DigiBase

Transforming Digital Pathology

Integrating AI to move towards Precision Pathology

30th April 2021 - 10:30am - 14:00 CET

Proud Partners of:

VISIOPHARM®

And

Agilent

Register Here

Lets take a look....

ARTIFICIAL INTELLIGENCE REVOLUTION

"Digital Pathology has been improving the quality and speed of patient care forever and is rapidly becoming the new standard of care. However, this advancement demands a strong connection between the internet, laboratory information systems and electronic medical records that artificial intelligence could help solve. Integrating AI in digital pathology is a much needed and important step towards achieving a greater and profound impact on the patient experience.

This webinar is scheduled to take place on **30th April 2021, 10:30 AM to 14:00 CET**, and will serve as a platform to further discuss and understand the strength of digital pathology tied with AI. The webinar will provide an insight into the practical aspects of implementing digital pathology into clinics and applications in AI settings."

Namrata N.

- Head of Production, DigiBase

Lets meet the speakers....

Dr. Gareth Bryson

Dr Gareth Bryson is a consultant pathologist at the Queen Elizabeth University Hospital, where he has also held the role of Head of Service for Pathology 2016-2020, overseeing the deployment of digital pathology. In addition, he is an honorary clinical associate professor at the University of Glasgow and honorary senior lecturer at University of St Andrews. Gareth's areas of expertise include gynaecological and urological pathology. His non-clinical interests include efficient systems, laboratory modernisation and workload measurement and digital pathology. He is the Scottish Pathology Network Lead for Digital Pathology. Within iCAIRD, Gareth is leading on the full digitisation of NHS GGC Pathology within the lifetime of the programme. He is also contributing to the exemplar projects with colleagues from University of St Andrews.

"I'm convinced that digital pathology will be the norm in the UK within 5 years."

TITLE OF TALK:

The road to a fully digital pathology service: Where are the biggest bumps?

OUTLINE:

- I will review our journey towards a fully digital workflow from 0 to 40,000 WSI per month
- What has gone well?
- Where have we work to do?

"Applications of artificial intelligence and machine learning techniques such as deep neural networks are now starting to make their way into the clinical diagnostic space and these will help in wider adoption of digital pathology".

THE OHIO STATE UNIVERSITY

WEXNER MEDICAL CENTER

Dr. Anil Parwani

Dr. Anil Parwani is a Professor of Pathology at The Ohio State University. He serves as the Vice Chair and Director of Anatomical Pathology. Dr. Parwani is also the Director of Pathology Informatics and Director of the Digital Pathology Shared Resource at The James Cancer Hospital. His research is focused on diagnostic and prognostic markers in bladder and prostate cancer, and molecular classification of renal cell carcinoma. Dr. Parwani has expertise in the area of surgical pathology, viral immunology and pathology informatics including designing quality assurance tools, bio banking informatics, clinical and research data integration, applications of whole slide imaging, digital imaging, telepathology, image analysis and lab automation. Dr. Parwani has authored over 300 peer-reviewed articles in major scientific journals and several books and book chapters. Dr. Parwani is the Editor-in-chief of Diagnostic Pathology and one of the Editors of the Journal of Pathology Informatics.

TITLE OF TALK:

Progress in Digital Pathology Clinical Implementation: Lessons learnt and the path forward using AI

OUTLINE:

- Provide an overview of the current state of Whole Slide Imaging for clinical diagnostics
- What are the key reasons to implement digital pathology?
- The impact of AI in propelling digital pathology adoption

Professor David Snead

Professor Snead is a consultant cellular (anatomical) pathologist at the University Hospitals Coventry and Warwickshire NHS Trust (UHCW) and Professor of Pathology at the University of Warwick. He has been in post at Coventry for 25 years. He is the founding director of PathLAKE, one of five Innovate UK funded centres of excellence for the development of artificial intelligence in digital pathology and radiology. He is an international expert in the use of digital pathology, having led Coventry to be one of the first hospitals in Europe to switch to digital pathology for routine diagnosis. His team published the world's largest validation study on the use of digital pathology, and was the recipient of the 2016 Roger Cotton Prize from Histopathology. Prior to setting up PathLAKE he was clinical service lead for cellular pathology at UHCW. This experience has given him a unique understanding of how innovative AI based solutions can be deployed to address the major challenges facing cellular pathology department across the NHS. There are no shortcuts to achieving excellent results with AI solutions, but a career's experience in diagnostic cellular pathology gives an invaluable understanding of where these innovations can be best deployed for the benefits of patients and pathologists.

