



ISMIRM

ONE  
COMMUNITY  
FOR CLINICIANS  
AND SCIENTISTS

# ISMIRM ANZ *in* MELBOURNE

7th Annual Chapter Meeting  
Program

NOVEMBER 19–20<sup>TH</sup> 2025

*Kenneth Myer Building*  
University of Melbourne (Parkville)  
Melbourne, Australia

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## DAY 1

WEDNESDAY 19<sup>TH</sup> NOVEMBER

09:30 – 10:00	Registration desk open	Kenneth Myer Building Foyer
<b>10:00 – 11:15</b>	<b>Keynote Lecture</b>	<b>Ian Potter Auditorium</b>
10:00 – 10:15	Welcome and introduction of Keynote	Zhaolin Chen
10:15 – 11:15	Methods and applications of simultaneous MR-PET to study human brain function and metabolism	Gary Egan
<b>11:15 – 11:45</b>	<b>Morning tea break</b>	<b>Kenneth Myer Building Foyer</b>
11:45 – 12:15	United Imaging United Imaging Healthcare - Yes. You Really Should Get To Know Us.	David Di Domenico
<b>12:15 – 13:03</b>	<b>Oral Session 1: Advances in MRI analysis</b> Chair: Warda Syeda	<b>Ian Potter Auditorium</b>
12:15 – 12:27	Guided and Privacy-Preserving DICOM Validation for Multi-Site Studies and Domain-Specific Guidelines	Ashley Stewart
12:27 – 12:39	Development of a Deep Learning Framework for Iron and Myelin Mapping from Quantitative Susceptibility Maps	Paula Stoll
12:39 – 12:51	Improving Multi-Echo fMRI Denoising Through Robust-tedana: A Scalable Pipeline for Automated Analysis	Bahman Tahayori
12:51 – 13:03	MU-Diff: a mutual learning diffusion model for synthetic MRI with Application for brain lesions	Sanuwani Dayarathna
<b>13:03 – 14:00</b>	<b>Lunch break</b>	<b>Kenneth Myer Building Foyer</b>
14:00 – 14:30	Siemens Healthineers Open MAGNETOM Community.	Daniel Staeb
<b>14:30 – 15:31</b>	<b>Oral session 2: Clinical applications of advanced MRI</b> Chair: Victoria Mercy Kataike	<b>Ian Potter Auditorium</b>
14:30 – 14:42	Imaging the Urban Brain: A City-Scale Integration of GIS and Longitudinal MRI to Map Street Connectivity and Hippocampal Subfields in Older Adults	Govinda Poudel
14:42 – 14:54	TRAINFIX: TRAvelling withIN scanner for FIXel-based analysis (a reproducibility and harmonisation study)	Michael Mercieca
14:54 – 15:06	Whole-brain phosphorus metabolism: regional distribution and associations with cognition	Mariia Ptukha
15:06 – 15:18	Composite Measures Combining Multimodal MRI, Plasma Biomarkers & Cardiovascular Risk are Sensitive to Cognition and Dementia	Ella Rowsthorn
15:18 – 15:31	Data-Driven Mapping of Cortical Thinning Patterns in Genetic and Sporadic Frontotemporal Dementia Using Longitudinal MRI	Taylor Solomon
<b>15:31 – 16:00</b>	<b>Afternoon tea &amp; poster viewing</b>	<b>Kenneth Myer Building Foyer</b>
<b>16:00 – 16:30</b>	<b>Datablitz session 1: Body and brain imaging</b> Chair: Ashley Stewart	<b>Ian Potter Auditorium</b>
16:00 – 16:03	Informing QSM Background Field Correction with an External Reference Scan	Xincheng Ye
16:03 – 16:06	Characterizing brain-cardiovascular aging using multi-organ imaging and machine learning	Yalda Amirmoezzi
16:06 – 16:09	Shape Matters: Predicting Huntington's Disease using Progression Modelling	Mohsen Ghofrani-Jahromi

16:09 – 16:12	Enlarged perivascular spaces as a biomarker of disease in progressive supranuclear palsy	Cassandra Marotta
16:12 – 16:15	TRAMFIX: TRavelling Across Melbourne for FIXel-based analysis (a reproducibility and reliability study)	Remika Mito
16:15 – 16:18	FixelBayes: A Bayesian framework for fixel-based analysis of diffusion MRI data	Jackson Miles Lee
16:18 – 16:21	M2Diff: Multi-Modality Multi-Task Enhanced Diffusion Model for MRI-Guided Low-Dose PET Enhancement	Ghulam Nabi Ahmad Hassan Yar
16:21 – 16:24	Cerebral metabolism changes after successful reperfusion in ischemic stroke patients	Victoria Mercy Kataike
16:24 – 16:27	Sparse Subspace Diffusion Model for Physically Consistent Accelerated MRI Reconstruction	Xiangyao Deng
16:27 – 16:30	An Effective Interference-Mode Adaptive Shimming Algorithm for $B_1^+$ Field Optimization at 5 Tesla	Yafeng Mei
16:30 – 16:45	<b>Day close &amp; housekeeping</b> Chair: Zhaolin Chen	<b>Ian Potter</b> <b>Auditorium</b>
16:45 – 19:00	<b>Networking &amp; canapes</b>	<b>Kenneth Myer</b> <b>Building Foyer</b>

