The Bulletin

of The Royal College of Pathologists

Number 163 July 2013

The Royal College of Pathologists
Pathology: the science behind the cure

In this issue

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On the cover: Dr Alex Freeman, histopathologist at University College Hospital London, at the Schools Science Conference demonstrating pathology pots to students. Please see page 171 for more information.

Photo credits: The Royal College of Pathologists, **John Goodman**, Warren Potter, Photos.com.

EDITORIAL

Dr Laszlo Igali
Bulletin Editor

Summer is finally here

When you receive this issue summer should finally be here, the season to take a holiday, relax and try to enjoy the good weather. But we should not forget the pressure points of our profession.

Quality is key

In this issue, quality is heading the agenda. It seems that the landscape of commissioning is finally taking shape. The Clinical Commissioning Groups are finally starting to feel their power and about to make decisions about how to use best our services for the benefit of the patients. As I see it, this is a gradual transition and we are only just at the beginning.

This process is very much like what parents go through with children: with the first one, we are unsure and try to feel our way, but fast forward a few years or decades and with the third or fourth child we are confident enough to let it flow. You just need patience, love and care – all the rest will happen naturally.

When we get experience, of course, the whole process will be smoother, but even if the same people are involved in the decision-making processes as before, the context and the rules are different and the whole system needs to settle in. Until then we will gather the experience, which not only may make it ultimately better for all involved, but we all influence each other in the process, hopefully for the better.

On a personal level, revalidation is now closer than you think. But did you think about the cost? By estimate, the 1.5 SPA nominally allocated to a consultant post will be needed for fulfilling all revalidation-related duties and collecting all the evidence. All in all, it is a fairly expensive way of proving our worth, amounting to somewhere between £7000 and £15 000 per year per consultant. Multiply it by the 250 000 doctors listed by the General Medical Council and the numbers adds up quickly: £3.75 billion per year – and this does not even contain the administrative (running) costs. If we use such an expensive process for assuring quality amongst the medics of the healthcare system, we need to make sure we will get a good value for the money.

On the specialty level, quality and value are also on the top of the commissioning shopping list. So if we want to stay credible and keep our jobs and our work, we have to give data about our work, and show the most important features and performance indicators.

On a professional level, molecular pathology is stealing the show in many aspects of our specialty. The expanding field and experience needs to be balanced with the clinical need and (hopefully) pathologist-driven interpretation of the results. So we will still be needed, albeit it may be with some change in our role...

Becoming a consultant

Ever thought about how you became a consultant? It is not an overnight change, and we would like to offer help with the article from Dr Terry Jones.

Working smarter?

Using digital technology can help enormously, but as you may see from the article on voice recognition, it is not always straightforward. We welcome your views for inclusion in the October *Bulletin*.

Life/work balance

Can I stop you for one more moment before you run away to enjoy your well-deserved summer break?

With the summer upon us and holidays all set, it is probably worth taking a moment to think about the balance of life. While pathologists are often amongst the most philosophical beings on earth, for now I would ask you not to think about the big questions of life, but merely to stop for a moment and consider your take on a more mundane topic.

Do you feel your life is in balance? Is your professional and family life in harmony?

Talking to colleagues who recently retired, most of them tell me they have now discovered another dimension of life: they are doing things that they enjoy and did not have enough time to pursue when they were active pathologists. In fact, they are even busier now than they were when were completely immersed in the world of pathology. Yet importantly they feel the exhilarating experience of being more in control of their life, and it doesn't matter if life is even more demanding now.

If we do not want to lose those important aspects, we would perhaps be better to think on them and maybe incorporate something extra into our daily lives now to make them better.

However, enough of philosophy and heavy pathology-related thinking. The season calls for lighter and fun-filled holidays, so only one thing remains for me to say... Enjoy your summer!

Dr Laszlo Igali
Bulletin Editor

Dr Archie Prentice
College President

Quality assessment, reconfiguration and learning

The three related subjects of quality assessment, reconfiguration and learning should be of interest to all pathologists. All of them reflect to some extent the strengths of our specialties, but, equally, they have some uncomfortable and unavoidable aspects that need to be addressed. The College staff and Honorary Officers work continuously on them.

External quality assessment (EQA)

EQA schemes in pathology in the UK have a long and successful history, extending now to almost every discipline and covering not only systematic performance but individual interpretive competence. The first point to make about them is that they are assessment schemes and not assurance schemes. That important difference surprises some, but is worth emphasising. Every clinical system on which patients' care depends should be open to external assessment to assure patients that all are effective and reliable. The uncomfortable questions here are whether assessments are performed and managed in such a way that such assurance can be given and can be used for accreditation. The current muddled thinking around these three very different 'As' – assessment, assurance and accreditation – is worrying since it suggests a degree of uncertainty about why we do these exercises. In the specific case of pathology, these questions translate into some awkward challenges, which do not permit complacency on the basis of historical success.

Having seen and stopped examples of gaming in the performance of EQA exercises under my own nose in the department I was once meant to be running, I suspect that this practice may still be widespread. How do we know that EQA samples are not sequestered on receipt at the department being assessed by the so-called expert in the analyte under test, rather than being given in rotation to all the relevant staff who have to perform the test, supervised or unsupervised, at some point in their daily 'routine' work. This form of gaming hardly tests the system. Can this conduct be taken on trust or should it be randomly audited like continuing professional development (CPD) returns? The latter would be more defensible practice. One hears reports of inter-departmental gaming too, in which colleagues in several departments collude to produce a consensus result in a single exercise. These rumours are difficult to prove but, if true, such consensus conduct of an EQA exercise illustrates only failure anxiety, necessitating recourse to native cunning, and what does it mean if they all get the 'wrong' answer? The excuse that consultation (collusion) is a part of normal practice is only partially acceptable. Every pathologist is challenged regularly with the need to give a singular opinion.

Are the principles and practice of creating, managing and surveying EQA schemes sufficiently robust and uniform, including their accreditation by Clinical Pathology Accreditation (CPA) Ltd/The United Kingdom Accreditation Service (UKAS)?

Is there sufficient uniformity in the application of these principles across the different disciplines? Who determines and how do they determine that the EQA exercises for a single analyte offered by several different provider organisations are also equally robust and uniform? Can we be confident that we have sufficiently rigorous methods for the serial assessment of departments and reporting by scheme organisers to National EQA Assessment Panels (NQAAPs) those departments that are actually or potentially failing? Is the performance of the different specialties' NQAAPs sufficiently robust and uniform? Is the relationship between the NQAAPs and the Joint Working Group on QA working?

In an era of precision diagnosis, and for an organisation claiming to be the science behind the cure, uncertain and incomplete answers to these awkward questions are not good enough. At some point before or after the completion of the ongoing Department of Health review of quality in pathology, the governance of the future conduct of these schemes will need to agreed, formalised and mandated with some new authority. It will also need to be adequately funded; the real cost of EQA is unknown, since so much is hidden in agreements between individual scheme organisers and the Trusts in which they are based.

There is an expectation that anonymity in reporting performance of pathology departments and pathologists will be removed. No-one should underestimate the risks and difficulties in removing anonymity. So once again, are EQA schemes of personal performance in all pathology disciplines uniformly fit for purpose, or do they need to redesigned? It is sometimes difficult for colleagues in other clinical disciplines, NHS management and politics to understand that we do not deal in binary results or simply in the provision of reassuring numbers. As one good friend, an experienced cardiac surgeon (not the Medical Director of NHS England), said to me recently: "My patients either die or get better". Pathology is not quite as simple as that, but this does not mean we should avoid the challenge. The practice of good EQA should reinforce the importance of pathology for all other aspects of clinical care and strengthen the position of pathology and pathologists in the NHS. I would argue that the reform and strengthening of EQA are essential in a devolved commissioning system if purchasing of pathology is to be based on quality criteria and not simply cost. This links EQA to reconfiguration.

Reconfiguration

It is difficult to establish and to maintain a clear picture of what is moving where across the UK, as Clinical Commissioning Groups inherit what Primary care trusts and Strategic Health Authorities have done or planned in reconfiguring pathology laboratories. It is clear from the work of RCPath Consulting (RCPC) that there is great variation in the current distribution of capacity and demand and in the desired change. No two RCPC contracts have been alike, except in the general inadequacy of managers and sometimes pathologists to construct a working solution to their problems, with only a few notable exceptions. Three aspects of this problem relate to EQA in particular.

The first is the need to ensure, whatever form any reconfiguration takes, that the interpretive skills of the pathologist remain readily available to the clinical users and increasingly to the patients. This may seem self-evident to us, but it isn't to a GP in a hurry. It does not necessarily mean face-to-face contact, but it does mean that three aspects of quality in pathology must be uppermost in the minds of purchasers when they commission pathology laboratories and in the minds of pathologists and their managers when arguing the case to be the provider. These are the need to manage demand by agreement with users, the need for clinical interpretation internally within the laboratory and finally the need to explain the result to the requester. These are all quality issues. The second and third should and could be covered by personal EQA interpretive schemes. The first is even more challenging, but there is no reason why the performance of the users should not be assessed for quality in any contract.

> **"EQA should be part of lifelong continuing medical education, as well as integral to practice"**

The second problem is that the impact of reconfiguration is different in different specialties, although none escapes issues of quality and competence in the interpretive role. If pathologists are to be gathered together, as seems to be happening across all disciplines, into fewer and larger departments serving bigger populations and a wider variety of users, then how are we going to differentiate and manage general work and specialised work. What will be the range of competencies and the minimum and maximum workloads that define both generalist and specialist practice and how will EQA of their performance differ? This is likely to be a bigger problem for cellular pathologists than for the clinical pathologists who manage patients directly, because the performance of the latter will be judged differently in part of their work. All types of pathology work are equally cerebral and practical and none should be seen as inferior or superior to the others because of differences in emphasis.

The third problem is common to all disciplines. How do we persuade employers and commissioners that pathology is a contemplative, cerebral specialty in all disciplines? This means that pathologists need time to think, reflect and study away from their direct work. We have failed so far to make real progress with the Foundation Trust Network to reach a consensus statement about this question. My personal view has always been that the direct clinical care (DCC)/supporting professional activity (SPA) split was a gross error. Time for EQA should be built into 'routine' practice but, because it's now seen as non-DCC by the more hawkish chief executives, it's harder to defend – as is all study leave. EQA should be part of lifelong continuing medical education, as well as an integral part of 'routine' practice. If the NHS wants the best quality of pathology, which it needs, this problem of time for quality has to be resolved.

Learning

Are we preparing our trainees satisfactorily to enter this perfect storm and are we able to teach all doctors about the importance of good quality in the use and practice of clinical pathology? We

have an opportunity to establish the primacy of our disciplines through the development of 'precision' or 'stratified' medicine, based on molecular diagnostic techniques. 'The science behind the cure' begins to look slightly more credible as a strapline.

This exponential proliferation of molecular tests affects all disciplines and has meant that there is increasing convergence technically and scientifically between them. So it's time to introduce common modules into the Part 1 sections of all curricula. These will include molecular techniques, critical appreciation of research techniques and results and EQA, among others. We have stopped short of a common Part 1, but I can feel the wheel turning. The many disciplines that make up this College are one of its strengths, but the artificial 'balkanisation' of these has not been healthy. All branches of pathology, some more than others, need to get used to the fact that they are not as unique as they think they are and that you don't really need a medical degree to practice the purely laboratory aspects of any of them.

Professor Mike Wells, our Vice-President for Learning, with the help of Professor Finbarr Cotter, our Director of Research, and Dr David Bailey, our Director of Training and Assessments, are stepping up the College's efforts in modernising pathology training, including a greater emphasis on research opportunities in training. Professor Wells is also working with Dr Suzy Lishman, our Vice-President for Advocacy, and Dr Nicki Cohen to improve the exposure of undergraduates to pathology. There are opportunities for this if we can convince the Medical Schools Council, the General Medical Council and Health Education England (and equivalent bodies in the devolved administrations) of the impact on whole patient experience of good quality pathology. The promotion of teaching and academic research in cellular pathology is a collaborative effort with the Pathology Society and the British Division of the International Association of Pathologists. Such collaboration with all the College's sister societies is a priority.

In summary, doing the job and maintaining the learning should always be intimately related. EQA should be embedded in work and in professional development, providing proof of continuing fitness to practise. Proving and improving one's worth never stops in practice.

Dr Archie Prentice
President

Dr Terry Jones

Everything you wanted to know about your new consultant post but were afraid to ask

Undoubtedly one of the major changes in a medical career is the transition from trainee to consultant, and from supervised to independent practice.

Although you will be prepared for your clinical responsibilities through years of training and the rigours of the medical college exam process, there are many aspects of the role of which you may be unaware – in particular, its place in the grand scheme of the NHS (or other employing body).

This article is not concerned directly with terms and conditions of service (the College is not a trades union), but rather with the differences between the post of trainee and consultant and the steps in between.

Please note this article relates to medical consultant posts in England, Wales and Northern Ireland; Scotland will be the subject of a future *Bulletin* article.

The consultant post

The first step is the application for the consultant post. These are often advertised in the *British Medical Journal* (http://careers.bmj.com/careers/hospital-medical-healthcare-doctors-jobs.html), but increasing numbers appear solely online in NHS jobs (www.jobs.nhs.uk/). The advertisement may give extensive details of the post or may give just a brief outline description.

In normal circumstances, the post concerned will have been approved by the RCPath prior to advertisement, although this is not always the case with Foundation Trust posts. The advertisement will include the contact details for the head of department and/or service lead/clinical director.

On receiving the job description, you should examine it closely to identify the key roles and responsibilities of the post. The job description should include a job plan, giving an outline timetable of the clinical commitments of the post and also identify time for supporting professional activities, or SPAs (see further details later in this article).

SPA time should be within normal working hours and not 'tagged on' the end of a working day.

If there is a significant teaching commitment, this should be clearly identified and timetabled. Teaching is included in the number of SPAs.

It is advisable to visit the department concerned after contacting the head of department or service lead, even if you are familiar with the hospital as part of your trainee rotation. This will enable informal discussion and allow you to meet your prospective colleagues. If there are concerns regarding the job description for the post, these should be raised with the head of department or service lead.

It is advisable at this discussion to ascertain if the post has received RCPath approval. Approval is the process by which job descriptions are reviewed via the regions. The reviewer will be an experienced consultant in the specialty concerned and will scrutinise all aspects of the job description, including workload, SPA numbers, office facilities and secretarial support.

Non-Foundation Trusts are required to obtain College approval for all consultant posts, though this is not the case for Foundation Trusts. If you are applying for a post in a Foundation Trust, you should therefore be aware that the post may either not have received College approval or have not even been forwarded to the College for comments. This places great emphasis on determining the full details of the post prior to application.

The College encourages prospective applicants to make enquiries regarding the details of the job plan, total number of programmed activities (PAs), arrangements for annual and study leave and out-of-hours' arrangements to the Trust's HR Department. It is also important to identify the managerial structure, including the line of accountability. This is normally through the medical head of department, but may in some cases lead to a healthcare scientist or other non-medical manager.

The issue of College non-approval or absence of knowledge of advertised posts is a continuing cause of concern, both for issues of workforce planning and for Fellows applying for these posts. This will be the subject of a future *Bulletin* article and hopefully will be resolved in the near future.

If there are concerns regarding application or acceptance of a non-approved post, please contact the RCPath Workforce Department or the Assistant Registrar care of the College.

Interviews

Following the shortlisting process, the candidates will be invited for interview. The structure of the interview process is highly variable, with some Trusts including a focussed assessment of competence. An example of this would be to ask the candidate to participate in a mock multidisciplinary team meeting. There is also usually an interview with a panel of representatives from the employing Trust. This may include the Chief Executive or other senior manager, and usually representatives from the relevant clinical department.

There will usually also be a College advisor, whose role it is to advise the Appointments Committee regarding the suitability of the candidate for the post.

At the end of the interview process, the candidate should ask the panel any questions that they feel are appropriate regarding any aspect of the post.

