

Dear colleagues,

here comes the ASL Newsletter No. 79.

We uploaded some pictures of the ASL Network dinner on our homepage (<http://asl-network.org/>). Thank you, Thomas for the photos. If anyone else wants to share his/hers impressions, just let me know.

As you might have heard about at the dinner, [Gold Standard Phantoms](#) just sent the first phantom of the pre-series manufacturing batch to UCLH. Congrats to GSP!

Again, some people put a new [COST Action](#) for our network on the table. Matthias and Xavier, who successfully initiated the first action, would like to encourage you to apply for a new action and offer some coaching. People interested in writing or contributing to a COST proposal can write me an e-mail. Maybe we can initiate a brainstorming session some time to find the right methodology and application.

Last but not least, mind the ISMRM deadline approaching quickly on November, 8th.

Kind regards,
Klaus

Recent publications

October 2017,

(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.

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Animal Studies

new

Evaluation of prolonged administration of isoflurane on cerebral blood flow and default mode network in macaque monkeys anesthetized with different maintenance doses.

Li CX, Zhang X.

Neurosci Lett. 2017 Oct 18. pii: S0304-3940(17)30860-1. doi: 10.1016/j.neulet.2017.10.034.

[Epub ahead of print]

new

Comorbid masticatory impairment delays recovery from acute cerebral ischemia and locomotor hypoactivity after subarachnoid hemorrhage in mice.

Kojima I, Mutoh T, Sasaki K, Tatewaki Y, Taki Y, Ishikawa T.

Clin Exp Pharmacol Physiol. 2017 Oct 17. doi: 10.1111/1440-1681.12874. [Epub ahead of print]

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Non-invasive Measurement of Renal Blood Flow by Magnetic Resonance Imaging (MRI) in Rats.

Romero CA, Cabral G, Knight RA, Ding G, Peterson EL, Carretero OA.

Am J Physiol Renal Physiol. 2017 Oct 4;ajprenal.00332.2017. doi: 10.1152/ajprenal.00332.2017.

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Hyperpolarized ¹³C magnetic resonance evaluation of renal ischemia reperfusion injury in a murine model.

Baligand C, Qin H, True-Yasaki A, Gordon JW, von Morze C, Santos JD, Wilson DM, Raffai R, Cowley PM, Baker AJ, Kurhanewicz J, Lovett DH, Wang ZJ.

NMR Biomed. 2017 Oct;30(10). doi: 10.1002/nbm.3765. Epub 2017 Jul 14.

Pharmacological / Drug Studies / Studies on the Effects of Therapies

new

Enhancing Innovation and Underlying Neural Mechanisms Via Cognitive Training in Healthy Older Adults.

Chapman SB, Spence JS, Aslan S, Keebler MW.

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[Free PMC Article](#)

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

Int J Radiat Oncol Biol Phys. 2017 Oct 1;99(2):476-485. doi: 10.1016/j.ijrobp.2017.04.007. Epub 2017 Apr 11.

new

Gamma-Hydroxybutyrate Increases Resting-State Limbic Perfusion and Body and Emotion Awareness in Humans.

Bosch OG, Esposito F, Havranek MM, Dornbierer D, von Rotz R, Staempfli P, Quednow BB, Seifritz E.

Neuropsychopharmacology. 2017 Oct;42(11):2141-2151. doi: 10.1038/npp.2017.110. Epub 2017 May 31.

new

Effects of aripiprazole versus risperidone on brain activation during planning and social-emotional evaluation in schizophrenia: A single-blind randomized exploratory study.

Liemburg EJ, van Es F, Knegtering H, Aleman A.

Prog Neuropsychopharmacol Biol Psychiatry. 2017 Oct 3;79(Pt B):112-119. doi:

10.1016/j.pnpbp.2017.05.022. Epub 2017 May 27.

Serial Arterial Spin Labeling May Be Useful in Assessing the Therapeutic Course of Cerebral Venous Thrombosis: Case Reports.

