

Dear colleagues, ASL enthusiasts and ISMRM travellers,

here is the ASL Newsletter No. 85. You will find recent publications as well as some information on the **ISMRM in Paris** in this newsletter. As the ISMRM is approaching and probably everyone is busy with some preparations, I browsed through this year's program and picked some - but surely not all - sessions, which are likely to be of interest for you:

- Sunrise Session: Is ASL Ready to Replace Contrast-Agent Perfusion Methods in the Clinic? Monday, 7:00 - 7:50, N03
- Scientific Session: Arterial Spin Labeling, Monday, 16:15-18:15, W03/04
- Member-Initiated Symposium: How to Make Perfusion Imaging Become a Quantitative Imaging Biomarker, Tuesday, 8:15-10:15, W03/04
- Scientific Session: Perfusion & Permeability, Tuesday, 13:45-15:45, S04
- Scientific Session: MRI in Alzheimer's Disease, Wednesday, 8:15-10:15, S05
- Scientific Session: Contrast-Enhanced & Non-Contrast-Enhanced MR Angiography, Wednesday, 16:15-18:15, S03

Maybe you would like to catch up with others for lunch or coffee break, or advertise your scientific contribution. For rapid communication during the ISMRM, you can join the open **slack channel: #aslnetwork**

Last, but not least for sure: our **ASL Network Dinner** will be from 19:00 onwards, so you are lucky to discuss all the interesting topics in ASL right after the session! Detailed information will be sent to those who have signed in within the next weeks.

Yet another schedule, some people might have in mind, can be accessed here: <http://www.fifa.com/worldcup/matches/>

Kind regards and see you in Paris,  
Klaus

# Recent publications

May 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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## Cerebral Blood Flow Studies

### CBF Regional Comparison / Regional ASL

*new*

#### **Brain Correlates of Continuous Pain in Rheumatoid Arthritis as Measured by Pulsed Arterial Spin Labeling.**

Lee YC, Fine A, Protsenko E, Massarotti E, Edwards RR, Mawla I, Napadow V, Loggia ML. Arthritis Care Res (Hoboken). 2018 May 21. doi: 10.1002/acr.23601. [Epub ahead of print]

## Studies on Special Disease

*new*

### **A mild traumatic brain injury in mice produces lasting deficits in brain metabolism.**

Lyons DN, Vekaria H, Macheda T, Bakshi V, Powell DK, Gold BT, Lin AL, Sullivan P, Bachstetter AD.

J Neurotrauma. 2018 May 29. doi: 10.1089/neu.2018.5663. [Epub ahead of print]

*new*

### **Evaluation of gray matter perfusion in episodic migraine using voxel-wise comparison of 3D pseudo-continuous arterial spin labeling.**

Chen Z, Chen X, Liu M, Liu M, Ma L, Yu S.

J Headache Pain. 2018 May 23;19(1):36. doi: 10.1186/s10194-018-0866-y.

*new*

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Arthritis Care Res (Hoboken). 2018 May 21. doi: 10.1002/acr.23601. [Epub ahead of print]

*new*

### **Crossed aphasia following cerebral infarction in a right-handed patient with atypical cerebral language dominance.**

Tan X, Guo Y, Dun S, Sun H.

J Neurol. 2018 May 18. doi: 10.1007/s00415-018-8901-0. [Epub ahead of print]

*new*

### **Noninvasively evaluating the grading and IDH1 mutation status of diffuse gliomas by three-dimensional pseudo-continuous arterial spin labeling and diffusion-weighted imaging.**

Liu T, Cheng G, Kang X, Xi Y, Zhu Y, Wang K, Sun C, Ye J, Li P, Yin H.

Neuroradiology. 2018 May 18. doi: 10.1007/s00234-018-2021-5. [Epub ahead of print]

*new*

### **Clinical utility of arterial spin labeling for preoperative grading of glioma: A diagnostic meta-analysis.**

Li L, Wang X, Zhang M, Zhang Y.

Biosci Rep. 2018 May 16. pii: BSR20180507. doi: 10.1042/BSR20180507. [Epub ahead of print]

*new*

### **Alzheimer Disease and Mild Cognitive Impairment: Integrated Pulsed Arterial Spin-Labeling MRI and 18F-FDG PET.**

Riederer I, Bohn KP, Preibisch C, Wiedemann E, Zimmer C, Alexopoulos P, Förster S.

Radiology. 2018 May 15:170575. doi: 10.1148/radiol.2018170575. [Epub ahead of print]

*new*

### **Cerebral Perfusion Is Perturbed by Preterm Birth and Brain Injury.**

Mahdi ES, Bouyssi-Kobar M, Jacobs MB, Murnick J, Chang T, Limperopoulos C.