The consultant contract

One basic difference between being a trainee and a consultant is the contract under which you are employed, the contract being with the employing Trust.

The present consultant contract was introduced in 2003 following negotiations between the Department of Health and the British Medical Association. The contract defines consultant time by 'programmed activities' (PAs), each PA being of four hours' duration.

PAs are further divided into 'direct clinical care' (DCCs) and 'supporting professional activities' (SPAs). These two types of PA are fundamentally different.

DCCs are the time spent in patient care such as outpatients, ward rounds, histology/cytology reporting, laboratory duties, infection control, advice on antimicrobial therapy and multidisciplinary team meetings (MDTs). The DCCs should be stated explicitly in the job plan that is produced for every consultant, along with the expected time spent on DCCs. DCCs form the core of the contract and comprise the duties of providing direct patient care and activities that are directly related to this provision.

SPAs are defined as the activities that underpin direct clinical care. These include training, medical education, CPD, audit, appraisal and research, and are an important part of the consultant contract. It is estimated by the Academy of Medical Royal Colleges that 1.5 SPAs are needed purely for revalidation.

In the initial 2003 contract, there was a 7.5/2.5 split between DCCs and SPAs. This number of SPAs was thought necessary to maintain the standards of consultant service provision by ensuring that all practice was based on current standards and knowledge, with sufficient time available for the holistic development of the individual consultant.

It was acknowledged that the role of consultant extends beyond service provision and that individual development was vital for overall service quality and this could only be achieved by an appropriate time allocation.

There have been considerable pressures placed upon this time by employing Trusts in recent years as a consequence of the financial and service challenges faced by the NHS in the UK. This is particularly the case with Foundation Trusts, which are in effect sovereign entities.

At the moment, discussions regarding the minimum number of SPAs are ongoing, but it is likely that the recommended minimum will be 1.5 for a 10 PA contract.

Foundation versus non-Foundation Trusts

Foundation Trusts were introduced to devolve decision-making regarding healthcare provision to a local level and are free from much of the central control of non-Foundation Trusts. One of the consequences of this independence has been on the input of the medical royal colleges into the consultant appointment process.

Foundation Trusts are no longer obliged to involve the Colleges in the job description, shortlisting or advisory appointment committee process. A concordat was signed between the Academy of Medical Royal Colleges and the Foundation Trust Network regarding College input into the appointment process, but this is no longer acknowledged by many Foundation Trusts (www.rcpath.org/workforce/medical-workforce/nhs-foundation-trusts.htm).

Recently there has been a move not to involve any College in the appointment process; the job descriptions and job plans are not scrutinised by a College representative and it is left to the prospective candidate to identify any shortfalls, which can be extremely difficult. This is a source of continuing concern to all medical royal colleges and will hopefully be resolved following negotiation with the Foundation Trust Network.

Private practice

Private practice or other activities that attract a payment cannot normally be performed within contracted hours. However it is allowed via 'time shifting' – the process whereby the time spent on private practice is made up by the same amount of time being allocated to contracted duties.

SPA time should not be regarded as time for private practice, as this is against the ethos of the contract. SPA time should be used for the purposes outlined above.

Revalidation

Revalidation is now an accepted part of the duties of a doctor. In general, 1.5 SPAs are required solely for revalidation purposes, but this may alter as the revalidation process develops. For details regarding revalidation, please see the

General Medical Council website (www.gmc-uk.org/doctors/revalidation.asp).

Continuing professional development (CPD)

CPD is the process by which clinical and professional standards are maintained throughout the lifetime of the consultant appointment. This encompasses both maintaining clinical and diagnostic expertise, but also allows for the development of other relevant skills such as managerial and teaching abilities.

The College has an online CPD Portfolio whereby related activities can be entered and a certificate of participation in this process obtained.

CPD is important for revalidation purposes and we encourage all Fellows to use this service. To register to participate in the CPD please register online www.rcpath.org/cpd

When you log into the website, for example to enter your CPD activities, you will now be asked to update your workforce data via an online form. This will allow the College accurately to plan the future workforce, as data regarding the number of Fellows in post is vital for this process.

Conclusion

The above is a fairly brief outline of the steps from trainee to consultant.

The College will in future be forwarding an information pack to all trainees on completion of CCT. This will include all the information given above, along with the contact numbers of the College departments concerned with workforce and Advisory Appointment Committees. We hope this will prove helpful, particularly in the light of the changes occurring within the NHS.

Dr Terry Jones
Assistant Registrar

Collecting information on the pathology workforce

So that the College can better advise the Department of Health on sustaining the pathology workforce please can you update your professional details. You can do this easily by completing a short form when logging into the website. It will take you only a few minutes to complete.

www.rcpath.org/workforce

Dr Akhtar Husain

Dr Peter Newton

Delivering tomorrow's improvement agenda for the NHS

In this article Dr Akhtar Husain and Dr Peter Newton discuss the benefits of collaborative working between pathology and dermatology in the diagnosis of malignant melanoma.

Introduction and background

Cutaneous malignant melanoma is a tumour of epidermal melanocytes, which is currently the sixth most common malignancy in the UK. The incidence of malignant melanoma is increasing, and in 2008, it was responsible for a mortality rate of 3.1 per 100000, with more than half of those deaths occurring in those under the age of 70.

In Newcastle upon Tyne, patients with suspicious pigmented lesions are referred by their general practitioners to the regional melanoma screening clinic, which is a dermatology-run clinic taking place at the Royal Victoria Infirmary every Thursday. The size of the clinic varies according to the time of year, but up to 100 patients can be seen in an afternoon, with between 10 and 25 being biopsied. Patients are then reviewed in the clinic the following week, when the histology results are available.

Biopsies from the melanoma screening clinic are reported by specialist dermatopathologists within the Royal Victoria Infirmary. Some pigmented lesions are straightforward and either obviously benign or malignant, whereas others are more challenging and require further work, such as deeper levels or immunohistochemistry, as well as discussion at a pathology consensus meeting. It is the departmental policy to discuss all melanocytic lesions from the melanoma screening clinic at the consensus meeting, where an agreed diagnosis is offered. Hence many of these cases were not being authorised until the Thursday morning immediately prior to the review clinic.

In 2010, the pathology department was approached by dermatology, who wished to propose a change in practice. The melanoma screening clinic was steadily increasing in size and becoming unmanageable. They wondered whether it would be possible to have histology reports authorised by the Wednesday lunchtime the day before the clinic, in which case a newly appointed skin cancer

> **The melanoma screening clinic was steadily increasing in size and becoming unmanageable**

clinical nurse specialist would be able to contact those patients with benign histology and advise them that there was no need to attend the clinic the following day.

This approach coincided with the publication of the NHS improvement document, *Learning how to achieve a seven day turnaround time in histopathology*, in November 2010, which was being discussed widely in the department. The department signed up to deliver a seven-day turnaround time with NHS Service Improvement. It was decided to use LEAN principles and other techniques advocated in that document, in order to try and meet this request by our users.

What changed?

LEAN principles emphasise the elimination of waste, and the process by which a specimen progresses through the laboratory was reviewed on a step-by-step basis, with the removal of unnecessary processes and delays. The introduction of continuous BMS cut-up reduced specimen batching, and improved flow through the laboratory. New techniques such as day processing of smaller biopsies were also employed, to enable cases to be issued from the laboratory more rapidly. The importance of end-to-end connectivity was also realised, and improvements were made both in the time taken to transport specimens to the laboratory, and in secretarial support to improve the speed with which reports could be typed and issued. The timing and day of the consensus meeting was changed from Wednesday to Monday, so that any additional work could be ordered early. All these cases are usually assigned to trainees, who were encouraged to have a provisional report ready on the pathology IT system. All melanomas are reported using RCPath proformas, agreed with the clinicians. After the consensus meeting, final report is issued. Following the usual guidelines, all melanomas and severely atypical naevi are discussed later at the skin multidisciplinary team meeting.

Outcome

To assess the impact of this initiative, the turnaround times for specimens from the melanoma screening clinic were audited over a 12-month period, both before and after these changes were implemented. It was found that despite an increase in the number of specimens received from 648 to 694, the mean turnaround time had decreased from 5.22 days to 4.93 days. This improvement was achieved with no additional staff cost. Whilst this was apparently only a small decrease in time, the impact of this change was considerable as it meant that we were now successfully authorising all cases by the Wednesday prior to the clinic. This enabled the clinical nurse specialist to telephone those patients whose biopsies was negative and give them the result. This avoided the patients' unnecessary stress of not knowing the diagnosis and having to come into the hospital to attend an outpatient appointment.

For our users in dermatology, this project was a great success: 322 outpatient appointments were prevented, resulting in a saving of £16 100 over the 12-month period. Perhaps more importantly, feedback from patients was considerably improved, with those with benign lesions being spared an unnecessary appointment, and dermatologists being able to concentrate their time on counselling those patients with malignant lesions.

Key message

Currently turnaround time is widely used as a surrogate marker of quality in cellular pathology, but from our experience we would suggest that having the correct result available at the right time is a more relevant parameter. For many routine histology specimens, a small improvement in turnaround time is of little relevance, but we have shown that a targeted improvement in an area highlighted by our users can result in both cost savings and a considerably improved patient experience. Hence in the future we will be adopting a more patient-centred approach, and improving communication with our users to identify further areas where such targeted interventions may be of use. Key to success is good communication with the users, collaborative good teamwork and good leadership skills. We have shown that the pathology services enhanced and maximised patients benefit and experience. This was achieved with no extra resources, due to good communication and effective team working.

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Consultant Dermatopathologist
Newcastle upon Tyne Hospitals NHS Foundation Trust
Newcastle upon Tyne

Dr Peter Newton
ST5 RVI, now Consultant Pathologist
Gateshead Hospital NHS Foundation Trust

Acknowledgements

We would like to thank our entire lab staff, dermatopathology team members, Sharon Ward, cancer nurse specialist, Dave Evans, lab manager and Terry Coaker, operational manager for their support and help in this matter.

Dr Joe Houghton

Dr Marie McFarland

Dr Derek Allen

Voice recognition in histopathology: pros and cons

In this article Dr Joe Houghton, Dr Marie McFarland and Dr Derek Allen discuss their experiences with using voice recognition software in Belfast.

Introduction

In September 2012, voice recognition (VR) software (Dragon NaturallySpeaking version 11.0) was installed in the Belfast Trust Cellular Pathology Laboratories by Hands Free Computing Ltd. It allowed direct entry of reports by pathologists into the Laboratory Information Management System (Labcentre v1.9, CliniSys Solutions Ltd). This article describes our mixed experiences both from a consultant and trainee perspective.

Joe Houghton, Consultant Histopathologist at the Royal Victoria Hospital, Belfast

I have had a positive experience with VR and I use it for all my reports. I only report dermatopathology cases and therefore use a more limited range of standard reports and cancer proformas than if I was reporting a broad range of general pathology cases. I find the system is almost time-neutral compared with a traditional dictaphone. This may be partly due to the fact that my reports are succinct. I report each case live as I go along, which has the added patient-safety benefit that there is less chance of mixing up cases. The recognition software has a high accuracy but can struggle with words like 'macerated'. I prefer VR to the traditional method of dictating and waiting for secretaries to type reports and then having a mountain of reports to authorise sometime later, the details of which can be difficult to remember. Whilst not directly applicable to generating reports, another feature that is included is a text-to-speech facility, which allows you to listen to documents instead of reading them. You can choose from the mellifluous voices of either British Jane or American Jennifer (our new, friendly, virtual secretaries). Jennifer is my favourite. The use of VR is another positive step towards a paperless NHS.

However, there have been some difficulties. I have used this system before in a previous post, where the software was installed directly onto my PC; that seemed to be more stable than the current arrangement, where it is installed on a communal server. Approximately once a day, 'Not responding' error messages appear, accompanied by the dreaded blue spinning 'wait circle', which sometimes requires shutting down and restarting programmes, which is frustrating. The overall speed of use is usually OK, but it can occasionally be very slow, especially when our local NHS IT department are making background changes such as upgrades. Our local IT support is not overly responsive, which does not help. Our reports are created in a Microsoft Word template and, whilst I have had VR training, I have had no specific training in word processing. Completely self-taught, I now know how to display hidden text, view rulers, remove formatting marks and the difference between 'first line indent' and 'hanging indent' – while this has been interesting, I am not sure if it is a good use of my time. A minor inconvenience is forgetting to charge the wireless headset. Finally, embracing VR doesn't make you particularly popular with the secretaries.

> **"The system is almost time-neutral compared with a traditional dictaphone"**

Marie McFarland, Specialty Registrar in Histopathology at Belfast City Hospital

By rotating between teaching hospitals and district general hospitals in our Deanery, I have used Dragon NaturallySpeaking in different hospitals. I have had very varied experiences because of differing installation methods, duties, time pressures and working conditions. Due to variations in installation, trainees need to familiarise themselves with new systems several times during their training. Registrars' offices can vary from a trainee having their own room during a peripheral attachment, to larger rooms shared by up to six trainees. Although we use unidirectional Bluetooth headsets, we find that VR struggles and trainees struggle when several people in the same room are trying to dictate simultaneously. In my current post, trainees cut and report the majority of the complex surgical specimens. The word processing and formatting involved in multi-part cancer proformas is time consuming and may over-run into the following day, interrupting our duties on that day. When it works, it works well. It is most useful for short reports that have text codes and simple proformas. Complex multi-part cancer reports require a greater degree of word processing and formatting, and at present we feel that these may be better manipulated by an experienced secretary. VR dictation allows trainees, depending on their level of experience,

> When it works, it works well

the freedom to start entering their reports whilst waiting to sign out, which can save time provided that major changes are not required. However, if several changes have to be subsequently made to the report after signing out with the consultant (which is more frequent with junior trainees), then considerable time may have been wasted entering a draft report. VR may result in secretaries being freed up to do other administrative tasks, such as assisting trainees with the preparation of multidisciplinary team meetings, though a reduction in administrative support is another possible consequence. If VR is the future for reporting, it is necessary for trainees to persist and be familiar with the technology prior to taking up a consultant post, where new pressures will be significantly lessened if one is already au fait with reporting technology. Alternatively, further investment and training may be required to improve the system and train doctors on technical aspects of word processing as part of their induction and training.

Derek Allen, Consultant Histopathologist at Belfast City Hospital

Becoming proficient in VR began with a small group workshop lasting three hours. I undertook a familiarisation period of one working week and quickly achieved a plateau of efficiency in its use. I compared individual case by case with batching of cases and found that there was no demonstrable time difference. Batching allowed me to assess and prioritise cases and sort out those requiring further work. Importantly, it built in a time of reflection between microscopy, dictation, SNOMED coding and electronic authorisation, allowing histological reassessment before completion of the report in a minority of cases. To streamline the process, we wrote shortcut macros for the pathologist's signature, date of report and authorisation. I also wrote 55 text codes, whereby a simple verbal command generates a surgical report, anatomical site, diagnosis and pathologist's signature. These standard reports can be customised to each case by editing the Word document. They can also be combined with free-text dictation in multipart specimens. We also use 40 standardised cancer proformas. Benefits include faster turnaround times for urgent cases and prompt availability for remote viewing by clinicians. It also confers more freedom for the pathologist to report out of hours and regardless of office staffing levels.

> Benefits include faster turnaround times for urgent cases

Daily use has highlighted that although the software is reasonably accurate, there is a need for some manual editing and double checking prior to finalisation of the report. The robustness and efficiency of its linkage to the LIMS is crucial. A formal audit over six weeks for 95% of my reports showed that it required an additional 2–3 minutes per case, compared to our previous system of dictation onto magnetic tapes for secretarial audiotyping with printing and signing of hard-copy reports. This is similar to the experience of our radiology consultant colleagues. This translates to a weekly total of 1–1.5 PAs of additional administration work transferred from secretarial to consultant staff. The unintended consequences of this include:

- pressure to rush microscopy and diagnostic decisions
- decreased daily productivity and ability to keep control of backlog work
- erosion of SPA activities and availability for interaction with the rest of the team.

