

Dear Colleagues,

Here is the ASL Newsletter No. 39.

Kind regards, Ina

## Recent publications February 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 .....	2
Cerebral Blood Flow Studies .....	3
CBF Correlation with Age.....	3
CBF Regional Comparison/ Regional ASL.....	3
Studies on Special Disease.....	3
Comparison of ASL Techniques / ASL Compared with Other Imaging Methods.....	5
Functional Imaging / BOLD.....	6
Physiological Parameters besides CBF.....	7
Reproducibility Studies.....	8
Cohort Studies.....	8
Review Paper/ Historical Review .....	8
Job offerings.....	8
Feature articles.....	8

## Animal Studies

[In vivo characterization of rodent cyclic myocardial perfusion variation at rest and during adenosine-induced stress using cine-ASL cardiovascular magnetic resonance.](#)

Troalen T, Capron T, Bernard M, Kober F.

J Cardiovasc Magn Reson. 2014 Feb 18;16(1):18. doi: 10.1186/1532-429X-16-18.

[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.

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

[Sex differences in resting state neural networks of nicotine-dependent cigarette smokers.](#)

Wetherill RR, Jagannathan K, Shin J, Franklin TR.

Addict Behav. 2014 Apr;39(4):789-92. doi: 10.1016/j.addbeh.2014.01.006. Epub 2014 Jan 24.

[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). 2014 Feb;116(3):267-73. doi: 10.1152/jappphysiol.00797.2013. Epub 2013 Dec 12.

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[Comparison of Magnetic Resonance Imaging With Radionuclide Methods of Evaluating the Kidney.](#)

Durand E.

Semin Nucl Med. 2014 Mar;44(2):82-92. doi: 10.1053/j.semnuclmed.2013.10.003. Review.

### [Functional magnetic resonance imaging of the lung.](#)

Biederer J, Heussel CP, Puderbach M, Wielpuetz MO.

Semin Respir Crit Care Med. 2014 Feb;35(1):74-82. doi: 10.1055/s-0033-1363453. Epub 2014 Jan 30.

### [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). 2014 Feb;116(4):451-61. doi: 10.1152/jappphysiol.00659.2013. Epub 2013 Dec 19.

## Cerebral Blood Flow Studies

### CBF Correlation with Age

#### [Arterial spin labeling characterization of cerebral perfusion during normal maturation from late childhood into adulthood: normal 'reference range' values and their use in clinical studies.](#)

Hales PW, Kawadler JM, Aylett SE, Kirkham FJ, Clark CA.

J Cereb Blood Flow Metab. 2014 Feb 5. doi: 10.1038/jcbfm.2014.17. [Epub ahead of print]

#### [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

#### [Arterial spin-labeled perfusion of pediatric brain tumors.](#)

Yeom KW, Mitchell LA, Lober RM, Barnes PD, Vogel H, Fisher PG, Edwards MS.

AJNR Am J Neuroradiol. 2014 Feb;35(2):395-401. doi: 10.3174/ajnr.A3670. Epub 2013 Aug 1.

#### [Differential brain activity in subjects with painful trigeminal neuropathy and painful temporomandibular disorder.](#)

Henderson LA.

Pain. 2014 Mar;155(3):467-75. doi: 10.1016/j.pain.2013.11.008. Epub 2013 Nov 21.

### Studies on Special Disease

#### [Multi-delay arterial spin labeling perfusion MRI in moyamoya disease-comparison with CT perfusion imaging.](#)

Wang R, Yu S, Alger JR, Zuo Z, Chen J, Wang R, An J, Wang B, Zhao J, Xue R, Wang DJ.

Eur Radiol. 2014 Feb 21. [Epub ahead of print]

[Effects of short-term environmental hyperthermia on patterns of cerebral blood flow.](#)

Qian S, Jiang Q, Liu K, Li B, Li M, Li L, Yang X, Yang Z, Sun G.

