

Dear ASL-Community,

please find attached the latest ASL Newsletter No. 63.

Matthias also would like to share some news on upcoming ISMRM events, so please notice his words below.

In case you feel encouraged to share your methods, results and knowledge on ASL, we still didn't give up the idea of creating a Wiki. By now the/your interest hasn't seemed to be very high, but I might be wrong. If so, feel free to use the [discussion board](#) or contact me via email.

Kind regards,
Klaus

*Dear all,
we are happy to announce that mediri is going to sponsor the ASL network dinner at ISMRM. The dinner will happen on Sunday after the opening ceremony. Details will come soon.*

To get a rough estimate of participants we would like to ask you to register for the dinner by sending an email to editor@asl-network.org by March 31st.

Looking forward to see you in Singapore!

*Best wishes,
Matthias*

Recent publications

February 2016, (Epub & Print):

Note: The '*new*-flag' is assigned to articles which haven't been in earlier newsletters (e.g. as e-publications). Additionally you will find titles printed in bold letters which indicates that they are listed for the first time in this particular newsletter. For articles listed multiple times in different sections the bold letters disappear in the later sections.

Content:

Animal Studies.....	2
Cerebral Blood Flow Studies.....	3
Studies on Special Disease	3
Comparison of ASL Techniques / ASL Compared with Other Imaging Methods / ASL Combined with Other Imaging Methods	4
Functional Imaging / BOLD	4
Others CBF Related.....	4
Perfusion Studies Other than on the Brain	5
Physiological Parameters besides CBF.....	5
ASL Data Analysis/ Comparison of ASL Evaluation Methods/ Kinetic Models/ Data Corrections	6
Technical Improvement / Parameter Optimization	6
Cohort Studies / Gender- and Age Dependencies	7
Review Paper / Historical Review / Guidelines	7
Job offerings	8
Feature articles.....	8

Animal Studies

new

[Gradual Carotid Artery Stenosis in Mice Closely Replicates Hypoperfusive Vascular Dementia in Humans.](#)

Hattori Y, Enmi J, Iguchi S, Saito S, Yamamoto Y, Tsuji M, Nagatsuka K, Kalaria RN, Iida H, Ihara M.

J Am Heart Assoc. 2016 Feb 22;5(2). pii: e002757. doi: 10.1161/JAHA.115.002757.

[Free Article](#)

Cerebral Blood Flow Studies

Studies on Special Disease

new

Cost-utility and biological underpinnings of Mindfulness-Based Stress Reduction (MBSR) versus a psychoeducational programme (FibroQoL) for fibromyalgia: a 12-month randomised controlled trial (EUDAIMON study).

Feliu-Soler A, Borràs X, Peñarrubia-María MT, Rozadilla-Sacanell A, D'Amico F, Moss-Morris R, Howard MA, Fayed N, Soriano-Mas C, Puebla-Guedea M, Serrano-Blanco A, Pérez-Aranda A, Tuccillo R, Luciano JV.

BMC Complement Altern Med. 2016 Feb 27;16(1):81. doi: 10.1186/s12906-016-1068-2.

[Free PMC Article](#)

new

Chronic kidney disease, cerebral blood flow, and white matter volume in hypertensive adults.

Kurella Tamura M, Pajewski NM, Bryan RN, Weiner DE, Diamond M, Van Buren P, Taylor A, Beddhu S, Rosendorff C, Jahanian H, Zaharchuk G; SPRINT Study Research Group.

Neurology. 2016 Feb 26. pii: 10.1212/WNL.0000000000002527. [Epub ahead of print]

new

The Utility of Cerebral Blood Flow as a Biomarker of Preclinical Alzheimer's Disease.

Hays CC, Zlatar ZZ, Wierenga CE.

Cell Mol Neurobiol. 2016 Feb 22. [Epub ahead of print]

new

Arterial Spin Labeling Perfusion Study in the Patients with Subacute Mild Traumatic Brain Injury.

Lin CM, Tseng YC, Hsu HL, Chen CJ, Chen DY, Yan FX, Chiu WT.

PLoS One. 2016 Feb 12;11(2):e0149109. doi: 10.1371/journal.pone.0149109. eCollection 2016.

