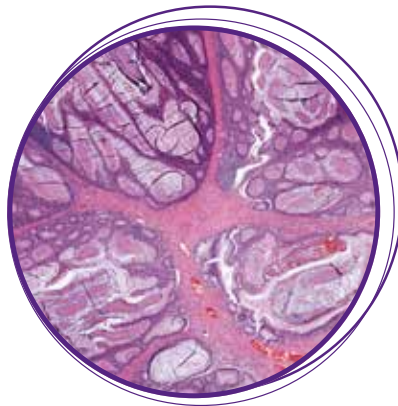




11TH DIGITAL PATHOLOGY & AI CONGRESS: EUROPE

UTILIZING DIGITAL PATHOLOGY & AI TO ADVANCE PATHOLOGY PRACTICE,
ENABLE ENHANCED PATIENT CARE AND FURTHER DRUG DISCOVERY

LONDON HILTON METROPOLE - LONDON, UK
11-12 December 2024



#DigiPathLondon

www.global-engage.com



Global Engage is pleased to announce the **11th Digital Pathology & AI Congress**, which is confirmed to take place on 11-12 December 2024 in London, UK at the London Hilton Metropole.

This world-renowned sell-out event attracted over 575 attendees and over 50 exhibitors last year. With 6 tracks focusing on the topics below, there is ample content to learn from top experts, network and broaden your connections and should you wish to showcase your work in the poster presentation sessions.

Conference Session Schedule

	Track 1	Track 2	Track 3
Day 1	Imaging AI & Digital Image Analysis	Digital Pathology Implementation, Strategy & Technology	Pharma/Biotech Case Studies
Day 2	Computational Pathology & AI	Applications and Research Case Studies	Pharma/Biotech Case Studies

- 75 strong senior level speaker faculty
- Exhibition hall for 60+ vendors
- Expert-led roundtables and interactive panel sessions
- Unique academic and pharma/biotech joint focus
- Poster presentations/ competition to promote scientific development
- Over 7 hours of networking time
- A fantastic reputation as the number one Digital Pathology & AI series worldwide

Reasons to attend

Are you:-

- Looking to invest and optimise the business case for digital pathology?
- Keen to learn how others have successfully implemented and integrated DP & AI into their workflow?
- An experienced user looking to uncover the latest advances, developments and case studies in the field
- Interested to meet 60+ vendors all in one room
- Wanting to network with like-minded peers

This congress is not to be missed and is a must attend event for anyone wanting to invest or utilize digital pathology to its full potential.



Medical staff and clinical scientists in career grade posts who are enrolled with one of the Royal Colleges for CPD purposes and attend the meeting will be entitled to receive 11 CPD credits.



ANDREW JANOWCZYK
Assistant Professor, Department of Biomedical Engineering, Emory University and Georgia Institute of Technology and Department of Oncology, Division of Precision Oncology, Department of Diagnostics, Division of Clinical Pathology, Geneva University Hospitals, Switzerland



ANNA BODÉN
Pathologist and co-lead Bigpicture, Department of Clinical Pathology, (Region Östergötland), Centre for Medical Image Science and Visualization, Linköping University, Linköping, Sweden



BASHARAT HUSSAIN
Deployment Director, National Pathology Imaging Co-operative (NPIC)



BRANKO PERUNOVIC
Chief Medical Officer, Black Country Pathology Service



CARA BRODIE
Histopathology/ISH core facility, Cancer Research UK



RADHA KRISHNAN
Distinguished Scientist, Merck



CHRIS SLEIGHT
Chief Officer, Greater Manchester Diagnostics Network



CORINNA WOLF
Scientific Associate Director Digital Pathology, Merck Healthcare KGaA



DARREN TREANOR
Consultant Pathologist, Leeds Teaching Hospitals NHS Trust, Clinical Professor of Pathology, University of Leeds, Adjunct Professor of Digital Pathology, Linköping University and Director, National Pathology Imaging Co-operative



DAVID SNEAD
Professor & Consultant Pathologist UHCW NHS Trust Coventry and Director of PathLAKE and Professor of Pathology Warwick Medical School Coventry, UK



ELENA DE MIGUEL (Reserved)
Associate Director Non-Clinical, UniQure



EVITA SADIMIN
Chief, Division of Pathology Informatics and Data Science, Department of Pathology, City of Hope National Medical Center



