

Dear Colleagues,

Here is the ASL Newsletter No. 28.

Kind Regards,  
Ina

## Recent publications February 2013, (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.....	3
Studies on special diseases .....	3
Comparison of ASL Techniques or ASL compared with other Imaging methods.....	4
Functional Imaging / BOLD .....	5
Physiological Parameters besides CBF .....	5
Technical Improvement/ Parameter Optimisation/ Theoretical Papers .....	6
Job offerings .....	6
Feature articles.....	6

## Animal studies

[Cortical atrophy and hypoperfusion in a transgenic mouse model of Alzheimer's disease.](#)

Hébert F, Grand'maison M, Ho MK, Lerch JP, Hamel E, Bedell BJ.

Neurobiol Aging. 2013 Jun;34(6):1644-52. doi: 10.1016/j.neurobiolaging.2012.11.022.

Epub 2012 Dec 27.

## Pharmacological / Drug studies

[Cerebral hypoperfusion in multiple sclerosis is reversible and mediated by endothelin-1.](#)

D'haeseleer M, Beelen R, Fierens Y, Cambron M, Vanbinst AM, Verborgh C, Demey J, De Keyser J.

Proc Natl Acad Sci U S A. 2013 Mar 18. [Epub ahead of print]

[The effect of black tea and caffeine on regional cerebral blood flow measured with arterial spin labeling.](#)

Vidyasagar R, Greyling A, Draijer R, Corfield DR, Parkes LM.

J Cereb Blood Flow Metab. 2013 Mar 13. doi: 10.1038/jcbfm.2013.40. [Epub ahead of print]

[Effects of subanesthetic dose of nitrous oxide on cerebral blood flow and metabolism: a multimodal magnetic resonance imaging study in healthy volunteers.](#)

Dashdorj N, Corrie K, Napolitano A, Petersen E, Mahajan RP, Auer DP.

Anesthesiology. 2013 Mar;118(3):577-86. doi: 10.1097/ALN.0b013e3182800d58.

[Mapping the hemodynamic response in human subjects to a dopaminergic challenge with dextroamphetamine using ASL-based pharmacological MRI.](#)

Schouw ML, Kaag AM, Caan MW, Heijtel DF, Majoie CB, Nederveen AJ, Booi J, Reneman L.

Neuroimage. 2013 May 15;72:1-9. doi: 10.1016/j.neuroimage.2012.12.056. Epub 2013 Jan 5.

[Cortical responses to amphetamine exposure studied by pCASL MRI and pharmacokinetic/pharmacodynamic dose modeling.](#)

Nordin LE, Li TQ, Brogren J, Johansson P, Sjögren N, Hannesdottir K, Björk C, Segerdahl M, Wang DJ, Julin P.

Neuroimage. 2013 Mar;68:75-82. doi: 10.1016/j.neuroimage.2012.11.035. Epub 2012 Dec 12.

[Mapping human brain fatty acid amide hydrolase activity with PET.](#)

Rusjan PM, Wilson AA, Mizrahi R, Boileau I, Chavez SE, Lobaugh NJ, Kish SJ, Houle S, Tong J.

J Cereb Blood Flow Metab. 2013 Mar;33(3):407-14. doi: 10.1038/jcbfm.2012.180. Epub 2012 Dec 5.

# Perfusion studies other than on the brain

[Estimation of single-kidney glomerular filtration rate without exogenous contrast agent.](#)

He X, Aghayev A, Gumus S, Ty Bae K.

Magn Reson Med. 2013 Mar 6. doi: 10.1002/mrm.24668. [Epub ahead of print]

[Correlation of biexponential diffusion parameters with arterial spin-labeling perfusion MRI: results in transplanted kidneys.](#)

Heusch P, Wittsack HJ, Heusner T, Buchbender C, Quang MN, Martirosian P, Bilk P, Kröpil P, Blondin D, Antoch G, Lanzman RS.

Invest Radiol. 2013 Mar;48(3):140-4. doi: 10.1097/RLI.0b013e318277bfe3.

# Cerebral blood flow studies

## CBF correlation with age

[Regional changes in brain perfusion during brain maturation measured non-invasively with Arterial Spin Labeling MRI in neonates.](#)

De Vis JB, Petersen ET, de Vries LS, Groenendaal F, Kersbergen KJ, Alderliesten T, Hendrikse J, Benders MJ.

Eur J Radiol. 2013 Mar;82(3):538-43. doi: 10.1016/j.ejrad.2012.10.013. Epub 2012 Nov 27.

[Inverse correspondence between hippocampal perfusion and verbal memory performance in older adults.](#)

Rane S, Ally BA, Hussey E, Wilson T, Thornton-Wells T, Gore JC, Donahue MJ.

