

Dear Colleagues.

We like to activate the ASL network a little by sending a two monthly newsletter with interesting publications, maybe feature articles, job offerings and general news from the network. Feel free to contribute.

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**Recent publications (November & December 2009, e-publications might have been earlier):**

**Animal studies:**

**[Functional assessment of skeletal muscle in intact mice lacking myostatin by concurrent NMR imaging and spectroscopy.](#)**

Baligand C, Gilson H, Ménard JC, Schakman O, Wary C, Thissen JP, Carlier PG.

Gene Ther. [Epub ahead of print]

**[Hypertension-induced vascular remodeling contributes to reduced cerebral perfusion and the development of spontaneous stroke in aged SHRSP rats.](#)**

Henning EC, Warach S, Spatz M.

J Cereb Blood Flow Metab. 2009 Dec 2. [Epub ahead of print]

**Studies on special disease:**

**[Cerebral blood flow in ischemic vascular dementia and Alzheimer's disease, measured by arterial spin-labeling magnetic resonance imaging.](#)**

Schuff N, Matsumoto S, Kmiecik J, Studholme C, Du A, Ezekiel F, Miller BL, Kramer JH, Jagust WJ, Chui HC, Weiner MW.

Alzheimers Dement. 2009 Nov;5(6):454-62.

**[Cerebral perfusion and oxygenation differences in Alzheimer's disease risk.](#)**

Fleisher AS, Podraza KM, Bangen KJ, Taylor C, Sherzai A, Sidhar K, Liu TT, Dale AM, Buxton RB.

Neurobiol Aging. 2009 Nov;30(11):1737-48. Epub 2008 Mar 5.

**[Reliability and precision of pseudo-continuous arterial spin labeling perfusion MRI on 3.0 T and comparison with \(15\)O-water PET in elderly subjects at risk for Alzheimer's disease.](#)**

Xu G, Rowley HA, Wu G, Alsop DC, Shankaranarayanan A, Dowling M, Christian BT, Oakes TR, Johnson SC.

NMR Biomed. 2009 Dec 1. [Epub ahead of print]

**[Autoimmune thyroid disease: arterial spin-labeling perfusion MR imaging.](#)**

Schraml C, Müssig K, Martirosian P, Schwenzer NF, Claussen CD, Häring HU, Balletshofer BM, Schick F.

Radiology. 2009 Nov;253(2):435-42. Epub 2009 Sep 29.

**[Arterial spin-labeling demonstrates ictal cortical hyperperfusion in epilepsy secondary to hemimegalencephaly.](#)**

Altrichter S, Pendse N, Wissmeyer M, Jägersberg M, Federspiel A, Viallon M, Seeck M, Lövblad KO.  
J Neuroradiol. 2009 Dec;36(5):303-5. Epub 2009 May 31.

[Association of blood pressure elevation and nocturnal dipping with brain atrophy, perfusion and functional measures in stroke and nonstroke individuals.](#)

Hajjar I, Zhao P, Alsop D, Abduljalil A, Selim M, Novak P, Novak V.  
Am J Hypertens. 2010 Jan;23(1):17-23. Epub 2009 Oct 1.

### **Drug study:**

[Antioxidants and aging: NMR-based evidence of improved skeletal muscle perfusion and energetics.](#)

Wray DW, Nishiyama SK, Monnet A, Wary C, Duteil SS, Carlier PG, Richardson RS.  
Am J Physiol Heart Circ Physiol. 2009 Nov;297(5):H1870-5. Epub 2009 Sep 18.

[Arterial spin labeling demonstrates that focal amygdalar glutamatergic agonist infusion leads to rapid diffuse cerebral activation.](#)

Munasinghe JP, Banerjee M, Acosta MT, Banks M, Heffer A, Silva AC, Koretsky A, Theodore WH.  
Acta Neurol Scand. 2009 Nov 26. [Epub ahead of print]

### **Perfusion study on other organs than the brain:**

[Pulmonary perfusion heterogeneity is increased by sustained, heavy exercise in humans.](#)

Burnham KJ, Arai TJ, Dubowitz DJ, Henderson AC, Holverda S, Buxton RB, Prisk GK, Hopkins SR.  
J Appl Physiol. 2009 Nov;107(5):1559-68. Epub 2009 Sep 10.

