

Dear Colleagues,

Here is the ASL Newsletter No. 34.

I would also like to draw your attention to:

Applications for Short Term Scientific Missions (STSMs) 2013

Last year, 10 students took advantage of the Short Term Scientific Missions from the COST Action to spend some time in another lab to work on a specific problem within ASL in Dementia.

We have a rather large amount of money reserved as well for this year, and it would be good for people to start thinking about projects and applying by submitting the STSM form online on the eCOST system, with a copy to Catherine Lloyd (clloyd@eibir.org).

Kind regards,
Ina

Recent publications September 2013, (e-publications might have been earlier):

Content:

Animal studies	2
Perfusion studies other than on the brain	2
Cerebral blood flow studies	3
CBF correlation with age.....	3
Studies on special diseases	4
Physiological Parameters besides CBF	7
Comparison of ASL Evaluation Methods.....	7
Technical Improvement/ Parameter Optimisation/ Theoretical Papers	7
Review Paper/ Historical Review	8
Job offerings.....	8
Feature articles.....	8

Animal studies

[Acute Kidney Injury: Arterial Spin Labeling to Monitor Renal Perfusion Impairment in Mice-Comparison with Histopathologic Results and Renal Function.](#)

Hueper K, Gutberlet M, Rong S, Hartung D, Mengel M, Lu X, Haller H, Wacker F, Meier M, Gueler F.

Radiology. 2013 Sep 10. [Epub ahead of print]

[Quantitative mouse renal perfusion using arterial spin labeling.](#)

Rajendran R, Lew SK, Yong CX, Tan J, Wang DJ, Chuang KH.

NMR Biomed. 2013 Oct;26(10):1225-32. doi: 10.1002/nbm.2939. Epub 2013 Apr 16.

Pharmacological / Drug studies / Studies on the effects of therapies

[Reduction in cerebral perfusion after heroin administration: a resting state arterial spin labeling study.](#)

Denier N, Gerber H, Vogel M, Klarhöfer M, Riecher-Rossler A, Wiesbeck GA, Lang UE, Borgwardt S, Walter M.

PLoS One. 2013 Sep 10;8(9):e71461. doi: 10.1371/journal.pone.0071461.

[Monitoring of extra-axial brain tumor response to radiotherapy using pseudo-continuous arterial spin labeling images: Preliminary results.](#)

Yamamoto T, Kinoshita K, Kosaka N, Sato Y, Shioura H, Takeuchi H, Kimura H.

Magn Reson Imaging. 2013 Oct;31(8):1271-7. doi: 10.1016/j.mri.2013.04.011. Epub 2013

[Acute caffeine administration impact on working memory-related brain activation and functional connectivity in the elderly: A BOLD and perfusion MRI study.](#)

Haller S, Rodriguez C, Moser D, Toma S, Hofmeister J, Sinanaj I, Van De Ville D, Giannakopoulos P, Lovblad KO.

Neuroscience. 2013 Oct 10;250:364-71. doi: 10.1016/j.neuroscience.2013.07.021. Epub 2013 Jul 19.

[Prefrontal cortical blood flow predicts response of depression to rTMS.](#)

Weiduschat N, Dubin MJ.

J Affect Disord. 2013 Sep 5;150(2):699-702. doi: 10.1016/j.jad.2013.04.049. Epub 2013 May 22.

Perfusion studies other than on the brain

[Acute Kidney Injury: Arterial Spin Labeling to Monitor Renal Perfusion Impairment in Mice-Comparison with Histopathologic Results and Renal Function.](#)

Hueper K, Gutberlet M, Rong S, Hartung D, Mengel M, Lu X, Haller H, Wacker F, Meier M, Gueler F.

Radiology. 2013 Sep 10. [Epub ahead of print]

[Balanced steady state free precession for arterial spin labeling MRI: Initial experience for blood flow mapping in human brain, retina, and kidney.](#)

Park SH, Wang DJ, Duong TQ.

Magn Reson Imaging. 2013 Sep;31(7):1044-50. doi: 10.1016/j.mri.2013.03.024. Epub 2013 May 8.