[Free PMC Article](#)

new

Dopaminergic Therapy Modulates Cortical Perfusion in Parkinson Disease With and Without Dementia According to Arterial Spin Labeled Perfusion Magnetic Resonance Imaging.

Lin WC, Chen PC, Huang YC, Tsai NW, Chen HL, Wang HC, Lin TK, Chou KH, Chen MH, Chen YW, Lu CH.

Medicine (Baltimore). 2016 Feb;95(5):e2206. doi: 10.1097/MD.0000000000002206.

[Free Article](#)

Arterial Spin Labeling Magnetic Resonance Imaging Estimation of Antegrade and Collateral Flow in Unilateral Middle Cerebral Artery Stenosis.

Lyu J, Ma N, Liebeskind DS, Wang DJ, Ma L, Xu Y, Wang T, Miao Z, Lou X.

Stroke. 2016 Feb;47(2):428-33. doi: 10.1161/STROKEAHA.115.011057. Epub 2016 Jan 5.

Usefulness of Pseudocontinuous Arterial Spin-Labeling for the Assessment of Patients with Head and Neck Squamous Cell Carcinoma by Measuring Tumor Blood Flow in the Pretreatment and Early Treatment Period.

Fujima N, Yoshida D, Sakashita T, Homma A, Tsukahara A, Tha KK, Kudo K, Shirato H. AJNR Am J Neuroradiol. 2016 Feb;37(2):342-8. doi: 10.3174/ajnr.A4513. Epub 2015 Oct 1.

Cerebral perfusion in the predementia stages of Alzheimer's disease.

Binnewijzend MA, Benedictus MR, Kuijter JP, van der Flier WM, Teunissen CE, Prins ND, Wattjes MP, van Berckel BN, Scheltens P, Barkhof F.

Eur Radiol. 2016 Feb;26(2):506-14. doi: 10.1007/s00330-015-3834-9. Epub 2015 Jun 5.

[Free PMC Article](#)

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

new

Intravoxel incoherent motion diffusion-weighted imaging analysis of diffusion and microperfusion in grading gliomas and comparison with arterial spin labeling for evaluation of tumor perfusion.

Shen N, Zhao L, Jiang J, Jiang R, Su C, Zhang S, Tang X, Zhu W.

J Magn Reson Imaging. 2016 Feb 16. doi: 10.1002/jmri.25191. [Epub ahead of print]

Functional Imaging / BOLD

Investigating the dependence of the calibration parameter M on echo time.

Hare HV, Bulte DP.

Magn Reson Med. 2016 Feb;75(2):556-61. doi: 10.1002/mrm.25603. Epub 2015 Mar 11.

Others CBF Related

new

Brain imaging demonstrates a reduced neural impact of eating in obesity.

Puzziferri N, Zigman JM, Thomas BP, Mihalakos P, Gallagher R, Lutter M, Carmody T, Lu H, Tamminga CA.

Obesity (Silver Spring). 2016 Feb 19. doi: 10.1002/oby.21424. [Epub ahead of print]

new

Arterial Spin Labeling Perfusion Study in the Patients with Subacute Mild Traumatic Brain Injury.

Lin CM, Tseng YC, Hsu HL, Chen CJ, Chen DY, Yan FX, Chiu WT.

PLoS One. 2016 Feb 12;11(2):e0149109. doi: 10.1371/journal.pone.0149109. eCollection 2016.

[Free PMC Article](#)

new

Developmental trajectories of cerebrovascular reactivity in healthy children and young adults assessed with magnetic resonance imaging.

Leung J, Kosinski PD, Croal PL, Kassner A.

J Physiol. 2016 Feb 5. doi: 10.1113/JP271056. [Epub ahead of print]

Perfusion Studies Other than on the Brain

new

Tumor Vascularity in Renal Masses: Correlation of Arterial Spin-Labeled and Dynamic Contrast-Enhanced Magnetic Resonance Imaging Assessments.

Zhang Y, Kapur P, Yuan Q, Xi Y, Carvo I, Signoretti S, Dimitrov I, Cadeddu JA, Margulis V, Muradyan N, Brugarolas J, Madhuranthakam AJ, Pedrosa I.