Hippocampus. 2013 Mar;23(3):213-20. doi: 10.1002/hipo.22080. Epub 2012 Oct 26.

[Intensive Blood Pressure Lowering Increases Cerebral Blood Flow in Older Subjects With Hypertension.](#)

Tryambake D, He J, Firbank MJ, O'Brien JT, Blamire AM, Ford GA.

Hypertension. 2013 Mar 25. [Epub ahead of print]

## Studies on special diseases

[Cerebral hypoperfusion in multiple sclerosis is reversible and mediated by endothelin-1.](#)

D'haeseleer M, Beelen R, Fierens Y, Cambron M, Vanbinst AM, Verborgh C, Demey J, De Keyser J.

Proc Natl Acad Sci U S A. 2013 Mar 18. [Epub ahead of print]

[Cerebral hyperperfusion syndrome after revascularization surgery in patients with moyamoya disease.](#)

Zhao WG, Luo Q, Jia JB, Yu JL.

Br J Neurosurg. 2013 Mar 5. [Epub ahead of print]

[Periprocedural arterial spin labeling and dynamic susceptibility contrast perfusion in detection of cerebral blood flow in patients with acute ischemic syndrome.](#)

Nael K, Meshksar A, Liebeskind DS, Wang DJ, Ellingson BM, Salamon N, Villablanca JP; UCLA Stroke investigators.

Stroke. 2013 Mar;44(3):664-70. doi: 10.1161/STROKEAHA.112.672956. Epub 2013 Feb 6.

[Changes in cerebral blood flow and vasoreactivity to CO2 measured by arterial spin labeling after 6days at 4350m.](#)

Villien M, Bouzat P, Rupp T, Robach P, Lamalle L, Troprès I, Estève F, Krainik A, Lévy P, Warnking JM, Verges S.

Neuroimage. 2013 May 15;72:272-9. doi: 10.1016/j.neuroimage.2013.01.066. Epub 2013

[Cortical atrophy and hypoperfusion in a transgenic mouse model of Alzheimer's disease.](#)

Hébert F, Grand'maison M, Ho MK, Lerch JP, Hamel E, Bedell BJ.

Neurobiol Aging. 2013 Jun;34(6):1644-52. doi: 10.1016/j.neurobiolaging.2012.11.022. Epub 2012 Dec 27.

[Correlation of biexponential diffusion parameters with arterial spin-labeling perfusion MRI: results in transplanted kidneys.](#)

Heusch P, Wittsack HJ, Heusner T, Buchbender C, Quang MN, Martirosian P, Bilk P, Kröpil P, Blondin D, Antoch G, Lanzman RS.

Invest Radiol. 2013 Mar;48(3):140-4. doi: 10.1097/RLI.0b013e318277bfe3.

[Reduced neuronal activity in language-related regions after transcranial magnetic stimulation therapy for auditory verbal hallucinations.](#)

Kindler J, Homan P, Jann K, Federspiel A, Flury R, Hauf M, Strik W, Dierks T, Hubl D.

Biol Psychiatry. 2013 Mar 15;73(6):518-24. doi: 10.1016/j.biopsych.2012.06.019. Epub 2012 Jul 27.

[Inverse correspondence between hippocampal perfusion and verbal memory performance in older adults.](#)

Rane S, Ally BA, Hussey E, Wilson T, Thornton-Wells T, Gore JC, Donahue MJ.

Hippocampus. 2013 Mar;23(3):213-20. doi: 10.1002/hipo.22080. Epub 2012 Oct 26.

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

[Acceleration-selective arterial spin labeling.](#)

Schmid S, Ghariq E, Teeuwisse WM, Webb A, van Osch MJ.

Magn Reson Med. 2013 Mar 8. doi: 10.1002/mrm.24650. [Epub ahead of print]

[Periprocedural arterial spin labeling and dynamic susceptibility contrast perfusion in detection of cerebral blood flow in patients with acute ischemic syndrome.](#)

Nael K, Meshksar A, Liebeskind DS, Wang DJ, Ellingson BM, Salamon N, Villablanca JP; UCLA Stroke investigators.

Stroke. 2013 Mar;44(3):664-70. doi: 10.1161/STROKEAHA.112.672956. Epub 2013 Feb 6.

[Correlation of biexponential diffusion parameters with arterial spin-labeling perfusion MRI: results in transplanted kidneys.](#)

Heusch P, Wittsack HJ, Heusner T, Buchbender C, Quang MN, Martirosian P, Bilk P, Kröpil P, Blondin D, Antoch G, Lanzman RS.

