

Dear Colleagues.

Here is the ASL Newsletter No. 12.
A lot more papers than usual. Enjoy!

Cheers,
Johanna

Recent publications September & October 2011, (e-publications might have been earlier):

Content:

Animal studies	2
Pharmacological / Drug studies	2
Perfusion studies other than on the brain	3
Cerebral blood flow studies	3
CBF correlation with age.....	4
Studies on special diseases	4
Comparison of ASL Techniques or ASL compared with other imaging methods	6
Functional Imaging / BOLD	7
Physiological Parameters beside CBF	8
Job offerings	9
Feature articles.....	9

Animal studies

[Longitudinal diffusion tensor imaging and perfusion MRI investigation in a macaque model of neuro-AIDS: A preliminary study.](#)

Li C, Zhang X, Komery A, Li Y, Novembre FJ, Herndon JG.
Neuroimage. 2011 Sep 1;58(1):286-92. Epub 2011 Jun 1.

[Magnetic resonance imaging quantification of regional cerebral blood flow and cerebrovascular reactivity to carbon dioxide in normotensive and hypertensive rats.](#)

Leoni RF, Paiva FF, Henning EC, Nascimento GC, Tannús A, de Araujo DB, Silva AC.
Neuroimage. 2011 Sep 1;58(1):75-81. Epub 2011 Jun 25.

[Multimodal MRI assessment of damage and plasticity caused by status epilepticus in the rat brain.](#)

Gröhn O, Sierra A, Immonen R, Laitinen T, Lehtimäki K, Airaksinen A, Hayward N, Nairismagi J, Lehto L, Pitkänen A.
Epilepsia. 2011 Oct;52 Suppl 8:57-60. doi: 10.1111/j.1528-1167.2011.03239.x.

[Pseudo-continuous arterial spin labeling at very high magnetic field \(11.75 T\) for high-resolution mouse brain perfusion imaging.](#)

Duhamel G, Callot V, Tachrount M, Alsop DC, Cozzone PJ.
Magn Reson Med. 2011 Oct 19. doi: 10.1002/mrm.23096. [Epub ahead of print]

[Quantification of myocardial blood flow and flow reserve in rats using arterial spin labeling MRI: comparison with a fluorescent microsphere technique.](#)

Jacquier A, Kober F, Bun S, Giorgi R, Cozzone PJ, Bernard M.
NMR Biomed. 2011 Nov;24(9):1047-53. doi: 10.1002/nbm.1645. Epub 2011 Jan 25.

[Response of mouse brain perfusion to hypo- and hyperventilation measured by arterial spin labeling.](#)

Oosterlinck WW, Dresselaers T, Geldhof V, Van Santvoort A, Robberecht W, Herijgers P, Himmelreich U.
Magn Reson Med. 2011 Sep;66(3):802-11. doi: 10.1002/mrm.23060. Epub 2011 Jul 11.

Pharmacological / Drug studies

[Cerebrovascular reactivity within perfusion territories in patients with an internal carotid artery occlusion.](#)

Bokkers RP, van Osch MJ, Klijn CJ, Kappelle LJ, Hendrikse J.
J Neurol Neurosurg Psychiatry. 2011 Sep;82(9):1011-6. Epub 2011 Mar 8.

[Dynamic physostigmine effects on hippocampus perfusion.](#)

Li X, Spence JS, Buhner DM, Haley RW, Briggs RW.
J Magn Reson Imaging. 2011 Sep 30. doi: 10.1002/jmri.22821. [Epub ahead of print]

[Evidence for involvement of the insula in the psychotropic effects of THC in humans: a double-blind, randomized pharmacological MRI study.](#)

van Hell HH, Bossong MG, Jager G, Kristo G, van Osch MJ, Zelaya F, Kahn RS, Ramsey NF. Int J Neuropsychopharmacol. 2011 Nov;14(10):1377-88. Epub 2011 Apr 14.

