



**5th Joint Winter Meeting of the Pathological Society
and the Royal Society of Medicine
31 January - 2 February 2023**

Unleashing the Edge Power of Pathology

Day 1 - Tuesday 31 January 2023

08.00-08.55 **Registration and Coffee**

08.55-09.00 Welcome and Introduction

09.00-10.45 **Symposium 1: Single Cells**

Chairs: Dr Luiza Moore, Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK and Dr Sam Behjati, Wellcome Sanger Institute, Cambridge, UK

09.00–09.25 Introduction to single cell sequencing
Dr Sam Behjati, Wellcome Sanger Institute, Cambridge, UK

09.25–09.45 Somatic mutations in normal human cells
Dr Luiza Moore, Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK

09.45–10.05 Single cell epigenomics and human cancer
Dr Celine Vallot, Institut Curie, Paris, France

10.05–10.30 Mapping the rules of glioblastoma using spatial genomics
Dr Omer Bayraktar, Wellcome Sanger Institute, Cambridge, UK

10.30-10.45 Discussion

10.45-11.15 **Coffee and Poster Viewing**

11.15-12.15 **Chairman's Poster Rounds (1)**

P01 – P11 (Breast)

P12 – P21 (Digital Pathology/AI)

P22 – P28 (Gastrointestinal)

P29 – P37 (Genitourinary, Gynaecological, Renal)

P38 – P43 (Neuropathology, Ophthalmic)

P44 – P51 (Education, Haematological Path, Endocrine)



12.15-13.15 Symposium 2: Building Partnerships in Pathology

Chairs: Dr Kate Marks, Leeds Teaching Hospitals NHS Trust, Leeds, UK and
Dr Abhik Mukerjee, University of Nottingham, Nottingham, UK

12.15-12.30 Integrating pathology in clinical trials
Dr Nick West, University of Leeds, Leeds, UK

12.30-12.45 Developing pathology-industry collaborations
Professor Clare Verrill, University of Oxford, Oxford, UK

12.45-13.00 How to establish successful public engagement in projects/trials
Ms Penny Fletcher, Royal College of Pathologists, London, UK

13.00-13.15 Questions and answers

13.15-14.00 Lunch and Poster Viewing

14.00-15.30 Symposium 3: Recent Advances in Pathology

Chairs: Professor Simon Herrington, University of Edinburgh, Edinburgh, UK
and Dr Richard Poulosom, The Pathological Society, UK

14.00-14.20 Lineage tracing methods for human tissues
Professor Trevor Graham, Institute of Cancer Research, London, UK

14.20-14.40 Single cell genomics, genome complexity and cancer evolution
Dr Nischalan Pillay, University College London, London, UK

14.40-15.00 Of microbes and malignancies – the relationship between the gut
microbiome and cancer response/toxicity to immune checkpoint inhibitors
Dr Ashray Gunjur, Wellcome Sanger Institute, Cambridge, UK

15.00-15.20 An update on cancer-associated fibroblasts
Dr Angus Cameron, Barts Cancer Institute, London, UK

15.20-15.30 Discussion

15.30-15.45 Coffee and Poster Viewing



15.45-17.15 Plenary Oral Presentations

Chairs: Professor Heike Grabsch, University of Leeds, Leeds, UK and Professor Louise Jones, Editor-in-Chief, Journal of Pathology, London, UK

15.45-16.00 High-grade gliomas occurring in teenagers and young adult patients comprise novel molecular subgroups

Dr Matthew Clarke, University College London Hospitals NHS Foundation Trust, London, UK

16.00-16.15 Multiple-instance-learning-based detection of coeliac disease in histological whole-slide images

Dr Jim Denholm, University of Cambridge, Cambridge, UK

16.15-16.30 Artificial intelligence- (AI) assisted evaluation of tumour infiltrating CD3+ and CD8+ T cells in the tumour core (CT) and invasive margin (IM) for prognostication and prediction of benefit from adjuvant chemotherapy in early stage colorectal cancer (CRC): A retrospective analysis of the QUASAR trial

Dr Christopher Williams, University of Leeds, Leeds, UK

16.30-16.45 Novel proliferation regulators identified using predictive bioinformatic approaches

Dr Asmaa Ibrahim, University of Nottingham, Nottingham, UK

16.45-17.00 Clonal trajectory to chronic myeloid leukaemia

Miss Aleksandra Kamizela, Brighton and Sussex Medical School, UK

17.00-17.15 Loss of key driver mutations in *IDH1* in metastatic chondrosarcoma

Dr William Cross, University College London Cancer Institute, London, UK

17.15-17.20 Announcement: Jeremy Jass Prize for Research Excellence in Pathology in 2020, Presented by Professor Louise Jones, Editor-in-Chief, *The Journal of Pathology*

17.20 Drinks Reception, Royal Society of Medicine (Ground Floor)



Day 2 – Wednesday 1 February 2023

Note, the programme of the parallel Undergraduate Day can be found further below.

