

Publications

1. A. Zampeli, B. Hansson, K. M. Bloch, E. Englund, K. Källén, M. C. Strandberg, I. M. Björkman-Burtscher, *Structural Association between Heterotopia and Cortical Lesions Visualised with 7 T MRI in Patients with Focal Epilepsy*, *Seizure*:**101**, p.177 (2022)
2. F. Ventorp, J. Lindahl, D. Van Westen, J. Jensen, J. Björkstrand, D. Lindqvist, *Preliminary Evidence of Efficacy and Target Engagement of Pramipexole in Anhedonic Depression*, *Psychiatric Research & Clinical Practice*:**4**, p.42 (2022)
3. J. Töger, M. Andersen, O. Haglund, T. M. Kylkilahti, I. Lundgaard, K. Markenroth Bloch, *Real-Time Imaging of Respiratory Effects on Cerebrospinal Fluid Flow In small Diameter Passageways*, *Magnetic Resonance in Medicine*:**88**, p.770 (2022)
4. A. Seidemo, R. Wirestam, G. Helms, K. Markenroth Bloch, X. Xu, J. Bengzon, P. C. Sundgren, P. C. M. Van Zijl, L. Knutsson, *Tissue Response Curve Shape Analysis of Dynamic Glucose Enhanced (DGE) and Dynamic Contrast Enhanced (DCE) MRI in Patients with Brain Tumor*, *NMR in Biomedicine*:<https://doi.org/10.1002/nbm.4863>, p.e4863 (2022)
5. H. Olsson, M. Andersen, M. Kadhim, G. Helms, *MP3RAGE: Simultaneous Mapping of T1 and in Human Brain at 7T*, *Magnetic Resonance in Medicine*:**87**, p.2637 (2022)
6. A. Lundberg, E. Lind, H. Olsson, G. Helms, L. Knutsson, R. Wirestam, *Comparison of MRI Methods for Measuring Whole-Brain Oxygen Extraction Fraction under Different Geometric Conditions at 7T*, *Journal of Neuroimaging*:**32**, p.442 (2022)
7. E. N. Kornaropoulos, S. Winzeck, T. Rumetshofer, A. Wikstrom, L. Knutsson, M. M. Correia, P. C. Sundgren, M. Nilsson, *Sensitivity of Diffusion MRI to White Matter Pathology: Influence of Diffusion Protocol, Magnetic Field Strength, and Processing Pipeline in Systemic Lupus Erythematosus*, *Frontiers in neurology*:**13**, p.837385 (2022)
8. B. Hansson, M. Simic, J. Olsrud, K. Markenroth Bloch, T. Owman, P. C. Sundgren, I. M. Björkman-Burtscher, *MR- Safety: Evaluation of Compliance with Screening Routines Using a Structured Screening Interview*, *Journal of Patient Safety and Risk Management*:**27**, p.76 (2022)
9. S. Götestrand, A. Björkman, I. M. Björkman-Burtscher, I. Kristiansson, E. Aksyuk, P. Szaro, K. Markenroth Bloch, M. Geijer, *Visualization of Wrist Anatomy—a Comparison between 7T and 3T MRI*, *European Radiology*:**32**, p.1362 (2022)
10. A. Glans, J. Wilén, L. Lindgren, I. M. Björkman-Burtscher, B. Hansson, *Health Effects Related to Exposure of Static Magnetic Fields and Acoustic Noise—Comparison between MR and CT Radiographers*, *European Radiology*:**32**, p.7896 (2022)
11. A. Gard, A. Al-Husseini, E. N. Kornaropoulos, A. De Maio, Y. Tegner, I. Björkman-Burtscher, K. Markenroth Bloch, M. Nilsson, M. Magnusson, N. Marklund, *Post-Concussive Vestibular Dysfunction Is Related to Injury to the Inferior Vestibular Nerve*, *Journal of Neurotrauma*:**39**, p.1 (2022)
12. V. Wiggermann, A. L. Mackay, A. Rauscher, G. Helms, *In Vivo Investigation of the Multi-Exponential T2 Decay in Human White Matter at 7 T: Implications for Myelin Water Imaging at UHF*, *NMR in Biomedicine*:**34**, p.e4429 (2021)
13. S. Waiczies, A. Els, J. Kuchling, K. Markenroth Bloch, A. Pankowska, H. Waiczies, C. Herrmann, C. Chien, C. Finke, F. Paul, T. Niendorf, *Magnetic Resonance Imaging of Multiple Sclerosis at 7.0 Tesla*, *Journal of Visual Experiments*:**168**, p.e62142 (2021)
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- Stufflebeam, T. J. Veersema, A. Vignaud, N. Voets, S. Vulliemoz, C. J. Wiggins, R. Xue, R. Guerrini, M. Guye, *7T Epilepsy Task Force Consensus Recommendations on the Use of 7T MRI in Clinical Practice*, *Neurology*:**96**, p.327 (2021)
