

Complete list of publications for Henrik BW Larsson
in Index Medicus, (**Larsson H** or **Larsson HB** or **Larsson HBW**).

1. **Larsson H**, Frederiksen J, Stigsby B, Olesen J. Evaluation of visual pathways in multiple sclerosis. I. After-images compared to visual evoked potentials. *Acta Neurol Scand.* 1986; 74: 195-202.
2. Frederiksen J, **Larsson H**, Olesen J, Stigsby B. Evaluation of the visual system in multiple sclerosis. II. Colour vision. *Acta Neurol Scand.* 1986; 74: 203-209.
3. **Larsson HB**, Frederiksen J, Kjær L, Henriksen O, Olesen J. In vivo determination of T1 and T2 in the brain of patients with severe but stable multiple sclerosis. *Magn Reson Med.* 1988; 7: 43-55.
4. Kjær L, Thomsen C, **Larsson HB**, Henriksen O, Ring P. Evaluation of biexponential relaxation processes by magnetic resonance imaging. A phantom study. *Acta Radiol.* 1988; 29: 473-479.
5. Helweg-Larsen S, **Larsson H**, Henriksen O, Sorensen, PS. Ataxic hemiparesis: three different locations of lesions studied by MRI. *Neurology.* 1988; 38: 1322-1324.
6. **Larsson HB**, Thomsen C, Frederiksen J, Henriksen O, Olesen J. Chemical shift selective magnetic resonance imaging of the optic nerve in patients with acute optic neuritis. *Acta Radiol.* 1988; 29: 629-632.
7. **Larsson HB**, Frederiksen J, Petersen J, Nordenbo A, Zeeberg I, Henriksen O, Olesen J, Henriksen O. Assessment of demyelination, edema and gliosis by in vivo determination of T1 and T2 in the brain of patients with acute attack of multiple sclerosis. *Magn Reson Med.* 1989; 11: 337-348.
8. Frederiksen J, **Larsson HB**, Henriksen O, Olesen J. Magnetic resonance imaging of the brain in patients with acute monosymptomatic optic neuritis. *Acta Neurol Scand.* 1989; 80: 512-517.
9. Stahlberg F, Mogelvang J, Thomsen C, Nordell B, Stubgaard M, Ericsson A, Sperber G, Greitz D, **Larsson H**, Henriksen O, Persson B. A method for MR quantification of flow velocities in blood and CSF using interleaved gradient echo pulse sequences. *Magn Reson Imaging.* 1989; 7: 655-667.
10. **Larsson HB**, Stubgaard M, Frederiksen JL, Jensen M, Henriksen O, Paulson OB. Quantitative measurement of blood-brain barrier defect by use of magnetic resonance imaging and gadolinium-DTPA in patients with multiple sclerosis and brain tumors. *Magn Reson Med.* 1990; 16: 117-131.
11. Henriksen O, **Larsson H**, Jensen KM. In vivo ¹H-spectroscopy of the human brain at 1.5 Tesla. Preliminary experience at a clinical installation. *Acta Radiol.* 1990; 31: 181-186.
12. Dejgaard A, Gade A, **Larsson H**, Balle V, Parving A, Parving HH. Evidence for diabetic encephalopathy. *Diabet Med.* 1991; 8: 162-167.
13. **Larsson HB**, Christiansen P, Jensen M, Frederiksen J, Heltberg A, Olesen J, Henriksen O. Localized in vivo proton spectroscopy in the brain of patients with multiple sclerosis. *Magn Reson Med.* 1991; 22: 23-31.
14. Frederiksen JL, **Larsson HB**, Ottovay E, Stigsby B, Olesen J. Acute optic neuritis with normal visual acuity. Comparison of symptoms and signs with psychophysiological, electrophysiological and magnetic resonance imaging data. *Acta Ophthalmol.* 1991; 69: 357-366.
15. Frederiksen JL, **Larsson HB**, Olesen J, Stigsby B. MRI, VEP, SEP, and biotestometry suggest monosymptomatic acute optic neuritis to be a first manifestation of multiple sclerosis. *Acta Neurol Scand.* 1991; 83: 343-350.
16. Frederiksen JL, **Larsson HB**, Nordenbo A, Seedorff HH. Plaques causing hemianopsia or quadrantanopsia in multiple sclerosis identified by MRI and VEP. *Acta Ophthalmol.* 1991; 69: 169-177.
17. Ravnborg M, Liguori R, Christiansen P, **Larsson H**, Sorensen PS. The diagnostic reliability of magnetically evoked motor potentials in multiple sclerosis. *Neurology.* 1992; 42: 1296-1301.
18. Frederiksen JL, **Larsson HB**, Olesen J. Correlation of magnetic resonance imaging and CSF findings in patients with acute monosymptomatic optic neuritis. *Acta Neurol Scand.* 1992; 86: 317-322.
19. **Larsson HB**, Thomsen C, Frederiksen J, Stubgaard M, Henriksen O. In vivo magnetic resonance diffusion measurement in the brain of patients with multiple sclerosis. *Magn Reson Imaging.* 1992; 10: 7-12.
20. Christiansen P, Frederiksen JL, Henriksen O, **Larsson HB**. Gd-DTPA-enhanced lesions in the brain in patients with acute optic neuritis. *Acta Neurol Scand.* 1992; 85: 141-146.
21. **Larsson HB**, Tofts PS. Measurements of blood brain barrier permeability using dynamic Gd-DTPA scanning - a comparison of methods. *Magn Reson Med.* 1992; 24: 174-176.
22. **Larsson HB**, Christiansen P, Zeeberg I, Henriksen O. In vivo evaluation of the reproducibility of T1 and T2 measured in the brain of patients with multiple sclerosis. *Magn Reson Imaging.* 1992; 10: 579-584.

23. Christiansen P, Henriksen O, Stubgaard M, Gideon P, **Larsson HB**. In vivo quantification of brain metabolites by ¹H-MRS using water as an internal standard. *Magn Reson Imaging*. 1993;11:107-118.
24. Christiansen P, Gideon P, Thomsen C, Stubgaard M, Henriksen, **Larsson HB**. Increased water self-diffusion in chronic plaques and in apparently normal white matter in patients with multiple sclerosis. *Acta Neurol Scand*. 1993;87:195-199.
25. Christiansen P, Toft P, **Larsson HB**, Stubgaard M, Henriksen O. The concentration of N-acetyl aspartate, creatine+phosphocreatine and choline in different parts of the brain in adulthood and senium. *Magn Reson Im-aging*. 1993;11:799-806.
26. Henriksen O, **Larsson HB**, Ring P, Rostrup E, Stensgaard A, Stubgaard M, Stahlberg F, Sondergaard M, Thomsen C, Toft P. Functional MR imaging at 1.5 T. Initial results using photic and motoric stimulation. *Acta Radiol*.1993;34:101-103.
27. **Larsson HB**, Stubgaard M, Sondergaard L, Henriksen O. In vivo quantification of the unidirectional influx constant for Gd-DTPA diffusion across the myocardial capillaries with MR imaging. *J Magn Reson Imaging*. 1994;4:433-440.
28. Christiansen P, **Larsson HB**, Thomsen C, Wieslander SB, Henriksen O. Age dependent white matter lesions and brain volume changes in healthy volunteers. *Acta Radiol*. 1994;35:117-122.
29. Waldemar G, Christiansen P, **Larsson HB**, Høgh P, Laursen H, Lassen N, Paulson OB. White matter magnetic resonance hyperintensities in dementia of the Alzheimer type: morphological and regional cerebral blood flow correlates. *J Neurol Neurosurg Psychiatry*. 1994;57:1458-1465.
30. Rostrup E, **Larsson HB**, Toft PB, Garde K, Thomsen C, Ring P, Sondergaard L, Henriksen O. Functional MRI of CO₂ induced increase in cerebral perfusion. *NMR Biomed*. 1994;7:29-34.
31. Christiansen AP, Wanscher B, **Larsson HB**, Henriksen O. Magnetic resonance imaging of disseminated sclerosis. *Ugeskr Laeger*. 1994; 156: 6348-6352. Review. Danish.
32. **Larsson HB**. In vivo characterization of the multiple sclerosis plaque by magnetic resonance imaging and spectroscopy. *Acta Neurol Scand Suppl*. 1995; 159: 1-44.
33. Wirestam R, Larsen VA, Stubgaard M, Thomsen C, Vikhoff B, **Larsson HB**, Stahlberg F, Henriksen O. Deuterium MR spectroscopy at 4.7 T. Quantification of tumour and subcutaneous tissue blood flow in animal models. *Acta Radiol*. 1995;35: 85-91.
34. Johnsen B, Frederiksen JL, **Larsson HB**. Comparison of the pattern visual evoked potential mediated by separate cone systems. *Electroencephalogr Clin Neurophysiol*. 1995;96:97-104.
35. Rostrup E, **Larsson HB**, Toft PB, Garde K, Henriksen O. Signal changes in gradient echo images induced by hypo- and hyperoxia. *NMR Biomed*. 1995;8:41-47.
36. Frederiksen JL, Olesen J, **Larsson HB**, Petrera J, Sellebjerg FT. Acute unilateral papillitis versus retrobulbar neuritis: relation to multiple sclerosis. *Mult Scler*. 1996; 1: 223-227.
37. **Larsson HB**, Fritz-Hansen T, Rostrup E, Sondergaard L, Ring P, Henriksen O. Myocardial perfusion modeling using MRI. *Magn Reson Med*. 1996; 35: 716-726.
38. Rostrup E, **Larsson HB**, Toft PB, Garde K, Ring PB, Henriksen O. Susceptibility contrast imaging of CO₂-induced changes in blood volume of human brain. *Acta Radiol*. 1996;37:813-822.
39. Fritz-Hansen T, Rostrup E, **Larsson HB**, Sondergaard L, Ring P, Henriksen O. Measurement of the arterial concentration of Gd-DTPA using MRI. A step towards quantitative perfusion imaging. *Magn Reson Med*. 1996; 36: 225-231.
40. Frederiksen JL, Petrera J, **Larsson HB**, Stigsby B, Olesen J. Serial MRI, VEP, SEP and biotestometry in acute optic neuritis: value of baseline results to predict the development of new lesions at one year follow up. *Acta Neurol Scand*. 1996; 93: 246-252.
41. Frederiksen JL, **Larsson HB**, Jensen C. Serial Gadolinium-enhanced MRI in untreated patients with acute optic neuritis: implications for natural history. *Acta Neurol Scand*. 1997; 96: 22-27.
42. Frederiksen JL, Madsen HO, Ryder LP, **Larsson HB**, Morling N, Svejgaard A. HLA typing in acute optic neuritis. Relation to multiple sclerosis and magnetic resonance imaging findings. *Arch Neurol*. 1997; 54: 76-80.
43. **Larsson HB**, Rostrup E. Functional MR imaging of CNS. *Ugeskr Laeger*. 1997;159,6659-6665. Danish.
44. Horsfield MA, **Larsson HB**, Jones DK, Gass A. Diffusion magnetic imaging in multiple sclerosis. *J Neurol Neurosurg Psychiatry*. 1998; 64 Suppl 1: 80-84. Review.
45. **Larsson HB**, Barker GJ, Mackay A. Nuclear magnetic resonance relaxation in multiple sclerosis. *J Neurol Neurosurg Psychiatry*. 1998;64 Suppl 1: 70-76. Review.
46. Fritz-Hansen T, Rostrup E, Sondergaard L, Ring P, Amtorp O, **Larsson HB**. Capillary transfer constant of Gd-DTPA in the myocardium at rest and during vasodilation assessed by MRI. *Magn Reson Med*. 1998; 40(6): 922-929.