TITLE OF TALK:

Artificial Intelligence in cellular pathology - what's not to like?

OUTLINE:

- A brief review of what is emerging from the AI space which is relevant to cellular pathologists now
- An overview of some of the challenges in delivering AI in practice with a strategy for overcoming these
- A discussion of the likely impact of AI on clinical practice focussing on some issues which may be important but which have received little attention so far.

Dr. Jennifer Hay

Dr. Jennifer Hay is the Head of the Glasgow Tissue Research Facility. The GTRF offers support in the next phase of research, post tissue acquisition and is closely linked to the NHS. Tissue-based research underpins precision medicine development and the GTRF enables the researcher to develop translational and preclinical aspects of their work through technical services and support. Jennifer has worked in the NHS for the last 13 years, previously as a senior Biomedical Scientist graduating with an MSC in Cellular Pathology and PhD in Neuropathology along the way. Prior to working in the NHS, she has worked in a commercial setting in LifeScan Scotland Ltd. and Stirling Medical Ltd.

Where do you think Digital Pathology is heading Jennifer?

"To the clouds!"

TITLE OF TALK:

‘Todays tissue for tomorrows research’

OUTLINE:

- NHS and the GTRF
- ‘Who, What, Why and How’ of the GTRF
- Future research

Institute for Molecular Medicine Finland
Nordic EMBL Partnership for Molecular Medicine
HiLIFE UNIT

Dr. Johan Lundin

Johan Lundin holds a joint position as Professor of Medical Technology at Karolinska Institutet in Stockholm, Sweden and as a Research Director at the Institute for Molecular Medicine Finland (FIMM), University of Helsinki, Finland. His overall research aims are to study the use of digital technologies and artificial intelligence (AI) for improvement of diagnostics and care of the individual patient.

He has together with researchers at KI and his research group at FIMM developed technologies for diagnostic decision support, for example cloud-based and mobile solutions that allow the diagnostic process to be performed remotely, by a human observer or using AI. The methods can aid in diagnostics at the point-of-care, decrease the workload of local experts and enable task-shifting. Johan Lundin will present ongoing projects on digital screening for cervical cancer and infectious disease diagnostics in Kenya and Tanzania.

TITLE OF TALK:

Artificial intelligence and digital diagnostics for global health applications

OUTLINE:

Pointer– experiences from implementation of digital pathology in resource-limited settings

WARWICK
THE UNIVERSITY OF WARWICK

Dr. Fayyaz Minhas

Dr. Minhas is an assistant professor at Warwick Department of Computer Science. He is also associated with the Tissue Image Analytics (TIA) centre and the Pathology image data Lake for Analytics, Knowledge and Education (PathLAKE) consortium. Dr. Minhas is a recipient of the Fulbright scholarship and works on solving problems in biology and medicine using machine learning methods as well as the development of bespoke machine learning algorithms in the domains of biomedical informatics and data science. Specifically, he is interested in designing machine learning models for integrating digital pathology and bioinformatics data for improved diagnosis and personalized treatment of cancer.

Where do you think Digital Pathology is heading Fayyaz?

"Towards reinvention with Artificial Intelligence".

TITLE OF TALK:

Computational Problems in Computational Pathology

OUTLINE:

- Discussion on various aspects of the data acquisition and processing pipelines in CPath
- Data Integration and Visualization
- Learning problems in CPath

VISIO PHARM®

Martin Kristensson

Senior Vice President, Global Clinical Sales

Senior Vice President, Global Clinical Sales Martin Kristensson is responsible for our global clinical commercial activities and teams. Together with his team, he coordinated the development of Visiopharms clinical products, and the change management processes used to implement the tools in the daily clinical routine across Denmark. In close collaboration with colleagues and customers, he continues to investigate new applications of image analysis within pathology, pursuing new ways of offering standardized high-quality data and diagnosis.

He received his M.Sc. in Biomedical Engineering from the Technical University of Denmark in 2011, specializing in Signal and Model-based Diagnostics, combined with Image Diagnostics and Radiation Physics. In 2014, he became a certified Project Manager.

