

Dear Colleagues,

Here is the ASL Newsletter No. 43.

Kind regards,
Ina

Recent publications

June 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.....	3
Studies on Special Disease.....	4
Comparison of ASL Techniques / ASL Compared with Other Imaging Methods.....	6
Functional Imaging / BOLD	6
Physiological Parameters besides CBF.....	7
ASL Data Analysis/ Comparison of ASL Evaluation Methods/ Kinetic Models	7
Technical Improvement/ Parameter Optimisation/ Theoretical Papers	8
Review Paper/ Historical Review	8
Job offerings.....	8
Feature articles.....	8

Animal Studies

[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, Darrach R, Lu L, Dell KM, Yu X, Flask CA. NMR Biomed. 2014 Jun 3. doi: 10.1002/nbm.3143. [Epub ahead of print]

[Global and regional differences in cerebral blood flow after asphyxial versus ventricular fibrillation cardiac arrest in rats using ASL-MRI.](#)

Drabek T, Foley LM, Janata A, Stezoski J, Kevin Hitchens T, Manole MD, Kochanek PM. Resuscitation. 2014 Jul;85(7):964-71. doi: 10.1016/j.resuscitation.2014.03.314. Epub 2014 Apr 12.

[Impaired CBF regulation and high CBF threshold contribute to the increased sensitivity of spontaneously hypertensive rats to cerebral ischemia.](#)

Kang BT, Leoni RF, Silva AC.

Neuroscience. 2014 Jun 6;269:223-31. doi: 10.1016/j.neuroscience.2014.03.031. Epub 2014 Mar 25.

Pharmacological / Drug Studies / Studies on the Effects of Therapies

[Arterial spin-labeling evaluation of cerebrovascular reactivity to acetazolamide in healthy subjects.](#)

Inoue Y, Tanaka Y, Hata H, Hara T.

AJNR Am J Neuroradiol. 2014 Jun;35(6):1111-6. doi: 10.3174/ajnr.A3815. Epub 2013 Dec 26.

[Routine Clinical Evaluation of Cerebrovascular Reserve Capacity Using Carbogen in Patients With Intracranial Stenosis.](#)

Donahue MJ, Dethrage LM, Faraco CC, Jordan LC, Clemmons P, Singer R, Mocco J, Shyr Y, Desai A, O'Duffy A, Riebau D, Hermann L, Connors J, Kirshner H, Strother MK.

Stroke. 2014 Jun 17. pii: STROKEAHA.114.005975. [Epub ahead of print]

[Neural correlates of mindfulness meditation-related anxiety relief.](#)

Zeidan F, Martucci KT, Kraft RA, McHaffie JG, Coghill RC.

Soc Cogn Affect Neurosci. 2014 Jun;9(6):751-9. doi: 10.1093/scan/nst041. Epub 2013 Apr 24.

Perfusion Studies Other than on the Brain

[Separate pulmonary artery and vein magnetic resonance angiography by use of an arterial spin labeling method.](#)

Okuaki T, Ishimoto T, Miyati T, Kobayashi S, Ishihara M, Kawakami M, Ogino T, Van Cauteren M.

Radiol Phys Technol. 2014 Jun 7. [Epub ahead of print]

[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 Jun 3. doi: 10.1002/nbm.3143. [Epub ahead of print]

[Functional evaluation of transplanted kidneys using arterial spin labeling MRI.](#)

Heusch P, Wittsack HJ, Blondin D, Ljimini A, Nguyen-Quang M, Martirosian P, Zenginli H, Bilk P, Kröpil P, Heusner TA, Antoch G, Lanzman RS.

J Magn Reson Imaging. 2014 Jul;40(1):84-9. doi: 10.1002/jmri.24336. Epub 2013 Oct 7.

[A comparison of arterial spin labeling perfusion MRI and DCE-MRI in human prostate cancer.](#)

Cai W, Li F, Wang J, Du H, Wang X, Zhang J, Fang J, Jiang X.

NMR Biomed. 2014 Jul;27(7):817-25. doi: 10.1002/nbm.3124. Epub 2014 May 9.

Cerebral Blood Flow Studies

CBF Correlation with Age

[Non-invasive MRI measurements of venous oxygenation, oxygen extraction fraction and oxygen consumption in neonates.](#)

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

Neuroimage. 2014 Jul 15;95:185-92. doi: 10.1016/j.neuroimage.2014.03.060. Epub 2014 Mar 29.

[Developmental changes in resting and functional cerebral blood flow and their relationship to the BOLD response.](#)

Moses P, DiNino M, Hernandez L, Liu TT.