ISABELLE SALMON
Head of the Department of Pathology, Erasme Hospital



JO MARTIN
Professor of Pathology, Deputy Vice Principal Health, Queen Mary University of London



JOHN LE QUESNE
Professor of Molecular Pathology, CRUK Beatson Institute



KATRIEN GRUNBERG
Professor & Chair of the Department of Pathology, Bigpicture co-coordinator, Radboud University



LASZLO IGALI
Consultant Histopathologist, Chair of the Informatics Committee, RCPATH, Norfolk and Norwich University Hospital



LAURI DIEHL
Executive Director Nonclinical Safety & Pathobiology, Gilead



LORENZO RESEL
Professor of Veterinary Pathology, University of Liverpool



LUIZA MOORE
Senior Director of Clinical Diagnostics, Global Oncology Diagnostics, AstraZeneca



MARILYN BUI
Scientific Director of Analytic Microscopy Core at Moffitt Cancer Center, Moffitt Cancer Center; Chair of Digital and Computation Pathology Committee of CAP



MATTHEW HUMPHRIES
Research Portfolio Delivery Manager, National Pathology Imaging Co-operative (NPIC)



MIKE LANGFORD
Principal Scientist and Laboratory Director, Spire Healthcare



NATHALIE FIASCHI (Reserved)
Senior Director, Oncology & Immune-Oncology, Head of the Clinical Histology Core (CHiC), Regeneron



NINA LINDER
Associate Professor, Global Health & Migration, Dept. of Women's and Children's Health, Uppsala University



ORLY ARDON
Director Digital Pathology Operations and Assistant Attending, Memorial Sloan Kettering Cancer Center



PETER SCHIRMACHER
Director, Institute of Pathology Heidelberg University Hospital; President, European Society of Pathology