Invest Radiol. 2013 Mar;48(3):140-4. doi: 10.1097/RLI.0b013e318277bfe3.

[Mapping human brain fatty acid amide hydrolase activity with PET.](#)

Rusjan PM, Wilson AA, Mizrahi R, Boileau I, Chavez SE, Lobaugh NJ, Kish SJ, Houle S, Tong J.

J Cereb Blood Flow Metab. 2013 Mar;33(3):407-14. doi: 10.1038/jcbfm.2012.180. Epub 2012 Dec 5.

## Functional Imaging / BOLD

[Quantification of Network Perfusion in ASL Cerebral Blood Flow Data with Seed Based and ICA Approaches.](#)

Jann K, Orosz A, Dierks T, Wang DJ, Wiest R, Federspiel A.

Brain Topogr. 2013 Mar 19. [Epub ahead of print]

[The effect of black tea and caffeine on regional cerebral blood flow measured with arterial spin labeling.](#)

Vidyasagar R, Greyling A, Draijer R, Corfield DR, Parkes LM.

J Cereb Blood Flow Metab. 2013 Mar 13. doi: 10.1038/jcbfm.2013.40. [Epub ahead of print]

[Coupling of cerebral blood flow and oxygen metabolism is conserved for chromatic and luminance stimuli in human visual cortex.](#)

Leontiev O, Buracas GT, Liang C, Ances BM, Perthen JE, Shmuel A, Buxton RB.

Neuroimage. 2013 Mar;68:221-8. doi: 10.1016/j.neuroimage.2012.11.050. Epub 2012 Dec 11.

## Physiological Parameters besides CBF

[Estimation of single-kidney glomerular filtration rate without exogenous contrast agent.](#)

He X, Aghayev A, Gumus S, Ty Bae K.

Magn Reson Med. 2013 Mar 6. doi: 10.1002/mrm.24668. [Epub ahead of print]

[Volumetric measurement of perfusion and arterial transit delay using hadamard encoded continuous arterial spin labeling.](#)

Dai W, Shankaranarayanan A, Alsop DC.

Magn Reson Med. 2013 Apr;69(4):1014-22. doi: 10.1002/mrm.24335. Epub 2012 May 22.

# Technical Improvement/ Parameter Optimisation/ Theoretical Papers

[Optimal individual inversion time in brain arterial spin labeling perfusion magnetic resonance imaging: correlation with carotid hemodynamics measured with cine phase-contrast magnetic resonance imaging.](#)

Ferré JC, Petr J, Barillot C, Raoult H, Gauvrit JY.

J Comput Assist Tomogr. 2013 Mar;37(2):247-51. doi: 10.1097/RCT.0b013e31827cd548.

[Acceleration-selective arterial spin labeling.](#)

Schmid S, Ghariq E, Teeuwisse WM, Webb A, van Osch MJ.

Magn Reson Med. 2013 Mar 8. doi: 10.1002/mrm.24650. [Epub ahead of print]

[Vessel-selective, non-contrast enhanced, time-resolved MR angiography with vessel-selective arterial spin labeling technique \(CINEMA-SELECT\) in intracranial arteries.](#)

Nakamura M, Yoneyama M, Tabuchi T, Takemura A, Obara M, Tatsuno S, Sawano S.

Radiol Phys Technol. 2013 Mar 10. [Epub ahead of print]

[Noncontrast-enhanced three-dimensional \(3D\) intracranial MR angiography using pseudocontinuous arterial spin labeling and accelerated 3D radial acquisition.](#)

Wu H, Block WF, Turski PA, Mistretta CA, Johnson KM.

Magn Reson Med. 2013 Mar 1;69(3):708-15. doi: 10.1002/mrm.24298. Epub 2012 Apr 24.

[Volumetric measurement of perfusion and arterial transit delay using hadamard encoded continuous arterial spin labeling.](#)

Dai W, Shankaranarayanan A, Alsop DC.

Magn Reson Med. 2013 Apr;69(4):1014-22. doi: 10.1002/mrm.24335. Epub 2012 May 22.

[An optimized velocity selective arterial spin labeling module with reduced eddy current sensitivity for improved perfusion quantification.](#)

Meakin JA, Jezzard P.

Magn Reson Med. 2013 Mar 1;69(3):832-8. doi: 10.1002/mrm.24302. Epub 2012 May 3.

[Superselective arterial spin labeling applied for flow territory mapping in various cerebrovascular diseases.](#)

Helle M, Rüfer S, van Osch MJ, Nabavi A, Alfke K, Norris DG, Jansen O.

J Magn Reson Imaging. 2013 Mar 22. doi: 10.1002/jmri.24041. [Epub ahead of print]

## 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)

