

Peer reviewed publications (data and/or co-authors at the national 7T facility)

1. Novén, M., Schremm, A., Horne, M., Roll, M., Cortical thickness and surface area of left anterior temporal areas affects processing of phonological cues to morphosyntax, *Brain Research* **2021**,1750:147150
2. Wiggermann, V., Mackay, A. L., Rauscher, A., Helms, G., In vivo investigation of the multi-exponential T2 decay in human white matter at 7 T: Implications for myelin water imaging at UHF, **2021**,34:e4429
3. Kylkilahti, T. M., Berends, E., Ramos, M., Shanbhag, N. C., Töger, J., Bloch, K. M., Lundgaard, I., Achieving brain clearance and preventing neurodegenerative diseases—a glymphatic perspective, *J Cerebr Blood F Met* **2021**,early view:0271678X20982388
4. Töger, J., Zahr, M. J., Aristokleous, N., Markenroth Bloch, K., Carlsson, M., Persson, P.-O., Blood flow imaging by optimal matching of computational fluid dynamics to 4D-flow data, *MRM* **2020**,84:2231
5. Opheim, G., Van Der Kolk, A., Bloch, K. M., Colon, A. J., Davis, K. A., *et al.*, 7T epilepsy task force consensus recommendations on the use of 7T in clinical practice, **2020**,doi doi.org/10.1212/WNL.0000000000011413
6. Olsson, H., Andersen, M., Lätt, J., Wirestam, R., Helms, G., Reducing bias in dual flip angle T1-mapping in human brain at 7T, *MRM* **2020**,84:1347
7. Olsson, H., Andersen, M., Helms, G., Reducing bias in DREAM flip angle mapping in human brain at 7T by multiple preparation flip angles, *Magnetic Resonance Imaging* **2020**,72:71
8. Markenroth Bloch, K., Kording, F., Töger, J., Doppler ultrasound cardiac gating of intracranial flow at 7T, *BMC Med Imaging* **2020**,20:128
9. Lampinen, B., Zampeli, A., Bjorkman-Burtscher, I. M., Szczepankiewicz, F., Kallen, K., Compagno Strandberg, M., Nilsson, M., Tensor-valued diffusion MRI differentiates cortex and white matter in malformations of cortical development associated with epilepsy, *Epilepsia* **2020**,61:1701
10. Hansson, B., Markenroth Bloch, K., Owman, T., Nilsson, M., Lätt, J., Olsrud, J., Björkman-Burtscher, I. M., Subjectively reported effects experienced in an actively shielded 7T MRI: A large-scale study, *Journal of Magnetic Resonance Imaging* **2020**,52:1265
11. Gottwald, L. M., Töger, J., Markenroth Bloch, K., Peper, E. S., Coolen, B. F., *et al.*, High spatiotemporal resolution 4D flow MRI of intracranial aneurysms at 7T in 10 minutes, *American Journal of Neuroradiology* **2020**,41:1201
12. Einarsson, E., Peterson, P., Önerfjord, P., Gottschalk, M., Xu, X., *et al.*, The role of cartilage glycosaminoglycan structure in gagCEST, *NMR in Biomedicine* **2020**,33:e4259
13. Truong, M., Bloch, K. M., Andersen, M., Andsberg, G., Töger, J., Wassélius, J., Subacute vessel wall imaging at 7-T MRI in post-thrombectomy stroke patients, *Neuroradiology* **2019**,61:1145
14. Szczepankiewicz, F., Sjolund, J., Stahlberg, F., Latt, J., Nilsson, M., Tensor-valued diffusion encoding for diffusional variance decomposition (DIVIDE): Technical feasibility in clinical MRI systems, *Plos One* **2019**,14:
15. Peterson, P., Olsson, E., Svensson, J., T2 relaxation time bias in gagCEST at 3T and 7T: Comparison of saturation schemes, *MRM* **2019**,81:1044

16. Novén, M., Schremm, A., Nilsson, M., Horne, M., Roll, M., Cortical thickness of broca's area and right homologue is related to grammar learning aptitude and pitch discrimination proficiency, *Brain Lang* **2019**,188:42
17. Hansson, B., Höglund, P., Markenroth Bloch, K., Nilsson, M., Olsrud, J., Wilén, J., Björkman-Burtscher, I. M., Short-term effects experienced during examinations in an actively shielded 7T MR, *Bioelectromagnetics* **2019**,40:234
18. Brinkhof, S., Ali Haghnejad, A., Ito, K., Markenroth Bloch, K., Klomp, D. W. J., Uncompromised MRI of knee cartilage while incorporating sensitive sodium MRI, *NMR in Biomedicine* **2019**,32:e4173
19. Peterson, P., Tiderius, C. J., Olsson, E., Lundin, B., Olsson, L. E., Svensson, J., Knee dGEMRIC at 7 T: Comparison against 1.5 T and evaluation of T1-mapping methods, *BMC Musc Dis* **2018**,19:149
20. Markenroth Bloch, K., Töger, J., Ståhlberg, F., Investigation of cerebrospinal fluid flow in the cerebral aqueduct using high-resolution phase contrast measurements at 7T MRI, *Acta Rad* **2018**,59:988
21. Knutsson, L., Seidemo, A., Anna, R., Markenroth Bloch, K., R., K., *et al.*, Arterial input functions and tissue response curves in dynamic glucose- enhanced (DGE) imaging: Comparison between glucocest and blood glucose sampling in humans, *Tomogr* **2018**,4:164
22. Lampinen, B., Szczepankiewicz, F., Mårtensson, J., Van Westen, D., Sundgren, P. C., Nilsson, M., Neurite density imaging versus imaging of microscopic anisotropy in diffusion MRI: A model comparison using spherical tensor encoding, *NeuroIm* **2017**,147:517
23. Knutsson, L., Xu, X., Ståhlberg, F., Barker, P., Lind, E., *et al.*, Dynamic susceptibility contrast MRI at 7T: Tail scaling; analysis and inferences about field strength dependence, *Tomogr* **2017**,3:74

Book Chapters

24. Björkman-Burtscher, I., Markenroth Bloch, K., Sundgren, P. M., *Detailed anatomy at 7T: Cerebellum*, Ch. 10 Neuroimaging: Anatomy meets function, **2017**, N. Agarwal and J. D. Port, Springer International Publishing AG,
25. Björkman-Burtscher, I., Markenroth Bloch, K., Sundgren, P. M., *Detailed anatomy at 7T: Cerebrum*, Ch. 4 Neuroimaging: Anatomy meets function, **2017**, N. Agarwal and J. D. Port, Springer International Publishing AG,

Popular science/outreach

26. Martinsson, B., Skärpa och djup som tar forskningen framåt, *Vetenskap&Hälsa* **2020**,doi
27. Markenroth Bloch, K., Björkman-Burtscher, I., Ståhlberg, F., Den nationella 7T anläggningen – en uppdatering, *Imago Medica* **2018**,doi 11
28. Markenroth Bloch, K., Magnetresonans (MR) – en flexibel metod att avbilda kroppens organ, *Fysikaktuellt* **2017**, No.2, p. 22

Thesis

29. Hansson, B., *Safety and health effects in high and ultra-high field MR*, **2020**, PhD, Faculty of medicine, Department of clinical sciences, Lund University,