My SNOMED coding and checking of specimen type has become more restricted due to time pressure and getting used to checking the totality of the case details on screen. Where now? Given our current systems, the answer is a combination of VR for selected cases and tape dictation and audiotyping for the residue.

Summary

Our experience has been relatively painful. VR accuracy is not a problem, it is more the interconnectedness of VR, our NHS IT systems and our LIMS provider resulting in a set-up that feels a little bit unstable and unpredictable. Updates or changes to any link in this chain can upset the apple cart. The speed of the system is variable, resulting in pathologists waiting in frustration for the computer to respond. It is still a work in progress, with improvements on the horizon such as faster response times, improved system linkages, use of drop-down menus, a larger repertoire of text code generated and formatted reports, and better IT training for pathologists.

Dr Joe Houghton
Consultant Histopathologist
Royal Victoria Hospital, Belfast

Dr Marie McFarland
Specialty Registrar in Histopathology
Belfast City Hospital

Dr Derek Allen
Consultant Histopathologist
Belfast City Hospital

The future home of the College

Daniel Ross

The original London home of the College was a single office on the fifth floor of 12 Grosvenor Crescent, rented from the British Red Cross Society. After 18 months, the space had become too small for the fledgling College and in 1965 a lease was taken of three rooms in Chandos House in Queen Anne Street, home to The Royal Society of Medicine. Then, in 1968 the College moved again, this time to 16 Park Crescent.

Whilst at Park Crescent the issue arose of finding funding for a permanent home for the College. In 1969, the British Empire Cancer Campaign for Research, later to become Cancer Research UK, were looking for a new headquarters. One of their benefactors, Sir Michael Sobell, Chairman of GEC, wished to make a substantial donation for cancer research. He approached the charity, which persuaded him that what they actually needed was office accommodation. Fortunately for the College, its Registrar was also the Scientific Secretary to the Cancer Campaign for Research and was able to persuade Sir Michael to make his gift jointly, to provide a home for both parties.[1]

2 Carlton House Terrace

The organisations formed a 'New Premises Committee' and in a very short period of time a suitable house was discovered, available from the Crown Estate on a 99-year lease. This was 2 Carlton House Terrace.

The initial construction of Carlton House Terrace was, in effect, a royal fundraising exercise. The Prince Regent decided that Carlton House, his royal palace on Pall Mall, was not really suitable as the front door opened directly onto the street. On his accession to the throne as King George IV, he vacated Carlton House for the newly built Buckingham Palace and, in order to fund its expansion, demolished Carlton House and proceeded with the building of 18 houses on what was to become Carlton House Terrace. Number 2 was the first house to be completed and occupied in 1829.

On 15 October 1940, an enemy bomb fell directly onto Number 2, causing substantial damage. The building remained derelict and open to the elements until 1969, and was nothing more than a shell. As part of the negotiations to occupy the property, agreement was reached that in recognition for renovating and redecorating the premises, the 99-year lease would be granted on peppercorn terms of a rent of £2000 per annum, fixed for the duration of the lease.

In June 1970, 2 Carlton House Terrace became the College's new home, with the College occupying a fifth of the building and Cancer Research four fifths. Gradually, with the effluxion of time and the College's expansion, changes in the relative occupancies of the property were negotiated such that in 1992 the College occupied 82% and finally, in 2003, Cancer Research moved out altogether.

The Crown Estate owns approximately 50% of the buildings in the St James's area of London. Their recently published strategy for the area states that they wish to take advantage of the super prime residential market and values, and would seek to obtain a change of use to residential where it was felt appropriate to reinforce St James's role as a high-quality residential locality.[2] Carlton House Terrace is specifically mentioned.

> **A freehold building would strengthen the balance sheet of the College and secure its long term future**

Aside from the College's membership, 2 Carlton House Terrace is our biggest asset. The lease is a wasting asset though, which will become worthless at the end of its remaining term. At that time, the College would have to find alternative premises without the benefit of value in the lease to fund the new acquisition. However, with 56 years remaining on the current peppercorn lease, the College is in a strong position to negotiate with the Crown Estate on the early relinquishment of the lease to release value, thus enabling them to achieve part of their strategy.

The College and the Crown Estate started talking about such a possibility in August 2011. Council's view was that if a suitable freehold property could be found in Central London, close to good transport links, refurbished to a high standard and with all the costs (including moving) obtained from the College's share of the proceeds of sale of 2 Carlton House Terrace, then this would be a good deal. As a freehold building would not be a wasting asset, this would strengthen the balance sheet of the College and secure its long-term future.

Faced with this opportunity, Council considered whether the College should remain based in London. It was agreed that as an organisation at the heart of healthcare, it would be sensible to remain based close to central government. Some form of London base would be needed. Additionally, London is the hub of many of the country's transport links, thus making attending the various committee and scientific meetings easier.

Members will recall that in 2007, after the College took the occupancy of the entire building, an appeal was launched and the lower ground floor was refurbished into additional lecture theatres and meeting rooms, which we have been using successfully for the last six years. It is a good question to ask why the College went to all that trouble, simply to consider moving now. The finances of the Crown Estate in 2007 were not as they are today and this type of deal was simply not available back then. It has been agreed that all the donor recognition will be taken with us into a new premises, including room recognitions and dedications, the main donor boards detailing names of those who donated and individual named chairs. There will also be some audio visual and other equipment, installed during the refurbishment, which we will transfer to a new building.

If the College were to proceed with such a move, there are a number of shortcomings of 2 Carlton House Terrace that we could seek to address.

- Our main lecture theatre can hold only 120 people. It would be desirable for the College to have a facility of between 200 and 300 seats.
- Honorary officers and others who perform an enormous amount of work for the College often have no office facilities when they are in attendance. Being able to provide dedicated facilities for them to use would be advantageous.
- Currently the layout of the building does not lend itself to modern ways of working. A more open-plan structure would allow greater flexibility and allow us to house staff and officers in a more effective way.
- We could also benefit by increasing the available overnight accommodation, as this should reduce the costs of members on College business staying in London hotels.

College Council has appointed property consultants and lawyers to conduct the negotiations on its behalf with the Crown Estate. Advice received was that the best interests of the College would be served by entering into a joint sale arrangement, which would marry up our leasehold interest and the Crown Estate's freehold reversionary interest. A new 125-year lease would then be offered to a purchaser. A sale and marketing agreement was signed in April 2013, allowing the joint marketing of the property to proceed.

The first stage of the process will be for the Crown Estate to submit a planning application to Westminster Council for change of use of the building to residential. It is hoped that this permission will be obtained later in the year, at which point the property will be marketed. Assuming a suitable buyer comes forward, I envisage that the College could be moving out some time in 2014.

This is an exciting time in the development of the College. We will keep members informed of progress through the Bulletin and other means, as the project progresses.

Daniel Ross
Chief Executive

References

1. *Pathology as a Profession in Great Britain*, WD Foster, 1977.
2. *The Strategies for St James's*, Crown Estate, 2011

Dr Suzy Lishman

Honorary Officers' Glasgow roadshow

In the April issue of The *Bulletin* you'll have read about the Honorary Officers' visit to Dublin to meet members of the College in Ireland. In this issue we report on a similar visit to Glasgow, one of a series of regional roadshows.

The Honorary Officers try to meet as many members as possible, travelling to Regional Council and scientific meetings around the country. The President, in particular, travels widely, both in the UK and abroad. In order to make it as easy as possible for all members to meet the Officers and ask them any questions they might have about College business, a series of roadshows is taking place.

After successful sessions in London and Dublin, the President, Dr Archie Prentice, and Vice-Presidents Dr Bernie Croal, Dr Suzy Lishman and Professor Mike Wells visited Glasgow in April.

Regional Council meeting

The day began with a meeting of the Scottish Regional Council, chaired by Professor Stephen Gillespie. Council members and Honorary Officers discussed a range of issues including the proposed changes in regional representation, how College members engage with the Scottish Government, the future of clinical science training in Scotland, representation of Scottish members on central College committees, training in molecular pathology and the future of infectious disease training.

Laboratory tour

The Officers were then given a tour of the new pathology laboratories at the Southern General Hospital, visiting the blood sciences lab, genetics and microbiology. The £90 million facility was opened last November and provides over 25000 square metres of laboratory space, with more than 800 members of staff working over five floors.

College myths and misconceptions

All members of the College in Scotland were invited to the Officers' roadshow, which was held at the Southern General Hospital. Vice-President Bernie Croal gave a brief introduction, then handed over to the President to say a few words about the work of the College.

Vice-President Suzy Lishman then gave a short presentation addressing some myths and misconceptions about the College. These included the myths that the College spends a fortune on renting 2 Carlton House Terrace (it doesn't), that there's a well-stocked wine cellar (unfortunately there isn't), that providing The *Bulletin* in electronic form would save money (it wouldn't) and that the College is out of touch with its members (the College is its members and over a third are actively involved in College business at any time).

Question and answer session

The presentation was followed by a Q&A session with the Honorary Officers. Topics discussed included whether scientific meetings in London could be viewed from Scotland to reduce travelling, the function of the College's new Clinical Effectiveness Unit, external funding for College activities, collaboration with other colleges, and the teaching of pathology in medical schools. The future of EQA was discussed, a topic that is likely to be relevant to all pathologists following the publication of the King's Mill report.

Future roadshows

The Honorary Officers would like to meet as many members as possible and look forward to future roadshows. The next is scheduled for 18 September in Cardiff.

It makes sense to link the roadshows to an event that is already happening, such as a regional council or scientific meeting. If you would like Officers to attend a meeting near you, please let us know.

Dr Suzy Lishman
Vice-President

Honorary Officers and College members

New College awards

Derek Bishop, Professor Tsvee Lapidot, Professor Matthew J McQueen and Dr Stanley J Robboy were admitted to the College as Honorary Fellows and Dr Charles Singer was awarded the College Medal.

Derek Bishop

Derek Bishop qualified as a medical laboratory technologist with HNC in 1979, passing the Special examination in histopathology and cytology, thus obtaining Fellowship of the Institute of Biomedical Science (IBMS) in 1981. Throughout his career, he has gained wide experience of practice, training and research in pathology and of their relationship to each other. He rose steadily through the grades to become finally Head Biomedical Scientist and Clinical Manager of the Pathology and Genetics Departments at Ninewells Hospital, Dundee in 2001. He consolidated this experience academically by obtaining in 1995 the Certificate in Health Management Studies of the Institute of Healthcare Management and then in 1999 a Masters in Business Administration at the University of Edinburgh. His experience and knowledge were recognised in 2007, when he was appointed the first Scottish Pathology Network Manager.

Derek has played a major advisory role on several key policy and implementation bodies. He was a member from 2003 to 2005 of the IBMS/RCPath Conjoint Board for the Role Extension of BMS in Histological Dissection, from 2004 to date a member of the Scottish Medical and Scientific Advisory Committee, in 2009 a member of the NCRI Working Group on Fostering the Role of Pathology and since 2009 a member of the Shadow Board/Council of the Academy of Heath Care Science. In 2012 he was appointed as a member of the Healthcare Science Programme Board of Medical Education England. For several years before and since his election as President of the IBMS, he has managed with great skill and diplomacy the difficult issues thrown up for IBMS and its Fellows and Members as a consequence of the Modernising Scientific Careers programme. The respect in which he is held by all who have had the privilege to work with him in his determination to maintain and to raise standards in pathology is a testament to his qualities which merit the award of Honorary Fellowship of this College.

Dr Archie Prentice
President

Derek Bishop and Dr Archie Prentice

Professor Tsvee Lapidot and Dr Archie Prentice

Professor Tsvee Lapidot

Professor Lapidot began his scientific training at The Hebrew University of Jerusalem, obtaining BSc in 1983. Then at the Weizmann Institute, Rehovot, he obtained first an MSc in 1985 on the role of auto-immune T cells in rheumatoid arthritis, then a PhD in 1990 on 'T Cell-Depleted Bone Marrow Transplantation in Mice: Mechanisms of Allograft Rejection and Enhancement'.

From 1990 to 1994, he was a Post-Doc at the Hospital for Sick Children, University of Toronto, with Professor John Dick researching functional, preclinical animal models for normal and leukemic human stem cells, returning to the Weizmann Institute in 1994 as Senior Scientist in the Department of Immunology. He was appointed Associate Professor in 2001 and the Edith Arnoff Stein Professor in Stem Cell Research in 2006.

He has published extensively in leading international journals on his highly original work on

the nature and behaviour of normal and leukaemic stem cells, in their engraftment and self-renewal and in the intimate relationship with their microenvironment necessary for their survival and proliferation. It is no exaggeration to say that his work has opened countless opportunities for further translation studies on the treatment of all malignant disease, not only haematological.

This work has been recognised internationally through numerous awards, including the EMBO Long-Term Fellowship 1990–1992, National Cancer Institute of Canada Post-doctoral Fellowship 1992–1994, the James Heineman Research Award in Life Sciences for achievements on regulation of normal and leukemic human stem cells from the Minna-James-Heineman Foundation of Munich 2002, the McCulloch & Till Lecture and Award for exceptional scientific contributions to the field of hematology and stem cells at 37th ISEH meeting 2008, and the Ham-Wasserman Lecture Award for contributions to our understanding of regulation of human blood forming stem cell homing and mobilization at the 52nd ASH meeting 2010.

He has served on the editorial boards of many journals (including *Blood and Experimental Haematology*) and the scientific boards of many specialty societies, including ASH, ISEH, EHA and EBMT.

His research continues with unabated power and intensity, including his recent revelatory work on the direct and indirect regulation of haemopoietic stem cells by the nervous system and the coagulation system.

Dr Archie Prentice
President

Professor Matthew J McQueen

Professor Matthew McQueen has made outstanding contributions to the field of clinical biochemistry in terms of clinical service, teaching, research and international leadership. Professor McQueen's Alma Mater, like that of our current President and myself, was Glasgow University, and it was there as an undergraduate in medicine that he showed the first signs of his much-admired public speaking skills by winning the Observer Mace Debating Trophy in 1967. His training in clinical biochemistry began there under the mentorship of Professor Gemmel Morgan and John King – indeed in 2007 he presented the first Gemmel Morgan award lecture for the Association for Clinical Biochemistry in Crieff.

Professor Matthew J McQueen and Dr Archie Prentice

Following a PhD in Glasgow, however, his career was not destined for these shores, and so following an early move to Canada in the 1970s, where he became a Fellow of The Royal College of Physicians of Canada, McMaster University and the Hamilton hospitals were to provide him with his base for the rest of his career. His contribution to Canadian clinical chemistry has been remarkable and he has led many important initiatives over his many years of practice. In particular, he led the drive to change to SI units. He has served in many roles on the Canadian Society of Clinical Chemistry executive, including a term as President. He also was integral in the development of the Canadian Academy of Clinical Biochemistry that oversees the professional regulation of clinical scientists practising in Canada. During his ten-year period as Chief of Laboratory Medicine for the combined Hamilton hospitals, he encouraged the development of the residency and post-doctoral training programs and these are amongst the strongest training units in Canada.

As a researcher in the fields of cardiovascular disease and population health, his work continues to flourish and he has 188 peer-reviewed publications, 16 book chapters and 14 other publications. His list of peer-reviewed abstracts is also extensive, totalling more than 400. He remains a key researcher with the Population Health Research Institute (PHRI) at McMaster University, where he continues to head the Clinical Trials Clinical Research Laboratory that he founded 25 years ago and is included on a number of high-profile grants. Notably, since 2000, his grant income as a named applicant totals more than $92 million. In collaboration with PHRI, he has developed the largest biobank in Canada, with more than 3 million fully characterised samples from 300 000 participants in clinical studies. This is seen as a true legacy that will benefit the research community for many years to come.

He has been recognised around the world and has been invited to present papers in 46 countries. Amongst these are many of the prestigious lectures in clinical chemistry including the AACC-ACB transatlantic lecture in 1999. In addition, he has been invited to be an external assessor or examiner for universities in nine countries outside of Canada and for six universities within Canada. The ACB awarded him Honorary Mem-

Dr Stanley J Robboy and Dr Archie Prentice

bership in 2009 for distinguished International Contribution to Clinical Biochemistry.