15. H. Olsson, M. Novén, J. Lätt, R. Wirestam, G. Helms, *Radiofrequency Bias Correction of Magnetization Prepared Rapid Gradient Echo MRI at 7.0 Tesla Using an External Reference in a Sequential Protocol*, *Tomography*:**7**, p.434 (2021)
 16. H. Olsson, M. Andersen, R. Wirestam, G. Helms, *Mapping Magnetization Transfer Saturation (MTsat) in Human Brain at 7T: Protocol Optimization under Specific Absorption Rate Constraints*, *Magnetic Resonance in Medicine*:**86**, p.2562 (2021)
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 18. M. Novén, H. Olsson, G. Helms, M. Horne, M. Nilsson, M. Roll, *Cortical and White Matter Correlates of Language-Learning Aptitudes*, *Human Brain Mapping*:**42**, p.5037 (2021)
 19. T. M. Kykilahti, E. Berends, M. Ramos, N. C. Shanbhag, J. Töger, K. Markenroth Bloch, I. Lundgaard, *Achieving Brain Clearance and Preventing Neurodegenerative Diseases-a Glymphatic Perspective*, *Journal of Cerebral Blood Flow and Metabolism*:**41**, p.2137 (2021)
 20. B. Hansson, M. Simic, J. Olsrud, K. Markenroth Bloch, T. Owman, P. C. Sundgren, I. M. Björkman-Burtscher, *MR-Safety in Clinical Practice at 7T: Evaluation of a Multistep Screening Process in 1819 Subjects*, *Radiography*:**28**, p.454 (2021)
 21. J. Töger, M. J. Zahr, N. Aristokleous, K. Markenroth Bloch, M. Carlsson, P.-O. Persson, *Blood Flow Imaging by Optimal Matching of Computational Fluid Dynamics to 4D-Flow Data*, *Magnetic Resonance in Medicine*:**84**, p.2231 (2020)
 22. H. Olsson, M. Andersen, J. Lätt, R. Wirestam, G. Helms, *Reducing Bias in Dual Flip Angle T1-Mapping in Human Brain at 7T*, *Magnetic Resonance in Medicine*:**84**, p.1347 (2020)
 23. H. Olsson, M. Andersen, G. Helms, *Reducing Bias in DREAM Flip Angle Mapping in Human Brain at 7T by Multiple Preparation Flip Angles*, *Magnetic Resonance Imaging*:**72**, p.71 (2020)
 24. K. Markenroth Bloch, F. Kording, J. Töger, *Doppler Ultrasound Cardiac Gating of Intracranial Flow at 7T*, *BMC Medical Imaging*:**20**, p.128 (2020)
 25. B. Lampinen, A. Zampeli, I. M. Björkman-Burtscher, F. Szczepankiewicz, K. Kallen, M. Compagno Strandberg, M. Nilsson, *Tensor-Valued Diffusion MRI Differentiates Cortex and White Matter in Malformations of Cortical Development Associated with Epilepsy*, *Epilepsia*:**61**, p.1701 (2020)
 26. B. Hansson, K. Markenroth Bloch, T. Owman, M. Nilsson, J. Lätt, J. Olsrud, I. M. Björkman-Burtscher, *Subjectively Reported Effects Experienced in an Actively Shielded 7T MRI: A Large-Scale Study*, *Journal of magnetic resonance imaging*:**52**, p.1265 (2020)
 27. L. M. Gottwald, J. Töger, K. Markenroth Bloch, E. S. Peper, B. F. Coolen, G. J. Strijkers, P. Van Ooij, A. J. Nederveen, *High Spatiotemporal Resolution 4D Flow MRI of Intracranial Aneurysms at 7T in 10 Minutes*, *American Journal of Neuroradiology*:**41**, p.1201 (2020)
 28. E. Einarsson, P. Peterson, P. Onnerfjord, M. Gottschalk, X. Xu, L. Knutsson, L. E. Dahlberg, A. Struglics, J. Svensson, *The Role of Cartilage Glycosaminoglycan Structure in gagCEST*, *NMR in Biomedicine*:**33**, (2020)
 29. V. O. Boer, M. Andersen, A. Lind, N. G. Lee, A. Marsman, E. T. Petersen, *MR Spectroscopy Using Static Higher Order Shimming with Dynamic Linear Terms (HOS-DLT) for Improved Water Suppression, Interleaved MRS-fMRI, and Navigator-Based Motion Correction at 7T*, *Magnetic Resonance in Medicine*:**84**, p.1101 (2020)
 30. M. Truong, K. M. Bloch, M. Andersen, G. Andsberg, J. Töger, J. Wassélius, *Subacute Vessel Wall Imaging at 7-T MRI in Post-Thrombectomy Stroke Patients*, *Neuroradiology*:**61**, p.1145 (2019)

