

Quality Matters



Photo Credit Kieran Voong

Lorraine Gillard Biomedical Scientist at Bedford Cellular Pathology Laboratory

02 Under the Microscope

Tissue Sciences Laboratories

Inside this issue

- 01** Welcome
2016 Viapath Quality Objectives
- 02** Under the Microscope
Tissue Sciences Laboratories at Bedford & King's
- 03** ISO15189 Success of the Oral Pathology Laboratories
- 04** Lets Talk Quality
St John's Dermatopathology & Immunodermatology Labs at St Thomas' Hospital UKAS/ISO Experience
- 05** Microbiology Team at Bedford ISO15189 Achievement

Welcome - 2016 Viapath Quality Objectives

This fourth edition of Quality Matters places our busy Tissue Sciences Services "Under The Microscope" to highlight the important work they undertake. Firstly, colleagues from Bedford Hospital and King's College Hospital describe what our Tissue Sciences Laboratories do. Then one of our Quality Managers Fiona Denham "Talks Quality", following the first annual ISO15189 surveillance visit in Viapath, when UKAS assessed Dermatopathology and Immunodermatology laboratories at Guy's & St Thomas' Hospital. One of our effectiveness Quality Objectives for 2016 is specifically focused on laboratory accreditation and assurance.

We will be launching the Viapath 2015 Quality Account at the end of June and will issue a special edition of Quality Matters to highlight key elements, and how they link with our 2016 Quality and

Health & Safety objectives.

At Viapath we use Lord Darzi's definition of high quality care which states that Care will be of a high standard if it is:

Safe, Effective and with a Positive Patient & Customer Experience, to define our Quality Objectives and standards for 2016.

Our Quality Safety Objective is:

1. To reduce by 10% the number of pre-analytical incidents, which in 2015 was 53% of all incidents reported, and to continue to nurture a proactive reporting culture.

Our Quality Effectiveness Objectives are:

1. To demonstrate assurance that all laboratories are working to and achieving, the UKAS CPA/ISO15189 transition requirements for laboratory accreditation.
2. 90% or more of all audit non-conformities to be cleared within 12 weeks of opening date.

Our Quality Patient & Customer Experience Objective is:

1. To respond quickly if a patient or customer has a problem or complaint, and act on learning to stop any preventable harm or delays.

Under the Microscope... Tissue Sciences

Tissue Sciences Laboratories @ Bedford Hospital



Photo Credit Kieran Voong

Part of the Histology Team at Bedford Hospital (from left to right): Lucy Newman, Zahid Iqbal (at the front), Neil Cully, Tafadzwa Moyo, Olubunmi Dogun

Tissue Sciences at Bedford incorporates both histology (the study of tissues) and cytology (the study of cells) with both disciplines processing and examining samples to provide a diagnosis of a patient's illness.

Histology process specimens such as biopsies, removed lumps and pieces of

tissue, parts of organs or whole organs removed during surgery (or autopsy).

Cytology is typically used to examine fluids or cells that have collected in the body as a result of an illness. Examples of this include pleural fluid drained from the chest and specimens from the cervical screening programme.

Both the Histopathology and Cytopathology sections use a range of scientific procedures to identify if a disease is present in the specimen, what disease it is, and the courses of action required. This can involve the diagnosis of cancer or other serious illnesses but can also confirm that there is no serious problem present and that no further treatment is required. If cancer is found investigations can be undertaken to identify what type of cancer it is, how advanced the disease is, how aggressive the cancer is, and what the best forms of treatment are likely to be.

The Tissue Sciences department also provides an Andrology service which performs diagnostic semen analyses to investigate for potential fertility problems or to check if a vasectomy operation has been successful.

The department is supported by the Admin & Clerical Office who perform a number of vital functions including the booking in of cases and typing of reports.

Neil Cully - Cellular Pathology Service Delivery Manager at Bedford Hospital

Tissue Sciences Laboratories @ King's College Hospital

The Tissue Sciences department at King's College Hospital deals with approximately 23000 cases per year. From specialties such as Gynaecology, Respiratory, Endocrine, Breast, Skin, Urology, Haematopathology and Gastro-Intestinal. Our dedicated team ensures all these cases are dealt with in a timely manner, which enables early diagnosis and therefore early treatment for the patient.

The department is well equipped, fully computerised and accredited by CPA (UK) Ltd. A range of histological and cytology services are provided by the department including: routine histopathology, diagnostic cytology, immunohistochemistry (advanced diagnostics), mortuary, renal, electron microscopy, molecular and enzyme histochemistry and a range of other specialist techniques.

For the core histopathology laboratory

the processes involves preparing tissue for processing into paraffin embedded blocks and then cutting sections for staining. Our Biomedical Scientists also carry out other staining techniques to demonstrate the tissue components, infective agents, pigment and minerals etc.

The department offers MOHS surgery which is a surgical technique developed by Dr Mohs, used to help treat various skin cancers (on the head and neck) that allow precise microscopic control of the margins by utilising frozen-section histology. This requires our BMS to be quick, competent and have a high level of concentration.

The Advanced Diagnostics Laboratory in Tissue Sciences performs the assays and tests that are required for the more complex cases received in Histopathology.



Photo Credit Kieran Voong

Skin excision being examined.



Cutting section of tissue embedded in paraffin block for staining

Whilst most of this work is performed on cancers, our workload is not exclusive to that. We carry a portfolio of approximately 170 antibodies. We also offer 8 FISH (Fluorescence In Situ Hybridization) assays, including Her2, and 8 molecular assays for solid tumours. The advantage of performing this type of work within the Histopathology department is that the abnormal tissue can be specifically targeted and enriched allowing for a more sensitive and specific result. A report is then issued integrating all aspects of testing on each case, including diagnosis and any prognostic and predictive information available.