Most notably, however, is his work with the International Federation of Clinical Chemistry (IFCC). From first joining the Scientific Committee in 1982, he then progressed to Treasurer between 1988 and 1990, served as Vice-President from 1991 to 1996 and then as President from 1997 to 1999, helping mould and expand the federation into a truly worldwide body. He was also instrumental in the drive to change the name of IFCC to the International Federation of Clinical Chemistry and Laboratory Medicine, thus making a public affirmation that the future roles were to be clinically driven and that a clinical and not a factory model would guide the future of diagnostics. He remains active in the IFCC and currently holds a position on the Committee on Ethics.

Professor Mathew McQueen is a remarkable individual whose contributions to clinical biochemistry and laboratory medicine have been huge. This, along with his sheer presence and his friendly, down-to-earth attitude, has made him an inspiration to many of us. He is a most deserving recipient of Honorary Fellowship of this College.

Dr Bernie Croal
Vice-President

Dr Charles Singer receiving the College Medal from Dr Archie Prentice

Dr Stanley J Robboy

Dr Robboy is Professor and Vice-Chair of Pathology at Duke University Medical Centre, Durham, North Carolina, USA and the current President of the College of American Pathologists. He received his medical degree from the University of Michigan in Ann Arbor in 1965 and completed his residency at Massachusetts General Hospital in Boston.

Dr Robboy is well known for having pioneered the unravelling of the diethylstilbestrol (DES) story, a drug administered to women during the 1940s and '50s for high-risk pregnancy, where a very small percentage of the exposed daughters developed vaginal cancer several decades later.

Dr Robboy has been an active member of the College of American Pathologists (CAP) for more than 35 years, having served as a member of the CAP Board of Governors and as vice chair of the Council on Membership and Public Affairs. In addition to the College of American Pathologists, Dr Robboy has held numerous leadership positions, including President of the Arthur Purdy Stout Society of Surgical Pathologists. He has also served as a board member for several pathology and medical publications, including *Human Pathology*, the *International Journal of Gynecological Pathology*, *Pathology Research and Practice* and *Gynecologic Oncology*. Throughout his career, Dr Robboy has demonstrated his firm commitment to upholding of professional standards and to postgraduate education, both as a speaker and organiser of scientific meetings and courses.

Dr Robboy has published over 280 peer-reviewed articles and invited chapters. He is the co-author of ten books and monographs including *Microglossary of SNOMED for Surgical Pathology* (1981) and, currently, serves as chief author and editor for the major textbook, *Pathology of the Female Reproductive Tract* (2nd edition, 2009).

Professor Mike Wells
Vice-President

Dr Charles Singer

The College Medal is an award made intermittently by decision of College Council to any Fellow who has undertaken exceptional work for the benefit of the College. Work above and beyond anything that could reasonably be expected, or even reasonably hoped for. I am delighted that College Council unanimously decided that the Medal should be awarded to Dr Charles Singer, particularly for his work as College Treasurer from 2008 to 2012.

Dr Archie Prentice
President

PUBLIC ENGAGEMENT

Professor Paola Domizio

Strength to strength

Public engagement at the College is going from strength to strength. In the last issue of The *Bulletin*, I urged Fellows not to let the momentum created by National Pathology Year go to waste, and I'm pleased to say that my word has been heeded.

One look at this issue's Public Engagement section is testament to that. You can read about a number of events that have been held across the country, as well as the tenth annual Schools Science Conference, which has now become a regular fixture in the College's own public engagement calendar. In addition, Lucie Houghton describes the progress being made with developing events and resources based on the *50 Objects* book. This includes what promises to be a highly popular series of public lectures planned for the autumn and winter.

Last but not least, this issue of The *Bulletin* marks the launch of the College's Public Engagement Innovation Grant Scheme, described in detail below. Although a number of other science institutions run public engagement grant schemes, this is the first one – to our knowledge – to be offered by a medical royal college. We look forward to receiving a large number of applications and, if the standard of events held during National Pathology Year is anything to go by, we know we'll have a difficult task selecting the successful applicants!

Professor Paola Domizio
Director of Public Engagement

Lucie Houghton

Public Engagement Innovation Grant Scheme

New for 2013, the College is pleased to be launching the Public Engagement Innovation Grant Scheme. This initiative has been introduced in response to Fellows' feedback that they require financial support for public engagement activities.

The Royal College of Pathologists has a critical role to play in raising awareness and understanding of the role of pathologists and aims to achieve this through the delivery of a public engagement programme.

The Public Engagement Innovation Grant Scheme has therefore been introduced to give financial support for delivery of a wider range of pathology- related events throughout the UK. Grants of up to £500 are available for individuals or organisations to help with the delivery of these activities.

The Innovation Grant Scheme aims to:

- inspire innovative and creative pathology-related public engagement projects and activities
- raise public awareness of, and engagement with, pathology, in particular with those who would not normally engage with the topic
- develop the science communication skills of pathologists and scientists
- stimulate discussion about pathology between pathologists and the public in order to motivate, inspire and enthuse both parties about the value of pathology as the 'science behind the cure'.

The Innovation Grant Scheme is open to all who wish to develop pathology-related public engagement activities or events. However, all proposals must include the involvement of pathologists and/or scientists as a key part of the activity. It is hoped that applications will be received from a wide range of individuals, groups and organisations and that this will help encourage collaborations between pathologists and the community.

Applications will be judged against the following criteria and should clearly demonstrate:

- that the project is pathology-based and explores underlying concepts and issues, rather than just providing information
- that the project involves the input and involvement of pathologists or scientists, ideally Fellows of the College. The Public Engagement team can help identify local pathologists to collaborate with if required

- awareness of public interest and concerns, including the relevance of the project to the target audience(s); pathology has an important role in healthcare, thus applications which explore the importance of pathology for the living are encouraged
- timeliness and relevance; projects linking pathology to external events in the wider community (e.g. anniversaries, local festivals) are welcomed
- targeting of specific audiences; projects that target traditionally hard-to-reach groups (e.g. ethnic minorities, geographically isolated communities), secondary school students, medical students and independent adults are encouraged
- clear project objectives and the potential to make an impact on the target audience; projects that demonstrate imaginative ways of engaging new audiences with pathology are welcomed
- evidence of adequate and appropriate publicity to attract the target audience
- evidence of appropriate evaluation of the project/activity
- cost effectiveness; every effort should be made to ensure that the lowest costs possible are achieved. If commercial activities are to be bought in, evidence for this should be provided
- value for money; applications that use innovative ideas to create effective engagement at low cost are encouraged
- that the activity is dependent on College funding or that it adds a significant element.

All applications must be received by Wednesday 18 September 2013. The panel of judges will review all applications and all applicants will be notified of the outcome by 21 October. All activities/projects must be completed by 30 June 2014.

The panel of judges will comprise:

- Professor Paola Domizio, Director of Public Engagement
- Dr Suzy Lishman, Vice President
- Karen Davies, Head of Learning, Science Museum.

The College Public Engagement team will provide support and advice to successful applicants as required, to ensure their aims are achieved and the event reaches its full potential. Successful applicants will be required to evaluate their event and provide photos and an article about the event for The *Bulletin*. So keep your eye out for these in future editions!

Full terms and conditions, application guidance and the application form are available on the I Love Pathology website at www.ilovepathology.org/events/event-funding or through www.rcpath.org/the-college/awards-and-prizes

Applicants are strongly encouraged to read the application guidelines and contact the Public Engagement team for informal advice and guidance prior to submitting an application. Contact the team on 020 7451 6727 or PEG@rcpath.org

We look forward to hearing from you and receiving your applications. Good luck!

Lucie Houghton
Public Engagement Manager

Samantha Jayaram

Schools Science Conference – celebrating 10 years

The Schools Science Conference (SSC) was founded in 2003 by College Fellow, Don Henderson, with the aim of inspiring, informing and enthusing secondary school students about the world of healthcare, science and technology.

In the ten years since the first conference it has more than fulfilled its original brief. Over 3000 secondary school students and their teachers have attended, with over 900 health professionals and scientists volunteering their skills, time and expertise.

Professor Lord Robert Winston helping some students make DNA bracelets of the MRSA PVL (Panton Valentine Leukocidin) toxin

Research has shown that, whilst many pupils have a natural curiosity and interest in science, they can often find that the way science is taught in school isn't always relevant to their lives. One of the main objectives of the SSC is to help inspire students to choose and enjoy science as a subject to study and to consider a career in science, healthcare or technology.

The first conference was held at the Commonwealth Institute, before moving to Kensington

> **The students came away really inspired about science and having learnt a lot which they felt they could use in their upcoming GCSE exams/ BTEC assignments. A lot of our students come from a background where they are not able to get advice about career options or to talk to adults about their experience of working life**

Town Hall. For the last four years, the College has hosted the day at 2 Carlton House Terrace. Every year, hundreds of students, teachers and volunteers turn the building into a hub of lively, exuberant, organised chaos. Full use is made of the College's Education Centre on the lower ground floor, which was designed to hold just this type of event.

The SSC focuses on healthcare and is a mixture of hand-on interactive workshops, demonstrations and displays. Over the years, activities have covered blood transfusion, microbiology, transplantation, biochemistry, resuscitation, physiotherapy, perfusion, immunology, haematology, histopathology, audiology, cardiology, andrology, pharmacy, physics, genetics and nuclear medicine, to name a few. Many of the activities are linked to the curriculum and are designed to complement science teaching back in the classroom.

Working alongside Don are a small dedicated organising committee, chaired by Kimberly Gilmour, who is also a College Fellow and an immunologist based at Great Ormond Street Hospital. The committee largely comprises health and educational professionals, who volunteer their time to organise the conference each year. This is not an easy task. Not only do the organising committee have to ensure there are enough volunteers on board to devise and run the activities, they also have to fundraise, as the SSC relies solely on sponsorship and grants. It is a credit to the tenacity and persistence of the team that the funds needed are raised each year, despite the increasing squeeze on available grants and sponsorship schemes.

Professor Lord Winston discusses genetics with volunteers Vanessa and Sarah

The students who attend the SSC are drawn from schools across London and the south east and are aged mainly between 11 and 16 (key stages 3 and 4). They are at that critical juncture of their lives where they are either about to choose or sit their GSCEs. Many will never have met adults who work in the sciences or in healthcare. The SSC gives students the opportunity to talk to the volunteers in a relaxed and informal environment. At this year's event, students were able to meet a range of professionals from pathologists, podiatrists and practice nurses to paramedics and pharmacists.

Whilst the SSC gives the volunteers the opportunity to demonstrate their skills and knowledge, it is a very much a two-way relationship. The experienced professionals who take part often find the discussions they have with the pupils are just as illuminating and rewarding for themselves as they are for the students.

Science for Living 2013 – tenth anniversary

The 10th Anniversary Conference, Science for Living, was held to coincide with National Science and Engineering Week in mid-March. It began with a keynote address from a special guest speaker, Professor Lord Robert Winston, who gave a motivational speech, urging students to use the day to explore their scientific curiosity and to consider a career in science. After his speech, Professor Lord Winston spent time talking to the students and volunteers and visited many of the stalls and activities.

The Kidney – a workshop

Throughout the day, the College, in association with the Institute of Biomedical Science and Association for Clinical Biochemistry, ran a series of workshops on the kidney; how it works, what it does and what happens when it doesn't work.

Led by College Fellow, Alex Freeman, a histopathologist based at University College London Hospitals, students were able to see real diseased specimens courtesy of a selection of pathology pots on loan from the University of London's Teaching and Research Collections. As well as examining the pots, students were able to learn about diabetes and glucose testing, as well as how kidneys are matched for transplantation. This workshop is an example of what the conference does best, giving pupils an insight into the working lives of healthcare professionals and an understanding of the relevance of science to people's health.

Students examine a pathology pot containing a kidney specimen

Taking the buzz back to the classroom

As well as the students' sessions, teachers were also able to attend a practical workshop that provided ideas for science-based clubs and activities the teachers could run back in the classroom.

Front row (l–r) Rebecca Macrae, Don Henderson, Kimberly Gilmour, Sharon Gage. Back row (l–r) Manfred Almeida, Sue Alexander, Maria Rossini, Mike Carter and Nic Dent

It's not all about the professionals

Each year, schools are asked to undertake a science-themed project and enter it for the Association for Clinical Biochemistry's Trophy for the Don Henderson Award. This year's winners were Oghogho Igbineweka and Dea Loughlin from La Sainte Union Catholic Girl School in Camden who presented their work on "*Keeping drinks hot!*" You can view their award wining project at www.science4u.info/

The feedback

Every year, the feedback from everyone who takes part in the conference is overwhelmingly positive, with many schools and volunteers returning year after year. If the main aim of the Schools Science Conference is to enthuse and inspire, the students certainly seem to have come away from the conference feeling just that.

And the last word? Well, that should be left to the students. Here are some of the feedback comments from this year:

"Today's event was exciting. I loved it."

"Brilliant event"

"I would like to attend more of these events in the future."

"It was a very interesting journey and very educational."

"Amusing and interesting."

"It was a very interesting and inspiring day, I learned a lot."

Samantha Jayaram
Press and Communications Manager

Amaka Nwagbara

Science Communication Training

We are pleased to announce that the next science communication training sessions will be held in London on 18 July 2013 and in Leeds on 4 October 2013.

The training is free for members and for anyone that has previously organised or helped run an event for National Pathology Week or Year. In return, all we ask is that you hold at least two events by December 2014.

The training will cover how to plan events, identifying your audience, how to meet their needs, how to cater for different learning styles and how to achieve the greatest impact from your event. There will also be a session dedicated to generating ideas for events and planning them, so you will have some basic formats to take away and replicate yourself or pass on to colleagues in your region.

This training will help you to gain some experience in organising events and working with the public, giving you increased confidence to run events or help others run events.

It will be run by Karen Davies from the Science Museum. Karen is a very passionate about communicating science and she will ensure that you leave with useful tips and information!

Please note that places are limited and offered on a first-come, first-served basis. Should you wish to attend on either date or would like more information, please email me.

Amaka Nwagbara
Public Engagement Assistant
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Jenny Antrobus

First impressions of pathology at the Royal Oldham Hospital

Dr Vivek Sen, a member of the North West Regional Council, recently invited Karen Sandler, Lay Chair of the College's Lay Advisory Committee, to visit his haematology department to help her with her work on the NEQAS General Haematology Steering Committee. Karen asked if she could bring along a 16-year-old student, Jenny Antrobus, whom she mentors and who wants to be a doctor. Dr Sen very kindly agreed, and this is Jenny's report.

The first thing I thought when I saw the Pathology Department at Oldham Hospital was how modern and 'state of the art' the building was. It looked so impressive from the outside, and I was eager to go inside. Whilst waiting to meet Dr Sen, a consultant haematologist at the hospital, I got to see the inside workings of a haematology lab. I watched as blood samples were delivered to the lab and realised how important the laboratory technicians were in the development of modern medicine.

On the way to Dr Sen's office, I got a passing glance at all the different labs in the department, not just for haematology. Dr Sen explained lots of things to me. He talked about the Pathology Department at the hospital as a whole, where he briefly mentioned all the different aspects of pathology, such as histopathology and microbiology. He then went on to talk about his specialty. This particular part of the meeting interested me greatly. Dr Sen discussed how he worked to diagnose and treat diseases of the blood, such as leukaemia and lymphoma. I enjoyed listening to him talk about his work, and also learnt a lot from what he had to say. After the meeting, I did more research into diseases of the blood to follow up what I had learnt from Dr Sen, as his work inspired me to learn more.

Jenny Antrobus in the laboratory

Dr Sen went on to discuss the fairly new clinical haematology unit in the hospital, which I got to see later on in the visit. Seeing the unit was also very inspiring and interesting for me, as I got to see where and how approximately 7500 patients a year are treated for both cancerous and non-cancerous diseases of the blood.

