

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

1. 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
2. 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 Res* **2021**,1750:147150
3. Kylkilahti, T. M., Berends, E., Ramos, M., Shanbhag, N. C., Töger, J., Markenroth Bloch, K., 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.00000000000011413
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, *Magn Reson 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, *J Magn Reson 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, *Am J Neuroradiol* **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. Boer, V. O., Andersen, M., Lind, A., Lee, N. G., Marsman, A., Petersen, E. T., 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, *MRM* **2020**,84:1101
14. 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

15. 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:
16. Peterson, P., Olsson, E., Svensson, J., T2 relaxation time bias in gagCEST at 3T and 7T: Comparison of saturation schemes, *MRM* **2019**,81:1044
17. 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
18. 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
19. 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
20. 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
21. 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
22. 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
23. 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
24. 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

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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,
26. 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,

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

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28. Martinsson, B., Skärpa och djup som tar forskningen framåt, *Vetenskap&Hälsa* **2020**,doi

29. Markenroth Bloch, K., Björkman-Burtscher, I., Ståhlberg, F., Den nationella 7T anläggningen – en uppdatering, *Imago Medica* **2018**,doi 11

30. Markenroth Bloch, K., Magnetresonans (MR) – en flexibel metod att avbilda kroppens organ, *Fysikaktuellt* **2017**, No.2, p. 22