TITLE OF TALK:

Accelerating Accurate Diagnosis

OUTLINE - (JOINT PRESENTATION WITH LIVE Q&A):

In this session, with experts from Agilent and Visiopharm, we will dive deeper into the current gaps in IHC staining and analysis and discuss how digital solutions can enable faster, more accurate information for patient diagnosis. Some of the topics that will be covered:

- How can we address the issues around workflow efficiency and staining standardization in the lab?
- What can image analysis offer to enhance pathologists' assessment of an ever-increasing case load of samples?
- What does it mean to go digital in the clinical lab, and how can you get started converting to a digital infrastructure?

Lars Christian von Gersdorff, M.Sc

Director of R&D Function, Reagent Development

Lars have been working with Agilent the past 5 years as R&D Director for Reagent Development in the Pathology division. In this role he is responsible for the entire Reagent Development flow all the way from early reagent research and feasibility through product development and final verification and validation. Over the years Lars have been in close collaboration with several divisions across Agilent which has given him me a solid understanding of Agilent business areas.

Prior to his career at Agilent Las has more than 15 years of experience in the Pharmaceutical, In-Vitro Diagnostic (IVD) and Medical Device industry in both large global organizations as well as smaller bio-tech start-ups. This experience combined with his background as M.Sc in Biotechnology from the Technical University of Denmark gives him a profound knowledge on Assay development as well as bringing new products to the market in this highly regulated market space.

TITLE OF TALK:

Accelerating Accurate Diagnosis

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- What does it mean to go digital in the clinical lab, and how can you get started converting to a digital infrastructure?

Agenda in brief

10:30 - 10:35 -

Opening Remarks - DigiBase

10:35 - 11:00 -

Dr. Gareth Bryson

Consultant Pathologist and Clinical Lead for Technology, NHS Greater Glasgow and Clyde, Honorary Clinical Associate Professor, University of Glasgow, Scotland, UK

Title - The Road To A Fully Digital Pathology Service: Where are the biggest bumps?

- I will review our journey towards a fully digital workflow from 0 to 40,000 WSI per month
- What has gone well?
- Where have we work to do?

11.00 - 11:25 -

Dr. Johan Lundin
Research Director, FIMM and Guest Professor in Medical Technology at Karolinska Institute, Stockholm

Title - Artificial intelligence and digital diagnostics for global health applications

Pointer– experiences from implementation of digital pathology in resource-limited settings

11:25 - 12:15 - Joint presentation & LIVE Q&A with our Partners:

Title – Accelerating Accurate Diagnosis

- How can we address the issues around workflow efficiency and staining standardization in the lab?
- What can image analysis offer to enhance pathologists' assessment of an ever-increasing case load of samples?
- What does it mean to go digital in the clinical lab, and how can you get started converting to a digital infrastructure?

12:15 - 12:40 -

Professor David Snead

Consultant Pathologist, University Hospitals Coventry and Warwickshire, Professor of Pathology Practice at the University of Warwick and Founding director, PathLAKE

• Title - Artificial Intelligence in cellular pathology - what's not to like?

• A brief review of what is emerging from the AI space which is relevant to cellular pathologists now
• An overview of some of the challenges in delivering AI in practice with a strategy for overcoming these
• A discussion of the likely impact of AI on clinical practice focussing on some issues which may be important but which have received little attention so far.

12:40 - 13:05 -

Dr. Fayyaz Minhas

Assistant Professor, PathLAKE Consortium, Warwick University, England, UK

Title – Computational Problems in Computational Pathology

• Discussion on various aspects of the data acquisition and processing pipelines in CPath
• Data Integration and Visualization
• Learning problems in CPath

13:05 - 13:30 -

Dr. Jennifer Hay
Laboratory Manager, Glasgow Tissue Research Facility, Scotland, UK

Title - 'Todays tissue for tomorrows research'

- NHS and the GTRF
- 'Who, What, Why and How' of the GTRF
- Future research

13.30 - 13:55 - **Keynote closing session:**

Dr. Anil Parwani
Professor of Pathology, The Ohio State University, USA

Title - Progress in Digital Pathology Clinical Implementation: Lessons learnt and the path forward using AI

- Provide an overview of the current state of Whole Slide Imaging for clinical diagnostics
- What are the key reasons to implement digital pathology?
- The impact of AI in propelling digital pathology adoption

13:55 - 14:00 -

Closing Remarks - DigiBase

Transforming Digital Pathology (online)

Integrating AI to move towards Precision Pathology

30th April 2021 - 10:30am - 14:25pm CET

COMING SOON

Register Here

AI Powered Drug Discovery (online)

The practicalities of deploying AI to your workflow.