RENATE KAIN
Head of Pathology, University of Vienna



RICHARD HAWORTH
Director, RosettaPath



MAXIMILIAN KOELLER
Pathology Resident & PhD Student, University of Vienna



STEFAN PLATZ
SVP, Clinical Pharmacology & Safety Sciences, AstraZeneca



THEO PLANTINGS (Reserved)
Principal Scientist, Pathology, Genmab



FIONA HENDERSON
PhD, Senior Field Applications Scientist, EMEA, Indica Labs



GLORIA BUENO
Full Professor, Universidad de Castilla-La Mancha, Spain



PRITI LAL
Professor of Pathology, University of Pennsylvania, USA

Diamond Sponsor



Platinum Sponsors



Gold Sponsors



Silver Sponsors



Bronze Sponsors



Other Exhibitors & Sponsors

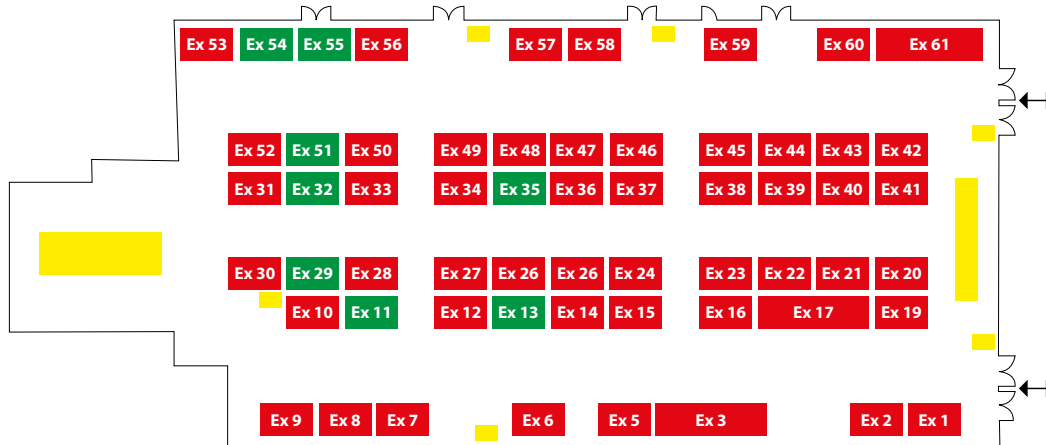




11TH DIGITAL PATHOLOGY & AI CONGRESS: EUROPE

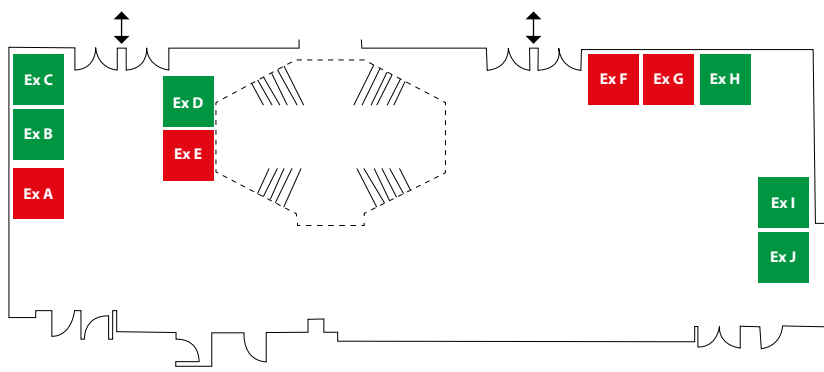
HILTON LONDON METROPOLE
11-12 December 2024

MAIN EXHIBITION AREA



#1 Indica Labs	#17 Objective Imaging	#33 Stratipath	#48 GE Healthcare
#2 Axlab	#19 Sectra	#34 LG Electronics	#49 PathQA
#3 Leica Biosystems	#20 Aiforia Technologies	#35 Techcyte Europe	#50 Dell Technologies
#5 Paige	#21 Medica Reporting	#36 EIZO	#51 FUJIFILM Healthcare UK Ltd
#6 Clinisys	#22 OracleBio	#37 Deep Bio	#52 INFINITT Europe
#7 Histofy	#23 Visiopharm	#38 Aurora mScope	#54 Grundium
#8 Roche	#24 KFBIO	#39 Grundium	#55 Lunaphore
#9 PathAI	#25 mTuitive	#40 Proscia	#56 Deciphex / Diagnexia
#10 Siemens Healthineers	#26 NPIC	#41 Aira Matrix Private Limited	#57 G2 Speech
#11 Evident Europe GmbH	#27 Sysmex	#42 Ultivue	#58 Lumea
#13 Philips	#28 Source LDPath	#43 Owkin	#59 Cirdan
#14 Barco NV	#30 Hamamatsu	#44 Tribun Health	#60 Epredia
#16 AGFA HealthCare	#31 IBEX Medical Analytics	#45 IBEX Medical Analytics	
	#32 SCC Soft Computer	#46 SCC Soft Computer	

START UP / INNOVATION ZONE EXHIBITION AREA



- A Tooploox
- B
- C
- D
- E Histomography
- F Modella AI
- G Spotlight Pathology
- H
- I
- J

Key

- Allocated Exhibition Space
- Available Exhibition Space
- Lunch / Refreshment Station
- ↔ To / From Conference Rooms

*Global Engage reserves the right to make adjustments to this plan where necessary for operational reasons

7:45-8:45 Registration & Sponsored Breakfast Workshop Session

8:50-9:00 Global Engage Welcome Address / Morning Chair's Opening Remarks

9:00-9:40



**KEYNOTE ADDRESS:
KATRIEN GRUNBERG**

Professor Head of the Department of Pathology at Radboudumc, Nijmegen, The Netherlands

AI Red Queen in pathology practice

Digitizing pathology has set the stage for borderless sharing of pathology expertise and for introducing artificial intelligence to everyday pathology practice. In this talk I will share experiences from Radboudumc pathology practice in digital collaboration in a regional network and creating a playground for safe and responsible introduction of AI solutions in clinical practice.

9:40-10:15



**KEYNOTE ADDRESS:
ANDREW JANOWCZYK**

Assistant Professor, Department of Biomedical Engineering, Emory University and Georgia Institute of Technology and Department of Oncology, Division of Precision Oncology, Department of Diagnostics, Division of Clinical Pathology, Geneva University Hospitals, Switzerland

Clinical deployment of digital pathology algorithms for precision medicine

- Integration: Explore how digital pathology algorithms are seamlessly integrated into clinical workflows, enhancing diagnostic accuracy and efficiency for pathologists.
- Precision Medicine Impact: Discuss the role of these algorithms in enabling precision medicine by identifying biomarkers, predicting treatment responses, and stratifying patients for personalized therapies based on pathomic profiles and disease characteristics.
- Clinical Validation and Adoption: Discuss the importance of clinical validation studies in demonstrating the reliability and effectiveness of digital pathology algorithms, and explore strategies for widespread adoption by healthcare institutions, including training programs for pathologists and infrastructure support for implementation.

