

Provisional Timetable: A Training Course in MRI and MRS (2023)

	Session title	Room	Lecturer
Day One			
9.30	Welcome and Introduction	VMR1/VMR2	S Doran
9.40	Lecture 1. Basis of NMR	VMR1/VMR2	G Barker
10.25	Lecture 2. Relaxation parameters and spin echoes	VMR1/VMR2	J Winfield
11.10	Coffee	Atrium	
11.45	Lecture 3 Magnetic field gradients, slice selection, frequency encoding	VMR1/VMR2	O White
12.30	Lecture 4. Basic Imaging Sequences: Spin-echo, gradient echo	VMR1/VMR2	M Blackledge
13.00	Lunch	Atrium	
14.00	Lecture 5. 2-D FT Imaging, k-space	VMR1/VMR2	G Barker
14.45	Lecture 6. Hardware: RF requirements and RF coils	VMR1/VMR2	G Charles-Edwards
15.30	Tea	Atrium	
16.00	Tutorial 1 in small groups	VMR1/VMR2	J Winfield / G Charles-Edwards
16.45	Lecture 7. Safety Considerations	VMR1/VMR2	G Charles-Edwards
17.30	Demonstration on Siemens Aera scanner Group 1	MRI Unit	M Rata/ E Kousi
Day Two			
9.30	Lecture 8. Hardware - Magnets, Gradients and Eddy Currents	VMR1/VMR2	M Rata
10.15	Lecture 9. Image contrast, resolution and signal-to-noise	VMR1/VMR2	S Keaveney
11.00	Coffee	Atrium	
11.30	Lecture 10. MRI in Practice	VMR1/VMR2	E Kousi
12.15	Lecture 11. MRI in Radiotherapy Planning	VMR1/VMR2	A Wetscherek
13.00	Lunch	Atrium/RMH canteen	
14.00	Lecture 12. K-space trajectories	VMR1/VMR2	S Doran
14.45	Lecture 13. Quantitative Imaging	VMR1/VMR2	M Orton
15.30	Tea	Atrium	
16.00	Tutorial 2 in small groups	VMR1/VMR2	S Doran / O White
16.45	Lecture 14. Acceleration of MR sequences	VMR1/VMR2	S Doran
Day Three			
9.30	Lecture 15. Diffusion MRI	VMR1/VMR2	M Blackledge
10.15	Lecture 16. Introduction to <i>in vivo</i> MR Spectroscopy	VMR1/VMR2	G Payne
11.00	Coffee	Atrium	
11.30	Lecture 17. MR Spectroscopy Acquisition and Analysis	VMR1/VMR2	G Payne
12.15	Lecture 18. MRI for Clinical Drug Development	VMR1/VMR2	P Murphy
13.00	Lunch	Atrium/RMH canteen	

14.00	Tutorial 3 in small groups	VMR1/VMR2	G Payne / S Doran
14.45	Lecture 19. Flow and MR Angiography	VMR1/VMR2	M Graves
15.30	Tea	Atrium	
15.55	Lecture 20. Functional Imaging Methods	VMR1/VMR2	M Graves
16.55	Lecture 21. Clinical Examples of MRI	VMR1/VMR2	K de Paepe
17.25	Closing Remarks	VMR1/VMR2	S Doran