08.00-08.30 Registration and Coffee

08.30-10.55 Jean Shanks and Pathological Society Symposium

Chairs: Professor Gareth Thomas, University of Southampton, Southampton, UK and Professor Mark Arends, University of Edinburgh, Edinburgh, UK

08.30-08.40 Welcome and introduction

Professor Gareth Thomas, University of Southampton, Southampton, UK

08.40-09.10 Illuminating the complex rearrangement landscape of sarcoma

Dr Sara Waise, Francis Crick Institute, London, UK

09.10-09.40 Disentangling strand interactions in DNA damage and repair

Dr Sarah Aitken, University of Cambridge, Cambridge, UK

09.40-10.10 Investigating the colorectal cancer-associated faecal microbiome

Dr Caroline Young, University of Leeds, Leeds, UK

10.10-10.30 Next-generation diagnosis of EBV+ Hodgkin-like lymphoproliferative disorder

Dr Matthew Pugh, University of Birmingham, Birmingham, UK

10.30-10.50 Investigating the role of intestinal Microfold (M) cells in Crohn's disease pathogenesis

Dr Alex Cavanagh, University of Edinburgh, Edinburgh, UK

10.50-10.55 Closing summary

Professor Gareth Thomas, University of Southampton, Southampton, UK

10.55-11.20 Coffee and Poster Viewing



11.20-12.35 Symposium 4: How to Explore the Microscopic World

Chairs: Professor Phil Quirke and Dr Susan Richman, University of Leeds, UK

11.20-11.40 Breaking into nanoimaging on routine FFPE tissue
Dr Scarlet Brockmoeller, University of Leeds, Leeds, UK

11.40-12.00 Using infrared and Raman hyperspectral imaging coupled with machine learning to improve pathology prediction: Current state-of-the-art and future directions
Professor Peter Gardner, The Manchester Institute of Biotechnology, Manchester, UK

12.00-12.20 Theia: A virtual reality cancer research lab for visualisation, analysis and collaboration
Mr Owen Harris, Suil Interactive, Dublin, Ireland

12.20-12.35 Discussion

12.35-13.15 Lunch Break and Poster Viewing

13.15-14.15 Chairman's Poster Rounds (2)

P52 – P61 (Autopsy/Forensic)

P62 – P70 (Head & Neck, Osteoarticular, Soft Tissue)

P71 – P78 (Gastrointestinal, Hepatobiliary, Pancreas)

P79 – P88 (Digital Pathology/AI)

P89 – P99 (Breast)

P100 – P109 (Cardiovascular, Pulmonary, COVID19, Dermatopathology, Case Reports)



14.15-15.30 Symposium 5: What can we learn from sequencing

Chairs: Professor Mark Arends, University of Edinburgh, Edinburgh, UK
and Dr David Adams, Wellcome Sanger Institute, Cambridge, UK

14.15–14.35 Cancer driver gene mutations

Dr Andrew Lawson, Wellcome Sanger Institute, Cambridge, UK

14.35–14.55 Uncovering the origins of paediatric cancers

Dr Thomas Oliver, Wellcome Sanger Institute, Cambridge, UK

14.55–15.15 The Genomic atlas of dermatopathology (Dermatlas)

Dr David Adams, Wellcome Sanger Institute, Cambridge, UK

15.15-15.30 Discussion

15.30-16.00 Coffee and Poster Viewing

16.00-17.30 Symposium 6: Molecular pathology in non-neoplastic diseases

Chairs: Natasha Cutmore, Leeds Teaching Hospitals NHS Trust, Leeds, UK and
Dr Tim Kendall, University of Edinburgh, Edinburgh, UK

