

Dear Colleagues,

here is the ASL Newsletter No. 48.

I wish you a happy holiday season!

Kind regards,
Ina

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

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Pharmacological / Drug Studies / Studies on the Effects of Therapies

[Inhaled nitric oxide alters the distribution of blood flow in the healthy human lung, suggesting active hypoxic pulmonary vasoconstriction in normoxia.](#)

Asadi AK, Sá RC, Kim NH, Theilmann RJ, Hopkins SR, Buxton RB, Prisk GK. J Appl Physiol (1985). 2014 Nov 26:jap.01354.2013. doi: 10.1152/jappphysiol.01354.2013. [Epub ahead of print]

[Nicotine and non-nicotine smoking factors differentially modulate craving, withdrawal and cerebral blood flow as measured with arterial spin labeling.](#)

Addicott MA, Froeliger B, Kozink RV, Van Wert DM, Westman EC, Rose JE, McClernon FJ. Neuropsychopharmacology. 2014 Nov;39(12):2750-9. doi: 10.1038/npp.2014.108. Epub 2014 May 13.

Perfusion Studies Other than on the Brain

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[Advances in functional and structural imaging of the human lung using proton MRI.](#)

Miller GW, Mugler JP 3rd, Sá RC, Altes TA, Prisk GK, Hopkins SR. NMR Biomed. 2014 Dec;27(12):1542-56. doi: 10.1002/nbm.3156. Epub 2014 Jul 2.

Cerebral Blood Flow Studies

CBF Regional Comparison/ Regional ASL

[Environmental heat stress enhances mental fatigue during sustained attention task performing: Evidence from an ASL perfusion study.](#)

Qian S, Li M, Li G, Liu K, Li B, Jiang Q, Li L, Yang Z, Sun G. Behav Brain Res. 2014 Nov 27. pii: S0166-4328(14)00772-4. doi: 10.1016/j.bbr.2014.11.036. [Epub ahead of print]

[Regional Reliability of Quantitative Signal Targeting with Alternating Radiofrequency \(STAR\) Labeling of Arterial Regions \(QUASAR\).](#)

Tatewaki Y, Higano S, Taki Y, Thyreau B, Murata T, Mugikura S, Ito D, Takase K, Takahashi S. J Neuroimaging. 2014 Nov;24(6):554-61. doi: 10.1111/jon.12076. Epub 2014 Feb 22.

[Vertigo-related cerebral blood flow changes on magnetic resonance imaging.](#)

Chang F, Li Z, Xie S, Liu H, Wang W.

Spine (Phila Pa 1976). 2014 Nov 1;39(23):E1374-9. doi: 10.1097/BRS.0000000000000468.

Studies on Special Disease

[Quantification of cerebral blood flow in healthy volunteers and type 1 diabetic patients: Comparison of MRI arterial spin labeling and \[\(15\) O\]H₂O positron emission tomography \(PET\).](#)

van Golen LW, Kuijjer JP, Huisman MC, IJzerman RG, Barkhof F, Diamant M, Lammertsma AA.

J Magn Reson Imaging. 2014 Dec;40(6):1300-9. doi: 10.1002/jmri.24484. Epub 2013 Nov

[Spectroscopy of reperfused tissue after stroke reveals heightened metabolism in patients with good clinical outcomes.](#)

Bivard A, Krishnamurthy V, Stanwell P, Yassi N, Spratt NJ, Nilsson M, Levi CR, Davis S, Parsons MW.

J Cereb Blood Flow Metab. 2014 Dec;34(12):1944-50. doi: 10.1038/jcbfm.2014.166. Epub 2014 Oct 1.

[Altered coupling of regional cerebral blood flow and brain temperature in schizophrenia compared with bipolar disorder and healthy subjects.](#)

Ota M, Sato N, Sakai K, Okazaki M, Maikusa N, Hattori K, Hori H, Teraishi T, Shimoji K, Yamada K, Kunugi H.

J Cereb Blood Flow Metab. 2014 Dec;34(12):1868-72. doi: 10.1038/jcbfm.2014.151. Epub 2014 Sep 3.

[Prognostic value of blood flow estimated by arterial spin labeling and dynamic susceptibility contrast-enhanced MR imaging in high-grade gliomas.](#)

Rau MK, Braun C, Skardelly M, Schittenhelm J, Paulsen F, Bender B, Ernemann U, Bisdas S. J Neurooncol. 2014 Dec;120(3):557-66. doi: 10.1007/s11060-014-1586-z. Epub 2014 Aug 27.