AJNR Am J Neuroradiol. 2018 May 10. doi: 10.3174/ajnr.A5669. [Epub ahead of print]

*new*

**Arterial spin labeling reveals relationships between resting cerebral perfusion and motor learning in Parkinson's disease.**

Barzgari A, Sojkova J, Maritza Dowling N, Pozorski V, Okonkwo OC, Starks EJ, Oh J, Thiesen F, Wey A, Nicholas CR, Johnson S, Gallagher CL.

Brain Imaging Behav. 2018 May 9. doi: 10.1007/s11682-018-9877-1. [Epub ahead of print]

*new*

**The combined application of magnetic resonance DTI and 3D-pcASL in differential diagnosis of hyper-acute and acute ischemic cerebral infarction.**

Dai ZY, Chen F, Yao LZ, Dong CS, Shi HC, Pan PL, Liu Y, Zhang ZP.

Zhonghua Yi Xue Za Zhi. 2018 May 8;98(17):1327-1332. doi: 10.3760/cma.j.issn.0376-2491.2018.17.009. Chinese.

*new*

**Prefrontal Recruitment Mitigates Risk-Taking Behavior in Human Immunodeficiency Virus-Infected Young Adults.**

Smith RX, Guha A, Vaida F, Paul RH, Ances B.

Clin Infect Dis. 2018 May 2;66(10):1595-1601. doi: 10.1093/cid/cix1031.

*new*

**Cerebral Blood Flow Changes in Multiple Sclerosis and Neuromyelitis Optica and Their Correlations With Clinical Disability.**

Zhang X, Guo X, Zhang N, Cai H, Sun J, Wang Q, Qi Y, Zhang L, Yang L, Shi FD, Yu C.

Front Neurol. 2018 May 2;9:305. doi: 10.3389/fneur.2018.00305. eCollection 2018.

[Free PMC Article](#)

*new*

**Deficient supplementary motor area at rest: Neural basis of limb kinetic deficits in Parkinson's disease.**

Kübel S, Stegmayer K, Vanbellingen T, Walther S, Bohlhalter S.

Hum Brain Mapp. 2018 May 2. doi: 10.1002/hbm.24204. [Epub ahead of print]

*new*

**Arterial spin labeling MR imaging aids to identify cortical venous drainage of dural arteriovenous fistulas.**

Kang JH, Yun TJ, Rhim JK, Cho YD, Yoo DH, Yoo RE, Kang KM, Choi SH, Kim JH, Sohn CH, Han MH.

Medicine (Baltimore). 2018 May;97(19):e0697. doi: 10.1097/MD.00000000000010697.

[Free Article](#)

*new*

**Monitoring Cerebral Perfusion Changes after Revascularization in Patients with Moyamoya Disease by Using Arterial Spin-labeling MR Imaging.**

Lee S, Yun TJ, Yoo RE, Yoon BW, Kang KM, Choi SH, Kim JH, Kim JE, Sohn CH, Han MH.

Radiology. 2018 May 1:170509. doi: 10.1148/radiol.2018170509. [Epub ahead of print]

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

*new*

[A mild traumatic brain injury in mice produces lasting deficits in brain metabolism.](#)

Lyons DN, Vekaria H, Macheda T, Bakshi V, Powell DK, Gold BT, Lin AL, Sullivan P, Bachstetter AD.

J Neurotrauma. 2018 May 29. doi: 10.1089/neu.2018.5663. [Epub ahead of print]

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Tan X, Guo Y, Dun S, Sun H.

J Neurol. 2018 May 18. doi: 10.1007/s00415-018-8901-0. [Epub ahead of print]

*new*

[Baseline NAWM structural integrity and CBF predict periventricular WMH expansion over time.](#)

Promjunyakul NO, Dodge HH, Lahna D, Boespflug EL, Kaye JA, Rooney WD, Silbert LC.

Neurology. 2018 May 16. pii: 10.1212/WNL.0000000000005684. doi:

10.1212/WNL.0000000000005684. [Epub ahead of print]

*new*

[Alzheimer Disease and Mild Cognitive Impairment: Integrated Pulsed Arterial Spin-Labeling MRI and 18F-FDG PET.](#)

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Zhonghua Yi Xue Za Zhi. 2018 May 8;98(17):1327-1332. doi: 10.3760/cma.j.issn.0376-2491.2018.17.009. Chinese.

