

Dear ASL community,

Here is the ASL Newsletter No. 83 for March 2018.

We hope, you had a good Easter break and enjoyed some days off. In the meantime, we found a location for the **ASL Network Dinner**. We are happy that Café Oz Denfert-Rochereau (<https://cafe-oz.com/fr/denfert-rochereau.html>) opens its room and stage to us on Monday, June 18th.

If you like to attend the ASL Network Dinner, please, **register via mail** (editor[ÄT]asl-network.org) until **Sunday, May 6th**.

Kind regards,
Klaus

Recent publications March 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.

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Animal Studies

new

Minoxidil improves vascular compliance, restores cerebral blood flow and alters extracellular matrix gene expression in a model of chronic vascular stiffness.

Knutsen R, Beeman SC, Broekelmann TJ, Liu D, Tsang KM, Kovacs A, Ye L, Danback J, Watson A, Wardlaw A, Wagenseil J, Garbow JR, Shoykhet M, Kozel BA.

Am J Physiol Heart Circ Physiol. 2018 Mar 2. doi: 10.1152/ajpheart.00683.2017. [Epub ahead of print]

Pharmacological / Drug Studies / Studies on the Effects of Therapies

new

Decreased Cerebral Blood Flow in Mesial Thalamus and Precuneus/PCC during Midazolam Induced Sedation Assessed with ASL.

Liang P, Xu Y, Lan F, Ma D, Li K.

Neuroinformatics. 2018 Mar 23. doi: 10.1007/s12021-018-9368-y. [Epub ahead of print]

new

Effect of Standard vs Intensive Blood Pressure Control on Cerebral Blood Flow in Small Vessel Disease: The PRESERVE Randomized Clinical Trial.

Croall ID, Tozer DJ, Moynihan B, Khan U, O'Brien JT, Morris RG, Cambridge VC, Barrick TR, Blamire AM, Ford GA, Markus HS; PRESERVE Study Team.

JAMA Neurol. 2018 Mar 5. doi: 10.1001/jamaneurol.2017.5153. [Epub ahead of print]

Cerebral Blood Flow Studies

CBF Regional Comparison / Regional ASL

new

[A double dissociation between two psychotic phenotypes: Periodic catatonia and cataphasia.](#)

Foucher JR, Zhang YF, Mathilde R, Julien L, De Sousa PL, Sébastien W, Pierre V, Olivier M, Fabrice B.

Prog Neuropsychopharmacol Biol Psychiatry. 2018 Mar 17. pii: S0278-5846(17)30983-1. doi: 10.1016/j.pnpbp.2018.03.008. [Epub ahead of print]

Studies on Special Disease

new

[Arterial spin labeling perfusion-weighted MR imaging: correlation of tumor blood flow with pathological degree of tumor differentiation, clinical stage and nodal metastasis of head and neck squamous cell carcinoma.](#)

Abdel Razek AAK, Nada N.

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new

[Arterial Spin-Labeling Improves Detection of Intracranial Dural Arteriovenous Fistulas with MRI.](#)

Amukotuwa SA, Marks MP, Zaharchuk G, Calamante F, Bammer R, Fischbein N.

AJNR Am J Neuroradiol. 2018 Mar 15. doi: 10.3174/ajnr.A5570. [Epub ahead of print]

new

[Carotid DSA based CFD simulation in assessing the patient with asymptomatic carotid stenosis: a preliminary study.](#)

Zhang D, Xu P, Qiao H, Liu X, Luo L, Huang W, Zhang H, Shi C.

Biomed Eng Online. 2018 Mar 12;17(1):31. doi: 10.1186/s12938-018-0465-9.

[Free PMC Article](#)

new

[Delineation between different components of chronic pain using dimension reduction - an ASL fMRI study in hand osteoarthritis.](#)

Keszthelyi D, Aziz Q, Ruffle JK, O'Daly O, Sanders D, Krause K, Williams SC, Howard MA.

Eur J Pain. 2018 Mar 9. doi: 10.1002/ejp.1212. [Epub ahead of print]

new

Arterial spin labeling method as a supplemental predictor to distinguish between high- and low-grade gliomas.

Komatsu K, Wanibuchi M, Mikami T, Akiyama Y, Iihoshi S, Miyata K, Sugino T, Suzuki K, Kanno A, Noshiro S, Ohtaki S, Mikuni N.