[Idiopathic normal pressure hydrocephalus: cerebral perfusion measured with pCASL before and repeatedly after CSF removal.](#)

Virhammar J, Laurell K, Ahlgren A, Cesarini KG, Larsson EM.

J Cereb Blood Flow Metab. 2014 Nov;34(11):1771-8. doi: 10.1038/jcbfm.2014.138. Epub 2014 Aug 20.

[Comparison of Multiple Parameters Obtained on 3T Pulsed Arterial Spin-Labeling, Diffusion Tensor Imaging, and MRS and the Ki-67 Labeling Index in Evaluating Glioma Grading.](#)

Fudaba H, Shimomura T, Abe T, Matsuta H, Momii Y, Sugita K, Ooba H, Kamida T, Hikawa T, Fujiki M.

AJNR Am J Neuroradiol. 2014 Nov;35(11):2091-8. doi: 10.3174/ajnr.A4018. Epub 2014 Jul 3.

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

[3D GRASE pulsed arterial spin labeling at multiple inflow times in patients with long arterial transit times: comparison with dynamic susceptibility-weighted contrast-enhanced MRI at 3 Tesla.](#)

Martin SZ, Madai VI, von Samson-Himmelstjerna FC, Mutke MA, Bauer M, Herzig CX, Hetzer S, Günther M, Sobesky J.

J Cereb Blood Flow Metab. 2014 Nov 19. doi: 10.1038/jcbfm.2014.200. [Epub ahead of print]

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[Absolute quantification of perfusion by dynamic susceptibility contrast MRI using Bookend and VASO steady-state CBV calibration: a comparison with pseudo-continuous ASL.](#)

Lindgren E, Wirestam R, Markenroth Bloch K, Ahlgren A, van Osch MJ, van Westen D, Surova Y, Ståhlberg F, Knutsson L.

MAGMA. 2014 Dec;27(6):487-99. doi: 10.1007/s10334-014-0431-x. Epub 2014 Feb 26.

Functional Imaging / BOLD

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10.1016/j.bbr.2014.11.036. [Epub ahead of print]

[Associations of resting-state fMRI functional connectivity with flow-BOLD coupling and regional vasculature.](#)

Tak S, Polimeni JR, Wang DJ, Yan L, Chen J.
Brain Connect. 2014 Nov 11. [Epub ahead of print]

[Optimization and reliability of multiple postlabeling delay pseudo-continuous arterial spin labeling during rest and stimulus-induced functional task activation.](#)

Mezue M, Segerdahl AR, Okell TW, Chappell MA, Kelly ME, Tracey I.
J Cereb Blood Flow Metab. 2014 Dec;34(12):1919-27. doi: 10.1038/jcbfm.2014.163. Epub
2014 Oct 1.

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Neuropsychopharmacology. 2014 Nov;39(12):2750-9. doi: 10.1038/npp.2014.108. Epub
2014 May 13.

Physiological Parameters besides CBF

[Estimation of arterial arrival time and cerebral blood flow from QUASAR arterial spin labeling using stable spline.](#)

Castellaro M, Peruzzo D, Mehndiratta A, Pillonetto G, Petersen ET, Golay X, Chappell MA, Bertoldo A.
Magn Reson Med. 2014 Nov 26. doi: 10.1002/mrm.25525. [Epub ahead of print]

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[Reproducibility of the quantification of arterial and tissue contributions in multiple postlabeling delay arterial spin labeling.](#)

Sousa I, Vilela P, Figueiredo P.
J Magn Reson Imaging. 2014 Dec;40(6):1453-62. doi: 10.1002/jmri.24493. Epub 2013
Nov 13.

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J Neurooncol. 2014 Aug 27. [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 Dec;72(6):1712-22. doi: 10.1002/mrm.25083. Epub 2014 Jan 6.

Reproducibility Studies

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Technical Improvement/ Parameter Optimisation/ Theoretical Papers

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[Evaluation of segmented 3D acquisition schemes for whole-brain high-resolution arterial spin labeling at 3 T.](#)

Vidorreta M, Balteau E, Wang Z, De Vita E, Pastor MA, Thomas DL, Detre JA, Fernández-Seara MA.

NMR Biomed. 2014 Nov;27(11):1387-96. doi: 10.1002/nbm.3201. Epub 2014 Sep 26.

Review Paper/ Historical Review

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NMR Biomed. 2014 Dec;27(12):1542-56. doi: 10.1002/nbm.3156. Epub 2014 Jul 2.

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