[Using MRI to measure drug action: caveats and new directions.](#)

Murphy SE, Mackay CE.

J Psychopharmacol. 2011 Sep;25(9):1168-74. Epub 2010 Jun 28.

Perfusion studies other than on the brain

[MRI to assess renal structure and function.](#)

Artunc F, Rossi C, Boss A.

Curr Opin Nephrol Hypertens. 2011 Nov;20(6):669-75.

[Quantification of myocardial blood flow and flow reserve in rats using arterial spin labeling MRI: comparison with a fluorescent microsphere technique.](#)

Jacquier A, Kober F, Bun S, Giorgi R, Cozzone PJ, Bernard M.

NMR Biomed. 2011 Nov;24(9):1047-53. doi: 10.1002/nbm.1645. Epub 2011 Jan 25.

Cerebral blood flow studies

[Cerebral Blood Flow during Rest Associates with General Intelligence and Creativity.](#)

Takeuchi H, Taki Y, Hashizume H, Sassa Y, Nagase T, Nouchi R, Kawashima R.

PLoS One. 2011;6(9):e25532. Epub 2011 Sep 29.

[Effects of transcranial direct current stimulation \(tDCS\) on human regional cerebral blood flow.](#)

Zheng X, Alsop DC, Schlaug G.

Neuroimage. 2011 Sep 1;58(1):26-33. Epub 2011 Jun 16.

[Gender differences in partial-volume corrected brain perfusion using brain MRI in healthy children.](#)

Taki Y, Hashizume H, Sassa Y, Takeuchi H, Wu K, Asano M, Asano K, Fukuda H, Kawashima R.

Neuroimage. 2011 Oct 1;58(3):709-15. Epub 2011 Jul 19.

[Phasic deactivation of the medial temporal lobe enables working memory processing under stress.](#)

Cousijn H, Rijpkema M, Qin S, van Wingen GA, Fernández G.

Neuroimage. 2011 Oct 1. [Epub ahead of print]

CBF correlation with age

[Correlation between gray matter density-adjusted brain perfusion and age using brain MR images of 202 healthy children.](#)

Taki Y, Hashizume H, Sassa Y, Takeuchi H, Wu K, Asano M, Asano K, Fukuda H, Kawashima R.

Hum Brain Mapp. 2011 Nov;32(11):1973-85. doi: 10.1002/hbm.21163. Epub 2011 Jan 21.

Studies on special diseases

[Adhesion Molecules, Altered Vasoreactivity, and Brain Atrophy in Type 2 Diabetes.](#)

Novak V, Zhao P, Manor B, Sejdic E, Alsop D, Abduljalil A, Roberson PK, Munshi M, Novak P.

Diabetes Care. 2011 Sep 16. [Epub ahead of print]

[Age-related cerebral perfusion changes in the parietal and temporal lobes measured by pulsed arterial spin labeling.](#)

Preibisch C, Sorg C, Förschler A, Grimmer T, Sax I, Wohlschläger AM, Perneczky R, Förstl H, Kurz A, Zimmer C, Alexopoulos P.

J Magn Reson Imaging. 2011 Sep 23. doi: 10.1002/jmri.22788. [Epub ahead of print]

[Arterial spin labeling and altered cerebral blood flow patterns in the minimally conscious state.](#)

Liu AA, Voss HU, Dyke JP, Heier LA, Schiff ND.

Neurology. 2011 Sep 21. [Epub ahead of print]

[Association between central elastic artery stiffness and cerebral perfusion in deep subcortical gray and white matter.](#)

Tarumi T, Shah F, Tanaka H, Haley AP.

Am J Hypertens. 2011 Oct;24(10):1108-13. doi: 10.1038/ajh.2011.101. Epub 2011 Jun 9.

[Cerebrovascular reactivity within perfusion territories in patients with an internal carotid artery occlusion.](#)

Bokkers RP, van Osch MJ, Klijn CJ, Kappelle LJ, Hendrikse J.