16.00-16.20 Molecular pathology in renal transplantation

Dr Candice Roufosse, Imperial College London, London, UK

16.20-16.40 Molecular pathology in non-neoplastic interstitial lung disease

Professor Ling-Pei Ho, University of Oxford, Oxford, UK

16.40-17.00 Molecular pathology in non-neoplastic hepatobiliary disease

Professor Alberto Quaglia, University College London, London, UK

17.00-17.20 Molecular pathology in infectious disease

Dr Charlene Rodrigues, Imperial College London, London, UK

17.20-17.25 Questions and answers

19.30 Society Dinner (pre-booked only)

The Brewery (52 Chiswell Street, London, EC1Y 4SD)



Day 2 – Wednesday 1 February 2023

Undergraduate Day – Max Rayne Auditorium

08.00-08.30 **Registration and Coffee**

08.30-08.35 Welcome and introduction
Path Soc Undergraduate Committee

08.35-09.25 An introduction of digital pathology
Dr Clare McGenity, Leeds Teaching Hospitals NHS Trust, Leeds, UK

09.30-10.05 Trainee's experience in digital pathology
Dr Charlotte Spencer, The Crick Institute, London, UK

10.10-10.55 An introduction to molecular pathology
Dr David Moore, University College London, London, UK

10.55-11.20 **Coffee and Poster Viewing**

11.20-11.45 Trainee's experience in molecular pathology
Dr Seung Hyun Lee, Cancer Research UK Manchester Institute, UK

11.45-12.10 Insight into Histopathology training
Dr Kate Marks, University of Leeds, Leeds, United Kingdom

12.10-12.20 Trainee Case Report Prize Winner: Tall Cell Carcinoma with Reversed Polarity
Dr Maiar Elghobashy

12.20-12.35 Questions and answers

12.35-13.15 **Lunch Break and Poster Viewing**

13.15-14.15 **Chairman's Poster Rounds (2)**

P52 – P61 (Autopsy/Forensic)

P62 – P70 (Head & Neck, Osteoarticular, Soft Tissue)

P71 – P78 (Gastrointestinal, Hepatobiliary, Pancreas)

P79 – P88 (Digital Pathology/AI)

P89 – P99 (Breast)

**P100 – P109 (Cardiovascular, Pulmonary, COVID19, Dermatopathology,
Case Reports)**

14.15-14.35 Life as District General Hospital pathologist
Dr Angus McGregor, Leicester Royal Infirmary, Leicester, UK



Undergraduate Day – Max Rayne Auditorium (continued)

- 14.35-14.55 Life as a tertiary centre pathologist
Dr Max Robinson, NovoPath, Newcastle, UK
- 14.55-15.15 Life as a research group leader and pathologist
Dr Elizabeth Soilleux, University of Cambridge, Cambridge, UK
- 15.15-15.30 Questions and Answers
- 15.30-16.00 Coffee and Poster Viewing**
- 16.00-17.30 Undergraduate Oral Poster Competition**
Judges: Dr Gemma Petts and Dr Kate Marks
- 16.00-16.15 Relationship between the Warburg effect in tumour cells and the tumour microenvironment in colorectal cancer patients: Results from a large multicentre study
Mr Jorn Steeghs, Maastricht University, Maastricht, Netherlands
- 16.15-16.30 Exposure to enterotoxigenic bacteroides fragilis (ETBF) bacteria found in association with colorectal cancer increases clonal mutations in mice
Mr Harry Hall, University of Birmingham, UK
- 16.30-16.45 Investigating the effects of irradiation on the peritumoral microvasculature in glioblastoma multiforme
Mr Arslan Shakeel, Hull York Medical School, York, UK
- 16.45-17.00 Morphological comparison of colon cancer resection specimens derived from two leading surgical techniques: Japanese D3 and European complete mesocolic excision with central vascular ligation
Mr Ross Jarrett, Leeds Institute of Medical Research, Leeds, UK
- 17.00-17.15 Deep learning segmentation of picosirius red staining for the assessment of collagen deposition in pre-clinical models of cancer
Mr Leshanth Uthayanan, Institute of Cancer Research, London, UK
- 17.15-17.30 Vascular remodelling and structural changes in placentas of pregnant mice infected with various pathogens
Miss Yasmin Adewusi, University of Cambridge, Cambridge, UK
- 19.30 Society Dinner (pre-booked only)**
The Brewery, 52 Chiswell Street, London, EC1Y 4SD