28th May 2021 - 10:30am - 1:45pm CET

Register Here

Computational Image Analysis (online)

From "Hot Trends" to Tools & Techniques to doing it well

10th September 2021 - 10:30am - 1:45pm CET

Register Here

COMING SOON

Transforming Digital Pathology & AI 2.0 (online)

Going Digital: How's it being done and adoption of AI, Hard sell or no brainer?

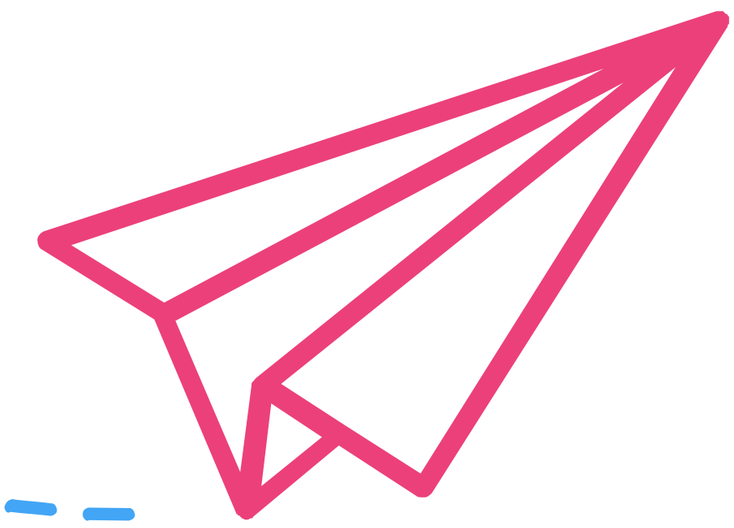
15th October 2021 - 10:30am - 1:45pm CET

Register Here

Microbiome: Inside-Out

Machine learning strategies for Gut-based Microbiome research

5th November 2021 - 10:30am - 1:45pm CET



Register Here

Transforming Digital Pathology LIVE (Covid permitting)

COMING SOON

Utilizing AI to transform your day-to-day workflow & how others are going digital

10th March 2022 - Edinburgh, Scotland

08:00am - Late!

A return to LIVE events is just around the corner and we're ready for it!

Integrating AI in digital pathology is a much needed and important step towards achieving a greater and profound impact on the patient experience and we're using this 1 day event to explore this, as well as the financial impact on introducing this technology into a concrete system.

With an agenda geared towards networking and close collaboration, the day will start with a keynote across a sit down breakfast, moving into presentations and refreshments and a "hands-on" product/software demo from one of the industries leading tech providers. After a buffet lunch and a couple more presentations through the afternoon, we will round the day off with an evening drinks reception and sit down, 3 course Gala Dinner!

Science is fun, use this relaxed 1 day event to further your knowledge as well as build those important, lasting connections!

Interested in securing a place? Register your details HERE

MEET OUR PARTNERS...

VISIOPHARM®

Visiopharm® is a world leader in AI-driven precision pathology software.

Visiopharm's pioneering image analysis tools support thousands of scientists, pathologists, and image analysis experts in academic institutions, biopharmaceutical industry, and diagnostic centers. Our AI-based image analysis and tissue mining tools support research and drug development research worldwide, while CE-IVD APPs support primary diagnostics. With the most advanced and sophisticated artificial intelligence and deep learning, Visiopharm delivers tissue data mining tools, precision results, and workflows.

Visiopharm was founded in 2001 and is privately owned. The company operates internationally with over 900 licenses and countless users in more than 40 countries. The company headquarters are in Denmark's Medicon Valley, with offices in Sweden, England, Germany, and the United States.

