

Cambridge Imaging Festival (VIRTUAL) 2021
Tuesday 25th May & Wednesday 26th May
FINAL PROGRAMME

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www.mrc-cbu.cam.ac.uk/conferences/cif2021/

DAY 1

09:20 Opening remarks

09:30 Keynote 1: Prof Richard Bowtell, Nottingham University

"The future of MRI in Healthcare"

Introduced and chaired by Chris Rodgers

10:00 Preclinical MRI – chaired by Steve Sawiak

10:00 *"New Horizons for Preclinical MRI in Cambridge"*

Dr Steve Sawiak

10:15 *"Predictive endophenotypes of compulsive cocaine reinforcement assessed by neuroimaging across the lifespan"*

Dr Jolyon Jones

10:25 Discussion – led by Chair

10:35 *The new pre-clinical imaging facility in the Anne McLaren Building*

Prof Ferdia Gallagher

10:40 Data Blitz (3 min pre-recorded poster talks by junior scientists)

1. *"A Synergistic Core for Human Brain Evolution and Cognition"*

Andrea Luppi, PhD student, Clinical Neurosciences

2. *"Prefrontal cortical connectivity mediates locus coeruleus noradrenergic regulation of inhibitory control in older adults"*

Alessandro Tomassini, Research Associate, MRC CBU

10:46 Coffee Break

11:00 Ultrasound – chaired by TC See

11:00 *"Future Development of Ultrasound"*

Dr Ed Godfrey

11:15 *"Fusion ultrasound biopsy- experience in ovarian malignancy"*

Dr Helen Addley

11:25 Discussion – led by Chair

11:45 Cardio imaging – chaired by Chris Rodgers

11:45 *"What's new and what's next?"*

Dr Bobby Agrawal, Royal Papworth

12:00 *"Ex situ MRI of perfused hearts to assess metabolism and perfusion"*

Dr Jonathan Weir-McCall, Royal Papworth

12:10 Discussion – led by Chair

12:15 Data Blitz (3 min pre-recorded poster talks by junior scientists)

1. *"7 Tesla Pre and Post Contrast Time of Flight MR Angiography of Lenticulostriate Arteries"*

Christopher Osuafor, PhD Student, Clinical Neurosciences

12:30 Lunch Break

13:30 Vascular/stroke imaging – chaired by Hugh Markus

13:30 *"Stroke Imaging to guide clinical management- what's new?"*

Prof Hugh Markus

13:45 *"Imaging Neuroinflammation and blood brain barrier leakage as a cause of small vessel disease"*

Dr Robin Brown

13:55 Discussion – led by Chair

14:05 Data Blitz (3 min pre-recorded poster talks by junior scientists)

1. *"Neuroinflammation and cerebral small vessel disease"*

Audrey Low, PhD Student, Psychiatry

2. *"Hybrid bias correction of thoracic zero echo time (ZTE) images"*

Chang Sun, PhD Student, Radiology

3. *"Delineating signature patterns of [¹⁸F]-AV1451 R₁ across neurodegenerative conditions"*

Elijah Mak, Research Associate, Psychiatry

14:15 Dementia – chaired by John O'Brien

14:15 *"New directions in dementia imaging"*

Prof James Rowe

14:30 *“Synaptic imaging in dementia and neurodegenerative disease”*

Dr Negin Holland

14:40 Discussion – led by Chair

14:50 Data Blitz (3 min pre-recorded poster talks by junior scientists)

1. *“Network stability predicts symptomatic conversion in familial frontotemporal dementia”*

David Whiteside, PhD student, Dept Clinical Neurosciences

2. *“The predictive code for language revealed with 7T fMRI”*

Thomas Cope, Clinical Lecturer, Dept Clinical Neurosciences/CBU

3. *“Dynamic causal models of Alzheimer's disease”*

Juliette Lanskey, PhD Student, Dept Clinical Neurosciences/CBU

15:00 End of Day 1, but zoom will remain open for talk replays/chat/breakouts

DAY 2

09:20 Opening remarks

09:30 Keynote 2: Prof Patricia Price, Imperial College London

“Whole Body PET - is this the future?”