## DAY 2

THURSDAY 20<sup>th</sup> NOVEMBER

08:45 – 09:00	Registration desk open	Kenneth Myer Building Foyer
<b>09:00 – 10:35</b>	<b>Keynote Lecture</b>	<b>Ian Potter Auditorium</b>
09:00 – 09:05	Welcome and introduction of Keynote	Yasmin Blunck
09:05 – 09:50	Achievements, challenges and prospects of parallel transmission up to 11.7T	Nicolas Boulant
09:50 – 10:35	NexGen 7T scanner hardware innovations advance mesoscale fMRI and diffusion imaging	David Feinberg
<b>10:35 – 11:05</b>	<b>Morning tea break</b>	<b>Kenneth Myer Building Foyer</b>
<b>11:05 – 12:13</b>	<b>Oral Session 3: UHF MRI</b> Chair: Karin Markenroth Bloch	<b>Ian Potter Auditorium</b>
11:05 – 11:15	UoM 7T overview	Leigh Johnston
11:15 – 11:25	UQ 7T overview	Markus Barth
11:25 – 11:37	Serial Acquisition of radiofrequency pulse MOdes (SAMO) with multiband EPI to mitigate B1+ inhomogeneity in diffusion MRI at 7T	Yining Chen
11:37 – 11:49	Boosting Sodium Signal in Interleaved 1H-MP2RAGE – 23Na-MERINA: A SAR-Constrained Optimisation Approach	Yasmin Blunck
11:49 – 12:01	On the design of a coaxial folded cable dipole antenna for 7T MRI	Guoliang Yang
12:01 – 12:13	Interaction between retinotopic and numerotopic field maps in parietal cortex with 7T fMRI	Jacob Paul
<b>12:13 – 13:15</b>	<b>Lunch break</b>	<b>Kenneth Myer Building Foyer</b>
<b>13:15 – 14:50</b>	<b>Keynote Lecture</b>	<b>Ian Potter Auditorium</b>
13:15 – 13:20	Welcome and introduction of Keynote	Rebecca Glarin
13:20 – 13:40	Exploring brain structure and function: the Swedish national 7T MR facility	Karin Markenroth Bloch
13:45 – 14:05	Technical Challenges of Metabolic MRI in Assessing Therapy Efficacy for Metastatic Prostate Cancer	René In 't Zandt
14:05 – 14:50	Advanced clinical imaging in London: The 7T experience so far	Jon Cleary
<b>14:50 – 15:20</b>	<b>Afternoon tea &amp; poster viewing</b>	<b>Kenneth Myer Building Foyer</b>
15:20 – 15:50	Bruker	
<b>15:50 – 16:23</b>	<b>Datablitz session 2: UHF MRI</b> Chair: René In 't Zandt	<b>Ian Potter Auditorium</b>
15:50 – 15:53	Ex-vivo DWI Tractography of the Pig Eye at 7T	Xiang Feng
15:53 – 15:56	Accurate Automated Brain Extraction and Segmentation at 7T"	Jessica Hoffmann
15:56 – 15:59	Microstructural diffusion imaging of cranial nerves at 7T with impulse gradient NexGen UHF technology	Rebecca K Glarin
15:59 – 16:02	Denoising High Resolution Intracranial Vessel Wall Imaging at 7T	Tudor V. Sava

16:02 – 16:05	B0 Homogeneity Improvement at 7T Utilising Polypropylene Pellets	Tudor V. Sava
16:05 – 16:08	Comparative Analysis of 3T and 7T MRI: Evaluating for White Matter Lesions and Paramagnetic Rim Lesions in Multiple Sclerosis	Wen Shin (Marcus) Chan
16:08 – 16:11	Comparing 3T and 7T MRI for Evaluating Lesions and Central Vessel Sign in Multiple Sclerosis Patients Undergoing Disease-Modifying Treatment Transitions	Elika Rezaeimanesh
16:11 – 16:14	Laplacian filtering for flip angle null detection in pTx pulse design	Joseph J. Bartlett
16:14 – 16:17	Deep Learning for the rapid design of tailored dynamic pTx multiband excitation pulses	Joseph J. Bartlett
16:17 – 16:20	Characterization of Human Midbrain Vasculature from High-Resolution Post-Mortem MRI Data	Marshall Xu
16:20 – 16:23	Deep-Learning Based Vessel Segmentation in T2*-weighted Images	Marshall Xu
16:23 – 16:30	<b>Awards presentation &amp; closing remarks</b> Chair: Sarah Hellewell	<b>Ian Potter</b> <b>Auditorium</b>

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