

Dear Colleagues

Hope, you all are back to work with some exciting and new ideas from the ISMRM in Paris. With this ASL Newsletter (No. 86), I would like to say a great thanks to all participants of the ASL Network Dinner!

About 80 persons from around the world joint the dinner and discussed enthusiastically about ASL. You could easily get an idea of how active our network is and how pleasant scientific exchange can be.



A second, **special thanks** goes out to our sponsors:

- [*Gold Standard Phantoms Limited*](#) (United Kingdom), who brought their first Quantitative ASL Perfusion Reference (QASPER) phantom into the community last year, provide various MRI calibration services independent of vendor or system.
- [*mediri GmbH*](#) (Germany) is specialized on support of clinical trials from imaging over data management to analysis, extended software solutions and medical imaging.
- [*Subtle Medical Inc*](#) (United States): AI technologies define new standard for MRI: faster, safer and smarter.

Thanks for supporting the ASL Network Dinner!

Please, find a categorized list of recent publication on ASL below.

Kind regards,

Klaus

Recent publications

June 2018,

(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:

Cerebral Blood Flow Studies.....	3
CBF Regional Comparison / Regional ASL.....	3
Studies on Special Disease	3
Comparison of ASL Techniques / ASL Compared with Other Imaging Methods / ASL Combined with Other Imaging Methods	5
Functional Imaging / BOLD	5
Others CBF Related.....	5
ASL Data Analysis/ Comparison of ASL Evaluation Methods/ Kinetic Models/ Data Corrections/ Postprocessing	6
Cohort Studies / Gender- and Age Dependencies	6
Pharmacological / Drug Studies / Studies on the Effects of Therapies	7
Technical Improvement / Parameter Optimization	8
Reproducibility Studies	8
Animal Studies	8
ASL in the Liver	9
ASL in Kidneys.....	9
Non-CBF specific: Comparison of ASL Methods/ Comparison of ASL with Other Diagnostic Methods.....	9
Perfusion Studies others than on Brain	9
Review Paper / Historical Review / Guidelines	10
Job Offerings & Featured Articles	10

Cerebral Blood Flow Studies

CBF Regional Comparison / Regional ASL

new

One MRI-compatible tDCS session attenuates ventromedial cortical perfusion when exposed to verbal criticism: The role of perceived criticism.

Baeken C, Dedoncker J, Remue J, Wu GR, Vanderhasselt MA, De Witte S, Poppa T, Hooley JM, De Raedt R.

Hum Brain Mapp. 2018 Jun 28. doi: 10.1002/hbm.24285. [Epub ahead of print]

Studies on Special Disease

new

Reduced Cerebral Blood Flow in the Visual Cortex and Its Correlation with Glaucomatous Structural Damage to the Retina in Patients with Mild to Moderate Primary Open Angle Glaucoma.

Wang Q, Chen W, Qu X, Wang H, Wang Y, Zhang X, Li T, Wang N, Xian J.

J Glaucoma. 2018 Jun 26. doi: 10.1097/IJG.0000000000001017. [Epub ahead of print]

new

Cerebral blood flow changes after radiation therapy identifies pseudoprogression in diffuse intrinsic pontine gliomas.

Calmon R, Puget S, Varlet P, Dangouloff-Ros V, Blauwblomme T, Beccaria K, Grevent D, Sainte-Rose C, Castel D, Debily MA, Dufour C, Bolle S, Dhermain F, Saitovitch A, Zilbovicius M, Brunelle F, Grill J, Boddaert N.

Neuro Oncol. 2018 Jun 18;20(7):994-1002. doi: 10.1093/neuonc/nox227.

new

Comparison of magnetic resonance spectroscopy (MRS) with arterial spin labeling (ASL) in the differentiation between mitochondrial encephalomyopathy, lactic Acidosis, plus stroke-like episodes (MELAS) and acute ischemic stroke (AIS).

Li X, Wang Y, Wang Z, Lu J, Xu Y, Ye J, Kuang Z, Li B, Pan M, Chen W, Lu S, Zhou Z, Cheng L, Wang H.

J Clin Neurosci. 2018 Jun 16. pii: S0967-5868(17)31727-7. doi: 10.1016/j.jocn.2018.06.015. [Epub ahead of print]

new

Blood biomarkers are associated with brain function and blood flow following sport concussion.

Di Battista AP, Churchill N, Schweizer TA, Rhind SG, Richards D, Baker AJ, Hutchison MG.