J Neurol Neurosurg Psychiatry. 2011 Sep;82(9):1011-6. Epub 2011 Mar 8.

[Clinical Application of Arterial Spin-Labeling MR Imaging in Patients with Carotid Stenosis: Quantitative Comparative Study with Single-Photon Emission CT.](#)

Uchihashi Y, Hosoda K, Zimine I, Fujita A, Fujii M, Sugimura K, Kohmura E.

AJNR Am J Neuroradiol. 2011 Sep;32(8):1545-51. Epub 2011 Jul 14.

[Complex relationships between cerebral blood flow and brain atrophy in early Huntington's disease.](#)

Chen JJ, Salat DH, Rosas HD.

Neuroimage. 2011 Sep 16. [Epub ahead of print]

[Direct comparison of fluorodeoxyglucose positron emission tomography and arterial spin labeling magnetic resonance imaging in Alzheimer's disease.](#)

Musiek ES, Chen Y, Korczykowski M, Saboury B, Martinez PM, Reddin JS, Alavi A, Kimberg DY, Wolk DA, Julin P, Newberg AB, Arnold SE, Detre JA.
Alzheimers Dement. 2011 Oct 20. [Epub ahead of print]

[\[Grading of adults primitive glial neoplasms using arterial spin-labeled perfusion MR imaging\].](#)

Canale S, Rodrigo S, Tourdias T, Mellerio C, Perrin M, Souillard R, Oppenheim C, Meder JF.
J Neuroradiol. 2011 Oct;38(4):207-13. Epub 2011 Feb 25. French.

[Hippocampal Dysfunction in Gulf War Veterans: Investigation with ASL Perfusion MR Imaging and Physostigmine Challenge.](#)

Li X, Spence JS, Buhner DM, Hart J Jr, Cullum CM, Biggs MM, Hester AL, Odegard TN, Carmack PS, Briggs RW, Haley RW.
Radiology. 2011 Oct;261(1):218-25. Epub 2011 Sep 13.

[Longitudinal MRI study of cortical thickness, perfusion, and metabolite levels in major depressive disorder.](#)

Järnum H, Eskildsen SF, Steffensen EG, Lundbye-Christensen S, Simonsen CW, Thomsen IS, Fründ ET, Théberge J, Larsson EM.
Acta Psychiatr Scand. 2011 Sep 16. doi: 10.1111/j.1600-0447.2011.01766.x. [Epub ahead of print]

[Magnetic resonance perfusion imaging of resting-state cerebral blood flow in preclinical Huntington's disease.](#)

Wolf RC, Grön G, Sambataro F, Vasic N, Wolf ND, Thomann PA, Saft C, Landwehrmeyer GB, Orth M.
J Cereb Blood Flow Metab. 2011 Sep;31(9):1908-18. doi: 10.1038/jcbfm.2011.60. Epub 2011 May 11.

[Measuring the neural response to continuous intramuscular infusion of hypertonic saline by perfusion MRI.](#)

Owen DG, Clarke CF, Bureau Y, Ganapathy S, Prato FS, St Lawrence KS.
J Magn Reson Imaging. 2011 Sep 23. doi: 10.1002/jmri.22814. [Epub ahead of print]

[Neural correlates of disbalanced motor control in major depression.](#)

Walther S, Höfle O, Federspiel A, Horn H, Hügli S, Wiest R, Strik W, Müller TJ.
J Affect Disord. 2011 Sep 17. [Epub ahead of print]

[Quantitative Blood Flow Measurements in Gliomas Using Arterial Spin-Labeling at 3T: Intermodality Agreement and Inter- and Intraobserver Reproducibility Study.](#)

Hirai T, Kitajima M, Nakamura H, Okuda T, Sasao A, Shigematsu Y, Utsunomiya D, Oda S, Uetani H, Morioka M, Yamashita Y.
AJNR Am J Neuroradiol. 2011 Oct 13. [Epub ahead of print]