I had a chance to ask Dr Sen some questions of my own too, particularly about medical school. He explained to me the stress of medical school, and gave me lots of advice on how to stand out when applying – information which I found extremely useful. An especially interesting fact he told me was that a large percentage of medical students drop out of the course before they complete it, due to the enormous amount of stress involved in the degree, something which I did not know before. This, however, still hasn't put me off wanting to be a doctor!

After the meeting in his office, I had the opportunity to go with Dr Sen around the department, where he showed me everything they do there. I got to properly see all the different labs that I had seen on my way up to Dr. Sen's office, and the ones he had explained to me about earlier. I found the haematology lab the most interesting, based on the first impressions. This was probably due to the detail Dr Sen had gone into when explaining about the lab, because it was his specialty, but all the same, I preferred that one over the rest.

After looking around the labs, we went up to the haematology ward in the hospital, which was amazing. I got to see the state-of-the-art clinical unit, where both day patients and inpatients are treated for blood disorders, and Dr Sen explained to me how things work in the ward, and where all the different things took place. I

learnt about the day patients, where they go and how they are treated, and I saw the wards where the inpatients stay. We went part way into the rooms for the extremely ill patients, where the air has to be purified and filtered because of their illness. Dr Sen showed me a standard consultant's room, and showed me how they get the information from blood tests and x-rays onto the computer, which is much more efficient than it used to be. On this part of the visit, I was particularly interested in the clinical unit, which I enjoyed looking round.

Overall, I found the day extremely interesting and inspirational. The things that I learnt from Dr Sen encouraged me to go home and do more research on pathology and haematology, and the information and tips he gave me about my future plans for medical school were extremely useful. My first impressions of pathology were excellent, particularly in such a wonderful department with such friendly doctors like Dr Sen. The visit definitely inspired me to look more into pathology, and definitely did not put me off wanting to be a doctor!

Special thanks to Dr Sen for allowing me to visit the department and being so helpful throughout the visit.

Jenny Antrobus
School student

Samantha Jayaram

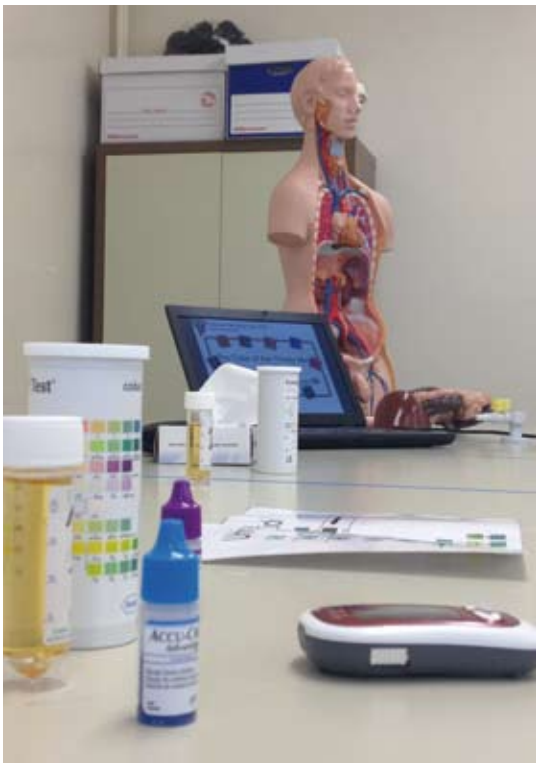
Members continue to organise events to promote pathology

Durham University Schools' Science Festival

Dr Tim Lang, Consultant Clinical Scientist at University Hospital of North Durham, organised an interactive activity for Year 9 and 10 students from County Durham schools attending the annual three-day Durham University Schools' Science Festival.

The festival aims to encourage and support the next generation of scientists from the local area.

As part of the activities, Tim organised 'Science behind the cure', where students investigated the case of a thirsty man, from his first visit to the doctor through to diagnosis and follow up using point-of-care testing kits.



Materials used as part of the Durham Schools' Science Festival

A student at Durham University Schools' Science Festival said:

"I loved how the people doing the activities weren't super scientists, just average people we could become."

Wycombe Higher Education and Careers Fair

Dr Katharine Sheppard and fellow histopathologist, Dr Kankate from Wycombe Hospital, set up a pathology stall at the annual Higher Education and Careers Fair at Wycombe High School. Anatomy posters, photographs and even a skeleton were kindly provided by Oxford Deanery histopathology trainees and biomedical scientists based in the Cellular Pathology Department at Buckinghamshire NHS Trust.

The careers fair was aimed at pupils aged 14 to 18 and designed to help pupils research their options on leaving school.

As an ex-pupil of Wycombe High School, Katherine was keen to meet students and to promote a career in medicine and pathology disciplines. She commented:

"It was a thoroughly enjoyable few hours and I did my best to dispel the myth that 'pathology is all about dead bodies'! Many of the students I spoke to had already decided upon a career in medicine, so it was also a great opportunity to promote pathology and alert them to possible future careers in histopathology and other pathology specialties. It was also great to be able to discuss work experience opportunities and the working life of a pathology trainee, as well as using the microscope we brought along to demonstrate histology and cytology slides to interested pupils and parents alike".

Dr Katherine Sheppard at the careers fair

Regional microbiology competition

The NHS microbiology establishments in the North of England had their first Regional Microbiology Audit Competition on 23 January 2013, at the Centre of Life Newcastle. The event was organised by Dr Muhammad Raza, consultant microbiologist, Gill Cresswell and Brenda Kirkbride, from in the Microbiology Department at Newcastle Hospital Foundation Trust.

The competition offered a unique opportunity for healthcare workers from all the Trusts in the region to share their ideas on service improvement, laboratory modernisation and audits. Despite bad weather and snow-bound roads, over 40 delegates and entrants from the majority of the microbiology departments in the regions participated. A buffet lunch was kindly provided by sponsors, Astellas.

The event, accredited for CPD by this College and the Institute of Biomedical Science, was chaired by Dr Jonathan Wallis, Clinical Director of Laboratory Medicine, Newcastle Hospitals Trust and judged by Dr J Sarma (Northumbria Trust), Dr M Kalra (James Cook University Hospital), Dr G Horne (Queen Elizabeth Hospital), Dr K Walton (Newcastle Hospitals) and Mr S Stoker, Clinical Effectiveness Manager from Newcastle Hospitals.

Eight entrants gave 15-minute presentations covering several aspects of innovation and audit in infection management, followed by questions from the judges and the floor.

Prizes were awarded to:

- Dr Vicky Cleeve, Northumbria Trust – first prize of £500
- Scott Barrett shared with Dr Tasmin Oswald, Northumbria Trust – second prize of £300
- Jennifer Collins, Newcastle Foundation Trust – third prize of £200.

The rest of the entrants did not go away empty-handed, getting £50 each.

The feedback received from the delegates on the organisation, venue, quality of programme and its educational value ranged from good to excellent. The judges, who also made up the working committee for the event, appreciated the potential and need for repeated annual events in the future.

Samantha Jayaram
Press and Communications Manager

The Furness Prize for Science Communication 2013

Nominations are now open for The Furness Prize for Science Communication. We are looking for a pathology trainee who has contributed significantly to communicating science over a sustained period of time, including some activity in 2013.

This person may have developed resources for teachers and students, run outreach sessions, produced high-quality public dialogue events, worked with other organisations such as museums or charities, evaluated their activities and encouraged colleagues to take part in science communication activities.

This prize was created to:

- cultivate awareness amongst pathology trainees about the importance of public engagement
- reward and recognise trainees who have undertaken sustained high-quality science communication activities.

The award is generously funded by Professor Peter Furness, former President of The Royal College of Pathologists.

The winner will be awarded £200 for displaying superior excellence in their science communication activities. Candidates may nominate themselves or be nominated by a colleague who is familiar with their work (the candidate must give their explicit consent for nomination). All nominations should be made by completing the College's nomination form on www.rcpath.org/the-college/awards-and-prizes/furness-prize

The deadline for nominations is Sunday 3 November 2013.

Lucie Houghton

A History of Pathology in 50 Objects

There are already lots of resources available on www.ilovepathology.org, but work has been continuing to ensure that *A History of Pathology in 50 Objects* continues to be developed as material for public engagement.

School resources

We were keen to ensure that new resources would be useful to teachers and fulfil their needs. We have therefore been running focus groups with teachers from a variety of secondary schools to determine the best way to develop these new resources.

Feedback on the book as a resource has been very positive and many of the objects fit easily within the curriculum. The focus groups have been very worthwhile in establishing teachers' needs and giving us greater insight into the way the objects can be incorporated into activities. The key findings so far include ensuring that the activities are easy to use and are flexible so that they can fit into varying lesson times. Preference was given to activities that allow debates and it was thought that high-quality images would be helpful in initiating discussion and sparking imagination. It was particularly interesting to learn that most current resources are targeted at 'gifted and talented' students only, so new activities for students of all abilities were therefore encouraged. Adding a historical story to a concept, as well as having a pathologist present to help deliver the activity, were both thought to be ways to achieve this. As one teacher explained: "There is an increased need for pathologists to visit schools to help encourage students to think for themselves". Another teacher summed this up, saying: "Objects in a historical context are more engaging for all abilities".

The way in which the resources are produced is also essential if they are to be readily used by teachers. One teacher explained: "I need to be able to pick up an activity and use it. I don't have time to read reams of information. 'Simple but effective' is the key". This also highlights the need for resources to be displayed for teachers according to the curriculum which the activity fulfils, rather than in an order that would suit us.


21 DNA DOUBLE HELIX

An understanding of the double helix structure of DNA (deoxyribonucleic acid) has had a huge impact on many areas of pathology, including prenatal diagnosis of inherited conditions, the development of the polymerase chain reaction and genetic fingerprinting to help solve crimes. It has also had a huge impact outside pathology.

What is it? DNA is a macromolecule in the shape of a double helix that forms the genetic blueprint for every plant and animal.

Pathology today Every person has a unique genetic code, determined by the order of base pairs in their DNA. Many diseases develop as a result of faults in our DNA. This fault may be inherited from a parent or it may develop by mutation. Geneticists use the information obtained from studying DNA to diagnose, manage and counsel people with genetic disorders such as cystic fibrosis, Down's syndrome and familial cancers. An understanding of the genetics of diseases such as cancer has allowed the development of targeted drugs specific to an individual's disease.

Based on the focus groups' feedback, we are now in the process of developing ten short resources. These will each fit into a specific aspect of the curriculum, may feature more than one object and will have a historical link throughout, whilst incorporating practical activities. The first of these resources will be available by the end of July. Teachers from the focus groups have agreed to trial the activities and provide feedback so that we can further adapt the resources based on their recommendations. We are keen to trial them with pathologists too, so please get in touch if you would like to help us further develop these resources.

Once we are sure that these resources are useful, we will promote them directly to teachers to ensure they are reaching the target audiences. We will ask teachers to rate the activities and provide comments on their use. This means we can review and amend the resources as they are used in the classroom.

Lecture series

In order to promote the work of pathologists to the wider public, we plan to organise a lecture series. To start this new venture, we thought it appropriate to base the first series on our '50 objects'. This series will start in September, with one lecture a month until the spring. To build an audience base, we are collaborating with other organisations including The Royal Society, Gresham College, Thinktank in Birmingham and the Hunterian Museum. Lectures will take place in different locations around the country and feature many of the 50 objects. They will be delivered by pathologists from a range of specialties and we hope will engage the public with some interesting and topical debates within which pathology plays a crucial role. The full programme of lectures will be published in the next edition of The *Bulletin* and on www.ilovepathology/events/ourevents

Lucie Houghton
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Dr Andrew Boon

Good Medical Practice: latest guidance

On 25 March 2013, the General Medical Council (GMC) released an updated version of its core ethical publication, *Good Medical Practice*. This guidance came into effect on 22 April and was accompanied by an equivalent (but much shorter) guide for patients: *What to Expect From your Doctor*.

All doctors are advised to be familiar with the contents of *Good Medical Practice*. The Chief Executive of the GMC, Niall Dickson, has stated that this document is "the foundation of medicine in the UK". He has also made it clear that the GMC and the medical profession must ensure that "every doctor is aware of the standards required in the updated *Good Medical Practice*". That's a pretty clear indication that ignorance is unlikely to be a reasonable defence, should anyone have the misfortune to be the subject of a GMC fitness-to-practise investigation.

What's it about?

As with the previous 2006 guidance, *Good Medical Practice* sets out the ethical principles that should govern the practice of every medical doctor. Some of the guidance is straightforward and obvious. Such entries tend to use the word 'must'. For example, I would hope that few medical practitioners have any difficulty understanding that "You must not use your professional position to pursue a sexual or improper emotional relationship with a patient or someone close to them" (Domain 4, paragraph 53). Most pathologists, I suspect, might suggest that their opportunities to contravene such an admonition is fairly limited. There are other examples, however, where pathologists may be at least as exposed as their more clinically oriented colleagues if they fail to recognise an overriding duty or principle.

There are a number of items in the guidance where individual professional judgement is as important as 'following the rules'. These include those duties and principles that do not apply in all circumstances or in all situations. Often, there may be factors outside the control of the individual. In such situations, *Good Medical Practice* states that it uses the word 'should' to reflect such considerations. For example, when working in teams, doctors "should be willing to take on a mentoring role for more junior doctors or other healthcare professionals" (Domain 3, paragraph 42). One can imagine circumstances when this would be inappropriate. On the whole, however, it is my impression that the number of 'musts' greatly exceeds the number of 'shoulds' and that this is more the case than with the previous, 2006 edition. Perhaps that is a good thing.

> **"All doctors are advised to be familiar with the contents of *Good Medical Practice*"**

So what has changed?

Basic ethical principles and professional standards have not undergone any radical revision since 2006. To that extent, the content of *Good Medical Practice* (2013) closely resembles that of its predecessor. However, there are substantial modifications and I have listed those that I find particularly striking.

The most obvious change is in how the content has been organised. Formerly, there were seven main 'headings'. There are now four 'domains' of practice:

- Domain 1 – Knowledge, skills and performance
- Domain 2 – Safety and quality
- Domain 3 – Communication, partnership and teamwork
- Domain 4 – Maintaining trust.

These 'domains' have apparently been developed to comply with the framework for medical appraisal and revalidation (although this framework was itself said to be based on *Good Medical Practice*). Whether the rearrangement of categories clarifies or confuses is debatable.

A second, more subtle, change is one of emphasis. The 2013 guidance makes it clear that a doctor's primary concern is patient care. As Niall Dickson states "[a doctor's] responsibility goes beyond providing good clinical treatment – the doctor must take a lead role in making sure that patients receive high quality compassionate care". To take one example, domain 2, paragraph 25 states "You must take prompt action if you think that patient safety, dignity or comfort is or may be compromised". The circumstances where this may occur are then specified, including instances where patients' basic care needs are not met and

Good medical practice

in particular where there are patients unable to drink, feed or clean themselves.

Third, there is explicit reference to explanatory guidance, outlining how the principles of *Good Medical Practice* might be applied to specific scenarios. The GMC website lists no fewer than 31 separate publications, seven of which are available in printed form and 24 of which are only available online. These include such topical subjects as use of social media. It is probably a reflection of the work carried out on revision of *Good Medical Practice* that no fewer than 12 of the explanatory guidelines were published in 2013. The GMC have clearly been very busy.

Fourth, the 2013 guidance includes links to an array of tools on the GMC website that illustrate the real-life application of *Good Medical Practice*. These include interactive decision-making tools and learning resources, real-life scenarios and examples of fitness-to-practise cases arising from failures to follow the guidelines. In my opinion, the last of these are of particular educational value.

Why has it changed?

The GMC began reviewing the 2006 edition of *Good Medical Practice* in 2011. Their intention was to ensure that the guidance was up to date and still reflected the priorities of both doctors and patients in relation to principles and values in healthcare. A wide consultation exercise was initially undertaken between February and April 2011. This involved emailing over 2000 professional, public, patient and third-sector organisations, inviting them to participate. 230 'registered' and 1867 'anonymous' respondents provided data, including 68 organisations and 2029 individuals.

