

“What’s new in Biomedical Imaging?”

Program

- 09:30** Opening Remarks
Professor Chris Rodgers, Department of Clinical Neurosciences
- 09:35** Keynote – Optical neuroimaging of oxygenation and metabolism –
From newborn brain injury to dementia
Dr Gemma Bale, Department of Engineering

Session AM

- 10:05** **Preclinical MRI**
Chair: Dr Stephen Sawiak, Department of Clinical Neurosciences
- Monitoring treatment response in vivo using deuterium metabolic imaging
Dr Friederike Hesse, Cancer Research UK – Cambridge Institute
- MRI at the Anne McLaren building
Dr Karthik Chary, Department of Radiology
- 11:00** **Break** (Lecture Room 4, Baker Building)
- 11:20** **Interdisciplinary work**
Chair: Professor James Rudd, Department of Medicine
- Imaging: Where maths meets medicine
Professor Sir John Aston, Department of Pure Mathematics & Mathematical Statistics
- Radiogenomics and data integration
Dr Mireia Crispin-Ortuzar, Cancer Research UK – Cambridge Institute
- From wings to hearts: Shape optimization in imaging problems
Professor Matthew Juniper, Department of Engineering
- AI + Maths, a step closer to clinical reality: Minimal supervision, domain generalisation and uncertainty
Dr Angelica Aviles Rivero, Department of Applied Mathematics & Theoretical Physics
- Barriers to AI adoption in the UK
Daniel Jones, Gleamer
- Aidoc - A case study in how to Scale AI Deployment
Mike Burns, aidoc
- 12:35** **Lunch Break** (Lecture Room 4, Baker Building)

Session PM

- 13:30 Body imaging**
Chair: Professor Martin Graves, Department of Radiology
- MR imaging of the liver
Dr David Bowden, Cambridge University Hospitals NHS Foundation Trust
- Hyperpolarised ^{13}C -MRI of the abdomen – From kidney to liver
Dr Ines Horvat Menih and Dr Eva Serrão, Department of Radiology
- Sodium MRI of the kidney
Dr Jonathan Birchall, Department of Radiology
- How to get a clinical trial started
Wendy Phillips, Cambridge University Hospitals NHS Foundation Trust
- 14:30 Neuroimaging**
Chair: Dr Thomas Cope, Department of Clinical Neurosciences
- What's new in TMS/fMRI?
Dr Ajay Halai, MRC Cognition & Brain Sciences Unit
- What's new in PET neuroimaging in Cambridge?
Dr Maura Malpetti, Department of Clinical Neurosciences
- A day in the life of a radiographer
Wolfson Brain Imaging Centre radiographer team
- 15:30 Break** (Lecture Room 4, Baker Building)
- 16:00 Oncological imaging**
Chair: Dr Selena Milicevic Sephton, Molecular Imaging Chemistry Laboratory
- Current trials in PET for radionuclide theranostics of cancer
Dr Luigi Aloj, Department of Radiology
- Imaging tumour cell death using ^{18}F -C2Am
Dr Flaviu Bulat, Cancer Research UK – Cambridge Institute
- Preclinical imaging facilities and possibilities
Dr Nisha Kuzhuppilly-Ramakrishnan, Molecular Imaging Chemistry Laboratory
- Introduction to the European Society of Molecular Imaging (ESMI)
Simon Zientek, Molecular Imaging Chemistry Laboratory
- How to make a radiotracer
Dr Matthew Hird, Molecular Imaging Chemistry Laboratory
- 17:00 Poster prizes**
Sponsored by the Centre for Mathematical Imaging in Healthcare
- 17:15 Drinks reception** (Lecture Room 4, Baker Building)