

Dear Colleagues.

Here is the last ASL Newsletter for 2010.

I hope all of you had a nice holidays and I wish you a Happy New Year!

Cheers,  
Johanna

## Recent publications November & December 2010, (e-publications might have been earlier):

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# Animal studies

[Arterial spin labeling and dynamic susceptibility contrast CBF MRI in postischemic hyperperfusion, hypercapnia, and after mannitol injection.](#)

Tanaka Y, Nagaoka T, Nair G, Ohno K, Duong TQ.  
J Cereb Blood Flow Metab. 2010 Dec 22. [Epub ahead of print]

[Association of chronic vascular changes with functional outcome after traumatic brain injury in rats.](#)

Hayward NM, Immonen R, Tuunanen PI, Ndoe-Ekane XE, Gröhn O, Pitkänen A.  
J Neurotrauma. 2010 Dec;27(12):2203-19. Epub 2010 Oct 18.

[Chronic hyperperfusion and angiogenesis follow subacute hypoperfusion in the thalamus of rats with focal cerebral ischemia.](#)

Hayward NM, Yanev P, Haapasalo A, Miettinen R, Hiltunen M, Gröhn O, Jolkkonen J.  
J Cereb Blood Flow Metab. 2010 Nov 17. [Epub ahead of print]

[Feasibility and precision of cerebral blood flow and cerebrovascular reactivity MRI measurements using a computer-controlled gas delivery system in an anesthetised juvenile animal model.](#)

Winter JD, Fierstra J, Dorner S, Fisher JA, St Lawrence KS, Kassner A.  
J Magn Reson Imaging. 2010 Nov;32(5):1068-75.

[High-field continuous arterial spin labeling with long labeling duration: Reduced confounds from blood transit time and postlabeling delay.](#)

Lu H, Leoni R, Silva AC, Stein EA, Yang Y.  
Magn Reson Med. 2010 Dec;64(6):1557-66. doi: 10.1002/mrm.22576. Epub 2010 Aug 16.

# Drug studies

[Effects on resting cerebral blood flow and functional connectivity induced by metoclopramide: a perfusion MRI study in healthy volunteers.](#)

Fernández-Seara MA, Aznárez-Sanado M, Mengual E, Irigoyen J, Heukamp F, Pastor MA.  
Br J Pharmacol. 2010 Dec 22. doi: 10.1111/j.1476-5381.2010.01161.x. [Epub ahead of print]

[Quantification of Cerebral Blood Flow as Biomarker of Drug Effect: Arterial Spin Labeling phMRI After a Single Dose of Oral Citalopram.](#)

Chen Y, Wan HI, O'Reardon JP, Wang DJ, Wang Z, Korczykowski M, Detre JA.  
Clin Pharmacol Ther. 2010 Dec 29. [Epub ahead of print]

[Quantification of Indirect Pathway Inhibition by the Adenosine A2a Antagonist SYN115 in Parkinson Disease.](#)

Black KJ, Koller JM, Campbell MC, Gusnard DA, Bandak SI.  
J Neurosci. 2010 Dec 1;30(48):16284-16292.

## Perfusion studies other than on the brain

### [Arterial spin labeling MRI for assessment of perfusion in native and transplanted kidneys.](#)

Artz NS, Sadowski EA, Wentland AL, Grist TM, Seo S, Djamali A, Fain SB.  
Magn Reson Imaging. 2011 Jan;29(1):74-82. Epub 2010 Sep 17.

### [Current role and future perspective of MRI for diagnosis and characterization of renal cell carcinoma.](#)

Schoth F, Persigehl T, Palmowski M.  
Panminerva Med. 2010 Dec;52(4):307-18.

### [Diffusion and perfusion of the kidney.](#)

Notohamiprodjo M, Reiser MF, Sourbron SP.  
Eur J Radiol. 2010 Dec;76(3):337-47. Epub 2010 Jun 26.

### [Early response assessment in patients with multiple myeloma during anti-angiogenic therapy using arterial spin labelling: first clinical results.](#)

Fenchel M, Konaktchieva M, Weisel K, Kraus S, Brodoefel H, Claussen CD, Horger M.  
Eur Radiol. 2010 Dec;20(12):2899-906. Epub 2010 Jul 1.

### [Estimation of perfusion and arterial transit time in myocardium using free-breathing myocardial arterial spin labeling with navigator-echo.](#)

Wang DJ, Bi X, Avants BB, Meng T, Zuehlsdorff S, Detre JA.  
Magn Reson Med. 2010 Nov;64(5):1289-95.

### [Lung perfusion measured using magnetic resonance imaging: New tools for physiological insights into the pulmonary circulation.](#)

Hopkins SR, Prisk GK.  
J Magn Reson Imaging. 2010 Dec;32(6):1287-301. doi: 10.1002/jmri.22378.

### [Lung volume does not alter the distribution of pulmonary perfusion in dependent lung in supine humans.](#)

Hopkins SR, Arai TJ, Henderson AC, Levin DL, Buxton RB, Kim Prisk G.  
J Physiol. 2010 Dec 1;588(Pt 23):4759-4768. Epub 2010 Oct 4.