Furuya S, Kawabori M, Fujima N, Tokairin K, Goto S, Iwasaki M, Niiya Y, Mabuchi S. *Neurol Med Chir (Tokyo)*. 2017 Oct 15;57(10):557-561. doi: 10.2176/nmc.cr.2017-0033. Epub 2017 Aug 23.

[Free PMC Article](#)

Cerebral perfusion alterations in type 2 diabetes and its relation to insulin resistance and cognitive dysfunction.

Cui Y, Liang X, Gu H, Hu Y, Zhao Z, Yang XY, Qian C, Yang Y, Teng GJ. *Brain Imaging Behav*. 2017 Oct;11(5):1248-1257. doi: 10.1007/s11682-016-9583-9.

Cerebral Blood Flow Studies

CBF Regional Comparison / Regional ASL

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Decreased Triple Network Connectivity in Patients with Recent Onset Post-Traumatic Stress Disorder after a Single Prolonged Trauma Exposure.

Liu Y, Li L, Li B, Feng N, Li L, Zhang X, Lu H, Yin H.

Sci Rep. 2017 Oct 3;7(1):12625. doi: 10.1038/s41598-017-12964-6.

[Free PMC Article](#)

new

Self-controlled super-selective arterial spin labelling.

Lindner T, Austein F, Jansen O, Helle M.

Eur Radiol. 2017 Oct 2. doi: 10.1007/s00330-017-5066-7. [Epub ahead of print]

Studies on Special Disease

new

Imaging of Cerebrovascular Function in Chronic Traumatic Brain Injury.

Amyot F, Kenney K, Moore C, Harber M, Turtzo LC, Shenouda CN, Silverman E, Gong Y, Qu BX, Harburg L, Lu H, Wassermann E, Diaz-Arrastia R.

J Neurotrauma. 2017 Oct 25. doi: 10.1089/neu.2017.5114. [Epub ahead of print]

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Clin Exp Pharmacol Physiol. 2017 Oct 17. doi: 10.1111/1440-1681.12874. [Epub ahead of print]

new

Structural and Functional Brain Changes at Early and Late Stages of Complex Regional Pain Syndrome.

Shokouhi M, Clarke C, Morley-Forster P, Moulin DE, Davis K, Lawrence KS.

J Pain. 2017 Oct 13. pii: S1526-5900(17)30734-4. doi: 10.1016/j.jpain.2017.09.007. [Epub ahead of print]

new

The role of three-dimensional pseudo-continuous arterial spin labelling in grading and differentiating histological subgroups of meningiomas.

Lu Y, Xiong J, Yin B, Wen J, Liu L, Geng D.

Clin Radiol. 2017 Oct 11. pii: S0009-9260(17)30439-7. doi: 10.1016/j.crad.2017.08.005. [Epub ahead of print]

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Screening for Cognitive Impairment by Model Assisted Cerebral Blood Flow Estimation.

Lassila T, Di Marco LY, Mitolo M, Iaia V, Levedianos G, Venneri A, Frangi AF.

IEEE Trans Biomed Eng. 2017 Oct 5. doi: 10.1109/TBME.2017.2759511. [Epub ahead of print]

new

Cerebral Blood Flow after Mild Traumatic Brain Injury: Associations between Symptoms and Post-Injury Perfusion.

Stephens JA, Liu P, Lu H, Suskauer SJ.

J Neurotrauma. 2017 Oct 1. doi: 10.1089/neu.2017.5237. [Epub ahead of print]

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Comparison of PASL, PCASL, and background-suppressed 3D PCASL in mild cognitive impairment.

Dolui S, Vidorreta M, Wang Z, Nasrallah IM, Alavi A, Wolk DA, Detre JA.
Hum Brain Mapp. 2017 Oct;38(10):5260-5273. doi: 10.1002/hbm.23732. Epub 2017 Jul 24.

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AJNR Am J Neuroradiol. 2017 Oct;38(10):1876-1883. doi: 10.3174/ajnr.A5299. Epub 2017 Jul 20.

Reduced regional cerebral blood flow in patients with heart failure.