[Perfusion imaging of cerebral arteriovenous malformations: a study comparing quantitative continuous arterial spin labeling and dynamic contrast-enhanced magnetic resonance imaging at 3 T.](#)

Lüdemann L, Jedrzejewski G, Heidenreich J, Han ET, Bruhn H.
Magn Reson Imaging. 2011 Sep 13. [Epub ahead of print]

[Reliability analysis of the resting state can sensitively and specifically identify the presence of Parkinson disease.](#)

Skidmore FM, Yang M, Baxter L, von Deneen KM, Collingwood J, He G, White K, Korenkevych D, Savenkov A, Heilman KM, Gold M, Liu Y.
Neuroimage. 2011 Sep 6. [Epub ahead of print]

[Resting quantitative cerebral blood flow in schizophrenia measured by pulsed arterial spin labeling perfusion MRI.](#)

Pinkham A, Loughead J, Ruparel K, Wu WC, Overton E, Gur R, Gur R.
Psychiatry Res. 2011 Oct 30;194(1):64-72. Epub 2011 Aug 9.

[Simultaneous Arterial Spin Labeling Cerebral Blood Flow and Morphological Assessments for Detection of Alzheimer's Disease.](#)

Dashjams T, Yoshiura T, Hiwatashi A, Yamashita K, Monji A, Ohyagi Y, Kamano H, Kawashima T, Kira JI, Honda H.
Acad Radiol. 2011 Sep 9. [Epub ahead of print]

Comparison of ASL Techniques or ASL compared with other imaging methods

[Arterial spin-labeling MRI can identify the presence and intensity of collateral perfusion in patients with moyamoya disease.](#)

Zaharchuk G, Do HM, Marks MP, Rosenberg J, Moseley ME, Steinberg GK.
Stroke. 2011 Sep;42(9):2485-91. Epub 2011 Jul 28.

[Clinical Application of Arterial Spin-Labeling MR Imaging in Patients with Carotid Stenosis: Quantitative Comparative Study with Single-Photon Emission CT.](#)

Uchihashi Y, Hosoda K, Zimine I, Fujita A, Fujii M, Sugimura K, Kohmura E.
AJNR Am J Neuroradiol. 2011 Sep;32(8):1545-51. Epub 2011 Jul 14.

[Direct comparison of fluorodeoxyglucose positron emission tomography and arterial spin labeling magnetic resonance imaging in Alzheimer's disease.](#)

Musiek ES, Chen Y, Korczykowski M, Saboury B, Martinez PM, Reddin JS, Alavi A, Kimberg DY, Wolk DA, Julin P, Newberg AB, Arnold SE, Detre JA.
Alzheimers Dement. 2011 Oct 20. [Epub ahead of print]

[Emerging Imaging Tools for Use with Traumatic Brain Injury Research.](#)

Hunter JV, Wilde EA, Tong KA, Holshouser BA.
J Neurotrauma. 2011 Oct 17. [Epub ahead of print]

[\[Nonenhanced MR Angiography Techniques\].](#)

Lanzman RS, Schmitt P, Kröpil P, Blondin D.
Rofo. 2011 Oct;183(10):913-24. Epub 2011 Mar 25. German.

[Perfusion imaging of cerebral arteriovenous malformations: a study comparing quantitative continuous arterial spin labeling and dynamic contrast-enhanced magnetic resonance imaging at 3 T.](#)

Lüdemann L, Jedrzejewski G, Heidenreich J, Han ET, Bruhn H.
Magn Reson Imaging. 2011 Sep 13. [Epub ahead of print]

[Pseudo-continuous transfer insensitive labeling technique.](#)

Ouyang C, Sutton BP.
Magn Reson Med. 2011 Sep;66(3):768-76. doi: 10.1002/mrm.22815. Epub 2011 Mar 4.

