

Dear Colleagues,

Here is the ASL Newsletter No. 45.

The upcoming COST Working Group Meeting will be taking place from Thursday, September 25th until Saturday, September 27th 2014 in Dubrovnik, Croatia. The meeting will be held in the CAAS Centre (<http://www.caas.unizg.hr/>). More details can be found at www.aslindementia.org.

Kind regards,
Ina

Recent publications

August 2014,

(e-publications might have been earlier):

Content:

Animal Studies.....	2
Pharmacological / Drug Studies / Studies on the Effects of Therapies.....	2
Perfusion Studies Other than on the Brain	3
Cerebral Blood Flow Studies	3
CBF Correlation with Age.....	3
CBF Regional Comparison/ Regional ASL.....	4
Studies on Special Disease.....	4
Comparison of ASL Techniques / ASL Compared with Other Imaging Methods / ASL Combined with Other Imaging Methods	6
Functional Imaging / BOLD.....	7
Physiological Parameters besides CBF.....	7
ASL Data Analysis/ Comparison of ASL Evaluation Methods/ Kinetic Models/ Data Corrections.....	8
Technical Improvement/ Parameter Optimisation/ Theoretical Papers	9
Reproducibility Studies.....	9
Review Paper/ Historical Review	10
Job offerings.....	10
Feature articles.....	10

Animal Studies

[Comparison of retinal and cerebral blood flow between continuous arterial spin labeling MRI and fluorescent microsphere techniques.](#)

Shih YY, De La Garza BH, Huang S, Li G, Wang L, Duong TQ.

J Magn Reson Imaging. 2014 Sep;40(3):609-15. doi: 10.1002/jmri.24407. Epub 2013 Nov 13.

[Arterial spin labeling-fast imaging with steady-state free precession \(ASL-FISP\): a rapid and quantitative perfusion technique for high-field MRI.](#)

Gao Y, Goodnough CL, Erokwu BO, Farr GW, Darrah R, Lu L, Dell KM, Yu X, Flask CA.

NMR Biomed. 2014 Aug;27(8):996-1004. doi: 10.1002/nbm.3143. Epub 2014 Jun 3.

[Effect of high dose isoflurane on cerebral blood flow in macaque monkeys.](#)

Li CX, Patel S, Wang DJ, Zhang X.

Magn Reson Imaging. 2014 Sep;32(7):956-60. doi: 10.1016/j.mri.2014.04.019. Epub 2014 Apr 26.

[Rate and extent of leakage of a magnetic resonance contrast agent tend to be lower under isoflurane anesthesia in comparison to halothane in a rat model of embolic stroke.](#)

Bezerra FJ, Brown M, Alarcon W, Karki K, Knight RA, Keenan KA, Nagaraja TN.

Neurol Res. 2014 Sep;36(9):847-50. doi: 10.1179/1743132814Y.0000000341. Epub 2014 Mar 7.

Pharmacological / Drug Studies / Studies on the Effects of Therapies

[Dose-dependent effects of intravenous alcohol administration on cerebral blood flow in young adults.](#)

Strang NM, Claus ED, Ramchandani VA, Graff-Guerrero A, Boileau I, Hendershot CS.

Psychopharmacology (Berl). 2014 Aug 12. [Epub ahead of print]

[Routine clinical evaluation of cerebrovascular reserve capacity using carbogen in patients with intracranial stenosis.](#)

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Cerebral Blood Flow Studies

CBF Correlation with Age

[Cerebral blood flow measurements in infants using look-locker arterial spin labeling.](#)

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[The impact of hypertension on cerebral perfusion and cortical thickness in older adults.](#)

Alosco ML, Gunstad J, Xu X, Clark US, Labbe DR, Riskin-Jones HH, Terrero G, Schwarz NF, Walsh EG, Poppas A, Cohen RA, Sweet LH. *J Am Soc Hypertens.* 2014 Aug;8(8):561-70. doi: 10.1016/j.jash.2014.04.002. Epub 2014 Apr 13.

[Accelerated white matter aging in schizophrenia: role of white matter blood perfusion.](#)

Wright SN, Kochunov P, Chiappelli J, McMahon RP, Muellerklein F, Wijtenburg SA, White MG, Rowland LM, Hong LE. *Neurobiol Aging.* 2014 Oct;35(10):2411-8. doi: 10.1016/j.neurobiolaging.2014.02.016. Epub 2014 Feb 28.

CBF Regional Comparison/ Regional ASL

[Spin labeling artery method perfusion MRI study of SPG4 and SCA3/MJD.](#)

Xing W, Wang XY, Liao XX, Liao WH, Shen L.

Magn Reson Imaging. 2014 Aug 27. pii: S0730-725X(14)00253-7. doi: 10.1016/j.mri.2014.08.022. [Epub ahead of print]

[Operator-bias-free Comparison of Quantitative Perfusion Maps Acquired with Pulsed-continuous Arterial Spin Labeling and Single-photon-emission Computed Tomography.](#)

Iwanaga T, Harada M, Kubo H, Funakoshi Y, Kunikane Y, Matsuda T.

Magn Reson Med Sci. 2014 Aug 27. [Epub ahead of print]

[Characteristic distributions of regional cerebral blood flow changes in major depressive disorder patients: a pseudo-continuous arterial spin labeling \(pCASL\) study.](#)

Ota M, Noda T, Sato N, Hattori K, Teraishi T, Hori H, Nagashima A, Shimoji K, Higuchi T, Kunugi H.