J Neuroimmunol. 2018 Jun 15;319:1-8. doi: 10.1016/j.jneuroim.2018.03.002. Epub 2018 Mar 18.

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new

Time Course of Cerebral Perfusion Changes in Children with Migraine with Aura Mimicking Stroke.

Cobb-Pitstick KM, Munjal N, Safier R, Cummings DD, Zuccoli G.
AJNR Am J Neuroradiol. 2018 Jun 14. doi: 10.3174/ajnr.A5693. [Epub ahead of print]

new

Regional Cerebral Blood Flow in Children and Young Adults with Chronic Kidney Disease.

Liu HS, Hartung EA, Jawad AF, Ware JB, Laney N, Port AM, Gur RC, Hooper SR, Radcliffe J, Furth SL, Detre JA.
Radiology. 2018 Jun 12:171339. doi: 10.1148/radiol.2018171339. [Epub ahead of print]

new

Increased resting perfusion of the hippocampus in high positive schizotypy: A pseudocontinuous arterial spin labeling study.

Modinos G, Egerton A, McMullen K, McLaughlin A, Kumari V, Barker GJ, Williams SCR, Zelaya F.
Hum Brain Mapp. 2018 Jun 8. doi: 10.1002/hbm.24231. [Epub ahead of print]

new

Arterial Spin Labeling MR imaging for differentiation between high and low grade glioma - a meta-analysis.

Falk Delgado A, De Luca F, van Westen D, Falk Delgado A.
Neuro Oncol. 2018 Jun 2. doi: 10.1093/neuonc/noy095. [Epub ahead of print]

new

Anserine/Carnosine Supplementation Preserves Blood Flow in the Prefrontal Brain of Elderly People Carrying APOE e4.

Ding Q, Tanigawa K, Kaneko J, Totsuka M, Katakura Y, Imabayashi E, Matsuda H, Hisatsune T.
Aging Dis. 2018 Jun 1;9(3):334-345. doi: 10.14336/AD.2017.0809. eCollection 2018 Jun.
[Free PMC Article](#)

new

No Evidence for Accelerated Aging-Related Brain Pathology in Treated Human Immunodeficiency Virus: Longitudinal Neuroimaging Results From the Comorbidity in Relation to AIDS (COBRA) Project.

Cole JH, Caan MWA, Underwood J, De Francesco D, van Zoest RA, Wit FWNM, Mutsaerts HJMM, Leech R, Geurtsen GJ, Portegies P, Majoie CBLM, Schim van der Loeff MF, Sabin CA, Reiss P, Winston A, Sharp DJ; Comorbidity in Relations to AIDS (COBRA) Collaboration.
Clin Infect Dis. 2018 Jun 1;66(12):1899-1909. doi: 10.1093/cid/cix1124.

new

Vasoreactivity in CADASIL: Comparison to structural MRI and neuropsychology.

Moreton FC, Cullen B, Delles C, Santosh C, Gonzalez RL, Dani K, Muir KW.
J Cereb Blood Flow Metab. 2018 Jun;38(6):1085-1095. doi: 10.1177/0271678X17710375. Epub 2017 May 24.

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

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J Neuroimmunol. 2018 Jun 15;319:1-8. doi: 10.1016/j.jneuroim.2018.03.002. Epub 2018 Mar 18. [Free Article](#)

Others CBF Related

new

[Should you stop wearing neckties?-wearing a tight necktie reduces cerebral blood flow.](#)

Lüddecke R, Lindner T, Forstenpointner J, Baron R, Jansen O, Gierthmühlen J.

Neuroradiology. 2018 Jun 30. doi: 10.1007/s00234-018-2048-7. [Epub ahead of print]

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

new

Effects of systematic partial volume errors on the estimation of gray matter cerebral blood flow with arterial spin labeling MRI.

Petr J, Mutsaerts HJMM, De Vita E, Steketee RME, Smits M, Nederveen AJ, Hofheinz F, van den Hoff J, Asllani I.

MAGMA. 2018 Jun 18. doi: 10.1007/s10334-018-0691-y. [Epub ahead of print]

new

Priors-guided Slice-wise Adaptive Outlier Cleaning for Arterial Spin Labeling Perfusion MRI.

Li Y, Dolui S, Xie DF, Wang Z; Alzheimer's Disease Neuroimaging Initiative.

