

UK NEQAS ICC & ISH Participants Meeting: 2019

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Delegates in the main Ludgate Suite

UK NEQAS ICC & ISH welcomed around 75 UK, Eire, and European delegates, from 55 individual laboratories, to its Participant Meeting held on 17th May at One America Square, London, EC3.

Six external speakers, in addition to UK NEQAS ICC & ISH staff and associates, contributed to a full day's programme. The meeting was complimented by the presence of 5 trade stands, plus a sixth sponsor, all of whom provided much appreciated support for the meeting.

The day was chaired by **Andrew Dodson**, UK NEQAS ICC & ISH Scheme Director.

A range of topics were covered, alongside several scheme related talks; and for the first time, a parallel workshop was held during the afternoon.

The opening presentation was given by **Dr Matthew Clarke**, Clinical Research Fellow at the ICR, who gave a talk detailing the '**History of The British School of Pathology**', which started with the ancient and medieval physicians and flagbearers, continuing through the ages, to the training and education of today's pathologist. Along the way Matthew highlighted the ever changing face of histopathology throughout the centuries, and charting its main players and luminaries.

Dr. José Cabecadas, MD, Instituto Português de Oncologia de Lisboa, gave the next presentation '**New Markers for Haematopoietic Tissues with Diagnostic Implications**' beginning with the early classifications and lymphoma marker panels, through to today's revised classification established within the last few years. José then explained the use of some novel diagnostic markers, and the detection of mutations using immunohistochemistry, before concluding with the possibility of triple staining techniques; e.g. for CCND1, Ki67, and CD20.

Gavin Rock, ICC Lead at Heartlands Hospital, gave a more EQA based talk, using the scheme's General Pathology module to outline some of the important issues relating to EQA, from both the NEQAS and Participants' perspective. He started by showing the antibody list, and how NEQAS decides which to select each year, and the addition of new markers. He then discussed some recent findings from the General module over the last 2-3 years, specifically CK20, p16, CD56, Ki67, and TTF-1, before ending with a bit about in-house controls, and some useful reference sources.

Rúben Roque, Anatomic Pathology Department, Portuguese Oncology Institute, presented on the '**Preparation and ICC on Cytology Samples**' subtitled: Life Beyond Cell Blocks. Although conceding that the use of cell blocks is the preferred method for cytological material requiring subsequent ICC, he emphasised that in around 40% of cases this is not always possible and that other protocols and techniques are required, from CSF, FNA, smears, and cytopsins. He also shared his own experiences, and how using NEQAS improved his in-house slide performances.

Jamie Hughes, UK NEQAS ICC & ISH Deputy Scheme Manager, gave an update on some of the newest modules: ALK/ROS1 FISH, two runs completed; and ROS1 IHC, launched May 2019. He explained the planning, participant details (30-40 labs), and sample composition, before outlining some of the technical details and showing some results data.

This concluded the morning session.

An excellent hot buffet lunch in the Cornhill Suite followed, before reconvening for the afternoon sessions.

Breast & Generic Modules workshop

Immediately following lunch, a small workshop was held in the Walbrook suite, numbers were limited to 20 delegates. The session was run by Suzanne Parry, UK NEQAS ICC & ISH Scheme Manager, and Jamie Hughes, Deputy Scheme Manager.

Slides of the good, the bad, and the ugly side of IHC were displayed, and delegates were invited to be 'assessors for the day', giving their own EQA scores for each slide, and discussing the results afterwards. Ideal controls were discussed, as well as many other technical issues, along with scheme guidelines and recommendations.



Suzanne Parry (Scheme Manager) presenting at the Breast & Generic Workshop

Kieren Allinson, Consultant Neuropathologist, Addenbrooke's spoke on '**Recent Advances in the Immunohistochemical Diagnosis of Brain Tumours**' Morphology v Molecular was the message on the first slide, which set the tone for the presentation. Kieren then outlined the extensive classification and grading of brain tumours, particularly glioblastomas, and how the prognosis, and diagnosis of the tumours are now defined by their IDH-1, ATRX reactivity, 1p 19q deletions, TERT and TP53 mutations.

Chris - Jude Quaye, UK NEQAS ICC & ISH Quality Manager presented a talk titled '**What Is Expected of us as an EQA?**' he started by defining what we mean by Quality Assurance and Quality Assessment, showing the processes involved with both before progressing to the specific role of an EQA scheme, its UKAS requirements and how it helps labs comply with ISO:15189. He concluded by highlighting other resources available to participants: Journals; Referral Service; Best Methods; Meetings.

Dr Ann Sandison, Consultant Histopathologist, Oral Pathology Guy's and St Thomas' gave the last talk by an external speaker '**Difficult Diagnoses in Head & Neck Pathology**' which was illustrated using three cases. Ann described the symptoms, clinical presentations, associated aetiologies, and subsequent surgical procedures, including actual video footage. She then moved onto the handling and orientation of the specimens in the laboratory, through to the difficult task of excluding differential diagnoses, and giving a definitive diagnosis, which ultimately required panels of ICC markers.

Andrew Dodson, UK NEQAS ICC & ISH Scheme Director, was the last speaker of the day, '**UK NEQAS ICC & ISH ER & HER2 audit overview**' a database of breast cancer biomarkers (HER2, ER, PR) testing with results from c. 200,000 patients, and Oestrogen receptor antibodies and their performance. The data examined patient demographics, and tumour characteristics. Detailed HER2 testing results were shown, followed by the performance of 5 ER antibody clones showing trends, usage over time, and associated platform performance during EQA.

This completed the programme of formal presentations.

Andrew, rounded things up by thanking all the speakers for their time and contribution to the day; the trade for their support; the UK NEQAS team for the organisation and assistance throughout the meeting; and the delegates for coming, all of which contributed to a successful meeting. He wished everyone a safe journey home.

The presentation pdfs can be viewed and downloaded from the scheme's website: www.ukneqasiccish.org/downloads/