Subsequently, a formal consultation was held between October 2011 and January 2012, based on issues identified by the initial exercise. It appears very likely that real world events, notably the Francis inquiry into care at Mid-Staffordshire NHS Foundation Trust, were a significant influence on the final version of *Good Medical Practice* (2013). In particular, the emphasis on compassionate patient care (and the apparent lack of this in Mid-Staffordshire) is a key theme of the both the GMC guidance and Robert Francis's report.

Other factors also seem to have influenced guidance in *Good Medical Practice*. In particular, the NHS reform agenda and the development of GP-led commissioning through CCGs have increased the potential for financial conflicts of interest.

Is it a good read?

Unless you have a particularly unusual personality, it is unlikely that you will find *Good Medical Practice* a compulsive page-turner. But it is important. Most of us, I hope, practise instinctively within the ethical framework outlined in this guidance. Medical practice in all its guises, including pathology, relies fundamentally on the judgement of individual practitioners. This is what it means to be professional. Professionalism is driven by values, not rules.

However, *Good Medical Practice* should not be perceived as a rule book. It is simply what it says it is – guidance. Essentially, the document is an organised exposition of the standards and principles that should govern the actions of every medical practitioner. From time to time, all doctors will encounter complex ethical situations where they will need to refer to *Good Medical Practice*.

The GMC publication has a further purpose. In order to retain a licence to practise in the UK, medical practitioners must now undergo a revalidation process. Fundamental to this is an annual appraisal. Doctors now need to demonstrate that they are meeting the standards in the GMC guidance to ensure they are up to date and fit to practise. Evidence provided for an appraiser maps to one or more of the four domains set out in *Good Medical Practice*. For this reason, if no other, I suspect familiarity with its contents will become increasingly common.

Changes in society and in the scope of medical practice will inevitably lead to new ethical dilemmas. I very much doubt if this edition will be the last.

The last word?

No guidance can guarantee an answer for all ethical problems in professional practice. Ultimately, individuals must make a judgement. What this publication makes very clear is that when value systems appear to conflict and decisions must be made, every doctor will be expected to make the care of the patient their first concern.

Dr Andrew Boon
Director of Professional Standards

Dr Michael J Brian

Audit of the impact of clinical advice provided by a clinical microbiologist

The College's Professional Standards Unit wishes to encourage high-quality clinical audit. We therefore periodically publish interesting examples of audits that have been successfully evaluated through our clinical audit certification scheme.

Background

With the advent of revalidation and ongoing pathology transformation, the role of the clinical microbiologist (CM) requires clarification. In day-to-day practice, it is sometimes difficult to assess the quality and effectiveness of clinical microbiology involvement. Indeed, attempts are being made to develop key performance indicators for the discipline. A variety of reasons exist for this difficulty in evaluating the impact of clinical microbiology advice on the quality of patient care. Particularly important is the difficulty of obtaining follow-up information about patients. The author recently moved to a new Trust and wished to make use of a variety of newly available electronic records to attempt an evaluation of the impact that his advice had made on the patients with whom he had been involved.

Standards against which practice is to be audited

There are no official standards that could be used for the evaluation. The author judged that a minimum requirement would be for <5% no or negative impact, <5% advice not followed and <5% death.

Methods

The author works in the Shrewsbury and Telford Hospital NHS Trust responsible for clinical advice to general practitioners (GPs), Royal Shrewsbury Hospital (RSH), Princess Royal Hospital (PRH) and Robert Jones and Agnes Hunt Secondary Care Trust (RJAH).

RSH and PRH use Telepath (iSoft Laboratory Systems) as the laboratory information system (LIMS); tQuest and Review (Indigo 4 Systems) for Order Communications; an in-house electronic medicines management system for drug review and access to discharge summaries (e-script) and VitalPAC (The Learning Clinic) for records of clinical measurements. RJAH uses Graphnet EPR gateway for electronic patient records.

The author prospectively entered data in an Excel spreadsheet from 8 May 2012 after each clinical contact. The study continued until 21 June 2012, when 500 contacts had been recorded. Technical or procedural questions from scientific staff were not evaluated.

The following details were recorded systematically in an Excel spreadsheet.

1. Patient identifiers and a short clinical note.
2. Whether the patient was new or known or, if the patient was known, whether the issue was totally new.
3. Nature of the individual to which the information was given: GP, registrar, senior/house officer, consultant, community/nurse, pharmacist, Health Protection Unit or written in hospital note only.
4. Whether the information could be obtained by referral to information available on the intra/internet.
5. Whether a discussion with a senior clinical colleague would be more appropriate.
6. Whether the discussion would be more appropriately carried out in a multi-disciplinary meeting.
7. Whether the patient was visited in the ward or discussed in a multi-disciplinary meeting.
8. Whether clinical information provided proved to be misleading.

A self-assessment was then carried out of outcome by reference to discharge summaries, drug history (electronic hospital records from RSH, PRH and RJAH) and pathology LIMS. The course of temperature could be obtained from VitalPAC while white cell count and C-reactive protein was available from Review. Information could often be obtained from a discharge summary and drug record (e-script). Record of death, discharge or re-admission was available from Sema-Helix Patient Administration System (PAS) and information from LIMS was obtained regarding future specimens.

Results

The total number of patients dealt with in the period was 372 and 500 contacts were evaluated. 70.8% contacts involved new patients or a new issue in the same patient (four patients, eight contacts). The number of first episodes was different to the number of patients, both because some patients were being followed before the study began and totally distinct new issues in a known patient were counted as new events. 146 episodes were follow-up contacts and 75 (51.91%) of these were as part of a regular critical care ward visit. These 75 visits were 70.8% of all 106 recorded contacts for the critical care visits.

Table 1 shows that hospital work dominated the workload, despite roughly 50% of the laboratory tests being requested by GPs. It is reassuring to see that 25.8% of contacts were with a consultant rather than junior staff. 124 (24.8%) of contacts involved a visit to the ward or department, rather than a telephone call.

During the admission when the contact took place, 15 patients died for whom a positive impact could not be seen (mortality 4.0%). Another eight patients died during that admission, but there was evidence of some improvement early in the course of the patient's illness after the microbiology consultation. The overall mortality was 6.2% of patients during the period of the study.

Only two of the enquiries were answerable by referring to information available from the inter/intranet – one from a junior hospital doctor about infection control policy related to decolonisation of MRSA carriers and another from a nurse practitioner in a GP surgery about the type of collection tubes used for a serology test.

Table 1: Type of professional seeking or being provided with information and/or advice by consultant microbiologist

Type of professional	Number	%
General practitioner	70	14
Registrar	53	10.6
Senior/house officer	153	30.6
Hospital/GP nurse	65	13
Community nurse	5	1
Consultant	129	25.8
Wrote in notes only	9	1.8
Pharmacist	4	0.8
Other/not recorded	9	1.8
Health Protection Unit	3	0.6
Total	500	100

Table 2: Episodes that could feasibly benefit from a multidisciplinary meeting according to clinical discipline

Discipline	Number	%
Outpatient parenteral antibiotic service	4	7.7
Care of chronic respiratory disease	1	1.9
Renal medicine	3	5.8
General surgery	4	7.7
Vascular surgery	4	7.7
Urological surgery	1	1.9
Diabetes medicine	4	7.7
C. difficile management	10	19.2
NICU	2	3.8
ENT and head and neck surgery	2	3.8
Orthopaedic surgery	12	23.1
Haematology and oncology	5	9.6
Total	52	100

No enquiry was for obtaining a result that was available on the intranet.

During the study, no enquiry was received that could have been dealt with better by approaching the senior clinical members of the team. There was one enquiry from a patient seeking a tobramycin level, which should have gone to the medical team caring for her. There were only two complaints of delay in gaining access to a microbiologist and these were from GPs. The clinical information provided was judged to be erroneous in only one case. The microbiologist was told when reporting a positive blood culture that no intervention was planned for the patient. This proved not to be the case when another microbiologist telephoned the next day.

In this Trust, the author attends only one multidisciplinary meeting, in neonatal intensive care, weekly. This is a new initiative and was not represented in this study. The potential usefulness of a regular meeting with various services was apparent in 52 contacts (Table 2), essentially because of complex problems persisting over a long time period, requiring senior clinical input to manage successfully. There is no multidisciplinary meeting for the management *C. difficile* infections. A weekly ward round with a pharmacist and an infection control nurse suffices. Enquiries regarding outpatient parenteral antibiotic therapy are handled over the phone or by visits to the GP-led day-care ward.

Orthopaedics is probably the most obvious service to warrant a meeting in terms of numbers of enquiries. At present, one consultant microbiologist visits the specialist orthopaedic hospital in Oswestry (RJAH) weekly. There is also orthopaedics on both other sites, making an overall meeting unlikely. Interestingly, renal medicine does not invite regular contact, despite the infection risks in this service. The logistics of a meeting or ward round for other surgical services would be difficult given the number of consultants and their workloads. Diabetes services seek input from microbiologists but mostly over the phone and generally regarding antibiotic choice, rather than overall management of infections.

Table 3 shows the types of information passed during the contacts with the consultant microbiologist. Enquiries about antibiotic use, rapid communication of important test results and the Critical Care Round dominate the workload.

Table 4 shows the results of the self-assessment carried out using the various electronic records available in the Trust. There were 50 episodes (13.3% of 377 total episodes) where the impact was uncertain, advice was not followed, patient died, the advice was inappropriate based on later results, there was failure to provide sufficient ongoing follow up or the caller was not helped at all. If death is excluded, the proportion of episodes with uncertain

Table 3: Type of information or advice sought from and/or provided by consultant microbiologist

Type of information or advice	Number	%
Antibiotic issue	185	37
Reporting a positive blood culture	42	8.4
Reporting another test result	59	11.8
Interpreting a test result	10	2
Advising regarding testing strategy	8	1.6
Out-patient antibiotic therapy issue	5	1
Critical care ward round	106	21.2
Weekly *C. difficile* round	7	1.4
Other ward visit excluding weekly *C. difficile* round	3	0.6
Infection diagnosis and management	20	4
Virology issue	7	1.4
Clarification of policy	11	2.2
Laboratory processing issue	6	1.2
Infection control issue	22	4.4
Reporting issue	5	1
Public health issue	1	0.2
Blood and body fluid exposure	3	0.6
Total	500	100

or negative impact is 9.4% of 361 episodes, or 7.8% if the 1.6% failure to follow advice is separated. One striking feature is the large proportion where the "issue (was) resolved independent of clinical course". This group largely consists of facilitating the flow of information by reporting significant results to the appropriate people in a timely manner.

An example of each type of outcome is given below.

i) Issue resolved, advice appropriate:
Pregnant woman exposed to son with varicella and proves to be immune.

ii) Improvement confirmed by clinical observation:
72-year-old woman being followed in intensive care who was being treated with meropenem for faecal peritonitis deteriorated. She was colonised at several sites with *Candida albicans*. On CM advice, fluconazole was commenced and the patient was observed to have improved on the next ITU visit.

iii) Electronic records record suggests improvement but no clinical report available:
On 14 May, a community matron asks for advice regarding a patient with chronic lung disease, positive for MRSA in sputum. The CM advises oral doxycycline and nasal mupirocin for 10 days. The LIMS reveals that a sputum culture on 6 June was negative for MRSA.

iv) Improvement by report (person-to person, discharge summary or clinic notes):
Contacted about a 41-year-old woman with three weeks of failed out-patient amoxicillin for radiological apparent pneumonia. The woman weighed 106 kg (available on VitalPAC). Benzylpenicillin was advised intravenously in high doses and the patient's improvement is documented in Review by a fall in white cell count and C-reactive protein, in VitalPAC by improvement in the temperature curve, by reading the discharge summary and by reviewing the patient's follow-up X-ray. Compliance with the advice is apparent from the drug history (e-script), although the physicians chose to add doxycycline despite the inflammatory markers having already declined on penicillin alone.

v) Issue resolved independent of clinical course:
A GP is telephoned about an isolate of *Neisseria gonorrhoeae* from a male urethral swab and advised to refer patient to sexual health (GUM) clinic.

vi) No readmission, pathology reports or electronic notes indicating failure:
Contacted from PRH outpatients about a 41-year-old diabetic man with an infected ulcer from which we had isolated MRSA. Doxycycline was suggested as therapy. There were no further wound swabs submitted, despite several outpatient appointments being kept (PAS) and no admissions.

vii) Saved from antibiotics:
71-year-old woman with past diarrhoea saved from further vancomycin. Discharge diagnosis thought to be 'nicorandil' colitis.

viii) Referral elsewhere:
Haematologist concerned about using cotrimoxazole prophylaxis for PCP in patient receiving methotrexate. I suggested contacting their tertiary partner. They encouraged him to continue.

ix) Eventually shown to be false positive or contaminant:
The clinician caring for a patient with a blood culture for Gram-positive cocci in clusters is telephoned, but it ends up being considered a skin contaminant.

x) Eventually an alternative non-infectious diagnosis was made:
A patient with chronic meningitis was eventually shown to have disseminated malignancy.

xi) Simplified clinical journey without known improvement:
A man was visited in coronary care with pyrexia of unknown origin and atrial fibrillation. His history revealed that he spent several weeks in ships travelling from Africa.

Table 4: Self-assessment of outcome of contact with consultant microbiologist

Self-assessment of outcome	Number	%
Issue resolved, advice appropriate	14	3.7
Improvement confirmed by clinical observation	6	1.6
Electronic records record suggests improvement but no clinical report available	10	2.7
Improvement by report (person-to person, discharge summary or clinic notes)	89	23.6
Issue resolved independent of clinical course	148	39.3
No readmission, pathology reports or electronic notes indicating failure	36	9.5
Saved from antibiotics	11	2.9
Referral elsewhere	6	1.6
Eventually shown to be false positive or contaminant	6	1.6
Eventually an alternative non-infectious diagnosis was made	2	0.5
Simplified clinical journey without known improvement	5	1.3
Uncertain impact	9	2.4
Advice not followed	6	1.6
Died	16	4.2
Advice inappropriate based on later results	5	1.3
Treatment failure	4	1.1
Failed follow up	2	0.5
Did not help caller	2	0.5
Subtotal	377	100.0
Died before contact	1	
Further consultation	122	
Total	500	

His antibiotics were stopped and some advice regarding investigations was provided. No cause for his pyrexia was found, but he did recover.

xii) Uncertain impact:
A 16-year-old patient with nephrotic syndrome and pneumonia was visited several times in intensive care. His antibiotics were ordered by the paediatricians and adult renal physicians. Microbiology probably helped shorten the course, but the impact was unclear.

xiii) Advice not followed:
The clinicians caring for a 69-year-old man with fever and negative cultures were advised to stop antibiotics. They stopped intravenous antibiotics but continued oral antibiotics. He died a few weeks later from disseminated adenocarcinoma.

xiv) Died:
A 49-year-old woman with pancreatitis and abdominal cellulitis who continued to deteriorate and died despite antibiotics.

xv) Advice inappropriate based on later results:
Contacted by a plastic surgeon on 18 May about a patient with an infected skin graft. She was allergic to penicillin and erythromycin. Doxycycline was suggested. On 4 July, her results were reviewed as part of this study and her isolate was seen to be resistant to tetracycline. The surgeon was contacted. Tetracycline resistant S. aureus was isolated from a swab taken on 4 July.

xvi) Treatment failure:
Contacted by an orthopaedic surgeon on 25 May who had received a histology report after a joint revision suggestive of infection at the site. We agreed on a period of oral ciprofloxacin and rifampicin, but the EPR showed that she required an operation in July.

xvii) Failed follow up:
Contacted by FY1 doctor about a 48-year-old woman with bilateral axillary abscesses after drainage because she was intolerant of penicillin and doxycycline. Clindamycin was suggested. As part of this study, I reviewed the pathology results to find that the organism isolated was an erythromycin and tetracycline-resistant MRSA. The discharge summary indicated discharge on clindamycin. The report had been authorised by another CM, who had mentioned the possible need for linezolid. Subsequent negative MRSA screens from an outpatient clinic indicated that the patient had indeed received linezolid.
A positive blood culture for S. aureus was telephoned on 8 June. The patient, a 78-year-old man, had been admitted on 4 June. The report drew attention to a positive wound swab from 4 June. The drug record shows clarithromycin being administered orally from 7 June and mentions bilateral pneumonia with no mention of the positive blood culture. He was transferred to a rehabilitation hospital on 10 June and discharged on 3 September. The discharge summary from the rehabilitation hospital does not mention the blood culture. There were no subsequent blood cultures.

xviii) Did not help caller:
A GP had been referred to me by the nurse organising admissions to the GP-led outpatient parenteral antibiotic therapy initiative. He had been erroneously led to believe that CMs were the gatekeepers and I could only discuss the antibiotics he might use, not arrange admission.