J Neurosci Methods. 2018 Jun 14. pii: S0165-0270(18)30180-8. doi:

10.1016/j.jneumeth.2018.06.007. [Epub ahead of print]

Cohort Studies / Gender- and Age Dependencies

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[Perfusion measures for symptom severity and differential outcome of revascularization in limb ischemia: Preliminary results with arterial spin labeling reactive hyperemia.](#)

Chen HJ, Roy TL, Wright GA. J Magn Reson Imaging. 2018 Jun;47(6):1578-1588. doi: 10.1002/jmri.25910. Epub 2017 Nov 28.

Pharmacological / Drug Studies / Studies on the Effects of Therapies

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new

[The influence of suturectomy on age-related changes in cerebral blood flow in rabbits with familial bicoronal suture craniosynostosis: A quantitative analysis.](#)

Grandhi R, Peitz GW, Foley LM, Bonfield CM, Fellows-Mayle W, Hitchens TK, Mooney MP. PLoS One. 2018 Jun 1;13(6):e0197296. doi: 10.1371/journal.pone.0197296. eCollection 2018. [Free PMC Article](#)

Technical Improvement / Parameter Optimization

new

[Evaluation of 2D Imaging Schemes for Pulsed Arterial Spin Labeling of the Human Kidney Cortex.](#)

Buchanan CE, Cox EF, Francis ST. Diagnostics (Basel). 2018 Jun 28;8(3). pii: E43. doi: 10.3390/diagnostics8030043.

new

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Li Y, Dolui S, Xie DF, Wang Z; Alzheimer's Disease Neuroimaging Initiative. J Neurosci Methods. 2018 Jun 14. pii: S0165-0270(18)30180-8. doi: 10.1016/j.jneumeth.2018.06.007. [Epub ahead of print]

Reproducibility Studies

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Animal Studies

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[The influence of suturectomy on age-related changes in cerebral blood flow in rabbits with familial bicoronal suture craniosynostosis: A quantitative analysis.](#)

Grandhi R, Peitz GW, Foley LM, Bonfield CM, Fellows-Mayle W, Hitchens TK, Mooney MP. PLoS One. 2018 Jun 1;13(6):e0197296. doi: 10.1371/journal.pone.0197296. eCollection 2018. [Free PMC Article](#)

ASL in the Liver

new

Multi organ assessment of Compensated Cirrhosis Patients using quantitative Magnetic Resonance Imaging.

Bradley CR, Cox EF, Scott RA, James MW, Kaye P, Aithal GP, Francis ST, Guha IN. J Hepatol. 2018 Jun 7. pii: S0168-8278(18)32122-6. doi: 10.1016/j.jhep.2018.05.037. [Epub ahead of print]

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ASL in Kidneys

new

Evaluation of 2D Imaging Schemes for Pulsed Arterial Spin Labeling of the Human Kidney Cortex.

Buchanan CE, Cox EF, Francis ST.

Diagnostics (Basel). 2018 Jun 28;8(3). pii: E43. doi: 10.3390/diagnostics8030043.

Non-CBF specific: Comparison of ASL Methods/ Comparison of ASL with Other Diagnostic Methods

new

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Buchanan CE, Cox EF, Francis ST.

Diagnostics (Basel). 2018 Jun 28;8(3). pii: E43. doi: 10.3390/diagnostics8030043.

Perfusion Studies others than on Brain

new

Evaluation of three-dimensional arterial spin labeling perfusion imaging for the pathological investigation of musculoskeletal tumors.

Xu L, Xu L, Zhu H.

Exp Ther Med. 2018 Jun;15(6):5029-5034. doi: 10.3892/etm.2018.6030. Epub 2018 Apr 3.

[Free PMC Article](#)

new

Perfusion measures for symptom severity and differential outcome of revascularization in limb ischemia: Preliminary results with arterial spin labeling reactive hyperemia.

Chen HJ, Roy TL, Wright GA.

J Magn Reson Imaging. 2018 Jun;47(6):1578-1588. doi: 10.1002/jmri.25910. Epub 2017 Nov 28.

Review Paper / Historical Review / Guidelines

new

[Arterial Spin Labeling MR imaging for differentiation between high and low grade glioma - a meta-analysis.](#)

Falk Delgado A, De Luca F, van Westen D, Falk Delgado A.

Neuro Oncol. 2018 Jun 2. doi: 10.1093/neuonc/noy095. [Epub ahead of print]

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