47. Born P, Leth H, Miranda MJ, Rostrup E, Stensgaard A, Peitersen B, **Larsson HB**, Lou HC. Visual activation in infants and young children studied by functional magnetic resonance imaging. *Pediatr Res.* 1998; 44(4): 578-583.
48. Fritz-Hansen T, Rostrup E, Ring P, **Larsson HB**. Quantification of gadolinium-DTPA concentrations for different inversion times using an IR-turbo flash pulse sequence: a study on optimizing multislice perfusion imaging. *Magn Reson Imaging.* 1998; 16(8): 893-899.
49. Brinck K, **Larsson HB**, Madsen JL. A deconvolution technique for processing small intestinal transit data. *Eur J Nucl Med.* 1999;26(3):272-276.
50. Tofts PS, Brix G, Buckley DL, Evelhoch JL, Henderson E, Knopp MV, **Larsson HB**, Lee TY, Mayr NA, Parker GJ, Port RE, Taylor J, Weisskoff RM. Estimation kinetic parameters from dynamic contrast-enhanced T(1)-weighted MRI of a diffusable tracer: standardized quantities and symbols. *J Magn Reson Imaging.* 1999; 10(3): 223-32. Review.
51. Kim SG, Rostrup E, **Larsson HB**, Ogawa S, Paulson OB. Determination of relative CMRO₂ from CBF and BOLD changes: significant increase of oxygen consumption rate during visual stimulation. *Magn Reson Med.* 1999; 41(6):1152-1161.
52. Rostrup E, Law I, Blinkenberg M, **Larsson HB**, Born AP, Holm S, Paulson OB. Regional differences in the CBF and BOLD responses to hypercapnia: A combined PET and fMRI study. *Neuroimage.* 2000; 11(2): 87-97.
53. Born AP, Miranda MJ, Rostrup E, Toft PB, Peitersen B, **Larsson HB**, Lou HC. Functional magnetic resonance imaging of the normal and abnormal visual system in early life. *Neuropediatrics.* 2000; 31(1): 24-32.
54. Andersen IK, Sidaros K, Gesmar H, Rostrup E, **Larsson HB**. A model system for perfusion quantification using FAIR. *Magn Reson Imaging.* 2000; 18(5): 565-574.
55. Garde E, Mortensen EL, Krabbe K, Rostrup E, **Larsson HB**. Relation between age-related decline in intelligence and cerebral white-matter hyperintensities in healthy octogenarians: a longitudinal study. *Lancet.* 2000; 356(9230): 628-634.
56. Wiegell MR, **Larsson HB**, Wedeen VJ. Fiber crossing in human brain depicted with diffusion tensor MR imaging. *Radiology.* 2000;217(3):897-903.
57. Wiegell M, Krabbe K, **Larsson HB**, Paulson OB. Picture of the month. *Ugeskrift For læger*, 2000, Mar 27; 162 (13): 1893.
58. Groenning B, Nilsson JC, Sondergaard L, Fritz-Hansen T, **Larsson HB**, Hildebrandt PR. Anti-remodelling effects on the left ventricle during β -blockade with metoprolol in the treatment of chronic heart failure. *J Am Coll Cardiol.* 2000; 36(7):2072-2080.
59. **Larsson HB**, Rosenbaum S, Fritz-Hansen T. Quantification of the effect of water exchange in dynamic contrast MRI perfusion measurements in the brain and heart. *Magn Reson Med.* 2001;46(2):272-281.
60. Nilsson JC, Nielsen G, Groenning BA, Fritz-Hansen T, Sondergaard L, Jensen GB, **Larsson HB**. Sustained postinfarction myocardial edema in humans visualized by magnetic resonance imaging. *Heart.* 2001;85(6):639-642.
61. Rosenbaum SH, Petersen P, **Larsson HB**. Imaging diagnostics in acute cerebral apoplexy. *Ugeskr Laeger.* 2001;163(17):2347.
62. Sidaros K, Andersen IK, Gesmar H, Rostrup E, **Larsson HB**. Improved Perfusion Quantification in FAIR Imaging by Offset Correction. *Magn Reson Med.* 2001;46(1):193-197.
63. Nilsson JC, Groenning BA, Nielsen G, Fritz-Hansen T, Trawinski J, Hildebrandt PR, Jensen GB, **Larsson HB**, Sondergaard L. Left ventricular remodelling in the first year following acute myocardial infarction and the predictive value of N-terminal pro brain natriuretic peptide. *Am Heart J.* 2002;143(4):696-702.
64. Marstrand JR, Rostrup E, Rosenbaum S, Garde E, **Larsson HB**. Cerebral hemodynamic changes measured by gradient-echo or spin-echo bolus tracking and its correlation to changes in ICA blood measured by phase-mapping MRI. *J Magn Reson Imaging.* 2001; 14(4):391-400.
65. Mathiesen HK, Langkilde AR, **Larsson HB**. Magnetisk resonans og multiple sklerose I. Konventionelle metoder. *Ugeskrift for læger.* 2002; 164(8):1026-1031.
66. Mathiesen HK, Langkilde AR, **Larsson HB**. Magnetisk resonans og multiple sklerose II. Nye metoder. *Ugeskrift for læger.* 2002; 164(8):1031-1036.
67. Groenning B, Nilsson JC, Sondergaard L, Kjaer A, **Larsson HB**, Hildebrandt P. Evaluation of impaired left ventricular ejection fraction and increased dimensions by multiple neurohumoral plasma concentrations. *Eur J Heart Failure.* 2001;3(6):699-708.
68. Groenning BA, Nilsson JC, Sondergaard L, Pedersen F, Trawinski J, Baumann M, **Larsson HB**, Hildebrandt PR. Detection of left ventricular enlargement and impaired systolic function by plasma N-terminal Pro Brain Natriuretic Peptide Concentration. *Am Heart J.* 2002;143(5):923-929.