## Cerebral blood flow studies

### [Hippocampal blood flow in normal aging measured with arterial spin labeling at 3T.](#)

Rusinek H, Brys M, Glodzik L, Switalski R, Tsui WH, Haas F, McGorty K, Chen Q, de Leon MJ.  
Magn Reson Med. 2011 Jan;65(1):128-37.

## Reproducibility study

### [Regional reproducibility of pulsed arterial spin labeling perfusion imaging at 3T.](#)

Wang Y, Saykin AJ, Pfeuffer J, Lin C, Mosier KM, Shen L, Kim S, Hutchins GD.  
Neuroimage. 2011 Jan 15;54(2):1188-95. Epub 2010 Aug 25.

[Reliability and reproducibility of perfusion MRI in cognitively normal subjects.](#)

Jiang L, Kim M, Chodkowski B, Donahue MJ, Pekar JJ, Van Zijl PC, Albert M.  
Magn Reson Imaging. 2010 Nov;28(9):1283-9. Epub 2010 Jun 22.

## Regional comparison

[Cerebral blood flow in posterior cortical nodes of the default mode network decreases with task engagement but remains higher than in most brain regions.](#)

Pfefferbaum A, Chanraud S, Pitel AL, Müller-Oehring E, Shankaranarayanan A, Alsop DC, Rohlfing T, Sullivan EV.

Cereb Cortex. 2011 Jan;21(1):233-44. Epub 2010 May 19.

## Determination of spin compartment

[Determination of spin compartment in arterial spin labeling MRI.](#)

Liu P, Uh J, Lu H.

Magn Reson Med. 2011 Jan;65(1):120-7.

## Studies on special diseases

[Cerebral blood flow is reduced in chronic fatigue syndrome as assessed by arterial spin labeling.](#)

Biswal B, Kunwar P, Natelson BH.

J Neurol Sci. 2010 Dec 15. [Epub ahead of print]

[Hemodynamic Studies of Intracranial Dural Arteriovenous Fistulas Using Arterial Spin-labeling MR Imaging.](#)

Noguchi T, Irie H, Takase Y, Kawashima M, Ootsuka T, Nishihara M, Egashira Y, Nojiri J, Matsushima T, Kudo S.

Interv Neuroradiol. 2010 Dec;16(4):409-19. Epub 2010 Dec 17.

[Hypertension and cerebral vasoreactivity: a continuous arterial spin labeling magnetic resonance imaging study.](#)

Hajjar I, Zhao P, Alsop D, Novak V.

Hypertension. 2010 Nov;56(5):859-64. Epub 2010 Sep 27.

[Multiple Inflow Pulsed Arterial Spin-Labeling Reveals Delays in the Arterial Arrival Time in Minor Stroke and Transient Ischemic Attack.](#)

Macintosh BJ, Lindsay AC, Kyliantiras I, Kuker W, Günther M, Robson MD, Kennedy J, Choudhury RP, Jezzard P.

AJNR Am J Neuroradiol. 2010 Nov;31(10):1892-1894. Epub 2010 Jan 28.

[Neurocognitive deficits in children with sickle cell disease are associated with the severity of anemia.](#)

Hijmans CT, Grootenhuis MA, Oosterlaan J, Heijboer H, Peters M, Fijnvandraat K.

Pediatr Blood Cancer. 2010 Dec 1. [Epub ahead of print]

[Perfusion deficit to cholinergic challenge in veterans with Gulf War Illness.](#)

Liu P, Aslan S, Li X, Buhner DM, Spence JS, Briggs RW, Haley RW, Lu H.  
Neurotoxicology. 2010 Dec 10. [Epub ahead of print]

[Response assessment in patients with multiple myeloma during antiangiogenic therapy using arterial spin labeling and diffusion-weighted imaging: a feasibility study.](#)

Fenchel M, Konaktchieva M, Weisel K, Kraus S, Claussen CD, Horger M.  
Acad Radiol. 2010 Nov;17(11):1326-33.

## Comparison of ASL Techniques or ASL compared with other imaging methods

[Assessment of cerebral perfusion from bypass arteries using magnetic resonance regional perfusion imaging in patients with moyamoya disease.](#)

Kitajima M, Hirai T, Shigematsu Y, Fukuoka H, Sasao A, Okuda T, Morioka M, Kai Y, Yamashita Y.

Jpn J Radiol. 2010 Dec;28(10):746-53. Epub 2010 Dec 30.

[Perfusion deficit to cholinergic challenge in veterans with Gulf War Illness.](#)

Liu P, Aslan S, Li X, Buhner DM, Spence JS, Briggs RW, Haley RW, Lu H.  
Neurotoxicology. 2010 Dec 10. [Epub ahead of print]

[Time-resolved vessel-selective digital subtraction MR angiography of the cerebral vasculature with arterial spin labeling.](#)

Robson PM, Dai W, Shankaranarayanan A, Rofsky NM, Alsop DC.  
Radiology. 2010 Nov;257(2):507-15.