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33. M. Novén, A. Schremm, M. Nilsson, M. Horne, M. Roll, *Cortical Thickness of Broca's Area and Right Homologue Is Related to Grammar Learning Aptitude and Pitch Discrimination Proficiency*, Brain and Language:**188**, p.42 (2019)
34. B. Hansson, P. Höglund, K. Markenroth Bloch, M. Nilsson, J. Olsrud, J. Wilén, I. M. Björkman-Burtscher, *Short-Term Effects Experienced During Examinations in an Actively Shielded 7T MR*, Bioelectromagnetics:**40**, p.234 (2019)
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Book Chapters

41. T. Rumetshofer, E. Papadaki, A. Jönsen, P. C. Sundgren, *Lupus*, Ch. 17 in *Imaging Neuroinflammation* (2023), eds. C. Laule and J. D. Port **Academic Press**
42. K. Markenroth Bloch, B. A. Poser, *Benefits, Challenges and Applications of Ultra-High Field Magnetic Resonance*, Ch. 35 in *Advanced Neuro MR Techniques and Applications* (2021), eds. I.-Y. Choi and P. Jezzard **Elsevier**
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45. I. Björkman-Burtscher, K. Markenroth Bloch, P. M. Sundgren, *Detailed Anatomy at 7T: Cerebrum*, Ch. 4 in *Neuroimaging: Anatomy Meets Function* (2017), eds. N. Agarwal and J. D. Port **Springer International Publishing AG**

Non-peer reviewed

46. J. Mauritsson, K. Markenroth Bloch, M. Novén, M. Petersson, *Magneter, MR-Kameror Och Meditation - Ett Kul Sätt Att Popularisera Och Nå Ut Med Fysik*, (2023)
47. A. Nilsson, *Så Funkar fMRI – Kameran Som Ser in I Hjärnan*, *Modern Psykologi*:9-10, p.23 (2022)
48. B. Martinsson, *Skärpa Och Djup Som Tar Forskningen Framåt*, *Vetenskap&Hälsa*:(2020)
49. K. Markenroth Bloch, I. Björkman-Burtscher, F. Ståhlberg, *Den Nationella 7T Anläggningen – En Uppdatering*, *Imago Medica*:p.11 (2018)
50. K. Markenroth Bloch, *Magnetresonans (MR) – En Flexibel Metod Att Avbilda Kroppens Organ*, (2017)

PhD Theses

51. A. Seidemo, *Dynamic Glucose Enhanced Chemical Exchange Saturation Transfer MRI : Optimization of Methodology and Characterization of Cerebral Transport Kinetics*, (2023), **PhD**, Medical Radiation Physics, Lund University Lund
52. M. Truong, *Advanced Vascular Imaging. From Wall to Plaque*, (2021), **PhD**, Diagnostic Radiology, the faculty of Medicine, Lund University
53. H. Olsson, *Gradient Echo-Based Quantitative MRI of Human Brain at 7T: Mapping of T1, MT Saturation and Local Flip Angle*, (2021), **PhD**, Medical Radiation physics, Lund University
54. M. Novén, *Brain Anatomical Correlates of Perceptual Phonological Proficiency and Language Learning Aptitude*, (2021), **PhD**, Centre for Languages and Literature, The Faculties of Humanities and Theology, Lund University
55. B. Lampinen, *Probing Brain Microstructure with Multidimensional Diffusion MRI: Encoding, Interpretation, and the Role of Exchange*, (2021), **PhD**, Medical Radiation physics, Lund University
56. B. Hansson, *Safety and Health Effects in High and Ultra-High Field MR*, (2020), **PhD**, Faculty of medicine, Department of clinical sciences, Lund University