69. Marstrand JR, Garde E, Rostrup E, Ring P, Rosenbaum S, Mortensen EL, **Larsson HB**. Cerebral perfusion and cerebrovascular reactivity is reduced in white matter hyperintensities. *Stroke*. 2002;33(4):972-976.
70. Born AP, Rostrup E, Miranda MJ, **Larsson HB**, Lou HC. Visual cortex reactivity in sedated children examined with perfusion MRI (FLAIR). *Magn Reson Imaging*. 2002;20(2):199-205.
71. Langkilde AR, Frederiksen J, Rostrup E, **Larsson HB**. FMRI and visual testing in patients with previous optic neuritis. *Eur J Neurol*. 2002;9(3):277-286.
72. Andersen IK, Szymkowiak A, Rasmussen C, Hanson LG, Marstrand JR, **Larsson HB**, Hansen LK. Perfusion quantification using gaussian process deconvolution. *MRM*. 2002;48(2): 351-361.
73. Taskiran M, Fritz-Hansen T, Rasmussen V, **Larsson HBW**, Hilsted J. Decreased myocardial perfusion reserve in diabetic autonomic neuropathy. *Diabetes*. 2002;51(11):3306-10.
74. Groenning BA, Nilsson JC, Hildebrandt PR, Kjaer A, Fritz-Hansen T, **Larsson HBW**, Sondergaard L. Neurohumoral prediction of left-ventricular morphologic response to beta-blockade with metoprolol in chronic left-ventricular systolic heart failure. *E. J. Heart Failure*. 2002;4:635-646.
75. Sellebjerg F, Jensen CV, **Larsson HB**, Frederiksen JL. Gadolinium-enhanced magnetic resonance imaging predicts response to methylprednisolone in multiple sclerosis. *Mult. Scler*. 2003;9(1):1002-1007.
76. Wiegell MR, Tuch DS, **Larsson HB**, Wedeen VJ. Automatic segmentation of thalamic nuclei from diffusion tensor magnetic resonance imaging. *Neuroimage*. 2003;19(2Pt1):391-401.
77. Freiberg J, Hove JD, Kofoed KF, Fritz-Hansen T, Holm S, **Larsson HB**, Kelbaek H. Absolute quantitation of left ventricular wall and cavity parameters using ECG-gated PET. *J Nucl Cardiol* 2004;11(1):38-46.
78. Broholm H, Andersen B, Wanscher B, Frederiksen JL, Rubin I, Pakkenberg B, **Larsson HB**, Lauritzen M. Nitric oxide synthase expression and enzymatic activity in multiple sclerosis. *Acta Neurol Scand* 2004;109:261-269.
79. Taskiran M, Rasmussen V, Rasmussen B, Fritz-Hansen T, **Larsson HB**, Jensen GB, Hilsted J. Left ventricular dysfunction in normotensive Type 1 diabetes patients: the impact of autonomic neuropathy. *Diabet Med*. 2004;21:524-30.
80. Malm S, Frigstad S, Sagberg E, **Larsson H**, Skjaerpe T. Accurate and reproducible measurement of left ventricular volume and ejection fraction by contrast echocardiography: a comparison with magnetic resonance imaging. *J Am Coll Cardiol* 2004;44(5):1030-1035.
81. Nielsen G, Fritz-Hansen T, Dirks CG, Jensen GB, **Larsson HB**. Evaluation of heart perfusion in patients with acute myocardial infarction using dynamic contrast-enhanced magnetic resonance imaging. *J Magn Reson Imaging*. 2004;20:403-10.
82. Skjold A, Vangberg TR, Kristoffersen A, Haraldseth O, Jynge P, **Larsson HB**. Relaxation enhancing properties of MnDPDP in human myocardium. *J Magn Reson Imaging*. 2004;20:948-52.
83. Rostrup E, Knudsen GM, Law I, Holm S, **Larsson HB**, Paulson OB. The relationship between cerebral blood flow and volume in humans. *Neuroimage*. 2005;24:1-11.
84. Stegmann MB, Olafsdottir H, **Larsson HB**. Unsupervised motion-compensation of multi-slice cardiac perfusion MRI. *Med Image Anal* 2005;9(4):394-410.
85. Mathiesen HK, Tschering T, Sørensen PS, Larsson HB, Rostrup E, Paulson OB, Hanson LG. Multi-slice echo-planar spectroscopic MR imaging provides both global and local metabolite measures in multiple sclerosis. *Magn Reson Med* 2005;53:750-9.
86. Rostrup E, **Larsson HB**, Born AP, Knudsen GM, Paulson OB. Changes in BOLD and ADC weighted imaging in acute hypoxia during sea-level and altitude adapted states. *Neuroimage* 2005;28:947-55.
87. Martinussen M, Fischl B, **Larsson HB**, Skranes J, Kulseng S, Vangberg TR, Vik T, Brubakk AM, Haraldseth O, Dale AM. Cerebral cortex thickness in 15-years-old adolescents with low birth weight measured by an automated MRI-based method. *Brain* 2005;128:2588-96.
88. Krabbe K, Karlsborg M, Hansen A, Werdelin L, Mehlsen J, **Larsson HB**, Paulson OB. Increased intracranial volume in Parkinson's disease. *J Neurol Sci* 2005;239(1):45-52.
89. Wiart M, Carme S, Mai W, **Larsson HB**, Neyran B, Canet-Soulas E. In vivo quantification of regional myocardial blood flow: Validity of the fast-exchange approximation for intravascular T(1) contrast agent and long inversion time. *Magn Reson Med* 2006;56:340-347.
90. Skjold A, Kristoffersen A, Vangberg T, Haraldseth O, Jynge P, **Larsson HB**. An apparent unidirectional influx constant for manganese as a measure of myocardial calcium channel activity. *J Magn Reson Imaging*. 2006; 24(5):1047-55.
91. Skjold A, Amundsen B, Wiseth R, Støjlén A, Haraldseth O, **Larsson HB**, Jynge P. Manganese dipyrroxyl-diphosphate (MnDPDP) as a Viability Marker in Patients with Myocardial Infarction. *J Magn Reson Imaging*. 2007;26:720-727.