Clin Genitourin Cancer. 2016 Feb;14(1):e25-36. doi: 10.1016/j.clgc.2015.08.007. Epub 2015 Aug 29.

[MRI methods for pulmonary ventilation and perfusion imaging].

Sommer G, Bauman G.

Radiologe. 2016 Feb;56(2):106-12. doi: 10.1007/s00117-015-0074-6. German.

Longitudinal Assessment of Renal Perfusion and Oxygenation in Transplant Donor-Recipient Pairs Using Arterial Spin Labeling and Blood Oxygen Level-Dependent Magnetic Resonance Imaging.

Niles DJ, Artz NS, Djamali A, Sadowski EA, Grist TM, Fain SB.

Invest Radiol. 2016 Feb;51(2):113-20. doi: 10.1097/RLI.0000000000000210.

Volumetric Arterial Spin-labeled Perfusion Imaging of the Kidneys with a Three-dimensional Fast Spin Echo Acquisition.

Robson PM, Madhuranthakam AJ, Smith MP, Sun MR, Dai W, Rofsky NM, Pedrosa I, Alsop DC.

Acad Radiol. 2016 Feb;23(2):144-54. doi: 10.1016/j.acra.2015.09.013. Epub 2015 Oct 29.

Physiological Parameters besides CBF

new

Developmental trajectories of cerebrovascular reactivity in healthy children and young adults assessed with magnetic resonance imaging.

Leung J, Kosinski PD, Croal PL, Kassner A.

J Physiol. 2016 Feb 5. doi: 10.1113/JP271056. [Epub ahead of print]

Investigating the dependence of the calibration parameter M on echo time.

Hare HV, Bulte DP.

Magn Reson Med. 2016 Feb;75(2):556-61. doi: 10.1002/mrm.25603. Epub 2015 Mar 11.

Reliability of arterial spin labelling measurements of perfusion within the quadriceps during steady-state exercise.

Fulford J, Vanhatalo A.

Eur J Sport Sci. 2016 Feb;16(1):80-7. doi: 10.1080/17461391.2014.997801. Epub 2015 Jan 14.

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

new

Gradual Carotid Artery Stenosis in Mice Closely Replicates Hypoperfusive Vascular Dementia in Humans.

Hattori Y, Enmi J, Iguchi S, Saito S, Yamamoto Y, Tsuji M, Nagatsuka K, Kalaria RN, Iida H, Ihara M.

J Am Heart Assoc. 2016 Feb 22;5(2). pii: e002757. doi: 10.1161/JAHA.115.002757.

[Free Article](#)

new

Comparison of long-labeled pseudo-continuous arterial spin labeling (ASL) features between young and elderly adults: special reference to parameter selection.

Fujiwara Y, Matsuda T, Kanamoto M, Tsuchida T, Tsuji K, Kosaka N, Adachi T, Kimura H. Acta Radiol. 2016 Feb 17. pii: 0284185116632387. [Epub ahead of print]

new

Tumor Vascularity in Renal Masses: Correlation of Arterial Spin-Labeled and Dynamic Contrast-Enhanced Magnetic Resonance Imaging Assessments.

Zhang Y, Kapur P, Yuan Q, Xi Y, Carvo I, Signoretti S, Dimitrov I, Cadeddu JA, Margulis V, Muradyan N, Brugarolas J, Madhuranthakam AJ, Pedrosa I.

Clin Genitourin Cancer. 2016 Feb;14(1):e25-36. doi: 10.1016/j.clgc.2015.08.007. Epub 2015 Aug 29.

new

A case report of sporadic hemiplegic migraine associated cerebral hypoperfusion: comparison of arterial spin labeling and dynamic susceptibility contrast perfusion MR imaging.

Kim S, Kang M, Choi S.

Eur J Pediatr. 2016 Feb;175(2):295-8. doi: 10.1007/s00431-015-2609-2. Epub 2015 Aug 7.

Technical Improvement / Parameter Optimization

new

Comparison of long-labeled pseudo-continuous arterial spin labeling (ASL) features between young and elderly adults: special reference to parameter selection.