World Neurosurg. 2018 Mar 9. pii: S1878-8750(18)30485-6. doi: 10.1016/j.wneu.2018.03.015. [Epub ahead of print]

new

Could Arterial Spin Labeling Distinguish Patients in Minimally Conscious State from Patients in Vegetative State?

Wu B, Yang Y, Zhou S, Wang W, Wang Z, Hu G, He J, Wu X.

Front Neurol. 2018 Mar 2;9:110. doi: 10.3389/fneur.2018.00110. eCollection 2018.

[Free PMC Article](#)

new

ASPECTS-based reperfusion status on arterial spin labeling is associated with clinical outcome in acute ischemic stroke patients.

Yu S, Ma SJ, Liebeskind DS, Yu D, Li N, Qiao XJ, Shao X, Yan L, Yoo B, Scalzo F, Hinman JD, Sharma LK, Rao N, Jahan R, Tateshima S, Duckwiler GR, Saver JL, Salamon N, Wang DJ.

J Cereb Blood Flow Metab. 2018 Mar;38(3):382-392. doi: 10.1177/0271678X17697339. Epub 2017 Mar 7.

new

Effect of Blood T1 Estimation Strategy on Arterial Spin Labeled Cerebral Blood Flow Quantification in Children and Young Adults with Kidney Disease.

Liu HS, Jawad AF, Laney N, Hartung EA, Furth SL, Detre JA.

J Neuroradiol. 2018 Mar 28. pii: S0150-9861(17)30402-9. doi: 10.1016/j.neurad.2018.03.002.

[Epub ahead of print]

new

Cerebral perfusion characteristics show differences in younger versus older children with sickle cell anaemia: Results from a multiple-inflow-time arterial spin labelling study.

Kawadler JM, Hales PW, Barker S, Cox TCS, Kirkham FJ, Clark CA.

NMR Biomed. 2018 Mar 30:e3915. doi: 10.1002/nbm.3915. [Epub ahead of print]

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

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Interleaved quantitative BOLD: Combining extravascular R_2' - And intravascular R_2 -Measurements for estimation of deoxygenated blood volume and hemoglobin oxygen saturation.

Lee H, Englund EK, Wehrli FW.

Neuroimage. 2018 Mar 23. pii: S1053-8119(18)30253-2. doi: 10.1016/j.neuroimage.2018.03.043.

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[Free PMC Article](#)

new

[Assessment of cerebral blood flow in neonates and infants: A phase-contrast MRI study.](#)

Liu P, Qi Y, Lin Z, Guo Q, Wang X, Lu H.
Neuroimage. 2018 Mar 10. pii: S1053-8119(18)30226-X. doi:
10.1016/j.neuroimage.2018.03.020. [Epub ahead of print] Review.

new

[Cerebral Metabolic Rate of Oxygen \(CMRO₂\) Mapping by Combining Quantitative Susceptibility Mapping \(QSM\) and Quantitative Blood Oxygenation Level-Dependent Imaging \(qBOLD\).](#)

Cho J, Kee Y, Spincemaille P, Nguyen TD, Zhang J, Gupta A, Zhang S, Wang Y.
Magn Reson Med. 2018 Mar 7. doi: 10.1002/mrm.27135. [Epub ahead of print]

new

[Increased cerebral blood flow on arterial spin labeling magnetic resonance imaging can localize to seizure focus in newborns: A report of 3 cases.](#)

Mabray P, Thewamit R, Whitehead MT, Kao A, Scafidi J, Gaillard WD, Chang T, Tsuchida TN.
Epilepsia. 2018 Mar 30. doi: 10.1111/epi.14060. [Epub ahead of print]

Functional Imaging / BOLD

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Physiological Parameters besides CBF

new

[γ-Aminobutyric acid type A receptor binding affinity in the right inferior frontal gyrus at resting state predicts the performance of healthy elderly people in the visual sustained attention test.](#)

Kasagi M, Motegi T, Narita K, Fujihara K, Suzuki Y, Tagawa M, Ujita K, Shimada H, Fukuda M. Int Psychogeriatr. 2018 Mar 21:1-7. doi: 10.1017/S1041610217002988. [Epub ahead of print]

Perfusion Studies others than on Brain

new

[Evaluation of skeletal muscle microvascular perfusion of lower extremities by cardiovascular magnetic resonance arterial spin labeling, blood oxygenation level-dependent, and intravoxel incoherent motion techniques.](#)

Suo S, Zhang L, Tang H, Ni Q, Li S, Mao H, Liu X, He S, Qu J, Lu Q, Xu J. J Cardiovasc Magn Reson. 2018 Mar 19;20(1):18. doi: 10.1186/s12968-018-0441-3.