92. Sjostrand K, Hansen MS, **Larsson HB**, Larsen R. A path algorithm for the support vector domain description and its application to medical imaging. *Med Image Anal.* 2007;11(5):417-28.
93. Munk S, Forchhammer HB, Brennum J, Hansen AE, **Larsson HB**. Presurgical functional MR imaging in the mapping of language function. *Ugeskr Laeger.* 2007;169(42):3571-4.
94. Schwitter J, Wacker CM, van Rossum AC, Lombardi M, Al-Saadi N, Ahlstrom H, Dill T, **Larsson HB**, Flamm SD, Marquardt M, Johansson L. MR-IMPACT: comparison of perfusion-cardiac magnetic resonance with single-photon emission computed tomography for the detection of coronary artery disease in a multicenter, multivendor, randomized trial. *Eur Heart J.* 2008;29(4):480-9.
95. Fritz-Hansen T, Hove JD, Kofoed KF, Kelback H, **Larsson HB**. Quantification of MRI measured myocardial perfusion reserve in healthy humans. A comparison with positron emission tomography. *J Magn Reson Imaging* 2008;27:818-824.
96. **Larsson HB**, Hansen AE, Berg HK, Rostrup E, Haraldseth O. Dynamic contrast enhanced quantitative perfusion measurement of the brain using T1-weighted MRI at 3 tesla. *J Magn Reson Imaging* 2008; 27: 754-762.
97. Henriksen OM, Fritz-Hansen T, Jensen LT, **Larsson HB**. Measurement of myocardial perfusion using magnetic resonance. *Ugeskr Laeger.* 2008;170(50):4136-41.
98. Kruuse C, Hansen AE, **Larsson HB**, Lauritzen M, Rostrup E. Cerebral haemodynamic response or excitability is not affected by sildenafil. *J Cereb Blood Flow Metab.* 2009;29(4):830-839.
99. Hansen AE, Pedersen H, Rostrup E, **Larsson HB**. Partial volume effect (PVE) on the arterial input function (AIF) in T1-weighted perfusion imaging and limitations of the multiplicative rescaling approach. *Magn Reson Med* 2009;62(4):1055-1059.
100. **Larsson HB**, Courivaud F, Rostrup E, Hansen AE. Measurement of the brain perfusion, blood volume, and blood-brain barrier permeability, using dynamic contrast-enhanced T1-weighted MRI at 3 tesla. *Magn Reson Med* 2009;62(5):1270-1281.
101. Petersen ET, Mouridsen K, Golay X; all named co-authors of the QUASAR test-retest study. The QUASAR reproducibility study, Part II: Results from a multi-center Arterial Spin Labelling test-retest study. *Neuroimage* 2010;49(1):104-113.
102. Lunde Larsen LS, **Larsson HB**, Frederiksen JL. The value of conventional high-field MRI in the light of the McDonald criteria: a literature review. *Acta Neurol Scand* 2010;122(3):149-158.
103. Laustsen SR, Sørensen P, Frund T, **Larsson HB**, Christensen T, Larsson EM. Preoperative functional magnetic resonance imaging in patients with brain tumors. *Ugeskr Laeger* 2010;172(35):2370-2376.
104. Kallenbach K, Simonsen H, Sander B, Wanscher B, **Larsson H**, Larsen M, Frederiksen JL. Retinal nerve fiber layer thickness is associated with lesion length in acute optic neuritis. *Neurology* 2010;74(3):252-258.
105. Asghar MS, Hansen AE, Kapijimpanga T, van der Geest RJ, van der Koning P, **Larsson HB**, Olesen J, Ashina M. Dilation by CGRP of middle meningeal artery and reversal by sumatriptan in normal volunteers. *Neurology* 2010;75(17):1520-1526.
106. Kallenbach K, Sander B, Tsakiri A, Wanscher B, Fuglød D, Larsen M, **Larsson H**, Frederiksen JL. Neither retinal nor brain atrophy can be shown in patients with isolated unilateral optic neuritis at the time of presentation. *Mult Scler* 2011;17(1):89-95.
107. Debes NM, Hansen A, Skov L, **Larsson H**. A functional magnetic resonance imaging study of a large clinical cohort of children with Tourette syndrome. *J Child Neurol* 2011;26(5):560-569.
108. Bak N, Glenthøj BY, Rostrup E, **Larsson HB**, Orange B. Source localization of sensory gating: a combined EEG and fMRI study in healthy volunteers. *Neuroimage* 2011;54(4):2711-2718.
109. Olsen NT, Sogaard P, **Larsson HB**, Goetze JP, Jons C, Mogelvang R, Nielsen OW, Fritz-Hansen T. Speckle-tracking echocardiography for prediction outcome in chronic aortic regurgitation during conservative management and after surgery. *JACC Cardiovasc Imaging* 2011;4(3):223-30.
110. Asghar MS, Hansen AE, Amin FM, van der Geest RJ, Koning P, **Larsson HB**, Olesen J, Ashina M. Evidence for a vascular factor in migraine. *Ann Neurol* 2011;69(4):635-45.
111. Asghar MS, Hansen AE, Pedersen S, **Larsson HB**, Ashina M. Pharmacological modulation of the BOLD response: A study of acetazolamide and glyceryl trinitrate in humans. *J Magn Reson Imaging* 2011; 34(4):921-927.
112. Fuglød D, Kallenbach K, Tsakiri A, Simonsen H, Sander B, Hansen AE, Rostrup E, Frederiksen J, **Larsson HB**. Retinal atrophy correlates with fMRI response in patients with recovered optic neuritis. *Neurology* 2011;77(7):645-651.
113. Tsakiri A, Kallenbach K, Fuglød D, Wanscher B, **Larsson H**, Frederiksen J. Simvastatin improves final visual outcome in acute optic neuritis: a randomized study. *Mult Scler* 2012;18(1):72-81.
114. Fuglød D, Petersen H, Rostrup E, Hansen AE, **Larsson HB**. Correlation between single-trial visual evoke potentials and the blood oxygenation level dependent response in simultaneously recorded EEG-fMRI. *Magn Reson Med.* 2012;68(1):252-260.

115. Schaefer K, Bankenburg F, Kupers R, Gruner JM, Law I, Lauritzen M, **Larsson HB**. Negative BOLD signal changes in ipsilateral primary somatosensory cortex are associated with perfusion decrease and behavioral evidence for functional inhibition. *Neuroimage* 2012;59(4):3119-3127
116. Headache and prolonged dilatation of the middle meningeal artery by PACAP38 in healthy volunteers. Amin FM, Asghar MS, Guo S, Hougaard A, Hansen AE, Schytz HW, van der Geest RJ, de Koning PJ, **Larsson HB**, Olesen J, Ashina M. *Cephalalgia* 2012;32(2):140-149.
117. Asghar MS, Hansen AE, **Larsson HB**, Olesen J, Ashina M. Effect of CGRP and sumatriptan on the BOLD response in visual cortex. *J Headache Pain* 2012;13(2):159-166.
118. Henriksen OM, **Larsson HB**, Hansen AE, Gruner JM, Law I, Rostrup E. Estimation of intersubject variability of cerebral blood flow measurements using MRI and positron emission tomography. *J Magn Reson Imaging* 2012;35(6):1290-1299.
119. Horwitz H, Degn M, Modvig S, **Larsson HB**, Wanscher B, Frederiksen JL. CSF abnormalities can be predicted by VEP and MRI pathology in the examination of optic neuritis. *J Neurol* 2012; 259(12):2616-20;
120. Larsen VA, Simonsen HJ, Law I, **Larsson HB**, Hansen AE. Evaluation of dynamic contrast-enhanced T1-weighted perfusion MRI in the differentiation of tumor recurrence from radiation necrosis. *Neuroradiology* 2013;55(3):361-369.
121. Henriksen OM, Kruuse C, Olesen J, Jensen LT, **Larsson HB**, Birk S, Hansen JM, Wienecke T, Rostrup E. Sources of variability of resting cerebral blood flow in healthy subjects: a study using (133)Xe SPECT measurements. *J Cereb Blood Flow Metab* 2013; 33(5):787-792.
122. Haddock B, **Larsson HB**, Hansen AE, Rostrup E. Measurement of brain oxygenation changes using T1-weighted imaging. *Neuroimage* 2013; 78:7-15.
123. Amin FM, Asghar MS, Hougaard A, Hansen AE, Larsen VA, de Koning PJ, **Larsson HB**, Olesen J, Ashina M. Magnetic resonance angiography of intracranial and extracranial arteries in patients with spontaneous migraine without aura: a cross-sectional study. *Lancet Neurol* 2013; 12(5):454-461.
124. Amin FM, Asghar MS, Ravneberg JW, de Koning PJ, **Larsson HB**, Olesen J, Ashina M. The effect of sumatriptan on cephalic arteries: A 3T MR-angiography study in healthy volunteers. *Cephalalgia* 2013;33(12):1009-1016.
125. Reichkender MH, Auerbach P, Rosenkilde M, Christensen AN, Holm S, Petersen MB, Lagerberg A, Larsson HB, Rostrup E, Mosbech TH, Sjødin A, Kjaer A, Ploug T, Hoejgaard L, Stallknecht BM. Exercise training favors increased insulin-stimulated glucose uptake in skeletal muscle in contrast to adipose tissue: a randomized study using FDG PET imaging. *Am J Physiol Endocrinol Metab* 2013;305(4):E496-506.
126. Henriksen JH, Jensen GB, **Larsson HB**. A century of indicator dilution technique. *Clin Physiol Funct Imaging* 2014;34(1):1-9. Review.
127. Hak S, Cebulla J, Huuse EM, Davies CD, Mulder WJ, **Larsson HB**, Haraldseth O. Periodicity in tumor vasculature targeting kinetics of ligand-functionalized nanoparticles studied by dynamic contrast enhanced magnetic resonance imaging and intravital microscopy. *Angiogenesis* 2014;17(1):93-107.
128. Hougaard A, Amin FM, Hoffmann MB, Rostrup E, **Larsson HB**, Asghar MS, Larsen VA, Olesen J, Ashina M. Interhemispheric differences of fMRI responses to visual stimuli in patients with side-fixed migraine aura. *Hum Brain Mapp* 2014;35(6):2714-23.
129. Modvig S, Degn MS, Horwitz H, Cramer SP, **Larsson HB**, Wanscher B, Sellebjerg F, Frederiksen JL. Relationship between Cerebrospinal Fluid Biomarkers for Inflammation, Demyelination and Neurodegeneration in Acute Optic Neuritis. *PloS One* 2013;8(10):e77163.
130. Mikati AG, Tan H, Shenkar R, Li L, Zhang L, Guo Z, **Larsson HB**, Shi C, Liu T, Wang Y, Shah A, Edelman R. Dynamic Permeability and Quantitative Susceptibility: Related Imaging Biomarkers in Cerebral Cavernous Malformations. *Stroke* 2014;45(2):598-601.
131. Henriksen OM, Jensen LT, Krabbe K, **Larsson HB**, Rostrup E. Relationship between cardiac function and resting cerebral blood flow: MRI measurements in healthy elderly subjects. *Clin Physiol Funct Imaging* 2014;34(6):471-7.
132. Bak N, Rostrup E, **Larsson HB**, Glenthøj BY, Orange B. Concurrent functional magnetic resonance imaging and electroencephalography assessment of sensory gating in schizophrenia. *Hum Brain Mapp* 2014; 35(8):3578-87.
133. Cramer SP, Simonsen H, Frederiksen JL, Rostrup E, **Larsson HB**. Abnormal blood-brain barrier permeability in normal appearing white matter in multiple sclerosis investigated by MRI. *Neuroimage Clin* 2013;4:182-189.
134. Amin FM, Hougaard A, Schytz HW, Asghar MS, Lundholm E, Parvaiz AI, de Koning PJ, Andersen MR, **Larsson HB**, Fahrenkrug J, Olesen J, Ashina M. Investigation of the pathophysiological mechanisms of migraine attacks induced by pituitary adenylate cyclase-activating polypeptide-38. *Brain* 2014; 137(pt3):779-794.