Get In Touch Here

Agilent

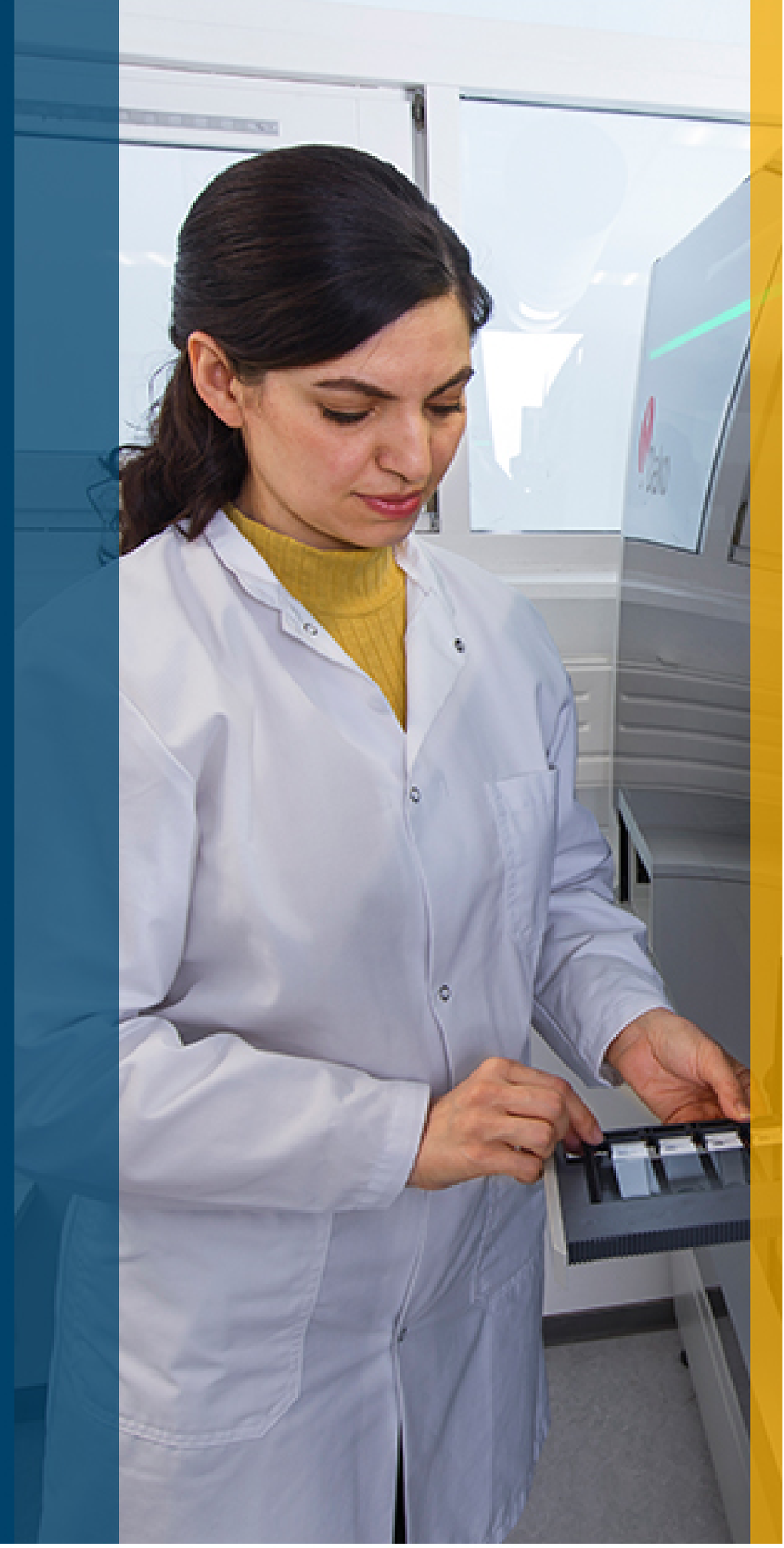
Agilent Technologies Inc. (NYSE: A) is a global leader in life sciences, diagnostics, and applied chemical markets, delivering insight and innovation toward improving the quality of life. Agilent instruments, software, services, solutions, and people provide trusted answers to customers' most challenging questions. The company generated revenue of $5.34 billion in fiscal 2020 and employs 16,400 people worldwide. Information about Agilent is available at www.agilent.com. To receive the latest Agilent news, subscribe to the Agilent Newsroom. Follow Agilent on LinkedIn, Twitter, and Facebook.

Get In Touch Here

Accurate and Timely Results Are at the Center of Patient Care

Process more, without compromising quality

Learn more



Agilent
Dako

VISIOPHARM®

Our mission is to transform pathology through AI-based image analysis and workflow standardization