

# National Imaging Facility Scientific Symposium 2023

Program I Friday, 11 August, Melbourne 080823

NIF Scientific Symposium I Ian Potter Auditorium, Kenneth Myer Building, University of Melbourne			
Name	Affiliation	Topic	
8:30	Margaret Harding	National Imaging Facility	Acknowledgement of Country and Opening Address
8:45	Wojtek Goscinski	National Imaging Facility	Introduction to National Imaging Facility 2023 and Beyond
Session 1: Addressing Australia's Burden of Disease		Chair: Paul Parizel	Focus: Large or insightful studies that are working to characterise and address major disease challenges
9:00	Jurgen Fripp	CSIRO	Neuroimaging Biomarkers and Digital Health Tools in Alzheimer's Clinical Trials: Accelerating the Path to Effective Treatments through Multimodal Imaging Approaches
9:25	Zanfina Ademi Delaney	Monash University	Health Economics: Calculating the Impact of Imaging for Epilepsy Research
9:40	Guy Cameron and Jennifer Rumbel	University of Newcastle - Hunter Medical Research Institute	Developing Inclusive Approaches to Australia's Health challenges
9:55	Karen Caeyenberghs	Deakin University	Neuroimaging and Biomarkers in Traumatic Brain Injury: Exploring the Hidden Effects through Large-scale Studies
10:10		Panel discussion	
10:30		Networking Break	
Session 2: Toward Precision Medicine		Chair: Ingrid Burvenich	Focus: Imaging being applied in new ways to develop new and individualised or precise medicines
11:00	Bianca Jupp	Monash University, MHELTHERA	The Power of PET Imaging to Inform Precision Psychiatry
11:15	Paul Donnelly	University of Melbourne	Metal-based Radiopharmaceuticals: For Cancer Diagnosis and Therapy
11:30	Mo Haskali	Peter MacCallum Cancer Centre	Developing New Theranostic Agents (TA) for Diagnosis and Personalised Treatment of Cancer
11:45	Lawson Spare	ANSTO	Future of Radioisotope, Radiochemistry, and Radiotracer Development in Australia
12:00	David Cade	Telix Pharmaceuticals	Delivering new Radiopharmaceuticals to market
12:15	Andrew Scott	Olivia Newton-John Cancer Research Institute	Precision Oncology: First In Patient Studies - from Biomarkers to Therapeutic Strategies
12:40		Panel discussion	
13:00		Networking Lunch	
13:50	VBIC UPDATE	Christoph Hagemeyer	The Victorian Biomedical Imaging Capability

NATIONAL IMAGING FACILITY  
SCIENTIFIC SYMPOSIUM 2023

11 AUGUST  
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Session 3: Frontiers of Imaging		Chair: Christoph Hagemeyer	Focus: New imaging technologies and imaging applied in new ways
14:00	Michelle Watt	University of Melbourne	Plants for Space: Pushing the Boundaries of Plant Diversity and Biotechnology
14:25	Zongyuan Ge	Monash University, ACEMID	Artificial Intelligence in Imaging: Harnessing the Power of AI to Improve Melanoma Diagnosis
14:40	Chris Plummer	Swinburne University of Technology	Clinical Application of Electrical and Magnetic Source Imaging in Focal Epilepsy
14:55	Andreas Fouras	4DMedical	Advances in Lung Function Imaging
15:20	Panel discussion		
15:40	Short Break		
Session 4: NIF Community Highlights		Chair: Shawna Farquharson   Co-Chair: Sara Moteman	
16:00	Shawna Farquharson	National Imaging Facility	Session Opening
16:03	Eric Pierre	The Florey Institute	Long-term QSM reproducibility phantom from a commercially available design
16:07	Igor Tyshchenko	University of Melbourne	Efficient Use of Specific Absorption Rate Limits Through Sub-Population Universal Pulses in Parallel Transmission
16:11	Lucy Vivash	Monash University	A novel PET radiotracer for imaging reparative microglia
16:15	Wai Lam Leung	Monash University	PET imaging of astrogliosis following traumatic brain injury
16:19	Christian Wichmann	Olivia Newton-John Cancer Research Institute	Fully Automated Radiosynthesis of [ <sup>89</sup> Zr]Zr-DFOSq-Durvalumab for Clinical PET Imaging of PD-L1
16:23	Jurie Tashkandi	Monash University	Investigation of SPIONs for Optimal Cancer Imaging using MPI
16:27	Kh Tohidul Islam	Monash Biomedical Imaging - Monash University	Deep Learning for point-of-care MRI Enhancement
16:31	Bahman Tahayori	The Florey Institute	Improving the performance of independent component analysis for denoising multi-echo multi-band fMRI data
16:35	Vicky He	The Florey Institute	Increased Connectivity from Ventral Temporal Cortex to Perisylvian Language Areas During Non-Word Reading
16:39	Leighton Barnden	Griffith University	A pilot study of Brain Connectivity in Long Covid during cognitive exertion
16:43	Kiran Thapaliya	Griffith University	Volumetric changes in the Brainstem of Long COVID and ME/CFS patients
16:47	Aswin Narayanan	The University of Queensland	Neurodesk: An accessible, flexible, and portable data analysis environment for reproducible neuroimaging
16:55	Wojtek Goscinski	National Imaging Facility	Awards and Closing remarks
17:00	Networking Drinks		
18:00	END		