[Quantitative mouse renal perfusion using arterial spin labeling.](#)

Rajendran R, Lew SK, Yong CX, Tan J, Wang DJ, Chuang KH.

NMR Biomed. 2013 Oct;26(10):1225-32. doi: 10.1002/nbm.2939. Epub 2013 Apr 16.

Cerebral blood flow studies

CBF correlation with age

[Neural Mechanisms of Age-Related Slowing: The \$\Delta\$ CBF/ \$\Delta\$ CMRO₂ Ratio Mediates Age-Differences in BOLD Signal and Human Performance.](#)

Hutchison JL, Lu H, Rypma B.

Cereb Cortex. 2013 Oct;23(10):2337-46. doi: 10.1093/cercor/bhs233. Epub 2012 Aug 8.

[Regional cerebral blood flow and FDG uptake in asymptomatic HIV-1 men.](#)

Towgood KJ, Pitkanen M, Kulasegaram R, Fradera A, Soni S, Sibtain N, Reed LJ, Bradbeer C, Barker GJ, Dunn JT, Zelaya F, Kopelman MD.

Hum Brain Mapp. 2013 Oct;34(10):2484-93. doi: 10.1002/hbm.22078. Epub 2012 Apr 12.

[Atlas-based and DTI-guided quantification of human brain cerebral blood flow: Feasibility, quality assurance, spatial heterogeneity and age effects.](#)

Hasan KM, Ali H, Shad MU.

Magn Reson Imaging. 2013 Oct;31(8):1445-52. doi: 10.1016/j.mri.2013.04.010. Epub 2013 Jun 2.

CBF regional comparison

[Arterial spin-labeling MR imaging in moyamoya disease compared with clinical assessments and other MR imaging findings.](#)

Noguchi T, Kawashima M, Nishihara M, Hirai T, Matsushima T, Irie H.

Eur J Radiol. 2013 Sep 1. doi:pii: S0720-048X(13)00453-1. 10.1016/j.ejrad.2013.08.040. [Epub ahead of print]

[Atlas-based and DTI-guided quantification of human brain cerebral blood flow: Feasibility, quality assurance, spatial heterogeneity and age effects.](#)

Hasan KM, Ali H, Shad MU.

Magn Reson Imaging. 2013 Oct;31(8):1445-52. doi: 10.1016/j.mri.2013.04.010. Epub 2013 Jun 2.

[Regional cerebral blood flow and FDG uptake in asymptomatic HIV-1 men.](#)

Towgood KJ, Pitkanen M, Kulasegaram R, Fradera A, Soni S, Sibtain N, Reed LJ, Bradbeer C, Barker GJ, Dunn JT, Zelaya F, Kopelman MD.

Hum Brain Mapp. 2013 Oct;34(10):2484-93. doi: 10.1002/hbm.22078. Epub 2012 Apr 12.

Studies on special diseases

[Arterial spin-labeling MR imaging in moyamoya disease compared with clinical assessments and other MR imaging findings.](#)

Noguchi T, Kawashima M, Nishihara M, Hirai T, Matsushima T, Irie H.

Eur J Radiol. 2013 Sep 1. doi:pii: S0720-048X(13)00453-1. 10.1016/j.ejrad.2013.08.040.

[Epub ahead of print]

[Cerebral arterial bolus arrival time is prolonged in multiple sclerosis and associated with disability.](#)

Paling D, Thade Petersen E, Tozer DJ, Altmann DR, Wheeler-Kingshott CA, Kapoor R, Miller DH, Golay X.

J Cereb Blood Flow Metab. 2013 Sep 18. doi: 10.1038/jcbfm.2013.161. [Epub ahead of print]

[Acute Kidney Injury: Arterial Spin Labeling to Monitor Renal Perfusion Impairment in Mice-Comparison with Histopathologic Results and Renal Function.](#)

Hueper K, Gutberlet M, Rong S, Hartung D, Mengel M, Lu X, Haller H, Wacker F, Meier M, Gueler F.