Conclusion
Overall there was a predominantly positive impact on the care of an average total of 79.4 consultations per week, involving 59 patients. The death of 4.2% of patients during the episode in which the consultation occurred is below the arbitrary target of 5%, as is the 1.6% failure to follow advice. The uncertain or negative impact proportion of 7.8% is higher than the target proposed of 5%.

The most obvious target for improving quality and effectiveness is to improve follow up and the electronic records definitely facilitate follow up.

Pathology is about the flow of information. A review such as this one highlights that a consultant microbiologist largely acts as a link in the chain, ensuring that the tests results have an impact on the 'patient journey'. This is exactly what was called for in the Carter Report.

If this Trust loses the GP work in the near future due to consolidation of GP pathology in a large hub, then it has been argued that fewer consultant microbiologists would be needed. This study would suggest that will not necessarily be the case.

Recommendations
The experience of performing this study emphasises the usefulness of making a habit of following up patients on a routine basis, using the electronic sources of data available.

Plan for re-audit
This audit should be repeated in 12 months to see if follow up is improved.

It would be also useful to perform this study again after the planned reconfiguration of pathology services, in 12 months or so, to try and ascertain if the impact of a consultant microbiologist has changed.

Dr Michael J Brian
Shrewsbury and Telford Hospital NHS Trust

An audit on rejected histopathology specimens

Background
"Histopathology is the diagnosis and study of disease by expert medical interpretation of cells and tissue samples."[1] Samples are sent to the laboratory in special containers. To avoid errors, all samples and all request forms require proper labelling.

Rationale
At the Russell Hall Hospital in Dudley, it was noticed that there was a high number of rejected samples in the histopathology department. Hence a retrospective audit was undertaken to assess the size of the problem.

Aim
To ensure that the Trust is conforming to the local guidelines.

Objective
To identify the reason behind the high number of rejected samples for the time period 1 January 2012 to 18 August 2012.

Standard
1. All 'Products of conception' requests require an accompanying consent form.
2. The mandatory 'high risk'[2] box needs to be filled.
3. The request form and the specimen details must match.
4. The details on the form and the container need to be legible and need to have the requestor's signature.

Method
Retrospective data, by using the laboratory log book on rejected samples, was collected for the time period 1 January 2012 to 18 August 2012. All rejected samples from both hospital and primary care were analysed.

Results
64 samples were returned to their senders. 31 were from GPs and 33 from hospital. The reasons for the returned samples are demonstrated below and shown in Figures 1 and 2.

92% of hospital request forms and 8% of primary care request forms for products of conception had no accompanying consent form.

3.125% of hospital samples did not have matching details on the form and pot compared to 12.5% from primary care. The audit showed that most of the labelling errors occurred in primary care as compared to secondary care.

60% of hospital samples were sent without request forms compared to 40% from primary care.

18.6% of hospital samples did not have 'high risk' box ticked compared to 15.6% from primary care.

Figure 1: Percentage of samples with no details on the pot or request form

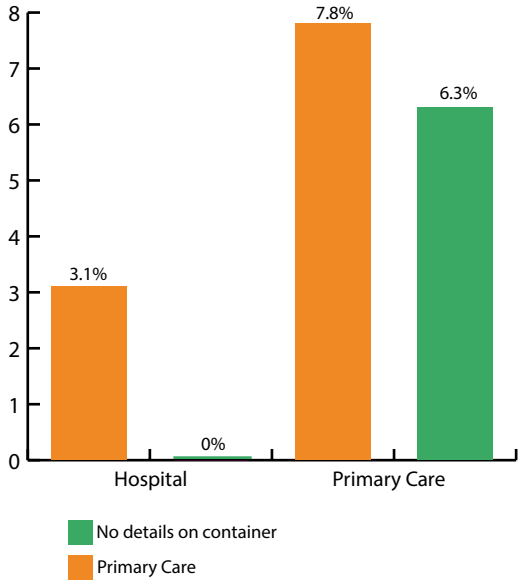
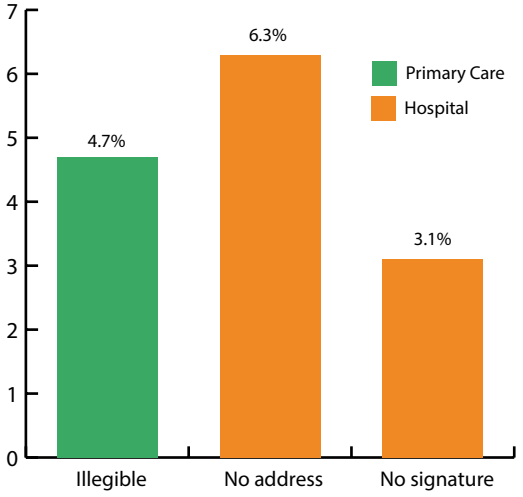


Figure 2: Percentage of request forms that were illegible, had no signature of medical officer or no patient address



Conclusion

It was observed that the highest return rate from hospital specimens were those containing products of conception but with no accompanying consent form, and those request forms which did not have the 'high risk' box ticked.

From primary care, an unticked 'high risk' box was the main reason for returned samples, closely followed by details on containers and request forms not matching.

Implications

If a sample is qualified as high risk, it needs to be in 10% formalin and requires the appropriate transport medium to prevent infection to porters and staff. It is a health and safety requirement that high-risk samples are made identifiable as they are a potential hazard to staff. If the 'high risk sample' box is left unticked, it can lead to considerable delays. The sample is sent back to the sender so that the 'high risk' box is ticked. This delay ultimately affects patient care in terms of late initiation of treatment.

The mismatch of the details on the container and the request form could lead to potential harm to patients through misdiagnosis. Hence it is vital that the senders enter the details correctly on both the container and the request form. Here again, the specimen is sent back to the sender for relabelling.

A high percentage of specimens containing products of conception were returned because they did not have a consent form attached to the request form. This causes unnecessary delays.

Because the Trust's guidelines were not followed properly, the health and safety of staff could have been affected. Furthermore there has been a wastage of resources and time, which could have had a negative impact on patient care.

Recommendation and action plan

Recommendation	Action plan	Responsibility	Timescale
Attach histology request form to consent form on wards sending regular POC	Educate the ward clerks	Leila Ahmed	1 Oct 2012
Educate doctors on the importance to tick the 'high risk' box	Flyers on the wards and to GP	Leila Ahmed	1 Oct 2012
Educate doctors on the importance to correctly label specimens	Flyers, teaching	Leila Ahmed	1 Nov 2012
Ensure positive and enduring change in current practice	Re-audit	Histopathology/audit department	1 August 2013

Dr Bibi Leila Ahmed and Dr S Ghosh
Russell Hall Hospital, Dudley

References

1. Medical careers. Histopathology. www.medicalcareers.nhs.uk/specialty_pages/pathology/histopathology.aspx
2. High risk group includes the following agents: HIV 1 & 2 ,Hepatitis B Virus ,Hepatitis C Virus , TB ,Brucella spp, Salmonella typhi & paratyphi , HTLV 1 & 2.

Rosy Emodi

Transformed International Committee gets ready to lead RCPath's global health agenda

The College has just completed a year long journey, which started with the development of new terms of reference for its International Committee and International Advisors. These changes were designed to lay the foundations for the College to pursue a more proactive and collaborative international agenda.

The International Committee is the primary forum for considering, developing, approving and implementing the College's international activities, partnerships and strategy. Supported by the International Department, new committee members and advisors have now been appointed in the last six months. The College's International Committee is now more diverse and representative, drawing on the immense talents, experience and commitment of the membership. It is therefore a pleasure to introduce the RCPath International Committee. These are the members who will work to raise the College's international profile, collaborations and influence as part of a wider global health agenda.

Dr Kenneth Fleming (UK)
Director of International Affairs
Dr Fleming graduated from Glasgow University in 1968, received his DPhil from Oxford University in 1980 and his Fellowship of The Royal College of Pathologists in 1988. His main research and clinical interest has been in liver disease and he has over 150 publications in learned journals on aspects of liver pathology and on molecular biology and pathology. Since 2008, he has been increasingly involved in addressing the problems of pathology in sub-Saharan Africa, jointly leading the creation of a MMed in Pathology in Zambia. In November 2011, he was appointed as the College's first Director for International Affairs.

Professor Imelda Bates (UK)
Vice Chair, International Committee
Imelda Bates is Professor of Tropical Haematology at the Liverpool School of Tropical Medicine, where she is Head of the Department of International Public Health and Director of the Capacity Strengthening Implementation Research Unit. She is also an honorary consultant haematologist at the Royal Liverpool University Hospital. Her research interests are focused on low-income countries and include public health aspects of anaemia and blood transfusion, diagnostics and laboratory systems, and the implementation and evaluation of capacity development. She is currently a member of the WHO Working Group on Capacity Development for Neglected Tropical Diseases.

Professor Mike Wells (UK)
Vice President (Learning)
Professor Wells is Vice President for Learning at the College and is currently also the President of the British Division of the International Academy of Pathology. He is Professor of Gynaecological Pathology at the University of Sheffield and an honorary consultant histopathologist to Sheffield Teaching Hospitals. He is co-editor of the major two-volume textbook of *Obstetrical and Gynaecological Pathology*, the fifth edition of which was published in 2003 and was Editor of *Histopathology* (2002–2011), the leading histopathology journal outside of North America. He has published more than 220 original papers, book chapters and review articles and has received numerous invitations to lecture around the world. In 2004 he was elected a Fellow of The Royal College of Obstetricians and Gynaecologists (*ad eundem*).

Dr David Bailey (UK)
Director of Training and Assessment
Dr Bailey is the Director of Training and Assessment at the College and has been a consultant histopathologist based at Wycombe Hospital in Bucks Hospitals NHS Trust since 1998, specialising in urological pathology. He was a Departmental Educational Supervisor for Histopathology Trainees for 15 years and member of the Specialty Training Committee for ten years. From 2003 to 2007, Dr Bailey chaired the Oxford Deanery Histopathology Specialty Training Committee and was the Training Programme Director. He is also been the College's Regional Training Advisor since 2004. In 2012, he was appointed Associate Postgraduate Dean of the Oxford Postgraduate Medical Deanery and provides the lead for educator development, Annual Review of Competence Programme/workplace-based assessment, e-Portfolio implementation, Modernising Medical Careers and run-through training.

Dr Kevin West (UK)
Director of Examinations
Dr West is Director of Examinations at the College and a consultant histopathologist in Leicester. He has a strong interest in postgraduate training and education and has held a number of positions at the College, including chair of the Joint Committee for Pathology Training and Director of Academic Activities. He has also been a member of the committee of the Pathological Society of Great Britain and Ireland. His diagnostic and research interests include gastrointestinal and lymph reticular pathology.

Dr Jeremy Pryce (UK)
Trainees Advisory Committee Representative
Dr Pryce is the Trainees Advisory Committee's representative on the International Committee and is a specialist registrar and academic clinical lecturer in paediatric pathology, based at Great Ormond Street Hospital for Children. He spent several years training in paediatrics, before beginning histopathology training in 2007. He sub-specialised in paediatric histopathology in 2009 and took time out to complete a MD (Res) in to the study of novel investigations in sudden unexpected death in infancy. He was elected to represent registrars as a member of the College's Specialty Advisory Committee on Pre-, Perinatal and Paediatric Pathology in 2010. In his role as specialty representative, he is a member of the Trainees Advisory Committee, supporting specialist registrars from the United Kingdom.

Edna Young (UK)
Lay Advisory Committee Representative
Edna Young is the Lay Advisory Committee's representative on the International Committee and has over 30 years' experience of working in a diverse range of major public sector organisations. For the last ten years she has worked in financial services regulation, with a particular focus on financial crime issues, seeking to raise anti-financial crime standards in the finance industry and publishing reports on anti-money laundering, anti-bribery, corruption and data security. Her most notable achievements include leading the UK Government's response to the economic changes in Eastern Europe in the 1990s; negotiating the first ever United Nations' Human Rights Resolutions on Iran and Afghanistan and organising Mikhail Gorbachev's first visit to the UK in 1984.

Dr Gopal Rao (UK)
International Advisor for India/Pakistan
Dr Rao is a consultant microbiologist and has been the College's International Advisor for the Americas since 2007. During this period he authored the International Committee's submission to the House of Lords' Advisory Committee on Communicable Diseases, has contributed to the development of the College's international strategy and advised the College on the needs of pathologists in South Asia, particularly in relation to the FRCPath examinations. Dr Rao is currently leading on the development of the College's relationship with the Indian Association of Medical Microbiologists (IAMM). Dr Rao will finish his term as International Advisor in November 2013.

Dr Ian Hosein (UK)
International Advisor for the Americas

Dr Hosein is a consultant microbiologist and has been the College's International Advisor for the Americas since 2007. He is currently the director of infection prevention and control at Barking, Havering and Redbridge University Hospital NHS Trust, having previously undertaken this role at North Middlesex University Hospital. Dr Hosein lived and trained in the United States for seven years where he undertook the federal licensing examinations for the American Boards in Clinical Pathology and Medical Microbiology. He is a fellow of the College of American Pathologists (CAP) and has extensive connections throughout the Americas. Dr Hosein will finish his term as International Advisor in November 2013.

Professor Runjan Chetty (Canada)
International Advisor for the Americas

Professor Chetty is the Deputy Medical Director of Laboratory Medicine, the Director of External Partnerships and the Professor of Pathology at the University Health Network and the University of Toronto, Canada. He has been a consultant pathologist for 25 years and has worked in South Africa, Australia, United Kingdom and North America. He was previously the Director of Translational Pathology and Head of Bioresources at the University of Oxford's Biomedical Research Centre. His diagnostic interests are in gastrointestinal and pancreatic pathology and he conducts research in the mechanisms of carcinogenesis, identifying potential drug targets in cancer. Professor Chetty is a member of the Canadian Association of Pathologists, the Association of Directors of Anatomic and Surgical Pathology and the United States and Canadian Academy of Pathology.

Dr Charles van Heyningen (UK)
International Advisor for Europe

Dr van Heyningen is a consultant chemical pathologist at Aintree University Hospital, where he is also the Clinical Director for Laboratories. He is an Honorary Clinical and Senior Lecturer at the University of Liverpool, as well as an RCPath regional advisor, examiner and member of the College's Advisory Training Team in Chemical Pathology. Having undertaken training in the UK and the Netherlands, Dr van Heyningen is a registered European Clinical Chemist (EC4) and is a member of the European EC4 Register Committee in the UK. He is a member of the editorial boards of the *British Journal of Diabetes and Vascular Disease* and *The Annals of Clinical Biochemistry*.

Professor Gareth Turner (Thailand)
International Advisor for South East Asia

Dr Gareth Turner is Professor of Tropical Pathology at the Mahidol-Oxford Research Unit in Bangkok, Thailand. His UK base is the Centre for Tropical Medicine, Nuffield Department of Clinical Medicine, and Cellular Pathology at the John Radcliffe Hospital, Oxford. Having trained in Oxford and Johannesburg, Professor Turner has experienced working in both developed and resource-poor settings, such as Vietnam and Mozambique. His areas of research are the pathology and pathophysiology of infectious and tropical diseases, including malaria, scrub typhus, dengue fever and pneumonia.