Hum Brain Mapp. 2014 Jul;35(7):3188-98. doi: 10.1002/hbm.22394. Epub 2013 Oct 18.

CBF Regional Comparison/ Regional ASL

[Investigating white matter perfusion using optimal sampling strategy arterial spin labeling at 7 Tesla.](#)

Gardener AG, Jezzard P.

Magn Reson Med. 2014 Jun 20. doi: 10.1002/mrm.25333. [Epub ahead of print]

[Vertigo-Related Cerebral Blood Flow Changes on MRI.](#)

Chang F, Li Z, Xie S, Liu H, Wang W.
Spine (Phila Pa 1976). 2014 Jun 11. [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.

[Regional perfusion imaging using pTILT.](#)

Ouyang C, Sutton BP.
J Magn Reson Imaging. 2014 Jul;40(1):192-9. doi: 10.1002/jmri.24346. Epub 2013 Oct 17.

[Global and regional differences in cerebral blood flow after asphyxial versus ventricular fibrillation cardiac arrest in rats using ASL-MRI.](#)

Drabek T, Foley LM, Janata A, Stezoski J, Kevin Hitchens T, Manole MD, Kochanek PM.
Resuscitation. 2014 Jul;85(7):964-71. doi: 10.1016/j.resuscitation.2014.03.314. Epub 2014 Apr 12.

[Comparing cerebral perfusion in Alzheimer's disease and Parkinson's disease dementia: an ASL-MRI study.](#)

Le Heron CJ, Wright SL, Melzer TR, Myall DJ, MacAskill MR, Livingston L, Keenan RJ, Watts R, Dalrymple-Alford JC, Anderson TJ.
J Cereb Blood Flow Metab. 2014 Jun;34(6):964-70. doi: 10.1038/jcbfm.2014.40. Epub 2014 Mar 12.

[Validation of planning-free vessel-encoded pseudo-continuous arterial spin labeling MR imaging as territorial-ASL strategy by comparison to super-selective p-CASL MRI.](#)

Hartkamp NS, Helle M, Chappell MA, Okell TW, Hendrikse J, Bokkers RP, van Osch MJ.
Magn Reson Med. 2014 Jun;71(6):2059-70. doi: 10.1002/mrm.24872. Epub 2013 Jul 22.

Studies on Special Disease

[Voxel-Based Morphometry and Arterial Spin Labeling fMRI Reveal Neuropathic and Neuroplastic Features of Brain Processing of Itch in End-Stage-Renal-Disease.](#)

Papoiu AD, Emerson NM, Patel TS, Kraft RA, Valdes-Rodriguez R, Nattkemper LA, Coghill RC, Yosipovitch G.
J Neurophysiol. 2014 Jun 18. pii: jn.00827.2013. [Epub ahead of print]

[Vertigo-Related Cerebral Blood Flow Changes on MRI.](#)

Chang F, Li Z, Xie S, Liu H, Wang W.
Spine (Phila Pa 1976). 2014 Jun 11. [Epub ahead of print]

[The vascular steal phenomenon is an incomplete contributor to negative cerebrovascular reactivity in patients with symptomatic intracranial stenosis.](#)

Arteaga DF, Strother MK, Faraco CC, Jordan LC, Ladner TR, Dethrage LM, Singer RJ, Mocco J, Clemmons PF, Ayad MJ, Donahue MJ.

J Cereb Blood Flow Metab. 2014 Jun 11. doi: 10.1038/jcbfm.2014.106. [Epub ahead of print]

[Prognostic value of blood flow measurements using arterial spin labeling in gliomas.](#)

Furtner J, Bender B, Braun C, Schittenhelm J, Skardelly M, Ernemann U, Bisdas S.

PLoS One. 2014 Jun 9;9(6):e99616. doi: 10.1371/journal.pone.0099616. eCollection 2014.

[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.

[Functional evaluation of transplanted kidneys using arterial spin labeling MRI.](#)

Heusch P, Wittsack HJ, Blondin D, Ljimini A, Nguyen-Quang M, Martirosian P, Zenginli H, Bilk P, Kröpil P, Heusner TA, Antoch G, Lanzman RS.

J Magn Reson Imaging. 2014 Jul;40(1):84-9. doi: 10.1002/jmri.24336. Epub 2013 Oct 7.