[Time spatial labeling inversion pulse cerebral MR angiography without subtraction by use of dual inversion recovery background suppression.](#)

Ishimori Y, Monma M, Kawamura H, Miyata T.

Radiol Phys Technol. 2010 Dec 1. [Epub ahead of print]

## Functional Imaging / BOLD

[Age-Associated Reductions in Cerebral Blood Flow Are Independent from Regional Atrophy.](#)

Chen JJ, Rosas HD, Salat DH.

Neuroimage. 2010 Dec 15. [Epub ahead of print]

[Anatomical differences and network characteristics underlying smoking cue reactivity.](#)

Zhang X, Salmeron BJ, Ross TJ, Gu H, Geng X, Yang Y, Stein EA.

Neuroimage. 2011 Jan 1;54(1):131-41. Epub 2010 Aug 3.

[Baseline GABA concentration and fMRI response.](#)

Donahue MJ, Near J, Blicher JU, Jezzard P.

Neuroimage. 2010 Nov 1;53(2):392-8. Epub 2010 Jul 12.

[Cerebral blood flow in posterior cortical nodes of the default mode network decreases with task engagement but remains higher than in most brain regions.](#)

Pfefferbaum A, Chanraud S, Pitel AL, Müller-Oehring E, Shankaranarayanan A, Alsop DC, Rohlfing T, Sullivan EV.

Cereb Cortex. 2011 Jan;21(1):233-44. Epub 2010 May 19.

[Challenges to attention: A continuous arterial spin labeling \(ASL\) study of the effects of distraction on sustained attention.](#)

Demeter E, Hernandez-Garcia L, Sarter M, Lustig C.

Neuroimage. 2011 Jan 15;54(2):1518-29. Epub 2010 Sep 17.

[Elimination of visually evoked BOLD responses during carbogen inhalation: Implications for calibrated MRI.](#)

Gauthier CJ, Madjar C, Tancredi FB, Stefanovic B, Hoge RD.

Neuroimage. 2011 Jan 15;54(2):1001-11. Epub 2010 Sep 29.

[Feasibility and precision of cerebral blood flow and cerebrovascular reactivity MRI measurements using a computer-controlled gas delivery system in an anesthetised juvenile animal model.](#)

Winter JD, Fierstra J, Dorner S, Fisher JA, St Lawrence KS, Kassner A.

J Magn Reson Imaging. 2010 Nov;32(5):1068-75.

[Improved fMRI calibration: Precisely controlled hyperoxic versus hypercapnic stimuli.](#)

Mark CI, Fisher JA, Pike GB.

Neuroimage. 2011 Jan 15;54(2):1102-11. Epub 2010 Sep 7.

[Lung perfusion measured using magnetic resonance imaging: New tools for physiological insights into the pulmonary circulation.](#)

Hopkins SR, Prisk GK.

J Magn Reson Imaging. 2010 Dec;32(6):1287-301. doi: 10.1002/jmri.22378.

[Simultaneous acquisition of gradient echo/spin echo BOLD and perfusion with a separate labeling coil.](#)

Glielmi CB, Xu Q, Craddock RC, Hu X.

Magn Reson Med. 2010 Dec;64(6):1827-1831.

## Technical Improvement/ Parameter Optimisation/ Theoretical Papers/ Review Papers

[A general framework for the analysis of vessel encoded arterial spin labeling for vascular territory mapping.](#)

Chappell MA, Okell TW, Jezzard P, Woolrich MW.

Magn Reson Med. 2010 Nov;64(5):1529-39.

[Diffusion and perfusion of the kidney.](#)

Notohamiprodjo M, Reiser MF, Sourbron SP.

Eur J Radiol. 2010 Dec;76(3):337-47. Epub 2010 Jun 26.

[Flow measurement in MRI using arterial spin labeling with cumulative readout pulses-- theory and validation.](#)

Wang Y, Kim SE, DiBella EV, Parker DL.  
Med Phys. 2010 Nov;37(11):5801-10.

[Perfusion territory imaging of intracranial branching arteries - optimization of continuous artery-selective spin labeling \(CASSL\).](#)

Helle M, Rüfer S, Alfke K, Jansen O, Norris DG.  
NMR Biomed. 2010 Nov 8. [Epub ahead of print]

[Robust EPI Nyquist ghost elimination via spatial and temporal encoding.](#)

Hoge WS, Tan H, Kraft RA.  
Magn Reson Med. 2010 Dec;64(6):1781-91. doi: 10.1002/mrm.22564. Epub 2010 Jul 27.

[Technical aspects of MR perfusion.](#)

Sourbron S.  
Eur J Radiol. 2010 Dec;76(3):304-13. Epub 2010 Apr 3.

## Job offerings

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

## Feature articles

If you like to write a comment on an interesting article mail it to [newsletter@asl-network.org](mailto:newsletter@asl-network.org)