

UK NEQAS ICC & ISH Participants Meeting 2015

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UK NEQAS ICC & ISH Participant Meeting November 6th

UK NEQAS ICC & ISH welcomed around 90 delegates from the UK, Eire, and overseas, from over 60 individual laboratories, to its Participant Meeting held in Mander Hall at Hamilton House, the same venue as for the previous meeting in September 2014.

Five external speakers, in addition to UK NEQAS ICC & ISH staff, contributed to a full day's programme. The meeting was complimented by the presence of 4 trade stands. Further support was provided by another two companies, who sent representatives on the day.

The morning session was chaired by Keith Miller, the UK NEQAS ICC & ISH Scheme Director.

A range of disease entities were covered, alongside several scheme related talks. The initial session (3 talks) focused on lung:

Prof Andrew Nicholson, consultant histopathologist from The Royal Brompton and Harefield Hospitals opened proceedings. His talk was titled: Lung: diagnosis, ICC, ALK and PD-L1 which gave an overview of the classification and sub-typing of lung tumours, before going on to outline the role of ICC in their diagnosis. The final part of the presentation focused on the biology, diagnostic and prognostic uses of ALK and PD-L1.

Dr Merdol Ibrahim, UK NEQAS ICC & ISH Scheme Manager, continued with a talk on the recently established NSCLC ALK IHC module. Starting with the preliminary survey to participants, the setting up of the module, the pre-pilot assessments and subsequent validation. He concluded by giving a review and summary of the results of the 4 completed runs analysing the protocols and methodologies used and their success rates.

Mr David Allen, Laboratory Services Manager at UCL-AD gave a list of the current slide based biomarkers used in pathology, before concentrating on the plethora of markers (11) currently available for lung. After emphasising the importance of 'personalised medicine' he gave a summary of most of these markers, but with particular attention to ALK, ROS1, NTRK1, RET and EGFR and their use on NSCLC cases.

Dr Manuel Rodriquez-Justo, consultant histopathologist at UCLH. His title was: Are there any new biomarkers in GI cancers? Starting with 'old friends' HER2, BRAF, and FGFR delving into the HER family giving details about HER2 antibodies, platforms, and scoring systems relating to CRC cases. He then expanded on the role of HER3 (new kid) and BRAF, again comparing primaries and platforms. Mention of checkpoint inhibitors/immune modulators (rising stars), MMR, FGFR2, and PD-L1/PD1 rounded off the talk.

Prof Chas Mangham, consultant histopathologist, spoke on ICC in soft tissue and bone tumours, an overview and illustrative cases. He began with the incidences, tumour types, organisation of services, and classifications for these pathologies. He then outlined the handling of samples, the list of, and most useful of the antibodies employed, and their diagnostic use, adding that other techniques, especially molecular should be used alongside ICC. He concluded with a series of illustrative cases.

This concluded the morning session, and five excellent presentations on the diagnostic aspects of ICC and biomarkers.

Unfortunately, for reasons beyond our control the lunch was both late and the amount insufficient for the number of attendees. This also impacted upon the proposed visit to the UK NEQAS ICC & ISH offices. We apologise to those that had registered to do the tour.

The afternoon session was chaired by Suzanne Parry, the Assistant Scheme Manager, and focused primarily on topics

closer to home, starting with two presentations from UK NEQAS ICC & ISH support scientists, **Neil Bilbe and Dawn Wilkinson**. Neil covered the new website which went live earlier this year, showing the old site and the need for a modern 21st century one and its features; he then drew attention to the Immunocytochemistry e-Journal which the scheme produces after each run, and concluded with a review of the 2015 User Survey, highlighting the disappointing low return rate (20%), and how previous survey feedbacks have been used by the scheme for improvement and advancement, with a series of examples.

Dawn gave a presentation on the recent single slide survey. She started by outlining the reasons for the switch to single slide EQA: regulatory (ISO), scheme (assessments and feedback) as well as reduced reagent costs. She then addressed the adhesion problems some labs had experienced with the new slides. Interestingly 63% of UK/Eire, but only 22% of overseas labs reported section adhesion problems. Modules, draining and drying protocols were analysed, before explaining hydrophobic and hydrophilic slide types. She concluded with some scheme news.

Julie Williams, Laboratory Manager at QAH, Portsmouth, and a long standing Lead Assessor for the scheme, continued with 'Day in the life of a UK NEQAS assessor' starting with a brief history of the ICC & ISH scheme, recent participant numbers, the role of both lead and other assessors, what's needed to be an assessor, how assessments are organised and conducted, from initiation to completion, outlining the scoring criteria with the help of some recent examples from the General module. Julie concluded by mentioning poor performance and some recent developments.

Dr Merdol Ibrahim, gave a second presentation on 'Uncertainty in Cellular Pathology', starting with the impact of both UKAS and NEQAS, ISO standards, *measurement uncertainty* contained in the standards, and the importance of good documentation. He then gave a review of a workshop where 53 delegates (scientists and pathologists) completed a matrix board where they indicated uncertainties (10 specific areas) in their own labs and showed the results. The final part focused on antibody validation and the thorny issue of out of date antibodies.

The final speaker was **Keith Miller**, who spoke about the CADQAS laboratory he has helped to set-up in Dorset. He started with a very brief overview of the genesis of ICC and his work at UCL, before expanding on the location (Poundbury Cancer Institute) and the role of CADQAS as a centre for education, R&D, and the validation and testing of antibodies produced in conjunction with new targeted therapies. He concluded by outlining the staff involved at the centre and some of the recent work produced.

This completed the programme of formal presentations. Unfortunately, due again to the late running we were unable to hold a Q&A session.



Dr Ibrahim giving a talk



Delegates listening intently!

The talks can be downloaded from the website:

http://www.uknegasiccish.org/wp/wp-content/uploads/2015/11/talks_final_web-2.pdf