

Qualifications

Doctor of Science, Data Driven Reconstruction Methods for Dynamic Undersampled MRI, Imperial College London
Award Date: 1 Jan 2008

Master of Research, Imperial College London
Award Date: 1 Jan 2004

Master in Science, University of Cambridge
Award Date: 1 Jan 2003

Research output

In-vivo T2 measurements of the Fetal Brain Using Single-Shot Fast Spin Echo Sequences

Bhattacharya, S., Price, A., Uus, A., Sousa, H., Marenzana, M., Colford, K., Murkin, P., Lee, M., Grande, L. C., A. G. Teixeira, R. P., Malik, S. & Deprez, M., 16 Apr 2024, In: *Magnetic resonance in medicine*.

Widespread, depth-dependent cortical microstructure alterations in pediatric focal epilepsy

Casella, C., Vecchiato, K., Cromb, D., Guo, Y., Winkler, A. M., Hughes, E., Dillon, L., Green, E., Colford, K., Egloff, A., Siddiqui, A., Price, A., Grande, L. C., Wood, T. C., Malik, S., Teixeira, R. P. A. G., Carmichael, D. W. & O'Muircheartaigh, J., 13 Dec 2023, (E-pub ahead of print) In: *Epilepsia*.

Quantitative T2 Relaxometry in Fetal Brain: Validation Using Modified FaBiaN Fetal Brain MRI Simulator

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Reliability and Feasibility of Low-Field-Strength Fetal MRI at 0.55 T during Pregnancy

Aviles Verdera, J., Story, L., Hall, M., Finck, T., Egloff, A., Seed, P. T., Malik, S. J., Rutherford, M. A., Hajnal, J. V., Tomi-Tricot, R. & Hutter, J., 1 Oct 2023, In: *Radiology*. 309, 1, e223050.

In vivo T₁ mapping of neonatal brain tissue at 64 mT

Padormo, F., Cawley, P., Dillon, L., Hughes, E., Almalbis, J., Robinson, J., Maggioni, A., Botella, M. D. L. F., Cromb, D., Price, A., Arlinghaus, L., Pitts, J., Luo, T., Zhang, D., Deoni, S. C. L., Williams, S., Malik, S., O'Muircheartaigh, J., Counsell, S. J., Rutherford, M., & 3 others Arichi, T., Edwards, A. D. & Hajnal, J. V., Mar 2023, In: *Magnetic Resonance in Medicine*. 89, 3, p. 1016-1025 10 p.

Reliability and safety of anaesthetic equipment around an high-field 7-Tesla MRI scanner

Bridgen, P., Malik, S., Wilkinson, T., Cronin, J., Bhagat, T., Hart, N., Mc Corkell, S., Perkins, J., Tibby, S., Hanna, S., Kirwan, R., Pauly, T., Weeks, A., Charles-Edwards, G., Padormo, F., Stell, D., El-Boghdadly, K., Ourselin, S., Giles, S., Edwards, D., & 2 others Hajnal, J. & Blaise, B. J., 19 Feb 2023, (Accepted/In press) In: *British Journal of Anaesthesia*.

Simultaneous Optimization of MP2RAGE T1-weighted (UNI) and FLuid And White matter Suppression (FLAWS) brain images at 7T using Extended Phase Graph (EPG) Simulations

Dokumaci, A. S., Aitken, F. R., Sedlacik, J., Bridgen, P., Tomi-Tricot, R., Mooiweer, R., Vecchiato, K., Wilkinson, T., Casella, C., Giles, S., Hajnal, J. V., Malik, S., O'Muircheartaigh, J. & Carmichael, D. W., 9 Nov 2022, (E-pub ahead of print) In: *Magnetic resonance in medicine : official journal of the Society of Magnetic Resonance in Medicine / Society of Magnetic Resonance in Medicine*.

In-Vivo T1 Mapping of Neonatal Brain Tissue at 64mT

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Towards an integrated neonatal brain and cardiac examination capability at 7 T: electromagnetic field simulations and early phantom experiments using an 8-channel dipole array

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Universal pulses for homogeneous excitation using single channel coils

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Evaluation of specific absorption rate and heating in children exposed to a 7T MRI head coil

Malik, S., Hand, J., Carmichael, D. & Hajnal, J., Sept 2022, In: Magnetic resonance in medicine. 88, 3, p. 1434-1449 16 p.

Data-driven motion-corrected brain MRI incorporating pose-dependent B0 fields

Brackenier, Y., Cordero-Grande, L., Tomi-Tricot, R., Wilkinson, T., Bridgen, P., Price, A., Malik, S. J., De Vita, E. & Hajnal, J. V., Aug 2022, In: Magnetic Resonance in Medicine. 88, 2, p. 817-831 15 p.

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Data-driven motion-corrected brain MRI incorporating pose-dependent B0 fields

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An MR fingerprinting approach for quantitative inhomogeneous magnetization transfer imaging

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An 8 channel parallel transmit system with current sensor feedback for MRI-guided interventional applications

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Safe guidewire visualization using the modes of a PTx transmit array MR system

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Time optimal control-based RF pulse design under gradient imperfections

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Fast quantitative MRI using Controlled Saturation Magnetization Transfer

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The effect of fetal dielectric properties, position and blood-flow in maternal tissues on fetal temperature for fetal MRI at 3T

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EPSRC Engineering and Physical Sciences Research Council: £565,987.00

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