10:15-10:45

SENIOR REPRESENTATIVE

Sectra



10:45-11:55 Morning Break / Poster Presentations / One-to-One Partner Meetings

IMAGING AI & DIGITAL IMAGE ANALYSIS

11:55-12:20



JOHN LE QUESNE

Professor of Molecular Pathology, CRUK Beatson Institute
Self-learning AI in pathology images; from H&E to multiplex
Abstract: HPL (Histomorphological Phenotype Learning) is a new self-learning artificial intelligence approach which

discovers the meaningful recurrent morphological landscape in a set of histology images, and assigns interpretable quantitative summary vectors to whole slide images. It performs extremely well, generating best-in-class performance in lung cancer and mesothelioma cohorts in several tasks including subtyping and prognosis. Furthermore, it is highly interpretable and democratizes image interpretation. We have been adapting the method to multiplex IF imaging, finding that it discovers key biologies related to patient outcomes without expert annotation. We will discuss this innovative approach and give multiple examples of its performance.

12:20-12:45



LASZLO IGALI

Consultant Histopathologist, Chair of the Informatics Committee, RCPATH, Norfolk and Norwich University Hospital

Topic: Practical use of imaging and other types of AI in diagnostics

DIGITAL PATHOLOGY IMPLEMENTATION, STRATEGY & APPLICATIONS

11:55-12:20



ANNA BODÉN

Pathologist and co-lead Bigpicture, Department of Clinical Pathology, (Region Östergötland), Centre for Medical Image Science and Visualization, Linköping University, Linköping, Sweden

Bigpicture: A Digital Pathology Platform for FAIR Data Sharing and AI Development - The Skin Node Experience

- Bigpicture is an IMI funded project that aims to develop a digital pathology repository and services for FAIR data sharing and AI development.
- Bigpicture has developed a data model, tools, and guides to support data extraction, conversion, and sharing, based on DICOM, ISO, and common ontologies.
- Bigpicture data collection is organized into 7 clinical nodes, each with a node coordinator and a specific data collection strategy. The skin node focuses on skin cancer cases and observations. I will in this talk present the practical steps from clinical data to the final sharable dataset, based on experiences from the first collected skin dataset.

12:20-12:45



BRANKO PERUNOVIC

Chief Medical Officer, Black Country Pathology Service
Journey to Pathology 3.0: Intelligent Digital Pathology Platform Programme

PHARMA/ BIOTECH CASE STUDIES

11:55-12:20



STEFAN PLATZ

Clinical Pharmacology & Safety Sciences, AstraZeneca
Digital pathology and its vital role as the cornerstone of the spatial biology revolution

At AstraZeneca, we are expanding the role and impact of digital toxicological pathology beyond quantitative image assessment. We are establishing a suite of tools and frameworks for integrating emerging multi-omic data to support our pathology project portfolios. By effectively embedding digital pathology tools into our workflows, we can improve the quality and quantity of pathology analysis but also apply it to new data sources. This is providing novel insights and a dynamic, integrated understanding of tissues, disease, and impact of our therapies. We are also expanding digital pathology into virtual pathology, where we use advances in AI analysis to accurately recreate label-free multiplex images from standard histology data. Key to driving our innovation and adoption are close collaborations between our pathologists and multidisciplinary data scientist, enabling a seamless and scalable digital revolution to support our accelerated drug discovery.

12:20-12:45

SENIOR REPRESENTATIVE

GSK

SENIOR REPRESENTATIVE
Aiforia



SENIOR REPRESENTATIVE
GE Healthcare



SENIOR REPRESENTATIVE
Diagnexia



12:45-1:15

12:45-1:00

12:45-1:15

1:00-1:15

15-Minute Solution Provider Presentation
For sponsorship opportunities contact Gavin Hambrook
gavin@globalengage.co.uk

1:15-2:25 Lunch



CARA BRODIE

Histopathology/ISH core facility, Cancer Research UK
Dissecting prostate cancer metabolic compartmentalization using digital pathology and hyperpolarized MRI

Prostate cancer (PCa) is the second commonest and the fifth deadliest male cancer worldwide. The key diagnostic challenge in PCa is differentiating indolent from clinically significant disease as the latter requires more stringent follow-up and/or immediate treatment. Hyperpolarized [1-13C]pyruvate MRI (HP-13C-MRI) is an emerging clinical imaging technique that can visualize metabolic alterations that occur throughout tumorigenesis. Digital pathology and image analysis with HALO was used to measure immunohistochemical and mRNA expression of monocarboxylate transporters 1 and 4, confirming that HP-13C MRI specifically visualizes tumor epithelial metabolism that was significantly different from that of PCa stroma.