[Routine Clinical Evaluation of Cerebrovascular Reserve Capacity Using Carbogen in Patients With Intracranial Stenosis.](#)

Donahue MJ, Dethrage LM, Faraco CC, Jordan LC, Clemmons P, Singer R, Mocco J, Shyr Y, Desai A, O'Duffy A, Riebau D, Hermann L, Connors J, Kirshner H, Strother MK.

Stroke. 2014 Jun 17. pii: STROKEAHA.114.005975. [Epub ahead of print]

[A comparison of arterial spin labeling perfusion MRI and DCE-MRI in human prostate cancer.](#)

Cai W, Li F, Wang J, Du H, Wang X, Zhang J, Fang J, Jiang X.

NMR Biomed. 2014 Jul;27(7):817-25. doi: 10.1002/nbm.3124. Epub 2014 May 9.

[Global and regional differences in cerebral blood flow after asphyxial versus ventricular fibrillation cardiac arrest in rats using ASL-MRI.](#)

Drabek T, Foley LM, Janata A, Stezoski J, Kevin Hitchens T, Manole MD, Kochanek PM.

Resuscitation. 2014 Jul;85(7):964-71. doi: 10.1016/j.resuscitation.2014.03.314. Epub 2014 Apr 12.

[Impaired CBF regulation and high CBF threshold contribute to the increased sensitivity of spontaneously hypertensive rats to cerebral ischemia.](#)

Kang BT, Leoni RF, Silva AC.

Neuroscience. 2014 Jun 6;269:223-31. doi: 10.1016/j.neuroscience.2014.03.031. Epub 2014 Mar 25.

[Comparing cerebral perfusion in Alzheimer's disease and Parkinson's disease dementia: an ASL-MRI study.](#)

Le Heron CJ, Wright SL, Melzer TR, Myall DJ, MacAskill MR, Livingston L, Keenan RJ, Watts R, Dalrymple-Alford JC, Anderson TJ.

J Cereb Blood Flow Metab. 2014 Jun;34(6):964-70. doi: 10.1038/jcbfm.2014.40. Epub 2014 Mar 12.

[Neural correlates of mindfulness meditation-related anxiety relief.](#)

Zeidan F, Martucci KT, Kraft RA, McHaffie JG, Coghill RC.

Soc Cogn Affect Neurosci. 2014 Jun;9(6):751-9. doi: 10.1093/scan/nst041. Epub 2013 Apr 24.

Comparison of ASL Techniques / ASL Compared with Other Imaging Methods

[A comparison of arterial spin labeling perfusion MRI and DCE-MRI in human prostate cancer.](#)

Cai W, Li F, Wang J, Du H, Wang X, Zhang J, Fang J, Jiang X.

NMR Biomed. 2014 Jul;27(7):817-25. doi: 10.1002/nbm.3124. Epub 2014 May 9.

[Validation of planning-free vessel-encoded pseudo-continuous arterial spin labeling MR imaging as territorial-ASL strategy by comparison to super-selective p-CASL MRI.](#)

Hartkamp NS, Helle M, Chappell MA, Okell TW, Hendrikse J, Bokkers RP, van Osch MJ.

Magn Reson Med. 2014 Jun;71(6):2059-70. doi: 10.1002/mrm.24872. Epub 2013 Jul 22.

Functional Imaging / BOLD

[Voxel-Based Morphometry and Arterial Spin Labeling fMRI Reveal Neuropathic and Neuroplastic Features of Brain Processing of Itch in End-Stage-Renal-Disease.](#)

Papoiu AD, Emerson NM, Patel TS, Kraft RA, Valdes-Rodriguez R, Nattkemper LA, Coghill RC, Yosipovitch G.

J Neurophysiol. 2014 Jun 18. pii: jn.00827.2013. [Epub ahead of print]

[Circadian and homeostatic modulation of functional connectivity and regional cerebral blood flow in humans under normal entrained conditions.](#)

Hodkinson DJ, O'Daly O, Zunszain PA, Pariante CM, Lazurenko V, Zelaya FO, Howard MA, Williams SC.

J Cereb Blood Flow Metab. 2014 Jun 18. doi: 10.1038/jcbfm.2014.109. [Epub ahead of print]

[Dissociative part-dependent resting-state activity in dissociative identity disorder: a controlled FMRI perfusion study.](#)

Schlumpf YR, Reinders AA, Nijenhuis ER, Luechinger R, van Osch MJ, Jäncke L.

PLoS One. 2014 Jun 12;9(6):e98795. doi: 10.1371/journal.pone.0098795. eCollection 2014.

