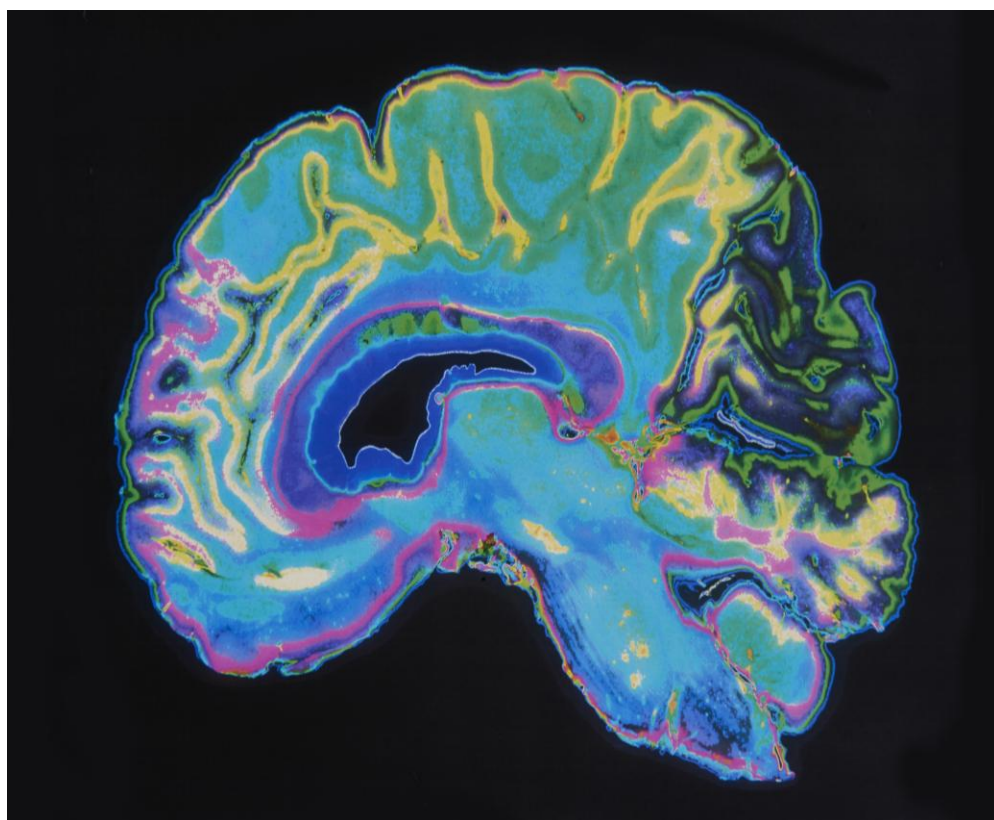


# **2025 Sydney Clinical Imaging Summit**

*presented by Sydney Clinical Imaging Network*



*Friday, 14 March 2025, 10:30am - 5:30pm |  
F23 (Michael Spence Building), Auditorium 1 & 2*