135. Rokamp KZ, Olesen ND, **Larsson HB**, Hansen AE, Seifert T, Nielsen HB, Secher NH, Rostrup E. Glyco-pyrrolate does not influence the visual or motor-induced increase in regional cerebral perfusion. *Front Physiol* 2014;5:45.doi:10.3389.
136. Ropele S, Kilsdonk ID, Wattjes MP, Langkammer C, de Graaf WL, Frederiksen JL, **Larsson HB**, Yiannakas M, Wheeler-Kingshott CA, Enzinger C, Khalil M, Rocca MA, Sprenger T, Amann M, Kappos L, Filippi M, Rovira A, Ciccarelli O, Barkhof F, Fazekas F. Determinants of iron accumulation in deep grey matter of multiple sclerosis patients. *Mult Scler* 2014;20(13):1692-1698.
137. Hougaard A, Amin FM, Hoffmann MB, **Larsson HB**, Magon S, Sprenger T, Ashina M. Structural gray matter abnormalities in migraine relate to headache lateralization, but not aura. *Cephalalgia*. 2015;35(1):3-9.
138. Qayyum AA, Hasbak P, **Larsson HB**, Christensen TE, Ghotbi AA, Mathiasen AB, Vejstrup NG, Kjaer A, Kastrup J. Quantification of myocardial perfusion using cardiac magnetic resonance imaging correlates significantly to rubidium-82 positron emission tomography in patients with severe coronary artery disease: A preliminary study. *Eur J Radiol* 2014; 83(7):1120-8.
139. Jeppesen SS, Debes NM, Simonsen HJ, Rostrup E, **Larsson HB**, Skov L. Study of medication-free children with tourette syndrome do not show imaging abnormalities. *Mov Disord* 2014;29(9):1212-6.
140. Arngrim N, Schytz HW, Asghar MS, Amin FM, Hougaard A, Larsen VA, de Koning PJ, **Larsson HB**, Olesen J, Ashina M. Association of acetazolamide infusion with headache and cranial artery dilation in healthy volunteers. *Pain* 2014;155(8):1649-58.
141. Amin FM, Lundholm E, Hougaard A, Arngrim N, Wiinberg L, de Koning PJ, **Larsson HB**, Ashina M. Measurement precision and biological variation of cranial arteries using automated analysis of 3 T magnetic resonance angiography. *J Headache Pain* 2014;15:25.doi:10.1186/1129-2377-15-25
142. Ezzatian-Ahar S, Amin FM, Obaid HG, Arngrim N, Hougaard A, **Larsson HB**, Ashina M. Migraine without aura is not associated with incomplete circle of Willis: a case-control study using high-resolution magnetic resonance angiography. *J Headache Pain* 2014; 15:27.doi:10.1186/1129-2377-15-27.
143. Cramer SP, **Larsson HB**. Accurate determination of blood-brain barrier permeability using dynamic contrast-enhanced T1-weighted MRI: a simulation and in vivo study on healthy subjects and multiple sclerosis patients. *J Cereb Blood Flow Metab* 2014;34(10):1655-65.
144. Falk A, Fahlstrom M, Rostrup E, Berntsson S, Zetterling M, Morell A, **Larsson HB**, Smits A, Larsson EM. Discrimination between glioma II and III in suspected low-grade gliomas using dynamic contrast-enhanced and dynamic susceptibility contrast perfusion MR imaging: a histogram analysis approach. *Neuroradiology* 2014 Dec;56(12):1031-8. doi: 10.1007/s00234-014-1426-z.
145. Asghar MS, Pereira MP, Werner MU, Mårtensson J, **Larsson HB**, Dahl JB. Secondary hyperalgesia phenotypes exhibit differences in brain activation during noxious stimulation. *PloS One*. 2015 Jan 23;10(1):e0114840.
146. Modvig S, Degn M, Roed H, Sørensen T, **Larsson HB**, Langkilde A, Frederiksen J, Sellebjerg F. Cerebro-spinal fluid levels of chitinase 3-like 1 and neurofilament light chain predict multiple sclerosis development and disability after optic neuritis. *Mult Scler* 2015;21(14):1761-1770.
147. Mikati AG, Khanna O, Zhang L, Girard R, Shenkar R, Guo X, Shah A, **Larsson HB**, Tan H, Li L, Wishnoff MS, Shi C, Christoforidis GA, Awad IA. Vascular permeability in cerebral cavernous malformations. *J Cereb Blood Flow Metab*. 2015;35(10):1632-1639.
148. Cramer SP, Modvig S, Simonsen HJ, Frederiksen JL, **Larsson HB**. Permeability of the blood-brain barrier predicts conversion from optic neuritis to multiple sclerosis. *Brain* 2015;138:2571-2583.
149. Kuhle J, Disanto G, Dobson R, Adutori R, Bianchi L, Topping J, Bestwick JP, Meier UC, Marta M, Costa GD, Runia T, Evdoshenko E, Lazareva N, Thouvenot E, Iaffaldano P, Drenzo V, Khademi M, Piehl F, Co-mabella M, Sombekke M, Killestein J, Hegen H, Rauch S, D'Alfonso S, Alvarez-Cermeño JC, Kleínová P, Horáková D, Roesler R, Lauda F, Llufríu S, Avsar T, Uygünoglu U, Altintas A, Saip S, Menge T, Rajda C, Bergamaschi R, Moll N, Khalil M, Marignier R, Dujmovic I, **Larsson H**, Malmestrom C, Scarpini E, Feno-glio C, Wergeland S, Laroni A, Annibali V, Romano S, Martínez AD, Carra A, Salvetti M, Uccelli A, Torkildsen Ø, Myhr KM, Galimberti D, Rejdak K, Lycke J, Frederiksen JL, Drulovic J, Confavreux C, Bras-sat D, Enzinger C, Fuchs S, Bosca I, Pelletier J, Picard C, Colombo E, Franciotta D, Derfuss T, Lindberg R, Yaldizli Ö, Vécsei L, Kieseier BC, Hartung HP, Villoslada P, Siva A, Saiz A, Tumani H, Havrdová E, Villar LM, Leone M, Barizzzone N, Deisenhammer F, Teunissen C, Montalban X, Tintoré M, Olsson T, Trojano M, Lehmann S, Castelnovo G, Lapin S, Hintzen R, Kappos L, Furlan R, Martinelli V, Comi G, Ramagopalan SV, Giovannoni G. Conversion from clinically isolated syndrome to multiple sclerosis: A large multicentre study. *Mult Scler* 2015;21(8):1013-1024.