One of the most recent and exciting developments in the Advanced Diagnostics Laboratory is the participation of the UK-wide 100,000 Genomes Project which aims to sequence 100,000 genomes from around 70,000 people. Participants are NHS patients with rare diseases, plus their families, and patients with cancer. Specifically, the Advanced Diagnostics Laboratory receives and processes cancer samples from patients who have

been recruited at King's College Hospital and South London and Maudsley NHS Foundation Trust. DNA is extracted locally and quality controlled before it is sent to be sequenced off-site. An aliquot of DNA is stored at King's and when the results of whole genome sequencing are returned to the laboratory, these findings will be confirmed using the stored sample. Then a report is jointly written with clinical colleagues.

The main aim of the project is to create a new genomic medicine service for the NHS – transforming the way people are cared for. Patients may be offered a diagnosis where there wasn't one before, and in time, there is the potential of new and more effective treatments.

Dalian Beaver - Histopathology Operations Manager at King's College Hospital



Part of the Tissue Sciences Team at King's College Hospital

ISO15189 Success of the Oral Pathology Lab

Oral Pathology Team @ Guy's Hospital

We are delighted to announce that our Tissue Sciences Head and Neck/Oral Pathology laboratory based at Guy's Hospital, have now officially been granted UKAS accreditation to ISO15189. This is for the range of techniques that were assessed at their transition assessment visit on the 10th February 2015. Here is a [link to the UKAS website](#) where you can see how the range of techniques which were assessed and accredited, is presented.



Photo Credit Kieran Voong

Part of the Head & Neck/ Oral Pathology Team at Guy's Hospital

Let's Talk Quality...

St John's Dermatopathology & Immunodermatology Labs @ St Thomas' Hospital UKAS/ISO Experience

2016 Quality Effectiveness Objective

To demonstrate assurance that all laboratories are working to and achieving, the UKAS CPA/ISO15189 transition requirements for laboratory accreditation.



Fiona Denham - Quality Managers

In September 2014, the St John's Dermatopathology & Immunodermatology laboratories, based at St Thomas' Hospital, were the first Viapath Analytics service to be assessed under ISO15189:2012 by UKAS (United Kingdom Accreditation Service). Like most labs we found the step up to the requirements of the ISO (International Organisation for Standardisation) standard, from those of the CPA (Clinical Pathology Accreditation) standards, to be a challenge. This was highlighted

during the visit when we received findings in areas such as monitoring of suppliers; service level agreements with customers; and traceability of calibration. However, we received an overall good report and positive feedback from the assessors following the visit, and were recommended for UKAS accreditation to ISO15189, but first we had to clear the findings! The action plan that we put in place to achieve this involved many of the laboratory team, and also input from our colleagues in Procurement and Customer Services. Following clearance of all our findings, the labs were awarded UKAS accreditation to ISO15189:2012 in July 2015.

This success was just the start of our ISO journey, as we had our first surveillance visit in January 2016. Surveillance visits are annual, and the assessors focus on specific areas of the laboratory repertoires at each visit, as well as returning to any areas where findings were raised previously, so maintenance of performance in these areas is essential. Again, most members of the lab teams were involved in preparation for the visit, and although we still had findings, they were largely in

different areas to the previous assessment, and it was very encouraging to hear the Assessment Manager say that we had clearly progressed in our compliance with the Standard since the previous visit. A great team effort ensured that we cleared all our findings on the first submission of evidence (required within four weeks of the visit), which we were very pleased about. This ensured our accreditation status was maintained.

One of the key aspects to come out of our ISO experience so far is the understanding that attaining & maintaining accreditation to ISO15189 requires a change in mindset for all employees compared to the days of CPA. We have started to see this in these two laboratories when, for example, staff stop to consider the ISO requirements for what they are doing before undertaking a new way of working or a change to process, and this is something we will continue to build on.

Fiona Denham - Quality Manager at St John's Dermatopathology & Immunodermatology Laboratories at St Thomas' Hospital



St John's Dermatopathology & Immunodermatology Team at St Thomas' Hospital

Photo Credit Kieran Voong

Microbiology @ Bedford Hospital ISO15189 Achievement



Photo Credit: Kieran Voding

Microbiology Team at Bedford Hospital

We have talked about some of our inspectors and regulators in previous editions but if you wish to read more about them you can follow this [link to our 2014 Quality Account](#).

We are making good progress with our transition from the CPA process to

ISO15189 by UKAS. To date, eight of our laboratories have undergone the UKAS transition assessment and we are delighted to announce that the Microbiology Laboratory at Bedford was formally granted accreditation to ISO15189:2012 in April 2016. You can

see all our ISO15189 accreditation on the UKAS website [here](#).

Our Nutristasis Unit at GSTT which operates the Vitamin K External Quality Assurance Scheme (KEQAS) is ISO 17043:2010 accredited.

Next Edition...

We will be publishing a special edition of Quality Matters in July to celebrate the Launch of the Viapath 2015 Quality Account and more about the 2016 Quality, Health and Safety Objectives.

Here is an introduction from Professor Jonathan Edgeworth, our Medical Director:

"A quality service that continuously improves is dependent on many components including a healthy organisational culture, the training and professionalism of staff, the governance structures we use to identify issues and implement change, and the resources we have available to do the job.

In this third Quality Account we have sought to describe many day-to-day events that together will give our employees, customers and patients an insight into how we support and link these components together."

We would like to hear from you...

If you have any suggestions or feedback please contact the Head of Quality - Liz Adair or the Quality Hub Coordinator - Carolina Salgado via telephone 020 7188 7188 (Ext. 54885) or email to QualityMatters@viapath.co.uk.