2:25-2:50



BASHARAT HUSSAIN

Deployment Director, National Pathology Imaging Co-operative (NPIC)
Digital Pathology Implementation, Strategy & Application
The NPIC Journey - covering the technical journey of

deploying a National Digital Pathology System, including some of the challenges and the benefits.

2:25-2:50



CORINNA WOLF

Scientific Associate Director Digital Pathology, Merck Healthcare KGaA

The power of DP & AI for clinical implementation of tissue-based biomarker assays in the context of DNA Damage Response (DDR) drug development

At AstraZeneca, we are expanding the role and impact of digital toxicological pathology beyond quantitative image assessment. We are establishing a suite of tools and frameworks for integrating emerging multi-omic data to support our pathology project portfolios. By effectively embedding digital pathology tools into our workflows, we can improve the quality and quantity of pathology analysis but also apply it to new data sources. This is providing novel insights and a dynamic, integrated understanding of tissues, disease, and impact of our therapies. We are also expanding digital pathology into virtual pathology, where we use advances in AI analysis to accurately recreate label-free multiplex images from standard histology data. Key to driving our innovation and adoption are close collaborations between our pathologists and multidisciplinary data scientist, enabling a seamless and scalable digital revolution to support our accelerated drug discovery.

2:25-2:50



RADHA KRISHNAN

Distinguished Scientist, Merck

2:50-3:15



EVITA SADIMIN

Chief, Division of Pathology Informatics and Data Science, Department of Pathology, City of Hope National Medical Center
Optimizing digital pathology: Enhancing efficiency and improving satisfaction

After the initial setup phase, which includes configuring scanners, storage solutions, Laboratory Information Systems (LIS), and Image Management Systems (IMS), attention to further details remains crucial for optimizing the digital pathology workflow. This presentation will delve into essential aspects such as monitors options and navigation tools designed to enhance efficiency and ensure user comfort. In addition, we will explore effective strategies for utilizing templates to streamline repetitive tasks, reducing errors and improving consistency in diagnostic processes. These solutions are useful not only for clinical applications but also for advancing education and facilitating research.

2:50-3:15

THEO PLANTINGS (Reserved)

Principal Scientist, Pathology, Genmab

Topics: Spatial Transcriptomics

2:50-3:15



ORLY ARDON

Director Digital Pathology Operations and Assistant Attending, Memorial Sloan Kettering Cancer Center

3:15-3:40



NINA LINDER

Professor (Guest), Uppsala University, Sweden and Researcher at the Institute for Molecular Medicine - FIMM, University of Helsinki, Finland

AI with pathologist verification for cervical cancer screening in a global setting

We have developed a method for point-of-care diagnostics in low-resource settings based on a combination of mobile small sized scanners and artificial intelligence, with a broad potential for application to cytology/histopathology, for example screening for cervical atypia (n=2950 patients). The microscope scanners are wirelessly connected via mobile networks for deep learning-

3:15-3:40

NATHALIE FIASCHI (Reserved)


Senior Director, Oncology & Immune-Oncology, Head of the Clinical Histology Core (CHiC), Regeneron

Topic: Image Analysis - Cell engagement with Tumour cells


3:15-3:40

3:15-3:40

Continued



FIONA HENDERSON
PhD, Senior Field Applications Scientist,
EMEA, Indica Labs




HALO: Powering Discovery with AI
Join us for a live demonstration of HALO® and HALO AI, the intuitive deep learning platform for image analysis. This session will showcase HALO AI's powerful capabilities, flexibility, and scalability across diverse research areas such as immuno-oncology, neuroscience, and metabolism. Whether you're new to HALO or an existing user, this demonstration will guide you through complex tissue and cell segmentation using pre-trained and trainable networks. Learn how to enhance your annotation skills for optimal training and discover the full potential of HALO AI. Nuclear and membrane segmentation optimised in HALO AI can then be embedded in HALO analysis modules for improved cell detection and phenotyping. We will also demonstrate how creating classifier pipelines can achieve more precise and efficient batch image analysis.