150. Møller S, Lundemann M, Law I, Poulsen HS, **Larsson HB**, Engelholm SA. Early changes in perfusion of glioblastoma during radio- and chemotherapy evaluated by T1 dynamic contrast enhanced magnetic resonance imaging. *Acta Oncol* 2015;54(9):1521-1528.
151. Jensen BH, Hougaard A, Amin FM, **Larsson HB**, Ashina M. Structural asymmetry of cortical visual areas is related to ocular dominance. *Neuroreport* 2015;26(17):1071-1076.
152. Vestergaard MB, Lindberg U, Aachmann-Andersen NJ, Lisbjerg K, Christensen SJ, Law I, Rasmussen P, Olsen NV, **Larsson HB**. Acute hypoxia increases the cerebral metabolic rate- a magnetic resonance imaging study. *J Cereb Blood Flow Metab* 2016;36(6):1046-1058.
153. Arngrim N, Schytz HW, Britze J, Amin FM, Vestergaard MB, Hougaard A, Wolfram F, de Koning PJ, Olsen KS, Secher NH, **Larsson HB**, Olesen J, Ashina M. Migraine induced by hypoxia: a MRI spectroscopy and angiography study. *Brain* 2016;139:723-737.
154. Hougaard A, Lindberg U, Arngrim N, **Larsson HB**, Olesen J, Amin FM, Ashina M, Haddock BT. Evidence of a Christmas spirit network in the brain: functional MRI study. *BMJ* 2015;351:h6266.
155. Henriksen OM, Larsen VA, Muhic A, Hansen AE, **Larsson HB**, Poulsen HS, Law I. Simultaneous evaluation of brain tumor metabolism, structure and blood volume using 18F-fluoroethyltyrosine (FET) PET/MRI: feasibility, agreement and initial experience. *Eur J Nucl Med Imaging* 2016;43(1):103-112.
156. Asghar MS, Becerra L, **Larsson HB**, Borsook D, Ashina M. Calcitonin gene-related peptide modulates heat nociception in the human brain- An fMRI study in healthy volunteers. *Plos One*. 2016;11(3):e0150334.doi:10.1371.
157. Hougaard A, Amin FM, Arngrim N, Vlachou M, Larsen VA, **Larsson HB**, Ashina M. Sensory migraine aura is not associated with structural grey matter abnormalities. *Neuroimage Clin*. 2016;11:322-327.
158. Sari H, Erlandsson K, Law I, **Larsson HB**, Ourselin S, Arridge S, Atkinson D, Hutton BF. Estimation of an image derived input function with MR-defined carotid arteries in FDG-PET human studies using a novel partial volume correction method. *J Cereb Blood Flow Metab* 2017;37(4):1398-1409.
159. Lindberg U, Witting N, Jørgensen SL, Vissing J, Rostrup E, **Larsson HB**, Kruuse C. Effects of sildenafil on cerebrovascular reactivity in patients with Becker Muscular Dystrophy. *Neurotherapeutics*. 2017;14(1):182-190.
160. Girard R, Fam MD, Zeineddine HA, Tan H, Mikati AG, Shi C, Jesselson M, Shenkar R, Wu M, Cao Y, Hobson N, **Larsson HB**, Christoforidis GA, Awad IA. Vascular permeability and iron deposition biomarkers in longitudinal follow-up of cerebral cavernous malformation. *J Neurosurg* 2017;127(1):102-110.
161. Haddock B, Holm S, Poulsen JM, Enevoldsen LH, **Larsson HB**, Kjær A, Suetta C. Assessment of muscle function using hybrid PET/MRI: comparison of 18F-FDG PET and T2-weighted MRI for quantifying muscle activation in human subjects. *Eur J Nucl Med Mol Imaging*. 2017;44(4):704-711.
162. Vestergaard MB, Lindberg U, Aachmann-Andersen NJ, Lisbjerg K, Christensen SJ, Rasmussen P, Olsen NV, Law I, **Larsson HB**, Henriksen OM. Comparison of global cerebral blood flow measured by phase-contrast mapping with 15O-H₂O positron emission tomography. *J Magn Reson Imaging*. 2017;45(3):692-699.
163. **Larsson HB**, Vestergaard MB, Lindberg U, Iversen HK, Cramer SP. Brain capillary transit time heterogeneity measured by dynamic contrast-enhanced T1-weighted perfusion Magnetic Resonance Imaging. *J Magn Reson Imaging* 2017;45(6):1809-1820.
164. Qayyum AA, Qayyum F, **Larsson HB**, Kjær A, Hasbak P, Vejlsstrup NG, Kastrup J. Comparison of rest and adenosine stress quantitative and semi-quantitative myocardial perfusion using magnetic resonance in patients with ischemic heart disease. *Clin Imaging*. 2017;41:149-156.
165. Hougaard A, Amin FM, **Larsson HB**, Rostrup E, Ashina M. Increased intrinsic brain connectivity between pons and somatosensory cortex during attacks of migraine with aura. *Hum Brain Mapp*. 2017;38(5):2635-2642.
166. Younis S, Hougaard A, Vestergaard MB, **Larsson HB**, Ashina M. Migraine and magnetic resonance spectroscopy: a systematic review. *Curr Opin Neurol* 2017;30(3):246-262.
167. Hougaard A, Amin F, Christensen CE, Younis S, Wolfram F, Cramer SP, **Larsson HBW**, Ashina M. Increased brainstem perfusion, but no blood-brain barrier disruption, during attacks of migraine with aura. *Brain* 2017;140(6):1633-1642.
168. Foged MT, Lindberg U, Vakamudi K, **Larsson HBW**, Pinborg LH, Kjær TW, Fabricius M, Svarer C, Ozenne B, Thomsen C, Beniczky S, Paulson OB, Posse S. Safety and EEG data quality of concurrent high-density EEG and high-speed fMRI at 3 Tesla. *Plos One*. 2017;12(5):e0178409.
169. Arngrim N, Hougaard A, Schytz HW, Vestergaard MB, Britze J, Amin FM, Olsen KS, **Larsson HB**, Olesen J, Ashina M. Effect of hypoxia on BOLD fMRI response and total cerebral blood flow in migraine with aura patients. *J Cereb Blood Flow Metab* 2019;39(4):680-689. Epub 2017 .

170. Amin FM, Hougaard A, Cramer SP, Christiansen CE, Wolfram F, **Larsson HBW**, Ashina M. Intact blood-brain barrier during spontaneous attacks of migraine without aura: a 3 T DCE-MRI study. *Eur J Neurol* 2017; 24(9):1116-1124.
171. Vestergaard MB, **Larsson HBW**. Cerebral metabolism and vascular reactivity during breath-hold and hypoxic challenge in freedivers and healthy controls. *J Cereb Blood Flow Metab* 2019;39(5):834-848. Epub 2017 nov3.
172. Arngrim N, Hougaard A, Ahmadi K, Vestergaard MB, Schytz HW, Amin FM, **Larsson HBW**, Olesen J, Hoffmann MB, Ashina M. Heterogenous migraine aura symptoms correlate with cortex functional magnetic resonance imaging responses. *Ann Neurol* 2017;82(6):925-939.
173. Jensen MLF, Vestergaard MB, Tønnesen P, **Larsson HBW**, Jennum PJ. Cerebral blood flow, oxygen metabolism and lactate during hypoxia in patients with obstructive sleep apnoea. *Sleep* 2018;41(3):doi:10.1093/sleep/zsy001.
174. Andersen JB, Lindberg U, Olesen OV, Benoit D, Ladefoged CN, **Larsson HB**, Højgaard L, Greisen G, Law I. Hybrid PET/MRI imaging in healthy unsedated newborn infants with quantitative rCBF measurements using 15O-water PET. *J Cereb Blood Flow Metab* 2019;39(5):782-793. Epub 2018 Jan15.
175. Vestergaard MB, Henriksen OM, Lindberg U, Aachmann-Andersen NJ, Lisbjerg K, Just Christensen S, Olsen NV, Law I, **Larsson HBW**, Rasmussen P. No evidence for direct effects of recombinant human erythropoietin on cerebral blood flow and metabolism in healthy humans. *J Appl Physiol* 2018. 124(4):1107-1116.
176. Ponsaing LB, Lindberg U, Rostrup E, Iversen HK, **Larsson HBW**, Jennum P. Impaired cerebrovascular reactivity in obstructive sleep apnea: a case-control study. *Sleep Med* 2018;43:7;doi:10.1016/j.sleep.2017.10.010
177. Cramer SP, Simonsen HJ, Varatharaj A, Galea I, Frederiksen JL, **Larsson HBW**. Permeability of the blood-brain barrier predicts no evidence of disease activity at two years after natalizumab or fingolimod treatment in relapsing-remitting multiple sclerosis. *Ann Neurol* 2018; 83(5):902-914.
178. Ismaili ARA, Vestergaard MB, Hansen AE, **Larsson HBW**, Johannesen HH, Law I, Henriksen OM. Components of day-to-day variability of cerebral measurements- Analysis of phase contrast mapping magnetic resonance imaging measurements in healthy volunteers. *Plos One* 2018;13(6):e0197807. Doi: 10.1371/journal.pone.0197807.
179. Younis S, Hougaard A, Christensen CE, Vestergaard MB, Petersen ET, Paulson OB, **Larsson HBW**, Ashina M. Effects of sildenafil and calcitonin gene-related peptide on brainstem glutamate levels: a pharmacological proton magnetic resonance spectroscopy study at 3.0 T. *J Headache Pain* 2018;19(1):44.
180. Sari H, Erlandsson K, Marner L, Law I, **Larsson HBW**, Thielemans K, Ourselin S, Arridge S, Atkinson D, Hutton BF. Non-invasive kinetic modelling of PET tracers with radiometabolites using a constrained simultaneous estimation method: evaluation with 11C-SB207455. *EJNMMI Res* 2018;8(1):58.
181. Henriksen OM, Vestergaard MB, Lindberg U, Aachmann-Andersen NJ, Lisbjerg K, Christensen SJ, Rasmussen P, Olsen NV, Forman JL, **Larsson HBW**, Law I. Interindividual and regional relationship between cerebral blood flow and glucose metabolism in the resting state. *J Appl. Physiol* 2018;125(4):1080-1089.
182. Christensen CE, Amin FM, Younis S, Lindberg U, de Koning P, Petersen ET, Paulson OB, **Larsson HBW**, Ashina M. Sildenafil and calcitonin gene-related peptide dilate intradural arteries: A 3T MR angiography study in healthy volunteers. *Cephalalgia* 2019;39(2):264-273.
183. Lindberg U, Kruuse C, Witting N, Jørgensen SL, Vissing J, Rostrup E, **Larsson HBW**. Altered somatosensory neurovascular response in patients with Becker muscular dystrophy. *Brain Behav* 2018;8(6):e00985. doi: 10.1002/brb3.985.
184. Puig O, Vestergaard MB, Lindberg U, Hansen AE, Ulrich A, Andersen FL, Johannesen HH, Rostrup E, Law I, **Larsson HB**, Henriksen OM. Phase contrast mapping MRI measurements of global cerebral blood flow across different perfusion states – A direct comparison with 15H2O positron emission tomography using a hybrid PET/MR system. *J Cereb Blood Flow Metab.* 2019;39(12):2368-2378;
185. Haddock BT, Francis ST, **Larsson HBW**, Andersen UB. Assessment of Perfusion and Oxygenation of the Human Renal Cortex and Medulla by Quantitative MRI during Handgrip Exercise. *J Am Soc Nephrol.* 2018;29(10):2510-2517.
186. Lundemann M, Munck Af Rosenschold P, Muhic A, Larsen VA, Poulsen HS, Engelholm SA, Andersen FL, Kjær A, **Larsson HBW**, Law I, Hansen AE. Feasibility of multi-parametric PET and MRI for prediction of tumour recurrence in patients with glioblastoma. *Eur J Nucl Med Mol Imaging* 2019;46(3):603-613.

