liang JM, Choo S, Reese T, Hentze H, van Boxtel S, Cliffe A, Rogers K, Henry B, Chuang KH.
Cancer Med. 2014 Jan 6. doi: 10.1002/cam4.177. [Epub ahead of print]

[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.

[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.

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

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[Acute effects of alcohol on brain perfusion monitored with arterial spin labeling magnetic resonance imaging in young adults.](#)

Marxen M, Gan G, Schwarz D, Mennigen E, Pilhatsch M, Zimmermann US, Guenther M, Smolka MN.
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Perfusion studies other than on the brain

[Myocardial arterial spin labeling perfusion imaging with improved sensitivity.](#)

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[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.

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CBF correlation with age

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[Vessel-encoded arterial spin labeling \(VE-ASL\) reveals elevated flow territory asymmetry in older adults with substandard verbal memory performance.](#)

Donahue MJ, Hussey E, Rane S, Wilson T, van Osch M, Hartkamp N, Hendrikse J, Ally BA.

J Magn Reson Imaging. 2014 Feb;39(2):377-86. doi: 10.1002/jmri.24150. Epub 2013 Apr 30.

CBF regional comparison/ Regional ASL

[Regional and Voxel-Wise Comparisons of Blood Flow Measurements Between Dynamic Susceptibility Contrast Magnetic Resonance Imaging \(DSC-MRI\) and Arterial Spin Labeling \(ASL\) in Brain Tumors.](#)

White CM, Pope WB, Zaw T, Qiao J, Naeini KM, Lai A, Nghiemphu PL, Wang JJ, Cloughesy TF, Ellingson BM.

J Neuroimaging. 2014 Jan;24(1):23-30. doi: 10.1111/j.1552-6569.2012.00703.x. Epub 2012 Jun 5.

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[Assessing Reperfusion With Whole-Brain Arterial Spin Labeling: A Noninvasive Alternative to Gadolinium.](#)

Mirasol RV, Bokkers RP, Hernandez DA, Merino JG, Luby M, Warach S, Latour LL.

Stroke. 2014 Jan 2. [Epub ahead of print]

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[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.](#)

Hartkamp NS, van Osch MJ, Kappelle J, Bokkers RP.

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

[Cerebral arterial bolus arrival time is prolonged in multiple sclerosis and associated with disability.](#)

Paling D, Thade Petersen E, Tozer DJ, Altmann DR, Wheeler-Kingshott CA, Kapoor R, Miller DH, Golay X.

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[Accuracy of vessel-encoded pseudocontinuous arterial spin-labeling in identification of feeding arteries in patients with intracranial arteriovenous malformations.](#)

Yu SL, Wang R, Wang R, Wang S, Yao YQ, Zhang D, Zhao YL, Zuo ZT, Xue R, Wang DJ, Zhao JZ.

AJNR Am J Neuroradiol. 2014 Jan;35(1):65-71. doi: 10.3174/ajnr.A3638. Epub 2013 Jul 18.

[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-dimensional pseudo-continuous arterial spin labeling perfusion imaging with gradient-echo and spin-echo dynamic susceptibility contrast MRI.](#)

Wong AM, Yan FX, Liu HL.
J Magn Reson Imaging. 2014 Feb;39(2):427-33. doi: 10.1002/jmri.24178. Epub 2013 May 15.

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Schmid S, Ghariq E, Teeuwisse WM, Webb A, van Osch MJ.
Magn Reson Med. 2014 Jan;71(1):191-9. doi: 10.1002/mrm.24650. Epub 2013 Mar 8.

Functional Imaging / BOLD

[Impact of a single bout of aerobic exercise on regional brain perfusion and activation responses in healthy young adults.](#)

Macintosh BJ, Crane DE, Sage MD, Rajab AS, Donahue MJ, McIlroy WE, Middleton LE.
PLoS One. 2014 Jan 8;9(1):e85163. doi: 10.1371/journal.pone.0085163. eCollection 2014.

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[Anterior cingulate GABA levels predict whole-brain cerebral blood flow.](#)

Krause BW, Wijtenburg SA, Holcomb HH, Kochunov P, Wang DJ, Hong LE, Rowland LM.
Neurosci Lett. 2014 Jan 4. pii: S0304-3940(13)01143-9. doi: 10.1016/j.neulet.2013.12.062. [Epub ahead of print]

[Graph analysis of resting-state ASL perfusion MRI data: Nonlinear correlations among CBF and network metrics.](#)

Liang X, Connelly A, Calamante F.
Neuroimage. 2014 Feb 15;87:265-75. doi: 10.1016/j.neuroimage.2013.11.013. Epub 2013 Nov 16.

[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 1;84:672-80. doi: 10.1016/j.neuroimage.2013.09.057. Epub 2013 Oct 4.

[Neural correlates of experimentally induced flow experiences.](#)

Ulrich M, Keller J, Hoenig K, Waller C, Grön G.

Neuroimage. 2014 Feb 1;86:194-202. doi: 10.1016/j.neuroimage.2013.08.019. Epub 2013 Aug 17.

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

[Support vector machine learning-based cerebral blood flow quantification for arterial spin labeling MRI.](#)

Wang Z.

Hum Brain Mapp. 2014 Jan 17. doi: 10.1002/hbm.22445. [Epub ahead of print]

Reproducibility studies

[Intra- and interscanner reliability and reproducibility of 3D whole-brain pseudo-continuous arterial spin-labeling MR perfusion at 3T.](#)

Wu B, Lou X, Wu X, Ma L.

J Magn Reson Imaging. 2014 Feb;39(2):402-9. doi: 10.1002/jmri.24175. Epub 2013 May 30.

Technical Improvement/ Parameter Optimisation/ Theoretical Papers

[Myocardial arterial spin labeling perfusion imaging with improved sensitivity.](#)

Do HP, Jao TR, Nayak KS.

J Cardiovasc Magn Reson. 2014 Jan 27;16(1):15. [Epub ahead of print]

[Time-encoded pseudocontinuous arterial spin labeling: Basic properties and timing strategies for human applications.](#)

Teeuwisse WM, Schmid S, Ghariq E, Veer IM, van Osch MJ.

Magn Reson Med. 2014 Jan 6. doi: 10.1002/mrm.25083. [Epub ahead of print]

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Magn Reson Med. 2014 Jan;71(1):191-9. doi: 10.1002/mrm.24650. Epub 2013 Mar 8.

Cohort Studies

[Neuroimaging of the Philadelphia neurodevelopmental cohort.](#)

Satterthwaite TD, Elliott MA, Ruparel K, Loughhead J, Prabhakaran K, Calkins ME, Hopson R, Jackson C, Keefe J, Riley M, Mentch FD, Sleiman P, Verma R, Davatzikos C, Hakonarson H, Gur RC, Gur RE.

Neuroimage. 2014 Feb 1;86:544-53. doi: 10.1016/j.neuroimage.2013.07.064. Epub 2013 Aug 3.

Review Paper/ Historical Review

[An Introduction to ASL Labeling Techniques.](#)

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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