3:40-4:10

3:15-3:40

based image analysis. Results are verified and classified by cytotechnologists and pathologists and agreement between observers is estimated. The diagnostic system provides a tool for access to advanced diagnostics at the point-of-care, meaning a significant step towards a more equitable and sustainable access to high-quality diagnostics in a global setting.

SENIOR REPRESENTATIVE
Proscia




3:40-4:10

3:15-3:40


Continued

SENIOR REPRESENTATIVE
Owkin



3:40-3:55

SENIOR REPRESENTATIVE
Histologix




3:55-4:10

4:10-5:00 Afternoon Break / Poster Presentations / One-to-One Partner Meetings

IMAGING AI & DIGITAL IMAGE ANALYSIS

SENIOR REPRESENTATIVE
Lumea



5:00-5:30

DIGITAL PATHOLOGY IMPLEMENTATION, STRATEGY & APPLICATIONS

SENIOR REPRESENTATIVE
EpreDia



5:00-5:30

DIGITAL PATHOLOGY TECHNOLOGY & APPLICATIONS

SENIOR REPRESENTATIVE
EIZO



5:00-5:15

5:15-5:30

15-Minute Solution Provider Presentation
For sponsorship opportunities contact Gavin Hambrook
gavin@globalengage.co.uk

PANEL DISCUSSION:
What AI tools do pathologists want and what are they likely to receive?

- What are the roles of AI in accelerating the generation of novel therapies, and how do we provide this?
- How do we reimburse the adoption of AI into clinical practice?
- Is digital pathology delivering on its promise?

Senior Representatives x 4

5:30-6:20

MIKE LANGFORD
Principal Scientist and Laboratory Director, Spire Healthcare



Leveraging the Transformative Power of Digital Pathology
As an independent sector hospital group, Spire have some similarities to the NHS, but also faced unique challenges in implementing digital pathology. Mike will explore the journey Spire have embarked on in providing a UK wide service, where digital pathology enabled pathways is changing job roles, improving patient care and opening the door for AI to augment improved outcomes.

CHRIS SLEIGHT
Chief Officer, Greater Manchester Diagnostics Network

Motivating the Future workforce and attitudes to technology and AI

5:30-5:55

5:55-6:20

ROUNDTABLE SESSIONS:
Roundtables are informal, small-group interactive discussions on key topics in the field. Discussion leaders will introduce sub-topics/questions for discussion and roundtable attendees are encouraged to participate actively in the session




TABLE 1: Accreditation of digital pathology algorithms within the clinical routine workflow
ANDREW JANOWCZYK
Assistant Professor, Department of Biomedical Engineering, Emory University and Georgia Institute of Technology and Department of Oncology, Division of Precision Oncology, Department of Diagnostics, Division of Clinical Pathology, Geneva University Hospitals, Switzerland

5:30-6:20

6:20-7:20 Networking Drinks Reception

7:20 Sponsored Dinner Workshop Session

7:45-8:45 Sponsored Breakfast Workshop Session

8:55-9:00 Morning Chair's Opening Remarks

9:00-9:40



**KEYNOTE ADDRESS:
PETER SCHIRMACHER**

Director, Institute of Pathology, Heidelberg University Hospital; President, European Society of Pathology
Computational Pathology - Strategy of the European Society of Pathology (ESP) and impact on pathohistological diagnostics

9:40-10:15



**KEYNOTE ADDRESS:
MARILYN M. BUI**

Senior Member and Professor of Pathology and Machine Learning Departments, Scientific Director of Analytic Microscopy Core, Moffitt Cancer Center & Research Institute, Tampa, FL, USA; Chair of Digital and Computation Pathology Committee of CAP
Digital Pathology and AI for Practicing Pathologists

- Update on recent developments in DP and AI relevant to practicing pathologists.
- Raise awareness of resources and guides for incorporating DP and AI into daily practice.
- Foster collaboration between pathology and scientific communities