<b>10:00am</b>	<b>Registration</b>
10:30am (5mins)	<b>Welcome – Professor Martin Ugander, Sydney Clinical Imaging Convenor</b>
<b>Keynote presentations chaired by Dr Sirisha Tadimalla</b>	
10:35am (25mins)	<b>Professor James ‘Mac’ Shine (Professor of Systems Neuroscience, Senior Principal Research Fellow, Brain and Mind Center, USyd)</b> <i>Functional neuroimaging as a catalyst for integrated neuroscience</i>
11:00am (25 mins)	<b>Professor Caroline (Lindy) Rae (Conjoint Senior Principal Scientist, NeuRA, Professor of Brain Sciences, UNSW)</b> <i>Electrical conductivity imaging: a new paradigm for brain activity</i>
11:25am (25mins)	<b>Professor Patrick Brennan (Professor of Diagnostic Imaging, USyd)</b> <i>Deep learning in breast imaging: some recent SCIN-led innovations.</i>
11:50am (15 mins)	<b>Q&amp;A with keynote speakers</b>
<b>12:05pm</b>	<b>Lunch</b>
<b>Research Showcase chaired by Dr David Waddington</b>	
01:00pm (75mins)	<b>Hannes Almgren (ECR, Neuroimaging, Brain and Mind Centre &amp; School of Biomedical Engineering, USyd)</b> <i>Monitoring Neurodegeneration Within Core Motor Pathways in Amyotrophic Lateral Sclerosis using Diffusion MRI</i>
	<b>Samuel L. Warren (ECR, Neuroimaging, Brain and Mind Centre &amp; School of Psychology, USyd)</b> <i>Uncovering different neural substrates of neuropsychiatric disturbances in dementia using Subtype and Stage Inference (SuStaln)</i>
	<b>Annie G. Bryant (PhD student, Neuroimaging, Dynamics and Neural Systems Lab, Brain and Mind Centre &amp; School of Physics, USyd)</b> <i>The highly comparative approach: Interpretable insights for structural and functional neuroimaging</i>
	<b>Fidel Navarro (PhD student, MRI Liver, Institute of Medical Physics, Faculty of Science, USyd)</b> <i>Novel radiation therapeutic approaches using functional imaging for poor prognosis primary liver cancer</i>
	<b>Samuel Klistorner (Brain and Mind Centre, USyd)</b> <i>Evolution of Chronic Lesion Tissue in Relapsing-Remitting MS Patients</i>
	<b>Thomas Boele (ECR, MRI, Image X Institute, School of Health Sciences, USyd)</b> <i>Quantum-enabled accessible metabolic MRI</i>
	<b>Nicholas Hindley (ECR, AI Lung, Image X Institute, Sydney School of Health Sciences, USyd)</b> <i>Maximising access while minimising toxicity: Real-time AI-guidance during radiotherapy</i>
	<b>Zhengqianq (Howard) Jiang (ECR, AI Breast, BREAST, Discipline of Medical Imaging Sciences, USyd)</b> <i>AI performance in screening mammograms may improve through multi-resolution data augmentation</i>
	<b>Erin Wang (ECR, BIRT, Biologically targeted radiation therapy, Institute of Medical Physics, School of Physics, Faculty of Science, USyd)</b> <i>Quantitative magnetic resonance imaging biomarkers for advancing personalised radiation therapy</i>
<b>02:15pm</b>	<b>Hunor Kertesz (ECR, CT ventilation imaging, Image X Institute, USyd)</b> <i>X-ray Motion Tomography: A novel method to calculate lung ventilation images from sparse 2D x-ray projections</i>
	<b>Afternoon Tea</b>

Infrastructure Updates chaired by Dr Tess Reynolds	
02:30pm (15mins)	<b>Dr David Waddington (Image X Institute, School of Health Sciences, Faculty of Medicine and Health, USyd)</b> Portable MRI at the University of Sydney
02:45pm (15 mins)	<b>Professor Fernando Calamante (Director, Sydney Imaging Core Research Facility, School of Biomedical Engineering, USyd)</b> <i>Updates on Sydney Imaging core research facility</i>
03:00pm (15mins)	<b>Professor Peter Kench (Discipline of Medical Imaging Sciences, Sydney School of Health Sciences, Faculty of Medicine and Health, USyd)</b> <i>New Spectral (dual energy) computed tomography acquisition and analysis capabilities at SWHB</i>
03:15pm (15 mins)	<b>James Tawadros (Technical Support Services, USyd)</b> <i>Phantom pains: addressing medical imaging challenges with 3D printing</i>
03:30pm (15mins)	<b>Q&amp;A with speakers</b>
03:45pm (15mins)	<b>Awards chaired by Professor Martin Ugander</b>
04:00pm	<b>Networking with canapes &amp; drinks</b>

## Meet the keynote speakers

### **Professor Patrick Brennan**

Professor Brennan is the world's most productive Medical Radiation Scientist. In 2020, he was awarded the Payne-Scott Professorial Distinction by the University of Sydney. He is a leader in medical imaging optimization, his research has been disseminated through 50 keynote/plenary talks across 5 continents and he is the recipient of over 20 highly prestigious awards. He has published 500 original papers and supervised over 50 research students.



### **Professor Caroline (Lindy) Rae**

Caroline Rae has published more than 140 research papers, including some that did not involve the use of magnetic resonance. Her research focusses on determining the fascinating relationships between brain biochemistry and brain function. In addition to study of normal brain function her research also includes sleep disorders, neuropharmacology, pain, congenital disorders involving the brain, and neurological disorders. She is also involved in the development of new magnetic resonance applications and analyses. She has held several Fellowships over her career, including the Oxford Nuffield medical Fellowship, and NHMRC RD Wright and SRFs. She is currently President of the International Society for Neurochemistry and was awarded the Medal of the Australian and New Zealand Society for Magnetic Resonance (2017) for outstanding contributions to magnetic resonance.



### **Professor James 'Mac' Shine**

Mac is a systems neurobiologist working to understand the mechanisms of cognition and attention using functional brain imaging, both in health and disease. He has a particular interest in understanding how the different arms of the ascending arousal system flexibly modulate the cross-scale organisation of the brain to facilitate adaptive behaviour. He is currently working as a joint NHMRC/Bellberry fellow at The University of Sydney.