[Quantification of renal allograft perfusion using arterial spin labeling MRI: initial results.](#)

Lanzman RS, Wittsack HJ, Martirosian P, Zgoura P, Bilk P, Kröpil P, Schick F, Voiculescu A, Blondin D.  
Eur Radiol. 2009 Dec 1. [Epub ahead of print]

[Measurement of kidney perfusion by magnetic resonance imaging: comparison of MRI with arterial spin labeling to para-aminohippuric acid plasma clearance in male subjects with metabolic syndrome.](#)

Ritt M, Janka R, Schneider MP, Martirosian P, Hornegger J, Bautz W, Uder M, Schmieder RE.  
Nephrol Dial Transplant. 2009 Nov 24. [Epub ahead of print]

### **Cerebral blood flow studies:**

#### **Comparisson of ASL Techniques or ASL compaired with other imaging methods:**

[Theoretical and experimental evaluation of continuous arterial spin labeling techniques.](#)

Pohmann R, Budde J, Auerbach EJ, Adriany G, Uğurbil K.  
Magn Reson Med. 2009 Dec 18. [Epub ahead of print]

[Interleaved TMS/CASL: Comparison of different rTMS protocols.](#)

Moisa M, Pohmann R, Uludağ K, Thielscher A.  
Neuroimage. 2010 Jan 1;49(1):612-20. Epub 2009 Jul 14.

[Arterial transit time effects in pulsed arterial spin labeling CBF mapping: Insight from a PET and MR study in normal human subjects.](#)

Qiu M, Paul Maguire R, Arora J, Planeta-Wilson B, Weinzimmer D, Wang J, Wang Y, Kim H, Rajeevan N, Huang Y, Carson RE, Constable RT.

Magn Reson Med. 2009 Dec 1. [Epub ahead of print]

[Absolute quantification of cerebral blood flow: correlation between dynamic susceptibility contrast](#)

### [MRI and model-free arterial spin labeling.](#)

Knutsson L, van Westen D, Petersen ET, Bloch KM, Holtås S, Ståhlberg F, Wirestam R.

Magn Reson Imaging. 2010 Jan;28(1):1-7. Epub 2009 Aug 19.

### **Functional imaging:**

#### [Dynamic subcortical blood flow during male sexual activity with ecological validity: A perfusion fMRI study.](#)

Georgiadis JR, Farrell MJ, Boessen R, Denton DA, Gavrilesco M, Kortekaas R, Renken RJ, Hoogduin JM, Egan GF.

Neuroimage. 2009 Dec 16. [Epub ahead of print]

#### [Measuring arterial and tissue responses to functional challenges using arterial spin labeling.](#)

Ho YC, Petersen ET, Golay X.

Neuroimage. 2010 Jan 1;49(1):478-87. Epub 2009 Jul 25.

### **Reproducibility study:**

#### [The QUASAR reproducibility study, Part II: Results from a multi-center Arterial Spin Labeling test-retest study.](#)

Petersen ET, Mouridsen K, Golay X; all named co-authors of the QUASAR test-retest study.

Neuroimage. 2010 Jan 1;49(1):104-13. Epub 2009 Aug 4.

### **Other topics on cerebral blood flow:**

#### [Imaging brain fatigue from sustained mental workload: An ASL perfusion study of the time-on-task effect.](#)

Lim J, Wu WC, Wang J, Detre JA, Dinges DF, Rao H.

Neuroimage. 2009 Nov 23. [Epub ahead of print]

#### [Static and dynamic characteristics of cerebral blood flow during the resting state.](#)

Zou Q, Wu CW, Stein EA, Zang Y, Yang Y.

Neuroimage. 2009 Nov 15;48(3):515-24. Epub 2009 Jul 14.

### **Technical Papers:**

#### [Tailored RF pulse for magnetization inversion at ultrahigh field.](#)

Hurley AC, Al-Radaideh A, Bai L, Aickelin U, Coxon R, Glover P, Gowland PA.

Magn Reson Med. 2010 Jan;63(1):51-8.

#### [Complex-valued analysis of arterial spin labeling-based functional magnetic resonance imaging signals.](#)

Hernandez-Garcia L, Vazquez AL, Rowe DB.

Magn Reson Med. 2009 Dec;62(6):1597-608.

#### [Characterizing the origin of the arterial spin labelling signal in MRI using a multiecho acquisition approach.](#)

Wells JA, Lythgoe MF, Choy M, Gadian DG, Ordidge RJ, Thomas DL.

J Cereb Blood Flow Metab. 2009 Nov;29(11):1836-45. Epub 2009 Aug 5.

If an interesting article is missing let me know, it will be included in the next newsletter. I do my best to keep the list as complete as possible.

### **Job offerings:**

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

**Feature articles:**

If you like to write a comment on an interesting article mail it to [newsletter@asl-network.org](mailto:newsletter@asl-network.org)

Happy New Year!

I am looking forward to you contributions.

Johanna Kramme