10:15-10:45

SENIOR REPRESENTATIVE
Aira Matrix



10:45-11:35 Morning Break / Poster Presentations / One-to-One Partner Meetings

COMPUTATIONAL PATHOLOGY & AI

11:35-12:00



DAVID SNEAD

Professor & Consultant Pathologist UHCW NHS Trust Coventry and Director of PathLAKE and Professor of Pathology Warwick Medical School Coventry, UK
Drivers and barriers to the adoption of AI into cellular pathology

The promise of AI to improve histopathology has been the focus of considerable attention over the past 5 years. However, its adoption remains limited to a relatively small number of laboratories and use cases. The vast majority of cellular pathology work remains the domain of the human pathologist alone. The adoption of digital pathology AI presents considerable challenges to laboratory managers, pathologists, procurement and IT departments. This talk, drawn largely from the experience of running the PathLAKE project for the past four and a half years, explores some of the main drivers and barriers to the adoption of this technology. A review of use cases considered in the PathLAKE procurement, the process of drawing up specifications, the difficulties in delivering solutions into the pathologist's workflow will be reviewed.

12:00-12:25



JO MARTIN

Professor of Pathology, Deputy Vice Principal Health, Queen Mary University of London

12:25-12:55

SENIOR REPRESENTATIVE
IBEX



DIGITAL PATHOLOGY STRATEGY & APPLICATIONS

11:35-12:00



RENATE KAIN

Head of Pathology, University of Vienna
Digital spatial profiling in immunological diseases of the kidney

Digital spatial profiling, a technology increasingly used to interrogate transcriptomic and protein expression profiles in tissue sections in topographical context has increasingly become a method not only to generate hypotheses but also to investigate specific disease pathways and molecular signatures. Well established in neoplastic disease, it now also provides a technology to be used in complex immunological diseases like auto-immune diseases of the kidney.

12:00-12:25



ISABELLE SALMON

Head of the Department of Pathology, Erasme Hospital
Improving the neuropathological diagnosis of pediatric brain tumors and clinical management of patients using the SecundOS diagnostic platform

12:25-12:55

SENIOR REPRESENTATIVE
Tribun Health



PHARMA/ BIOTECH CASE STUDIES

11:35-12:25

PANEL DISCUSSION:

How is AI implementation delivering a return on investment in your pathology workflows?



RICHARD HAWORTH

Founder and Director, RosettaPath

Senior Representatives x 4

12:25-12:55

SENIOR REPRESENTATIVE
Ultivue



POSTER COMPETITION WINNERS TALK:

If interested in submitting a poster and/or applying to present a poster on the programme, please apply before the deadline of 22nd November 2024

12:55-1:10

POSTER COMPETITION WINNERS TALK:

If interested in submitting a poster and/or applying to present a poster on the programme, please apply before the deadline of 22nd November 2024

12:55-1:10

POSTER COMPETITION WINNERS TALK:

If interested in submitting a poster and/or applying to present a poster on the programme, please apply before the deadline of 22nd November 2024

12:55-1:10

1:10-2:20

Lunch

SENIOR REPRESENTATIVE

Leica Biosystems



2:20-2:50



GLORIA BUENO

Full Professor, Universidad de Castilla-La Mancha, Spain

Classification of Glomerulonephritis with AI

Although renal biopsy is the gold standard for diagnosing glomerulonephritis, it remains inaccessible to many patients worldwide. Nephropathologists use a combination of microscopy, immunohistology, electron microscopy, clinical data, and genetics for diagnosis, but variability in evaluation has limited its integration with emerging technologies and personalized medicine. This study proposes the use of deep learning to extract significant features to distinguish glomerulonephritis from PAS sections without other modalities. To test this hypothesis, various AI methods were used to classify 12 common glomerulonephritis diagnoses. The best results were obtained using Swin-Transformers and ConvNeXt. An average balanced accuracy of 97% and an AUC of 0.96 were achieved for classifying sclerosed glomeruli, while an average balanced accuracy of up to 79.5% and an average AUC of 0.76 were achieved for the 12 glomerulonephritis diagnoses. This study establishes a baseline for this challenging classification task, demonstrating promising results even on single PAS glomerular crops.

2:50-3:15



MATTHEW HUMPHRIES

Research Portfolio Delivery Manager, National Pathology Imaging Co-operative (NPIC)

The NPIC AI FORGE: A unique multi-scanner facility for artificial intelligence data acquisition

The talk will describe the concept, installation, and capabilities of the scanning facility, including how we are already supporting translation research.