Day 3 – Thursday 2 February 2023

08.00-09.00 **Registration and Coffee**

09.00-10.35 **Symposium 7: Principles of Computational Pathology**

Chairs: Professor Jakob Kather, Dresden University of Technology, Dresden, Germany and Dr Julien Calderaro, Henri Mondor Hospital, Paris, France

09.00–09.20 Digital pathology: The broader integration

Professor Manuel Salto-Tellez, Queen’s University Belfast, Belfast, UK

09.20–09.40 A brief history of end-to-end AI in computational pathology

Professor Jakob Kather, Dresden University of Technology, Dresden, Germany

09.40–10.00 Quality control of whole slide images in computational pathology

Dr Lisa Browning, John Radcliffe Hospital, Oxford, UK

10.00-10.20 Explainability in pathology AI

Dr Mara Graziani, IBM Research Zürich, Switzerland

10.20-10.35 Discussion

10.35-11.00 **Coffee and Poster Viewing**

11.00-12.20 **Free Oral Presentations**

Chairs: Professor Mark Arends, University of Edinburgh, Edinburgh, UK and Professor Mohammad Ilyas, University of Nottingham, Nottingham, UK

11.00-11.10 Predicting soft tissue tumours diagnoses with deep learning

Dr Mikaël Simard, University College London, London, UK

11.10-11.20 Inflammatory pathology in human motor neuron disease

Dr Bridget Ashford, Sheffield Institute for Translational Neuroscience, Sheffield, UK

11.20-11.30 Spatial evolution of ductal carcinoma in-situ precludes accurate risk stratification on biopsy alone

Dr Philip Elliott, Barts Cancer Institute, London, UK

11.30-11.40 Label-free imaging of fresh human tissue and clinical application for histopathology



Dr Takahiro Matsui, Osaka University, Osaka, Japan

- 11.40-11.50 Quantifying the accumulation of clonal mutations in colorectal epithelium from patients who develop cancer compared to those without
Dr Kate Marks, Leeds Teaching Hospitals NHS Trust, Leeds, UK
- 11.50-12.00 pTERT mutation in the risk-stratification of solitary fibrous tumours
Dr Thomas Butters, University College London Cancer Institute, London, UK
- 12.00-12.10 A mouse model of PTEN Hamartoma Tumour Syndrome (PHTS): insights into the pathology and genomics of PTEN as a tumour suppressor and utilisation for pre-clinical tumour prevention drug testing
Dr Victoria Rathbone, University College London, London, UK
- 12.10-12.20 Development of a comprehensive assay for the molecular profiling of cancer by target enrichment from FFPE specimens
Dr Shinji Kohsaka, National Cancer Centre Research Institute, Tokyo, Japan
- 12.20-13.10 The Pathological Society of Great Britain & Ireland 16th Goudie Lecture**
Chair: Sarah E Coupland, General Secretary, Pathological Society & University of Liverpool, UK
- How I learned to stop worrying and love genomics
Professor Jorge S Reis-Filho, Memorial Sloan Kettering Cancer Center, New York, USA
- 13.10-14.00 Lunch Break and Poster Viewing**
- 14.00-14.45 The Royal College of Pathologists Neera Patel Lecture**
Chair: Sarah E Coupland, General Secretary, Pathological Society & University of Liverpool, UK
- Exploring sex differences in the breast cancer microenvironment
Professor Valeries Speirs, University of Aberdeen, Aberdeen, UK

14.50-16.30 Symposium 8: Applied Computational Pathology

Chairs: Professor Ralf Huss, University Hospital Augsburg, Augsburg, Germany
and Dr Sabine Leh, Haukeland University Hospital, Bergen, Norway

14.50–15.10 Applications of AI in liver pathology

Dr Julien Calderaro, Henri Mondor Hospital, Paris, France

15:10–15:30 The rationale of digital pathology in prostate cancer

Professor Ralf Huss, University Hospital Augsburg, Augsburg, Germany

15:30–15.50 AI in renal pathology

Dr Sabine Leh, Haukeland University Hospital, Bergen, Norway

15.50-16.10 Pros and cons of AI in diagnostic pathology

Professor Paul van Diest, University Medical Center Utrecht, Utrecht, NL

16.10-16.30 Discussion

16.30 Closing remarks