Fujiwara Y, Matsuda T, Kanamoto M, Tsuchida T, Tsuji K, Kosaka N, Adachi T, Kimura H. Acta Radiol. 2016 Feb 17. pii: 0284185116632387. [Epub ahead of print]

[\[MRI methods for pulmonary ventilation and perfusion imaging\].](#)

Sommer G, Bauman G.

Radiologe. 2016 Feb;56(2):106-12. doi: 10.1007/s00117-015-0074-6. German.

[Volumetric Arterial Spin-labeled Perfusion Imaging of the Kidneys with a Three-dimensional Fast Spin Echo Acquisition.](#)

Robson PM, Madhuranthakam AJ, Smith MP, Sun MR, Dai W, Rofsky NM, Pedrosa I, Alsop DC.

Acad Radiol. 2016 Feb;23(2):144-54. doi: 10.1016/j.acra.2015.09.013. Epub 2015 Oct 29.

Cohort Studies / Gender- and Age Dependencies

new

[Comparison of long-labeled pseudo-continuous arterial spin labeling \(ASL\) features between young and elderly adults: special reference to parameter selection.](#)

Fujiwara Y, Matsuda T, Kanamoto M, Tsuchida T, Tsuji K, Kosaka N, Adachi T, Kimura H.

Acta Radiol. 2016 Feb 17. pii: 0284185116632387. [Epub ahead of print]

new

[Brain imaging demonstrates a reduced neural impact of eating in obesity.](#)

Puzziferri N, Zigman JM, Thomas BP, Mihalakos P, Gallagher R, Lutter M, Carmody T, Lu H, Tamminga CA.

Obesity (Silver Spring). 2016 Feb 19. doi: 10.1002/oby.21424. [Epub ahead of print]

new

[Developmental trajectories of cerebrovascular reactivity in healthy children and young adults assessed with magnetic resonance imaging.](#)

Leung J, Kosinski PD, Croal PL, Kassner A.

J Physiol. 2016 Feb 5. doi: 10.1113/JP271056. [Epub ahead of print]

Review Paper / Historical Review / Guidelines

new

[The Utility of Cerebral Blood Flow as a Biomarker of Preclinical Alzheimer's Disease.](#)

Hays CC, Zlatar ZZ, Wierenga CE.

Cell Mol Neurobiol. 2016 Feb 22. [Epub ahead of print]

new

[Comparison of long-labeled pseudo-continuous arterial spin labeling \(ASL\) features between young and elderly adults: special reference to parameter selection.](#)

Fujiwara Y, Matsuda T, Kanamoto M, Tsuchida T, Tsuji K, Kosaka N, Adachi T, Kimura H.

Acta Radiol. 2016 Feb 17. pii: 0284185116632387. [Epub ahead of print]

new

[Developmental trajectories of cerebrovascular reactivity in healthy children and young adults assessed with magnetic resonance imaging.](#)

Leung J, Kosinski PD, Croal PL, Kassner A.

J Physiol. 2016 Feb 5. doi: 10.1113/JP271056. [Epub ahead of print]

[\[Quantitative perfusion imaging in magnetic resonance imaging\].](#)

Zöllner FG, Gaa T, Zimmer F, Ong MM, Riffel P, Hausmann D, Schoenberg SO, Weis M.

Radiologe. 2016 Feb;56(2):113-23. doi: 10.1007/s00117-015-0068-4. German.

[Global and Regional Derangements of Cerebral Blood Flow and Diffusion Magnetic Resonance Imaging after Pediatric Cardiac Arrest.](#)

Manchester LC, Lee V, Schmithorst V, Kochanek PM, Panigrahy A, Fink EL.

J Pediatr. 2016 Feb;169:28-35.e1. doi: 10.1016/j.jpeds.2015.10.003. Epub 2015 Nov 11.

[Arterial spin labeling in clinical pediatric imaging.](#)

Proisy M, Bruneau B, Rozel C, Tréguier C, Chouklati K, Riffaud L, Darnault P, Ferré JC.

Diagn Interv Imaging. 2016 Feb;97(2):151-8. doi: 10.1016/j.diii.2015.09.001. Epub 2015 Oct 9.

Job offerings

If you have any vacancies please send them to jobsATasl-network.org

Feature articles

If you would like to write a comment on an interesting article mail it to editorATasl-network.org