Physiol Behav. 2014 Feb 14;128C:99-107. doi: 10.1016/j.physbeh.2014.01.028. [Epub ahead of print]

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[Clinical evaluation of an arterial-spin-labeling product sequence in steno-occlusive disease of the brain.](#)

Mutke MA, Madai VI, von Samson-Himmelstjerna FC, Zaro Weber O, Revankar GS, Martin SZ, Stengl KL, Bauer M, Hetzer S, Günther M, Sobesky J.

PLoS One. 2014 Feb 6;9(2):e87143. doi: 10.1371/journal.pone.0087143. eCollection 2014.

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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 Feb;45(2):456-61. doi: 10.1161/STROKEAHA.113.004001. Epub 2014 Jan 2.

[Imaging findings of patients with metastatic neuroblastoma to the brain.](#)

Nabavizadeh SA, Feygin T, Harding BN, Bilaniuk LT, Zimmerman RA, Vossough A.

Acad Radiol. 2014 Mar;21(3):329-37. doi: 10.1016/j.acra.2013.10.016. Epub 2013 Dec 22.

[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.

[Differential brain activity in subjects with painful trigeminal neuropathy and painful temporomandibular disorder.](#)

Youssef AM, Gustin SM, Nash PG, Reeves JM, Petersen ET, Peck CC, Murray GM, Henderson LA.

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

## [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 Feb 26. [Epub ahead of print]

## [Accuracy and precision of pseudo-continuous arterial spin labeling perfusion during baseline and hypercapnia: A head-to-head comparison with <sup>15</sup>O H<sub>2</sub>O positron emission tomography.](#)

Heijtel DF, Mutsaerts HJ, Bakker E, Schober P, Stevens MF, Petersen ET, van Berckel BN, Majoie CB, Booij J, van Osch MJ, Vanbavel E, Boellaard R, Lammertsma AA, Nederveen AJ.  
Neuroimage. 2014 Feb 13. pii: S1053-8119(14)00102-5. doi: 10.1016/j.neuroimage.2014.02.011. [Epub ahead of print]

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Acad Radiol. 2014 Mar;21(3):329-37. doi: 10.1016/j.acra.2013.10.016. Epub 2013 Dec 22.

## [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.

## Functional Imaging / BOLD

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Semin Respir Crit Care Med. 2014 Feb;35(1):74-82. doi: 10.1055/s-0033-1363453. Epub 2014 Jan 30.

[Spatial heterogeneity of the relation between resting-state connectivity and blood flow: An important consideration for pharmacological studies.](#)

Khalili-Mahani N, van Osch MJ, de Rooij M, Beckmann CF, van Buchem MA, Dahan A, van Gerven JM, Rombouts SA.

Hum Brain Mapp. 2014 Mar;35(3):929-42. doi: 10.1002/hbm.22224. Epub 2012 Dec 26.

[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 Feb 21;561:188-91. doi: 10.1016/j.neulet.2013.12.062. Epub 2014 Jan 4.

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Hall ET, Sá RC, Holverda S, Arai TJ, Dubowitz DJ, Theilmann RJ, Prisk GK, Hopkins SR.

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J Appl Physiol (1985). 2014 Feb;116(3):267-73. doi: 10.1152/jappphysiol.00797.2013.

Epub 2013 Dec 12.

[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.

[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.

[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.

## Physiological Parameters besides CBF

[Accuracy and precision of pseudo-continuous arterial spin labeling perfusion during baseline and hypercapnia: A head-to-head comparison with <sup>15</sup>O H<sub>2</sub>O positron emission tomography.](#)

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Neurosci Lett. 2014 Feb 21;561:188-91. doi: 10.1016/j.neulet.2013.12.062. Epub 2014

Jan 4.

## 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.

## 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

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

## Job offerings

If you have any vacancies please send them to [jobs@asl-network.org](mailto: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](mailto:editor@asl-network.org)