Radiology. 2013 Sep 10. [Epub ahead of print]

[3 TESLA MR imaging in adults with focal onset epilepsy.](#)

Toledo M, Sarria-Estrada S, Quintana M, Auger C, Salas-Puig X, Santamarina E, Vert C, Rovira A.

Clin Neurol Neurosurg. 2013 Oct;115(10):2111-6. doi: 10.1016/j.clineuro.2013.07.039.

Epub 2013 Aug 7.

[Cerebral white matter blood flow and energy metabolism in multiple sclerosis.](#)

Steen C, D'haeseleer M, Hoogduin JM, Fierens Y, Cambron M, Mostert JP, Heersema DJ, Koch MW, De Keyser J.

Mult Scler. 2013 Sep;19(10):1282-9. doi: 10.1177/1352458513477228. Epub 2013 Feb 21.

[Regional cerebral blood flow and FDG uptake in asymptomatic HIV-1 men.](#)

Towgood KJ, Pitkanen M, Kulasegaram R, Fradera A, Soni S, Sibtain N, Reed LJ, Bradbeer C, Barker GJ, Dunn JT, Zelaya F, Kopelman MD.

Hum Brain Mapp. 2013 Oct;34(10):2484-93. doi: 10.1002/hbm.22078. Epub 2012 Apr 12.

[Functional MRI and outcome in traumatic coma.](#)

Edlow BL, Giacino JT, Wu O.

Curr Neurol Neurosci Rep. 2013 Sep;13(9):375. doi: 10.1007/s11910-013-0375-y.

[Arterial spin-labeled perfusion imaging to predict mismatch in acute ischemic stroke.](#)

Niibo T, Ohta H, Yonenaga K, Ikushima I, Miyata S, Takeshima H.

Stroke. 2013 Sep;44(9):2601-3. doi: 10.1161/STROKEAHA.113.002097. Epub 2013 Jul 18.

[Effects of dietary glycemic index on brain regions related to reward and craving in men.](#)

Lennerz BS, Alsop DC, Holsen LM, Stern E, Rojas R, Ebbeling CB, Goldstein JM, Ludwig DS.

Am J Clin Nutr. 2013 Sep;98(3):641-7. doi: 10.3945/ajcn.113.064113. Epub 2013 Jun 26.

[Evaluation of perinatal arterial ischemic stroke using noninvasive arterial spin labeling perfusion MRI.](#)

De Vis JB, Petersen ET, Kersbergen KJ, Alderliesten T, de Vries LS, van Bel F, Groenendaal F, Lemmers PM, Hendrikse J, Benders MJ.

Pediatr Res. 2013 Sep;74(3):307-13. doi: 10.1038/pr.2013.111. Epub 2013 Jun 24.

[Prefrontal cortical blood flow predicts response of depression to rTMS.](#)

Weiduschat N, Dubin MJ.

J Affect Disord. 2013 Sep 5;150(2):699-702. doi: 10.1016/j.jad.2013.04.049. Epub 2013 May 22.

[A selective insular perfusion deficit contributes to compromised salience network connectivity in recovering alcoholic men.](#)

Sullivan EV, Müller-Oehring E, Pitel AL, Chanraud S, Shankaranarayanan A, Alsop DC, Rohlfing T, Pfefferbaum A.

Biol Psychiatry. 2013 Oct 1;74(7):547-55. doi: 10.1016/j.biopsych.2013.02.026. Epub 2013 Apr 12.

[Transjugular intrahepatic portosystemic shunt induced short- and long-term cerebral blood flow variations in cirrhotic patients: an arterial spin labeling MRI study.](#)

Zheng G, Zhang LJ, Cao Y, Pan Z, Qi RF, Ni L, Shi D, Fan X, Lu GM.

Metab Brain Dis. 2013 Sep;28(3):463-71. doi: 10.1007/s11011-013-9400-8. Epub 2013 Apr 7.