Introduced and chaired by Franklin Aigbirhio

10:00 Integrated Cancer Imaging – chaired by Lorena Escudero

10.00 *“Integrated Cancer Imaging with a focus on Ovarian and Renal Cancer”*
Prof Evis Sala

10.15 *“Computerised image analysis for radiogenomics and precision oncology”*
Dr Leonardo Rundo

10:25 Discussion – led by Chair

10:35 Data Blitz (3 min pre-recorded poster talks by junior scientists)

1. *“Towards automisation of oncological image analysis”*

Lorena Escudero, Research Associate, Radiology

2. *“Synaptic density in carriers of C9orf72 mutations: a [11C]UCB-J PET study”*

Maura Malpetti, Research Associate, Clinical Neurosciences

3. *“Lesion-Specific 3D-Printed Moulds of High-Grade Serous Ovarian Cancer Tumours for Image-Guided Tissue Sampling”*

Maria Delgado Ortet, PhD student, Radiology

10:45 Coffee Break

11:00 Oncological Imaging – chaired by Leonardo Rundo

11.00 *“Advanced Prostate Cancer Imaging - (is there a) Clinical Need?”*

Dr Tristan Barrett

11.15 *“Predicting complete pathological response to neoadjuvant chemotherapy in breast cancer: features from DCE-MRI”*

Mrs Gabrielle Baxter

11:25 Discussion – led by Chair

11:35 Data Blitz (3 min pre-recorded poster talks by junior scientists)

1. *"Detection limit of ⁸⁹Zr-labelled cells for cellular tracking using clinical PET/CT and PET/MRI"*

Laura Lechermann, PhD Student, Radiology

11:45 COVID imaging – chaired by Evis Sala

- 11:45 *"A global AI tool for COVID-19 diagnosis and prognosis"*
Prof Carola Schoenlieb

- 12:00 *"Neuroimaging of COVID"*
Prof David Menon

12:10 Discussion – led by Chair

12:20 Data Blitz (3 min pre-recorded poster talks by junior scientists)

1. *"Metabolic changes in patients recovering from COVID-19"*
Carina Graf, PhD Student

12:30 Lunch Break

13:30 Cognitive Neuroscience – chaired by Ed Bullmore

- 13:30 *"Future of Magnetoencephalography"*
Prof Rik Henson

- 13:45 *"Combining TMS and MRI"*
Dr Jade Jackson

13:55 Discussion – led by Chair

14:05 Data Blitz (3 min pre-recorded poster talks by junior scientists)

1. *"M1 GABA relates to functional connectivity changes and retention in visuomotor adaptation"*
Caroline Nettekoven, Post-doc, Dept Psychiatry
2. *"Bilingual Brains are Bigger"*
Brendan Weekes, Professor, HKU
3. *"Does Hemispheric Asymmetry Reduction in Older Adults (HAROLD) in motor cortex reflect compensation?"*
Ethan Knights, Post-doc, MRC CBU

14:15 Mental Health – chaired by Rik Henson

- 14:15 *"Getting under the surface of MRI in mental health disorders"*
Prof Ed Bullmore

14:30 *“What can brain MRI tell us about schizophrenia?”*
Dr Sarah Morgan

14:40 Discussion – led by Chair

14:50 Data Blitz (3 min pre-recorded poster talks by junior scientists)

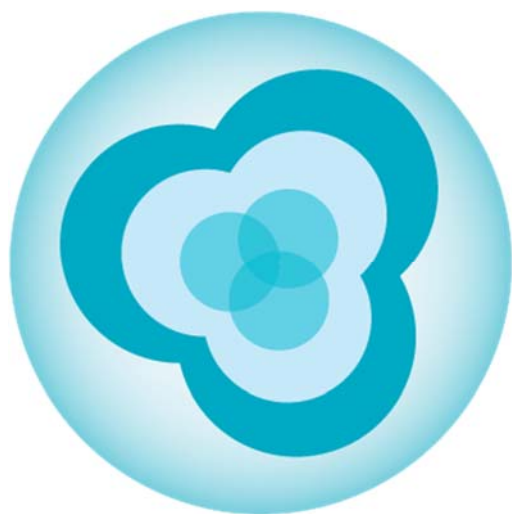
1. *“Non-social sensory perception in autism: a meta-analysis of task fMRI studies”*
Nazia Jassim, PhD student, Dept Psychiatry

2. *“Restoring glutamatergic function in Frontotemporal Dementia is conditional on patients GABA physiology”*
Alistair Perry, Research Associate, Clinical Neurosciences

15:00 Poster Prizes, Goodbyes

End of Day 2, but zoom will remain open for talk replays/chat/breakouts

Prizes Sponsored by: Cambridge Centre for Mathematical Imaging in Healthcare (CMIH)



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