[The vascular steal phenomenon is an incomplete contributor to negative cerebrovascular reactivity in patients with symptomatic intracranial stenosis.](#)

Arteaga DF, Strother MK, Faraco CC, Jordan LC, Ladner TR, Dethrage LM, Singer RJ, Mocco J, Clemmons PF, Ayad MJ, Donahue MJ.

J Cereb Blood Flow Metab. 2014 Jun 11. doi: 10.1038/jcbfm.2014.106. [Epub ahead of print]

[Developmental changes in resting and functional cerebral blood flow and their relationship to the BOLD response.](#)

Moses P, DiNino M, Hernandez L, Liu TT.

Hum Brain Mapp. 2014 Jul;35(7):3188-98. doi: 10.1002/hbm.22394. Epub 2013 Oct 18.

[Routine Clinical Evaluation of Cerebrovascular Reserve Capacity Using Carbogen in Patients With Intracranial Stenosis.](#)

Donahue MJ, Dethrage LM, Faraco CC, Jordan LC, Clemmons P, Singer R, Mocco J, Shyr Y, Desai A, O'Duffy A, Riebau D, Hermann L, Connors J, Kirshner H, Strother MK.

Stroke. 2014 Jun 17. pii: STROKEAHA.114.005975. [Epub ahead of print]

[Neural correlates of mindfulness meditation-related anxiety relief.](#)

Zeidan F, Martucci KT, Kraft RA, McHaffie JG, Coghill RC.

Soc Cogn Affect Neurosci. 2014 Jun;9(6):751-9. doi: 10.1093/scan/nst041. Epub 2013 Apr 24.

Physiological Parameters besides CBF

[Non-invasive MRI measurements of venous oxygenation, oxygen extraction fraction and oxygen consumption in neonates.](#)

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

Neuroimage. 2014 Jul 15;95:185-92. doi: 10.1016/j.neuroimage.2014.03.060. Epub 2014 Mar 29.

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

[Support vector machine learning-based cerebral blood flow quantification for arterial spin labeling MRI.](#)

Wang Z.

Hum Brain Mapp. 2014 Jul;35(7):2869-75. doi: 10.1002/hbm.22445. Epub 2014 Jan 17.

[Validation of planning-free vessel-encoded pseudo-continuous arterial spin labeling MR imaging as territorial-ASL strategy by comparison to super-selective p-CASL MRI.](#)

Hartkamp NS, Helle M, Chappell MA, Okell TW, Hendrikse J, Bokkers RP, van Osch MJ.

Magn Reson Med. 2014 Jun;71(6):2059-70. doi: 10.1002/mrm.24872. Epub 2013 Jul 22.

Technical Improvement/ Parameter Optimisation/ Theoretical Papers

[Investigating white matter perfusion using optimal sampling strategy arterial spin labeling at 7 Tesla.](#)

Gardener AG, Jezzard P.

Magn Reson Med. 2014 Jun 20. doi: 10.1002/mrm.25333. [Epub ahead of print]

[Separate pulmonary artery and vein magnetic resonance angiography by use of an arterial spin labeling method.](#)

Okuaki T, Ishimoto T, Miyati T, Kobayashi S, Ishihara M, Kawakami M, Ogino T, Van Caueren M.

Radiol Phys Technol. 2014 Jun 7. [Epub ahead of print]

[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 Jun 3. doi: 10.1002/nbm.3143. [Epub ahead of print]

[Regional perfusion imaging using pTILT.](#)

Ouyang C, Sutton BP.

J Magn Reson Imaging. 2014 Jul;40(1):192-9. doi: 10.1002/jmri.24346. Epub 2013 Oct 17.

[Acoustic noise reduction in pseudo-continuous arterial spin labeling \(pCASL\).](#)

van der Meer JN, Heijtel DF, van Hest G, Plattel GJ, van Osch MJ, van Someren EJ, vanBavel ET, Nederveen AJ.

MAGMA. 2014 Jun;27(3):269-76. doi: 10.1007/s10334-013-0406-3. Epub 2013 Sep 24.

[Near-contiguous spin echo imaging using matched-phase RF and its application in velocity-selective arterial spin labeling.](#)

Zun Z, Hargreaves BA, Pauly J, Zaharchuk G.

Magn Reson Med. 2014 Jun;71(6):2043-50. doi: 10.1002/mrm.24866. Epub 2013 Jul 15.

Review Paper/ Historical Review

[An introduction to ASL labeling techniques.](#)

Wong EC.

J Magn Reson Imaging. 2014 Jul;40(1):1-10. doi: 10.1002/jmri.24565. Epub 2014 Jan 15.

Job offerings

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