Functional Imaging / BOLD

[Arterial spin labeling for motor activation mapping at 3T with a 32-channel coil: Reproducibility and spatial accuracy in comparison with BOLD fMRI.](#)

Raoult H, Petr J, Bannier E, Stamm A, Gauthier JY, Barillot C, Ferré JC.
Neuroimage. 2011 Sep 1;58(1):157-67. Epub 2011 Jun 14.

[Cortical activation and lamina terminalis functional connectivity during thirst and drinking in humans.](#)

Farrell MJ, Bowala TK, Gavrilescu M, Phillips PA, McKinley MJ, McAllen RM, Denton DA, Egan GF.
Am J Physiol Regul Integr Comp Physiol. 2011 Sep;301(3):R623-31. Epub 2011 Jun 15.

[Impaired cerebral vasoreactivity to CO\(2\) in Alzheimer's disease using BOLD fMRI.](#)

S Cantin, Villien M, Moreaud O, Tropres I, Keignart S, Chipon E, Le Bas JF, Warnking J, Krainik A.
Neuroimage. 2011 Sep 15;58(2):579-87. Epub 2011 Jul 1.

[\[Innovations in functional MR imaging of the brain: Arterial spin labeling and diffusion\].](#)

Raoult H, Gauthier JY, Petr J, Bannier E, Le Rumeur E, Barillot C, Ferré JC.
J Radiol. 2011 Oct;92(10):878-88. Epub 2011 Sep 28. French.

[Reliability analysis of the resting state can sensitively and specifically identify the presence of Parkinson disease.](#)

Skidmore FM, Yang M, Baxter L, von Deneen KM, Collingwood J, He G, White K, Korenkevych D, Savenkov A, Heilman KM, Gold M, Liu Y.
Neuroimage. 2011 Sep 6. [Epub ahead of print]

Physiological Parameters beside CBF

[Mapping of Cerebral Oxygen Extraction Fraction Changes with Susceptibility-weighted Phase Imaging.](#)

Zaitsu Y, Kudo K, Terae S, Yazu R, Ishizaka K, Fujima N, Tha KK, Haacke EM, Sasaki M, Shirato H.

Radiology. 2011 Oct 26. [Epub ahead of print]

Technical Improvement/ Parameter Optimisation/ Theoretical Papers/ Review Papers

[Background suppression in arterial spin labeling MRI with a separate neck labeling coil.](#)

Shen Q, Duong TQ.

NMR Biomed. 2011 Nov;24(9):1111-8. doi: 10.1002/nbm.1666. Epub 2011 Feb 4.

[Correcting for the echo-time effect after measuring the cerebral blood flow by arterial spin labeling.](#)

Foucher JR, Roquet D, Marrer C, Pham BT, Gounot D.

J Magn Reson Imaging. 2011 Oct;34(4):785-90. doi: 10.1002/jmri.22678. Epub 2011 Jul 18.

[Determination of the rCBF in the Amygdala and Rhinal Cortex Using a FAIR-TrueFISP Sequence.](#)

Ludescher B, Martirosian P, Klose U, Nägele T, Schick F, Ernemann U.

Korean J Radiol. 2011 Sep;12(5):554-8. Epub 2011 Aug 24.

[Optimal Sampling and Estimation in PASL Perfusion Imaging.](#)

Santos N, Sanches JM, Sousa I, Figueiredo P.

IEEE Trans Biomed Eng. 2011 Nov;58(11):3165-74. Epub 2011 Aug 15.

[Optimization of background suppression for arterial spin labeling perfusion imaging.](#)

Maleki N, Dai W, Alsop DC.

MAGMA. 2011 Oct 19. [Epub ahead of print]

[Pseudo-random arterial modulation \(PRAM\): A novel arterial spin labeling approach to measure flow and blood transit times.](#)

Taei-Tehrani MR, Van Osch MJ, Brown TR.

J Magn Reson Imaging. 2011 Oct 11. doi: 10.1002/jmri.22844. [Epub ahead of print]

Job offerings

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

Feature articles

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