J Affect Disord. 2014 Aug;165:59-63. doi: 10.1016/j.jad.2014.04.032. Epub 2014 Apr 21.

[Diagnostic classification of arterial spin labeling and structural MRI in presenile early stage dementia.](#)

Bron EE, Steketee RM, Houston GC, Oliver RA, Achterberg HC, Loog M, van Swieten JC, Hammers A, Niessen WJ, Smits M, Klein S; Alzheimer's Disease Neuroimaging Initiative.

Hum Brain Mapp. 2014 Sep;35(9):4916-31. doi: 10.1002/hbm.22522. Epub 2014 Apr 3.

Studies on Special Disease

[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 Aug 20. doi: 10.1038/jcbfm.2014.138. [Epub ahead of print]

[Impaired Cerebrovascular Reactivity in Multiple Sclerosis.](#)

Marshall O, Lu H, Brisset JC, Xu F, Liu P, Herbert J, Grossman RI, Ge Y.

JAMA Neurol. 2014 Aug 18. doi: 10.1001/jamaneurol.2014.1668. [Epub ahead of print]

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Wierenga CE, Hays CC, Zlatar ZZ.
J Alzheimers Dis. 2014 Aug 26. [Epub ahead of print]

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[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. 2014 Aug;35(8):3750-9. doi: 10.1002/hbm.22434. Epub 2013 Dec 31.

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[Comparison of cerebral blood flow acquired by simultaneous \[\(15\)O\]water positron emission tomography and arterial spin labeling magnetic resonance imaging.](#)

Zhang K, Herzog H, Mauler J, Filss C, Okell TW, Kops ER, Tellmann L, Fischer T, Brocke B, Sturm W, Coenen HH, Shah NJ.

J Cereb Blood Flow Metab. 2014 Aug;34(8):1373-80. doi: 10.1038/jcbfm.2014.92. Epub 2014 May 21.

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Functional Imaging / BOLD

[Three-dimensional acquisition of cerebral blood volume and flow responses during functional stimulation in a single scan.](#)

Cheng Y, van Zijl PC, Pekar JJ, Hua J. *Neuroimage.* 2014 Aug 23. pii: S1053-8119(14)00699-5. doi: 10.1016/j.neuroimage.2014.08.025. [Epub ahead of print]

[Direct imaging of functional networks.](#)

Wong EC. *Brain Connect.* 2014 Sep;4(7):481-6. doi: 10.1089/brain.2014.0294.

[Physiological and psychological individual differences influence resting brain function measured by ASL perfusion.](#)

Kano M, Coen SJ, Farmer AD, Aziz Q, Williams SC, Alsop DC, Fukudo S, O'Gorman RL. *Brain Struct Funct.* 2014 Sep;219(5):1673-84. doi: 10.1007/s00429-013-0593-8. Epub 2013 Jun 16.

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AJNR Am J Neuroradiol. 2014 Aug 21. [Epub ahead of print]

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

[Partial volume correction of brain perfusion estimates using the inherent signal data of time-resolved arterial spin labeling.](#)

Ahlgren A, Wirestam R, Petersen ET, Ståhlberg F, Knutsson L.

NMR Biomed. 2014 Sep;27(9):1112-22. doi: 10.1002/nbm.3164. Epub 2014 Jul 26.

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J Magn Reson Imaging. 2014 Aug 20. doi: 10.1002/jmri.24716. [Epub ahead of print]

[Improving perfusion quantification in Arterial Spin Labeling for delayed arrival times by using optimized acquisition schemes.](#)

Kramme J, Gregori J, Diehl V, Madai VI, von Samson-Himmelstjerna FC, Lentschig M, Sobesky J, Günther M.

Z Med Phys. 2014 Aug 11. pii: S0939-3889(14)00094-4. doi:

10.1016/j.zemedi.2014.07.003. [Epub ahead of print]

[Time-Resolved Angiography using InfLow Subtraction \(TRAILS\).](#)

Kopeinigg D, Bammer R.

Magn Reson Med. 2014 Sep;72(3):669-78. doi: 10.1002/mrm.24985. Epub 2013 Oct 24.

[A variable flip angle-based method for reducing blurring in 3D GRASE ASL.](#)

Liang X, Connelly A, Tournier JD, Calamante F.

Phys Med Biol. 2014 Aug 29;59(18):5559-5573. [Epub ahead of print]

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Reproducibility Studies

[Inter-vendor reproducibility of pseudo-continuous arterial spin labeling at 3 tesla.](#)

Mutsaerts HJ, Steketee RM, Heijtel DF, Kuijter JP, van Osch MJ, Majoie CB, Smits M, Nederveen AJ.

PLoS One. 2014 Aug 4;9(8):e104108. doi: 10.1371/journal.pone.0104108. eCollection 2014.

Review Paper/ Historical Review

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Wierenga CE, Hays CC, Zlatar ZZ.

J Alzheimers Dis. 2014 Aug 26. [Epub ahead of print]

[Perfusion imaging.](#)

Günther M.

J Magn Reson Imaging. 2014 Aug;40(2):269-79. doi: 10.1002/jmri.24382. Epub 2013 Nov 25.

Job offerings

12 month post-doctoral position at the University of Manchester involving the development and testing of ASL for use in pharmacological fMRI:

<https://www.jobs.manchester.ac.uk/DisplayJob.aspx?&frnd=Idapply&JobID=8391&clientid=1>

Deadline: September 14th, 2014

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