187. Varatharaj A, Lijeroth M, Darekar A, **Larsson HBW**, Galea I, Cramer SP. Blood-brain barrier measured using dynamic contrast-enhanced magnetic resonance imaging: a validation study. *J Physiol* 2019;597(3):699-709.
188. Vestergaard MB, Jensen MLF, Arngrim N, Lindberg U, **Larsson HBW**. Higher physiological vulnerability to hypoxic exposure with advancing age in the human brain. *J Cereb Blood Flow Metab*. 2020;40(2):341-353.
189. Khan S, Amin FM, Christensen CE, Ghanizada H, Younis S, Olinger ACR, de Koning PJH, **Larsson HBW**, Ashina M. Meningeal contribution to migraine pain: a magnetic resonance study. *Brain* 2019; 142(1):93-102.
190. Egelund J, Nyberg M, Mandrup CM, Abdulla J, Stallknecht B, Bangsbo J, Hellsten Y, **Larsson HBW**. Cardiac perfusion and function after high-intensity exercise training in late premenopausal and recent postmenopausal women: an MRI study. *J Appl Physiol* 2019;126(5):1272-1280.
191. Sitter B, Sjøbakk TE, **Larsson HBW**, Kvistad KA. Clinical MR spectroscopy of the brain. *Tidsskr Nor Laegeforen* 2019;139(6). Doi:10.4045/tidsskr.17.1099
192. Haddock B, **Larsson HBW**, Francis S, Andersen UB. Human renal response to furosemide: Simultaneous oxygenation and perfusion measurements in cortex and medulla. *Acta Physiol* 2019;227(1):e13292. doi 10.1111/apha.13292.
193. Christensen CE, Younis S, Lindberg U, Boer VO, de Koning P, Petersen ET, Paulson OB, **Larsson HBW**, Amin FM, Ashina M. Ultra-high field MR angiography in human migraine models: a 3.0T/7.0T comparison study. *J Headache Pain* 2019;20(1):48. doi: 10.1186/s10194-019-1014-z.
194. Khan S, Amin FM, Flidner FP, Christensen CE, Tolnai D, Younis S, Olinger ACR Birgens H, Daldrup-Link H, Kjær A, **Larsson HBW**, Lindberg U, Ashina M. Investigation macrophage-mediated inflammation in migraine using ultrasmall superparamagnetic iron oxide-enhanced 3 T magnetic resonance imaging. *Cephalalgia* 2019;39(11):1407-1420.
195. Gbyl K, Rostrup E, Raghava JM, Carlsen JF, Schmidt LS, Lindberg U, Ashraf A, Jørgensen MB, **Larsson HBW**, Rosenberg R, Videbech P. Cortical thickness following electroconvulsive therapy in patients with depression- a longitudinal MRI study. *Acta Psychiatr Scand* 2019;140(3):205-216.
196. Ghanizada H, Al-Karagholi MA, Arngrim N, Ghanazida M, **Larsson HBW**, Amin FM, Ashina M. Effect of pituitary adenylate cyclase-activating polypeptide-27 on cerebral hemodynamics in healthy volunteers: A 3T MRI study. *Peptides* 2019 Nov;121:170134. doi 10.1016/j.peptides.
197. Puig O, Henriksen OM, Vestergaard MB, Hansen FL, Ladefoged CN, Rostrup E, **Larsson HB**, Lindberg U, Law I. Comparison of simultaneous arterial spin labelling MRI and 15O-H₂O PET measurements of regional cerebral blood flow in rest and altered perfusion states. *J Cereb Blood Flow Metab* 2020;40(8):1621-1633.
198. Bojesen KB, Ebdrup BH, Jessen K, Sigvard A, Tangmose K, Edden RAE, **Larsson HBW**, Rostrup E, Broberg BV, Glenthøj BY. Treatment response after 6 and 26 weeks is related to baseline glutamate and GABA levels in antipsychotic-naïve patients with psychosis. *Psychol Med* 2020;50(13):2182-2193.
199. Al-Karagholi MA, Ghanizada H, Hansen JM, Skovgaard LT, Olesen J, **Larsson HBW**, Amin FM, Ashina M. Levocromakalim, an Adenosine Triphosphate-Sensitive Potassium Channel Opener, Dilates Extracerebral but not Cerebral Arteries. *Headache* 2019 Oct;59(9):1468-1480.
200. Ghanizada H, Al-karagholi MA, Arngrim N, Mørch-Rasmussen M, Metcalf-Clausen M, **Larsson HBW**, Amin FM, Ashina M. Investigation of sumatriptan and ketorolac trometamol in the human experimental model of headache. *J Headache Pain* 2020;21(1):19. doi: 10.1186/s10194-020-01089-3.
201. Younis S, Christensen CE, Vestergaard MB, Lindberg U, Tolnai D, Paulson OB, **Larsson HB**, Hougaard A, Ashina M. Glutamate levels and perfusion in pons during migraine attacks: A 3T MRI study using proton spectroscopy and arterial spin labelling. *J Cereb Flow Metab* 2021;41(3):604-616.
202. Baltzersen OB, Meltzer HY, Frokjaer VG, Raghava JM, Baandrup L, Fagerlund B, **Larsson HBW**, Fibiger C, Glenthøj BY, Knudsen GM, Ebdrup BH. Identification of a Serotonin 2A Receptor Subtype of Schizophrenia Spectrum Disorders with Pimavanserin: The Sub-sero Proof-of-Concept Trial Protokol. *Front Pharma-col* 2020;11:591.
203. Hvedstrup J, Amin FM, Hougaard A, Ashina H, Christensen CE, **Larsson HBW**, Ashina M, Schytz HW. Volume of the rectus capitis posterior minor muscle in migraine patients: a cross-sectional structural MRI study. *J Headache Pain* 2020;21(1):57.
204. Gbyl K, Rostrup E, Raghava JM, Andersen C, Rosenberg R, **Larsson HBW**, Videbech P. Volume of hippocampal subregions and clinical improvement following electroconvulsive therapy in patients with depression. *Prog Neuropsychopharmacol Biol Psychiatry* 2020;104:110048.
205. Al-Karagholi MA, Ghanizada H, Nielsen CAW, Ansari A, Gram C, Younis S, Vestergaard MB, **Larsson HB**, Skovgaard LT, Amin FM, Ashina M. Cerebrovascular effects of glibenclamide