Comparison of ASL Techniques or ASL compared with other Imaging methods

[Reliability of two-dimensional and three-dimensional pseudo-continuous arterial spin labeling perfusion MRI in elderly populations: Comparison with 15o-water positron emission tomography.](#)

Kilroy E, Apostolova L, Liu C, Yan L, Ringman J, Wang DJ.

J Magn Reson Imaging. 2013 Sep 13. doi: 10.1002/jmri.24246. [Epub ahead of print]

[Acute Kidney Injury: Arterial Spin Labeling to Monitor Renal Perfusion Impairment in Mice-Comparison with Histopathologic Results and Renal Function.](#)

Hueper K, Gutberlet M, Rong S, Hartung D, Mengel M, Lu X, Haller H, Wacker F, Meier M, Gueler F.

Radiology. 2013 Sep 10. [Epub ahead of print]

[Arterial spin-labeled perfusion imaging to predict mismatch in acute ischemic stroke.](#)

Niibo T, Ohta H, Yonenaga K, Ikushima I, Miyata S, Takeshima H.

Stroke. 2013 Sep;44(9):2601-3. doi: 10.1161/STROKEAHA.113.002097. Epub 2013 Jul 18.

Functional Imaging / BOLD

[Reduction in cerebral perfusion after heroin administration: a resting state arterial spin labeling study.](#)

Denier N, Gerber H, Vogel M, Klarhöfer M, Riecher-Rossler A, Wiesbeck GA, Lang UE, Borgwardt S, Walter M.

PLoS One. 2013 Sep 10;8(9):e71461. doi: 10.1371/journal.pone.0071461.

[Functional imaging of cerebral perfusion.](#)

Krainik A, Villien M, Troprès I, Attyé A, Lamalle L, Bouvier J, Pietras J, Grand S, Le Bas JF, Warnking J.

Diagn Interv Imaging. 2013 Sep 4. doi:pii: S2211-5684(13)00247-7. 10.1016/j.diii.2013.08.004. [Epub ahead of print]

[Acute caffeine administration impact on working memory-related brain activation and functional connectivity in the elderly: A BOLD and perfusion MRI study.](#)

Haller S, Rodriguez C, Moser D, Toma S, Hofmeister J, Sinanaj I, Van De Ville D, Giannakopoulos P, Lovblad KO.

Neuroscience. 2013 Oct 10;250:364-71. doi: 10.1016/j.neuroscience.2013.07.021. Epub 2013 Jul 19.

[Reproducibility of functional network metrics and network structure: A comparison of task-related BOLD, resting ASL with BOLD contrast, and resting cerebral blood flow.](#)

Weber MJ, Detre JA, Thompson-Schill SL, Avants BB.

Cogn Affect Behav Neurosci. 2013 Sep;13(3):627-40. doi: 10.3758/s13415-013-0181-7.

[Cerebral white matter blood flow and energy metabolism in multiple sclerosis.](#)

Steen C, D'haeseleer M, Hoogduin JM, Fierens Y, Cambron M, Mostert JP, Heersema DJ, Koch MW, De Keyser J.

Mult Scler. 2013 Sep;19(10):1282-9. doi: 10.1177/1352458513477228. Epub 2013 Feb 21.

[Neural Mechanisms of Age-Related Slowing: The \$\Delta\$ CBF/ \$\Delta\$ CMRO₂ Ratio Mediates Age-Differences in BOLD Signal and Human Performance.](#)

Hutchison JL, Lu H, Rypma B.

Cereb Cortex. 2013 Oct;23(10):2337-46. doi: 10.1093/cercor/bhs233. Epub 2012 Aug 8.

[Regional cerebral blood flow and FDG uptake in asymptomatic HIV-1 men.](#)

Towgood KJ, Pitkanen M, Kulasegaram R, Fradera A, Soni S, Sibtain N, Reed LJ, Bradbeer C, Barker GJ, Dunn JT, Zelaya F, Kopelman MD.

Hum Brain Mapp. 2013 Oct;34(10):2484-93. doi: 10.1002/hbm.22078. Epub 2012 Apr 12.