# Functional Imaging / BOLD

*new*

## [Brain Correlates of Continuous Pain in Rheumatoid Arthritis as Measured by Pulsed Arterial Spin Labeling.](#)

Lee YC, Fine A, Protsenko E, Massarotti E, Edwards RR, Mawla I, Napadow V, Loggia ML. Arthritis Care Res (Hoboken). 2018 May 21. doi: 10.1002/acr.23601. [Epub ahead of print]

*new*

## [Effects of global signal regression and subtraction methods on resting-state functional connectivity using arterial spin labeling data.](#)

Silva JPS, da Mata Mônaco L, Paschoal AM, de Oliveira ÍAF, Leoni RF. Magn Reson Imaging. 2018 May 16. pii: S0730-725X(18)30139-5. doi: 10.1016/j.mri.2018.05.006. [Epub ahead of print]

*new*

## [Arterial spin labeling reveals relationships between resting cerebral perfusion and motor learning in Parkinson's disease.](#)

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*new*

## [Reduction of BOLD interference in pseudo-continuous arterial spin labeling: towards quantitative fMRI.](#)

Warnock G, Özbay PS, Kuhn FP, Nanz D, Buck A, Boss A, Rossi C. J Cereb Blood Flow Metab. 2018 May;38(5):847-856. doi: 10.1177/0271678X17704785. Epub 2017 Apr 19.

*new*

## [Quantitative cerebrovascular pathology in a community-based cohort of older adults.](#)

Rane S, Koh N, Boord P, Madhyastha T, Askren MK, Jayadev S, Cholerton B, Larson E, Grabowski TJ. Neurobiol Aging. 2018 May;65:77-85. doi: 10.1016/j.neurobiolaging.2018.01.006. Epub 2018 Jan 31.

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

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## ASL at Field Strength > 3T

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J Neurotrauma. 2018 May 29. doi: 10.1089/neu.2018.5663. [Epub ahead of print]

## Cohort Studies / Gender- and Age Dependencies

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AJNR Am J Neuroradiol. 2018 May 10. doi: 10.3174/ajnr.A5669. [Epub ahead of print]

*new*

[Prospective study of myelin water fraction changes after mild traumatic brain injury in collegiate contact sports.](#)

Spader HS, Dean DC 3rd, LaFrance WC Jr., Raukar NP, Cosgrove GR, Eyerly-Webb SA, Ellermeier A, Correia S, Deoni SCL, Rogg J.

J Neurosurg. 2018 May 1:1-9. doi: 10.3171/2017.12.JNS171597. [Epub ahead of print]

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Neurobiol Aging. 2018 May;65:77-85. doi: 10.1016/j.neurobiolaging.2018.01.006. Epub 2018 Jan 31.

## Pharmacological / Drug Studies / Studies on the Effects of Therapies

*new*

### [Xiaoshuan enteric-coated capsule alleviates cognitive impairment by enhancing hippocampal glucose metabolism, hemodynamics and neuroplasticity of rat with chronic cerebral hypoperfusion.](#)

Li MZ, Zhang Y, Zou HY, Wang YL, Cheng BY, Wang L, Zhang QX, Lei JF, Zhao H. Sci Rep. 2018 May 10;8(1):7449. doi: 10.1038/s41598-018-25929-0. [Free PMC Article](#)

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## Screening / Prognosis / Prevention

*new*

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## Technical Improvement / Parameter Optimization

*new*

### [Accelerated 3D-GRASE imaging improves quantitative multiple post labeling delay arterial spin labeling.](#)

Boland M, Stirnberg R, Pracht ED, Kramme J, Viviani R, Stingl J, Stöcker T. Magn Reson Med. 2018 May 16. doi: 10.1002/mrm.27226. [Epub ahead of print]

*new*

### [4D ASL-based MR angiography for visualization of distal arteries and leptomeningeal collateral vessels in moyamoya disease: a comparison of techniques.](#)

Togao O, Hiwatashi A, Obara M, Yamashita K, Momosaka D, Nishimura A, Arimura K, Hata N, Yoshimoto K, Iihara K, Van Cauteren M, Honda H. Eur Radiol. 2018 May 8. doi: 10.1007/s00330-018-5462-7. [Epub ahead of print]



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## Reproducibility Studies & Meta-Analysis

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## Animal Studies

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## ASL for Angiography

*new*

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## Job Offerings & Featured Articles

If you have any vacancies please send them to [jobs\[AT\]asl-network.org](mailto:jobs[AT]asl-network.org).

If you would like to write a comment on an interesting article, present software or work of common interest, e-mail some information to [editor\[AT\]asl-network.org](mailto:editor[AT]asl-network.org).