- investigated using high-resolution magnetic resonance imaging in healthy volunteers. *J Cereb Blood Flow Metab* 2021;41(6):1328-1337.
206. Younis S, Hougaard A, Christensen CE, Vestergaard MB, Petersen ET, Boer VO, Paulson OB, Ashina M, Marsman A, **Larsson HBW**. Feasibility of Glutamate and GABA detection in pons and thalamus at 3 T and 7T by proton magnetic resonance spectroscopy. *Front Neurosci* 2020 Oct 23;14:559314.
 207. Madsen SS, Møller K, Olsen KS, Vestergaard MB, Lindberg U, **Larsson HBW**, Mårtensson J, Werner MU Santos SAG, Asghar MS. Neuroplasticity induced by general anaesthesia: study protocol for a randomised cross-over clinical trial exploring the effects of sevoflurane and propofol on brain – A 3-T magnetic resonance imaging study of healthy volunteers. *Trials* 2020 Sep 22;21(1):805.
 208. Haddock B, Hansen SK, Lindberg U, Nielsen JL, Frandsen U, Aagaard P, **Larsson HBW**, Suetta C. Physi-ological responses of human skeletal muscle to acute blood flow restricted exercise assessed by multimodal MRI. *J Appl Physiol* (1985). 2020 Oct1;29(4):748-759.
 209. Bojesen KB, Broberg BV, Fagerlund B, Jessen K, Thomas MB, Sigvard A, Tangmose K, Nielsen MØ, Andersen GS, **Larsson HBW**, Edden RAE Rostrup E, Glenthøj BY. Associations between cognitive function and levels of glutamatergic metabolites and gamma-aminobutyric acid in antipsychotic-naïve patients with schizophrenia or psychosis. *Biol Psychiatry* 2021 Feb 1; 89(3):278-287.
 210. Christensen CE, Younis S, Lindberg U, de Koning P, Toinai D, Paulson OB, **Larsson HBW**, Amin FM, Ashina M. Intradural artery dilation during experimentally induced migraine attacks. *Pain* 2021;162(1):176-183.
 211. Vestergaard MB, Calvo OP, Hansen AE, Rosenbaum S, **Larsson HBW**, Henriksen OM, Lawl. Validation of kinetic modelling of [¹⁵O]H₂O PET using an image derived input function on hybrid PET/MRI. *Neuroimage* 2021;233:117950. Doi:10.1016
 212. Haddock B, Hansen SK, Lindberg U, Nielsen JL, Frandsen U, Aagaard P, **Larsson HBW**, Suetta C. Exer-cise-induced fluid shifts are distinct to exercise mode and intensity: a comparison of blood flow-restricted and free-flow resistance exercise. *J Appl Physiol* 2021;130(6):1822-1835.
 213. Laursen JC, Søndergaard-Heinrich N, de Melo JML, Haddock B, Rasmussen LKB, Safavimanesh F, Hansen CS, Størling J, **Larsson HBW**, Groop PH, Frimodt-Møller M, Andersen UB, Rossing P. Acute effects of dapagliflozin on renal oxygenation and perfusion in type 1 diabetes with albuminuria: A randomised, double-blind, placebo-controlled crossover trial. *EClinicalMedicine* 2021;37:100895. Doi:10.1016
 214. Amin FM, De Icco R, Al-Karaghali MA, Raghava J, Wolfram F, **Larsson HBW**, Ashina M. Investigation of cortical thickness and volume during spontaneous attacks of migraine without aura: a 3-Tesla MRI study. *J Headache Pain* 2021;21(1):98. Doi:10.1186.
 215. Vestergaard MB, Ghanizada H, Lindberg U, Arngrim N, Paulson OB, Gjedde A, Ashina M, **Larsson HBW**. Human cerebral perfusion, oxygen consumption and lactate production in response to hypoxic exposure. *Cerebral Cortex*. *Cerebral Cortex* 2022;32(6):1295-1306.
 216. Younis S, Hougaard A, Christensen CE, Vestergaard MB, Paulson OB, **Larsson HBW**, Ashina M. Interictal pontine metabolism in migraine without aura patients: A 3 Tesla proton magnetic resonance spectroscopy study. *Neuroimage Clin* 2021;32:102824. Doi:10.1016.
 217. Vestergaard MB, Lindberg U, Knudsen MH, Urdanibia-Centelles O, Bakhtiari A, Mortensen EL, Osler M, Fagerlund B, Benedek K, Lauritzen M, **Larsson HBW**. Subclinical cognitive deficits are associated with reduced cerebrovascular response to visual stimulation in mid-sixties men. *Geroscience* 2022, doi 10.1007/s11357-022-00596-2.
 218. Knudsen MH, Lindberg U, Frederiksen JL, Vestergaard MB, Simonsen HJ, Varatharaj A, Galea I, Blinkenberg M, Sellebjerg F, **Larsson HBW**, Cramer SP. Blood-brain barrier permeability changes in the first year after alemtuzumab treatment predict 2-year outcomes in relapsing-remitting multiple sclerosis. *Mult Scler Disord* 2022. Epub ahead of print.
 219. Vestergaard MB, Frederiksen JL, **Larsson HBW**, Cramer SP. Cerebrovascular reactivity and neurovascular coupling in multiple sclerosis – A systematic review. *Front Neurol* 2022. Doi:103389/fneur.2022.912828.
 220. Stuart CM, Varatharaj A, Winberg ME, Galea P, **Larsson HBW**, Cramer SP, Fasano A, Maherally Z, Pilkington GJ, Keita AV, Galea I. Zonolin and blood-brain barrier permeability are dissociated in humans. *Clin Transl Med* 2022. Doi: 10.1002/ctm2.965.
 221. Henriksen OM, Hansen AE, Muhic A, Marner L, Madsen K, Møller S, Hasselbalch B, Lundemann MJ, Scheie D, Skjøth-Rasmussen J, Poulsen HS, Larsen VA, **Larsson HBW**, Law I. Diagnostic yield of simultaneous dynamic contrast-enhanced magnetic resonance perfusion measurements and [¹⁸F]FET PET in patients with suspected recurrent anaplastic astrocytoma and glioblastoma. *Eur J Med Mol Imaging* 2022. Doi: 10.1007/s00259-022-05917.

222. Cramer SP, **Larsson HBW**, Knudsen MH, Simonsen HJ, Vestergaard MB, Lindberg U. Reproducibility and optimal arterial input function selection in dynamic contrast-enhanced perfusion MRI in the healthy brain. *J Magn Reson Imaging* 2022. Doi: 10.1002/jmri.28380.
223. Vestergaard MD, Iversen HK, Simonsen SA, Lindberg U, Cramer SP, Andersen UB, **Larsson HBW**. Capillary transit time heterogeneity inhibits cerebral oxygen metabolism in patients with reduced cerebrovascular reserve capacity from steno-occlusive disease. *J Cereb Flow Metab* 2022. In press.

Other Publications

Manuscript, Notes, Book chapters not in registered in Index Medicus

Larsson HB, Henriksen O. The possibility of estimating the blood brain barrier permeability by use of magnetic resonance and Gadolinium in patients with multiple sclerosis. P 186-192. In contrast agents for MRI tissue characterization: basic principles and research methodology; Proceedings of Rennes EEC Workshop (European Concerted Project Comac-BME 11.2.2)Eds. J.D. de Certaines, F. Podo. Luxembourg: Office for Official Publications of the European Communities, ISBN 92-825-8448-8, Catalogue number: CO-NA-10986-EN-C ECSC-EEC-EAEC, Brussels, Luxembourg, 1988.

Frederiksen J, **Larsson HB**, Zrenner E. Coloured pattern-shift visual evoked potentials (VEP) in patients with multiple sclerosis (MS). IN: Excerpta Medica International Congress series, Elsevier 1988. *Ophthalmology Today*;697-8.

Frederiksen J, **Larsson HB**. Applications of psychophysical visual tests and visual evoked potentials in 65 patients with multiple sclerosis. I: Seeing Colour and Contour, Kulikkowski JJ, Dickinson CM, Murray IJ (eds.). I. Pergamon Press 1988, p. 566-568.

Waldemar G, **Larsson HB**, Lassen NA, Paulson OB. Tomographic measurements of regional cerebral blood flow by SPECT in vascular dementia. In *Cerebral Ischemia and Dementia*. Ed. by A. Hartmann, W. Kuschinsky, and S. Hoyer. Springer-Verlag Berlin Heidelberg 1991.

Frederiksen JL, **Larsson HB**, Zrenner E. Spectral sensitivity of visual evoked potentials elicited by shifting monochromatic checkerboard patterns. I: Normal observers. *Clin. Vision. Sci.* 1993; Vol.8:No.4:365-374.

Frederiksen JL, **Larsson HB**, Paulus W, Zrenner E. Spectral sensitivity of visual evoked potentials elicited by shifting monochromatic checkerboard patterns. II: Patients with multiple sclerosis. *Clin. Vision. Sci.* 1993; Vol.8:No.4:375-383.

Henriksen O, Christiansen P, **Larsson HBW**, Stubgaard M. 'Quantitative proton MR spectroscopy of the human brain' in *Magnetic Resonance Scanning and Epilepsy*, Edited by S.D. Shorvon et al. Plenum Press, New York, 1994.

Frederiksen JL, **Larsson HB**, Christiansen P, Sellebjerg FT, Olesen J. Blood-brain barrier impairment in acute optic neuritis evaluated by Gadolinium-DTPA enhanced MRI and CSF studies. *European Journal of Neurology*, 1996;3, 560-566.

Frederiksen JL, **Larsson HB**, Christiansen P, Olesen J. Assessment of MRI criteria for abnormal brain MRI in acute monosymptomatic optic neuritis. Comparison to findings in healthy persons. *European Journal of Neurology*, 1997; 4, 561-566.

Henriksen JH, Fuglsang S, **Larsson HB**. 'Basal kinetik: Kinetiske principper i den intakte organisme og de enkelte organer'. Book in tracer kinetic theory, 150 pages. 2006.