[Free PMC Article](#)

new

[Evaluation of retained products of conception using pulsed continuous arterial spin-labeling MRI: clinical feasibility and initial results.](#)

Kosaka N, Fujiwara Y, Kurokawa T, Matsuda T, Kanamoto M, Takei N, Takata K, Takahashi J, Yoshida Y, Kimura H.

MAGMA. 2018 Mar 16. doi: 10.1007/s10334-018-0681-0. [Epub ahead of print]

ASL in Kidneys

new

[Consistency of Multiple Renal Functional MRI Measurements Over 18 Months.](#)

Li LP, Thacker J, Li W, Tan H, Wang C, Kohn O, Sprague S, Prasad P.

J Magn Reson Imaging. 2018 Mar 8. doi: 10.1002/jmri.26001. [Epub ahead of print]

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Abdel Razek AAK, Nada N.

Eur Arch Otorhinolaryngol. 2018 Mar 27. doi: 10.1007/s00405-018-4950-3. [Epub ahead of print]

new

[Radiomics strategy for glioma grading using texture features from multiparametric MRI.](#)

Tian Q, Yan LF, Zhang X, Zhang X, Hu YC, Han Y, Liu ZC, Nan HY, Sun Q, Sun YZ, Yang Y, Yu Y, Zhang J, Hu B, Xiao G, Chen P, Tian S, Xu J, Wang W, Cui GB.

J Magn Reson Imaging. 2018 Mar 23. doi: 10.1002/jmri.26010. [Epub ahead of print]

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[Estimation of perfusion properties with MR fingerprinting arterial spin labeling.](#)

Wright KL, Jiang Y, Ma D, Noll DC, Griswold MA, Gulani V, Hernandez-Garcia L.

Magn Reson Imaging. 2018 Mar 12. pii: S0730-725X(18)30036-5. doi:

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Technical Improvement / Parameter Optimization

new

[Improved calculation of the equilibrium magnetization of arterial blood in arterial spin labeling.](#)

Ahlgren A, Wirestam R, Knutsson L, Petersen ET.

Magn Reson Med. 2018 Mar 25. doi: 10.1002/mrm.27193. [Epub ahead of print]

new

[Single-shot spiral imaging at 7 T.](#)

Engel M, Kasper L, Barmet C, Schmid T, Vionnet L, Wilm B, Pruessmann KP.

Magn Reson Med. 2018 Mar 25. doi: 10.1002/mrm.27176. [Epub ahead of print]

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10.1016/j.mri.2018.03.011. [Epub ahead of print]

new

Non-contrast MR imaging of blood-brain barrier permeability to water.

Lin Z, Li Y, Su P, Mao D, Wei Z, Pillai JJ, Moghekar A, van Osch M, Ge Y, Lu H. Magn Reson Med. 2018 Mar 1. doi: 10.1002/mrm.27141. [Epub ahead of print]

Screening / Prognosis / Prevention

new

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Reproducibility Studies

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J Magn Reson Imaging. 2018 Mar 8. doi: 10.1002/jmri.26001. [Epub ahead of print]

new

[Reliability of 3D arterial spin labeling MR perfusion measurements: The effects of imaging parameters, scanner model, and field strength.](#)

Tanaka Y, Inoue Y, Abe Y, Miyatake H, Hata H.

Clin Imaging. 2018 Mar 3;52:23-27. doi: 10.1016/j.clinimag.2018.02.016. [Epub ahead of print]

Cohort Studies / Gender- and Age Dependencies

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Epilepsia. 2018 Mar 30. doi: 10.1111/epi.14060. [Epub ahead of print]

Review Paper / Historical Review / Guidelines

new

[Cerebrovascular reactivity \(CVR\) MRI with CO2 challenge: A technical review.](#)

Liu P, De Vis J, Lu H.

Neuroimage. 2018 Mar 21. pii: S1053-8119(18)30257-X. doi:

10.1016/j.neuroimage.2018.03.047. [Epub ahead of print]

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10.1016/j.neuroimage.2018.03.020. [Epub ahead of print] Review.

new

[Calibrated fMRI for mapping absolute CMRO₂: Practicalities and prospects.](#)

Germuska M, Wise RG.

Neuroimage. 2018 Mar 29. pii: S1053-8119(18)30278-7. doi: 10.1016/j.neuroimage.2018.03.068.

[Epub ahead of print]

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