3:15-3:40



MAXIMILIAN KOELLER

Pathology Resident & PhD Student, University of Vienna

Standardized metadata for computational pathology

The interrogation of scanned whole slide images of histopathological specimen requires unified nomenclatures and metadata not only for comparative clinical studies but also to interrogate repositories containing whole slide images. Bigpicture, an EC funded IMI project designed to collect 3 Million histopathological whole slide images and associated metadata set out to fulfill this goal by providing a framework for collecting data and associated metadata at pre-analytical, technical and diagnostic level. Here we present a minimum standardized metadata for the development of artificial intelligence in computational pathology.

3:40-4:05

SENIOR REPRESENTATIVE

AGFA Healthcare



2:20-2:50



LORENZO RESSEL

Professor of Veterinary Pathology, University of Liverpool

3D Virtual anatomical pathology: the experience of Liverpool Veterinary School

Pathology educators have long aimed to preserve unique and typical lesions for teaching, a need accelerated by the shift to online learning. To address this, we developed a standardized protocol for creating digital 3D models for veterinary pathology education. Utilizing photogrammetry, we capture multiple photographs from different angles to reconstruct a 3D mesh, overlaying it with detailed textures of the organ surfaces. These models are used in live sessions or uploaded to online platforms for study and revision. Additionally, we incorporate these models into a virtual reality (VR) environment in the metaverse, allowing users to interact with the models and each other in a virtual room. This approach not only enhances learning with life-like, durable 3D models but also leverages the metaverse's potential for immersive and interactive education in veterinary pathology.

2:50-3:15

PRITI LAL

Professor of Pathology, University of Pennsylvania, USA

3:15-3:40

ACADEMIC PRESENTATION

Invitation Out

3:40-4:05

SENIOR REPRESENTATIVE

Dell Technologies



2:20-2:50



LUIZA MOORE

Senior Director of Clinical Diagnostics, Global Oncology Diagnostics, AstraZeneca

Topic: Biomarker Assessment

2:50-3:15



LAURI DIEHL

Executive Director Nonclinical Safety & Pathobiology, Gilead

How we apply deep learning/AI to practical problems in computational pathology

3:15-3:40



RICHARD HAWORTH

Director, RosettaPath

Integration of AI in the Pathology workflow of toxicology studies

- Effective implementation of AI tools into the pathology workflow will lead to enhanced productivity and insights
- Increasing numbers of off-the-shelf algorithms and software vendors incorporating these tools into non-GLP and GLP workflows requires strategic review and careful selection by Pharma/ biotech/CRO decision makers
- Quantitative image analysis data will form an increasing part of pathology reports and needs to be generated, interpreted and reported alongside traditional semi-quantitative and qualitative diagnostic terms.

3:40-4:05

4:05-4:35



CLOSING KEYNOTE ADDRESS:

DARREN TREANOR

Consultant Pathologist, Leeds Teaching Hospitals NHS Trust, Clinical Professor of Pathology, University of Leeds, Adjunct Professor of Digital Pathology, Linköping University and Director, National Pathology Imaging Co-operative

Update from NPIC - a national digital pathology system

4:35

End of Conference

MAKING A POSTER PRESENTATION – CLOSING DATE 22ND NOVEMBER 2024

Poster presentation sessions will take place in breaks and alongside the other breakout sessions of the conference. Your presentation will be displayed in a dedicated area, with the other accepted posters from industry and academic presenters.

We also issue a poster eBook to all attendees with your full abstract in and can share your poster as a PDF after the meeting if you desire (optional).

Whether looking for funding, employment opportunities or simply wanting to share your work with a like-minded and focused group, these are an excellent way to join the heart of this congress.

In order to present a poster at the forum you need to be registered as a delegate. Please note that there is limited space available and poster space is assigned on a first come first served basis (subject to checks and successful registration)

SUBMISSION INSTRUCTIONS

We will require the form to be submitted by the 22nd November. This is the formal deadline however space is another limiting factor so early application is recommended. Therefore please contact us with any questions you have as soon as possible.

POSTER COMPETITION

- Three 15-minute speaking slots have been reserved on the Agenda for you to give an oral presentation of your research.
- Simply indicate that you would like your poster presentation to be submitted to the judging panel on the poster submission form.
 - The winning entries will be notified one week after the closing date above.
- The competition is not open to representatives of organisations offering services and/or business & technology solutions or business consultants.