[Time-on-task and sleep deprivation effects are evidenced in overlapping brain areas.](#)

Asplund CL, Chee MW.

Neuroimage. 2013 Nov 15;82:326-35. doi: 10.1016/j.neuroimage.2013.05.119. Epub 2013

[Amygdala functional connectivity is reduced after the cold pressor task.](#)

Clewett D, Schoeke A, Mather M.

Cogn Affect Behav Neurosci. 2013 Sep;13(3):501-18. doi: 10.3758/s13415-013-0162-x.

[Quantification of Network Perfusion in ASL Cerebral Blood Flow Data with Seed Based and ICA Approaches.](#)

Jann K, Orosz A, Dierks T, Wang DJ, Wiest R, Federspiel A.

Brain Topogr. 2013 Oct;26(4):569-80. doi: 10.1007/s10548-013-0280-3. Epub 2013 Mar 19.

[A comparison of physiologic modulators of fMRI signals.](#)

Liu P, Hebrank AC, Rodrigue KM, Kennedy KM, Park DC, Lu H.

Hum Brain Mapp. 2013 Sep;34(9):2078-88. doi: 10.1002/hbm.22053. Epub 2012 Mar 28.

Physiological Parameters besides CBF

[Cerebral arterial bolus arrival time is prolonged in multiple sclerosis and associated with disability.](#)

Paling D, Thade Petersen E, Tozer DJ, Altmann DR, Wheeler-Kingshott CA, Kapoor R, Miller DH, Golay X.

J Cereb Blood Flow Metab. 2013 Sep 18. doi: 10.1038/jcbfm.2013.161. [Epub ahead of print]

[Monitoring of extra-axial brain tumor response to radiotherapy using pseudo-continuous arterial spin labeling images: Preliminary results.](#)

Yamamoto T, Kinoshita K, Kosaka N, Sato Y, Shioura H, Takeuchi H, Kimura H.

Magn Reson Imaging. 2013 Oct;31(8):1271-7. doi: 10.1016/j.mri.2013.04.011. Epub 2013

Comparison of ASL Evaluation Methods

[Patient-specific detection of perfusion abnormalities combining within-subject and between-subject variances in Arterial Spin Labeling.](#)

Maumet C, Maurel P, Ferré JC, Carsin B, Barillot C.

Neuroimage. 2013 Nov 1;81:121-30. doi: 10.1016/j.neuroimage.2013.04.079. Epub 2013 May 10.

Technical Improvement/ Parameter Optimisation/ Theoretical Papers

[Acoustic noise reduction in pseudo-continuous arterial spin labeling \(pCASL\).](#)

van der Meer JN, Heijtel DF, van Hest G, Plattèl GJ, van Osch MJ, van Someren EJ, Vanbavel ET, Nederveen AJ.

MAGMA. 2013 Sep 24. [Epub ahead of print]

[Balanced steady state free precession for arterial spin labeling MRI: Initial experience for blood flow mapping in human brain, retina, and kidney.](#)

Park SH, Wang DJ, Duong TQ.

Magn Reson Imaging. 2013 Sep;31(7):1044-50. doi: 10.1016/j.mri.2013.03.024. Epub 2013 May 8.

Review Paper/ Historical Review

[Functional imaging of cerebral perfusion.](#)

Krainik A, Villien M, Troprès I, Attyé A, Lamalle L, Bouvier J, Pietras J, Grand S, Le Bas JF, Warnking J.

Diagn Interv Imaging. 2013 Sep 4. doi:pii: S2211-5684(13)00247-7.
10.1016/j.diii.2013.08.004. [Epub ahead of print]

[Functional MRI and outcome in traumatic coma.](#)

Edlow BL, Giacino JT, Wu O.

Curr Neurol Neurosci Rep. 2013 Sep;13(9):375. doi: 10.1007/s11910-013-0375-y.

Job offerings

If you have any vacancies please send them to jobs@asl-network.org

Feature articles

If you would like to write a comment on an interesting article mail it to editor@asl-network.org