Roy B, Woo MA, Wang DJJ, Fonarow GC, Harper RM, Kumar R.
Eur J Heart Fail. 2017 Oct;19(10):1294-1302. doi: 10.1002/ejhf.874. Epub 2017 May 30.

Structural and physiological neurovascular changes in idiopathic Parkinson's disease and its clinical phenotypes.

Al-Bachari S, Vidyasagar R, Emsley HC, Parkes LM.
J Cereb Blood Flow Metab. 2017 Oct;37(10):3409-3421. doi: 10.1177/0271678X16688919.
Epub 2017 Jan 23.

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Altered Coupling Between Resting-State Cerebral Blood Flow and Functional Connectivity in Schizophrenia.

Zhu J, Zhuo C, Xu L, Liu F, Qin W, Yu C.
Schizophr Bull. 2017 Oct 21;43(6):1363-1374. doi: 10.1093/schbul/sbx051.

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Functional Imaging / BOLD

Others CBF Related

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[Free PMC Article](#)

new

[Brain Regional Blood Flow and Working Memory Performance Predict Change in Blood Pressure Over 2 Years.](#)

Jennings JR, Heim AF, Sheu LK, Muldoon MF, Ryan C, Gach HM, Schirda C, Gianaros PJ.

Hypertension. 2017 Oct 16. pii: HYPERTENSIONAHA.117.09978. doi:

10.1161/HYPERTENSIONAHA.117.09978. [Epub ahead of print]

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new

[Subjective Cognitive Decline Modifies the Relationship Between Cerebral Blood Flow and Memory Function in Cognitively Normal Older Adults.](#)

Hays CC, Zlatar ZZ, Campbell L, Meloy MJ, Wierenga CE.

J Int Neuropsychol Soc. 2017 Oct 4:1-11. doi: 10.1017/S135561771700087X. [Epub ahead of print]

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Bright sinus appearance on arterial spin labeling MR imaging aids to identify cerebral venous thrombosis.

Kang JH, Yun TJ, Yoo RE, Yoon BW, Lee AL, Kang KM, Choi SH, Kim JH, Sohn CH, Han MH. Medicine (Baltimore). 2017 Oct;96(41):e8244. doi: 10.1097/MD.00000000000008244.

ASL for Angiography

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Automatic temporal segmentation of vessels of the brain using 4D ASL MRA images.

Phellan R, Lindner T, Helle M, Falcao A, Forkert ND.

IEEE Trans Biomed Eng. 2017 Oct 5. doi: 10.1109/TBME.2017.2759730. [Epub ahead of print]

Selective arterial spin labeling in conjunction with phase-contrast acquisition for the simultaneous visualization of morphology, flow direction, and velocity of individual arteries in the cerebrovascular system.

Lindner T, Larsen N, Jansen O, Helle M.

Magn Reson Med. 2017 Oct;78(4):1469-1475. doi: 10.1002/mrm.26542. Epub 2016 Oct 31.

ASL in Kidneys

new

Measurement of Murine Single-Kidney Glomerular Filtration Rate Using Dynamic Contrast-Enhanced MRI.

Jiang K, Tang H, Mishra PK, Macura SI, Lerman LO.

Magn Reson Med. 2017 Oct 16. doi: 10.1002/mrm.26955. [Epub ahead of print]

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Non-invasive Measurement of Renal Blood Flow by Magnetic Resonance Imaging (MRI) in Rats.

Romero CA, Cabral G, Knight RA, Ding G, Peterson EL, Carretero OA.

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3D-accelerated, stack-of-spirals acquisitions and reconstruction of arterial spin labeling MRI.

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[Improving the robustness of pseudo-continuous arterial spin labeling to off-resonance and pulsatile flow velocity.](#)

Zhao L, Vidorreta M, Soman S, Detre JA, Alsop DC.

Magn Reson Med. 2017 Oct;78(4):1342-1351. doi: 10.1002/mrm.26513. Epub 2016 Oct 23.

Screening / Prognosis / Prevention

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Job Offerings & Featured Articles

- If you have any vacancies please send them to jobsATasl-network.org
- If you would like to write a comment on an interesting article mail it to editorATasl-network.org