Professor Akin Abayomi (South Africa)
International Advisor for Sub-Saharan Africa

Professor Abayomi is Chief Pathologist, Head of the Division of Haematology and Associate Professor at the University of Stellenbosch in South Africa. He was previously Head of the Caribbean HIV Reference Unit at the University of the West Indies and has also worked as a clinical haematologist at the University of Zimbabwe Medical School. He has been Chair of the Expert National Haematology Committee of South Africa since 2010, is the Medical Director and South African representative to the National Bone Marrow Program, a Council member of the International Society of Clinical Cytometry Society and the lead consultant to the South African Government on health issues relating to the impact of climate change on health in South Africa.

Professor Soo-Yong Tan (Singapore)
International Advisor for Western Pacific

Professor Tan is a practising haematopathologist and Associate Professor at Singapore's Duke-NUS Graduate Medical School, where he is Chair of the Residency Advisory Committee, which oversees postgraduate training in pathology. He is also the Chief Examiner in Pathology in Singapore and a senior consultant to the Ministry of Health, advising on training and workforce development issues. As a visiting professor at the University of Malaya in Malaysia, Professor Tan has acted as an external examiner for Malaysia's Master of Pathology examination. He is a board member of the Asian Network of Research Resource Centres, where he chairs the Biobanking Committee, a panel member of the Asian Haematopathology Forum and a country representative of the Asia-Pacific Society of Molecular Immunohistology.

Professor John Greenspan (USA)
Committee member

Professor Greenspan is a Distinguished Professor of Oral Pathology and the Associate Dean for Global Oral Health in the School of Dentistry at the University of California, San Francisco (UCSF). He is also a Distinguished Professor of Pathology at the School of Medicine, a leading participant in UCSF's Global Health Sciences Program, Director-Emeritus of the AIDS Research Institute in the School of Medicine and founding Director of the UCSF Oral AIDS Center and of the UCSF AIDS Specimen Bank. Professor Greenspan's research interests include the global health aspects of AIDS, notably studies of oral aspects of AIDS and the role of viruses in oral epithelial and salivary gland lesions. He was the founding Director from 2003 to 2010 of the International Sjogren's Syndrome Registry, a worldwide registry for this autoimmune disease.

Professor Goura Kudesia (UK)
Committee member

Professor Kudesia is a consultant medical virologist and Head of Sheffield Virology Service at Sheffield Teaching Hospital NHS Foundation Trust. She is also Honorary Senior Clinical Lecturer at the University of Sheffield and Honorary Professor of Clinical Virology at Sheffield Hallam University. She is the immediate past chair of the College's Virology Training Committee and will complete a three-year term as chair of the Virology Examiners' Panel at the end of 2013. She helped to establish an HIV anonymous serosurveillance project in Bangalore, India, and is the General Secretary of the European Society of Clinical Virology. Professor Kudesia currently chairs the UK National External Quality Assessment's Virology Sub-Group and, through this work, is closely involved with international quality assessment work and issues.

Professor Tahir Pillay (South Africa)
Committee member

Professor Pillay is Honorary Professor of Chemical Pathology at the University of Cape Town, South Africa. Prior to this, he was Professor of Chemical Pathology, Deputy Vice Chancellor and Head of the College of Health Sciences at the University of KwaZulu-Natal. He is a member of the Board of the Human Sciences Research Council of South Africa, the Medical and Dental Board of the Health Professions Council of South Africa and the World Federation of Chinese Medicine Societies. Professor Pillay also currently serves on the Executive Editorial Board of the *Journal of Clinical Pathology*, the International Federation of Clinical Chemistry Task Force on Paediatric Laboratory Medicine and the Council of the College of Pathologists of South Africa.

Dr Abeer Shaaban (UK)
Committee member

Dr Shaaban is a Consultant Histopathologist and Honorary Senior Lecturer at St James's University Hospital in Leeds. She is a specialist breast pathology consultant and the lead for breast pathology at the hospital, which operates a regional service for HER2 testing for the Yorkshire Cancer Network hospitals. She has led a number of international multicentre studies, collecting tumour samples to study breast cancer of ethnic origin and in male patients. Through this work, Dr Shaaban has established collaborations with a number of hospitals in Nigeria and Ghana to study the taxonomy of breast cancer in African women. She obtained her primary medical degree from Tanta University Hospital in Egypt and is a member of the Egyptian Medical Syndicate and the Gharbeya Medical Syndicate.

Professor Monalisa Sur (Canada)
Committee member

Professor Sur completed her training in anatomical pathology at the University of the Witwatersrand in South Africa. She is a Fellow of the College of Pathologists of South Africa and The Royal College of Physicians of Canada, and sits on the latter's Anatomical Pathology Specialty Committee. Professor Sur is also a member of the Postgraduate Medical Education Committee at McMaster University, as well as Director of the Postgraduate Residency Training Program for Anatomical Pathology. She is Secretary of the Patient Safety and Quality Assurance Committee at the Canadian Association of Pathologists (CAP) and also chairs CAP's Annual Meeting Committee. Outside of Canada, she is an executive member of the Association of Indian Pathologists of North America and Visiting Professor to St George's University, Grenada.

Professor Cheng-Hock Toh (UK)
Committee member

Professor Toh directs the Roald Dahl Centre in Liverpool, providing comprehensive care for patients with bleeding, thrombotic and red cell disorders. As Professor in Haematology at the University of Liverpool's Institute of Infection and Global Health, Professor Toh's research is in the field of thrombosis and haemostasis, with a focus on the coagulopathy of critical illness. His translational research programme has generated four patents for new diagnostic tests that have been granted worldwide. He is a member of the grant award panels of the Medical Research Council (MRC) and the National Institute for Health Research (NIHR). Professor Toh is also chair of the European Haematology Association's Curriculum Committee, which works to foster evidence-based education to harmonise haematology training across Europe.

Dr Mashal Al Nawab (UAE)
Committee member

Dr Al Nawab is Chief Executive and Medical Director of Integra Healthcare, a medical infrastructural design, build, fit-out and transfer company working in the Middle East and North Africa (MENA) region. He previously worked as a consultant histopathologist/cytopathologist at King's College NHS Trust and is an honorary senior lecturer at King's College London Medical School, based at Guy's and St Thomas' NHS Foundation Trust. Dr Al Nawab trained and practiced medicine in Iraq and has an understanding of the particular requirements and needs of the healthcare system in the Middle East. He is the 1990 recipient of the Royal Society of Medicine's President's Prize for Pathology Research.

Work with us to make a difference

Lab Skills Africa–Volunteering Opportunities

Lab Skills Africa is a two-year collaboration involving 12 partners in the UK and Africa. The programme is funded through a US$1.1 million grant from the UK Department for International Development (DFID) and aims to contribute towards the improvement of the diagnostic services of 20 public sector laboratories in Kenya, Tanzania, Uganda, Zambia and Zimbabwe.

RCPath is the lead partner for Lab Skills Africa and is working in partnership with the College of Pathologists of East, Central and Southern Africa (COPECSA), the British Division of the International Academy of Pathology (BDIAP), the Aga Khan University Hospital in Nairobi, and the Liverpool School of Tropical Medicine (LSTM) to deliver the programme.

Volunteers are an important part of the Lab Skills Africa programme and we are now looking to recruit suitably experienced and qualified pathologists (in microbiology, haematology and biochemistry) and biomedical scientists who are interested in contributing to the development and delivery of this major initiative as volunteer trainers, mentors and assessors.

A detailed volunteer brief can be downloaded from the International section of the College website: www.rcpath.org/international/get-involved

If you would like to be considered for these volunteering opportunities, please submit a completed application form and CV (no more than 4 sides of A4) to Rashpal Saini, UK Programme Co-ordinator on rashpal.saini@rcpath.org).

Dr Nicki Cohen

Delphi project

Dr Nicki Cohen introduces a crucial new project for undergraduate pathology education. Nicki completed a Masters in medical education while a trainee and is a consultant senior lecturer in neuropathology at Frenchay. She is Deputy Programme Director and Director of Assessments for the MB ChB Programme at the University of Bristol.

Next month, hospital wards across the UK will be full of new Foundation doctors, straight out of medical school, joining the ranks of the medical profession. This new band of enthusiastic juniors will have brains full of medical knowledge and honed skills, due to the five-plus long years of medical training they have received.

Many of us are involved in undergraduate medical education, whether that be contact with the odd student on the ward, an occasional lecture or tutorial, or a more specific role within the hospitals and universities in which we work. Yet how many of us, if we take a step back, are left wondering whether today's medical students are equipped with the right 'pathology-related stuff' to inform their future medical practice? To put it another way: how many people reading this *Bulletin* have ideas about what key concepts relating to pathology should be within their local medical curriculum?

If you extend that thought, the juniors starting at your Trust, all appointed through national selection, may have trained at any of the 33 UK medical schools. Whether that specific education is traditionally split, fully integrated, problem-based or a blended mixture of something else, the outcome is broadly similar. With national recruitment, there is a growing theme of national assessment of medical students. Ranking and situational judgement tests lead the way. If national assessment grows in the future, a national curriculum may well follow.

Who is best placed to decide what the essential outcomes relating to pathology are? And if it is pathologists ('and if not, what is this article about?', I hear you cry), then who has the final say, how do we agree and who will listen?

The Delphi method is commonly used in medical education to bring together the views of a group of experts. A US general at the end of World War II is credited with developing this consensus tool in order to predict the need for future warfare technology during the birth of the Cold War. Briefly, it relies on a panel of experts who are asked to identify a series of important issues, vote as a group on the importance of each of these issues and then finally consider whether their own opinion on the importance of these issues is altered by the view of the group. It has been used in the military, politics, business and elsewhere for decades.

During the remainder of this year, I will be leading a College-based Delphi project to identify what the fundamental knowledge, skills and behaviours of a Foundation doctor are, relating to pathology. The validity and potential power of this document will be largely a function of the breadth of views across pathology, no matter what specialty you work in. The views of clinical scientists are just as valid as those of us with medical degrees. Pathology trainees are closer to remembering what it was like to be a Foundation doctor or house officer and many have particular insights into medical education. And we must not forget the views of patients, who of course depend on the products of our teaching. What better group is there to usefully create a workable list of key learning objectives for any undergraduate medical curriculum.

We will do this entirely via email. We are all balancing a wealth of projects, and attending meetings is difficult. There will be a series of three emails coming to those who opt to be involved, running between September and December. The first will involve some creative thinking and may take a little longer (but I hope this article has already encouraged that). The second two will be much quicker to complete and should be based on gut feelings rather than agonised consideration of every potential curriculum point. I hope that many of you will see this as an exciting and constructive way of contributing to something that is important.

I have already written to all UK medical schools in an attempt to identify those across all pathology specialties who may be prepared to contribute. I will also be trying to recruit members from postgraduate education circles, and will be engaging with a College committee near you...

This is not about the isolated views of the few. Neither is it trying to create a Wikipedia of pathology demands. We need to create a digestible, succinct, but broad and user-friendly list of curriculum points. We will all be able to use this to inform our own medical school's curricula. In so doing, I hope we will have created a network of pathologists interested in medical education.

If you would like to contribute to this study, or would like more information, please contact me.

Dr Nicki Cohen
undergrad@rcpath.org

Jenny Maddocks

General Medical Council guidance

The GMC has issued new guidance that impacts upon the curriculum and training requirements for specialty trainees. Some of the key changes are highlighted below. For further details, please refer to the GMC and College websites.

CCT application timescales

The Postgraduate Board at the GMC has approved the introduction of a limit on the timeframe within which a doctor is able to apply for a CCT. This limit will be 12 months from the doctors expected end of training, effective from 31 March 2013. Doctors will continue to have the ability for entry to the specialist or GP register, but they would need to do so via the equivalence routes of CESR or CEGPR and provide the necessary documentation to confirm their current competence.

Time out of training

Individual Colleges had different rules for the amount of time that a trainee could spend out of training without it affecting their CCT date, therefore the GMC wanted to ensure fairness whilst recognising the different indicative lengths of each curriculum.

The GMC has determined that within each 12-month period where a trainee has been absent for a total of 14 days or more (when a trainee would normally be at work), this will trigger a review of whether or not the trainee needs to have their CCT date extended. The absence includes all forms of absence such as sickness, maternity and compassionate paid or unpaid leave.

The administration of the absence and any extension to training will be undertaken by the relevant deanery, in consultation with the relevant College or Faculty where necessary.

Where a trainee has already been granted absence under the previous guidance, this will not be retrospectively removed. However, each trainee is required to demonstrate the curriculum competencies and this may therefore require targeted training or an extension to training in order for the trainee to demonstrate the curriculum competencies.

Moving to the current curriculum

In the interests of patient safety and educational quality, at any one time there will now only be a maximum of two approved curriculum per specialty, the 'old' one, in which only those trainees in their final year of training will remain, and the current curriculum. Therefore the College's Training and Educational Standards Department will shortly be re-releasing the histopathology transitional arrangement.

Transitional arrangements will also be published for chemical pathology, including those doing metabolic medicine trainees later in the year.

For medical microbiology and virology trainees, the transitional arrangements will be tied in with the introduction of combined infection training. Details will be published shortly.

If you wish to discuss any of the above, please do not hesitate to contact me on jenny.maddocks@rcpath.org

Jenny Maddocks
Training and Educational Standards Manager

Dr Emma Johnson

Trainees' notes

Trainees comprise 8% of the College membership and, whilst traversing our way from registration to Fellowship, all 840 of us are shaping the very future of our profession. This feature is written by/for trainees to reflect on the journey, discuss training issues and optimise engagement with the College pan-specialty.

'Been there, done that' – an expression that consultants no doubt think as they watch us trainees 'grow up' in our specialty. In this edition, Olena Dotsenko, an ST2 Histopathology trainee, interviews Professor Tim Stephenson, Consultant Histopathologist, who reflects on his career and passes on some advice.

Professor Stephenson has special interests in endocrine, breast and gastro-intestinal histopathology. He has been Clinical Director of Laboratory Medicine at Sheffield Teaching Hospitals Trust for 15 years and holds an honorary Chair at both Sheffield University and Sheffield Hallam.

How did histopathology come into your life?

It is the hearing of the word 'histopathology' and the realising that it is a vital, life-changing subject. At my tenth birthday party, the other boys were playing football whilst I was busy sorting all my nuts and bolts into categorised drawers in the garage. A GP friend of my family came in and said "you'll end up being a histopathologist". I thought nothing more of the word until I was 16 and happened to listen to a parody of Radio Four with its programmes for extreme minority audiences: 'Histopathologists Question Time'. So I looked up what it meant! I later saw the word again when my dear grandfather was clutching a histopathology report on his prostatic chips. They were cancerous. Thereafter, he gave all his money away and faced the inevitable.

So I knew that histopathology was for those who can sort things; it's not everyone's cup of tea, and it's damned important.

Professor Tim Stephenson and Olena Dotsenko

Why did you choose endocrine pathology as your main interest?

The Sheffield Diagnostic Histopathology Course was starting and an eminent endocrine pathologist, now a Knight of the Realm, couldn't be recruited to teach as he was too busy. Our organisers said: "You are a good teacher and have four months' notice, get on with it". So I did, and then lots of people started referring me cases and asking me to teach in the area, and I ended up President of the UK Endocrine Pathology Society.

What do you think about the future of academic histopathology?

I believe that it will rebuild due to the realisation that pathology is the profession which understands the genesis of disease, and which should be the hub of pathogenic research and personalised medicine.

What is the most memorable challenge you've faced during your 15 years as Clinical Director of Laboratory Medicine in a large NHS Trust?

My darkest day was when a signed petition was submitted to the local paper opposing the £16 million redevelopment of pathology in our Trust, saying that it should have been spent instead on 'patient care'. I could have cried. The message that pathology is the centre of patient care had clearly not been conveyed. My approach is to 'sell' pathology for what it is. It's the knowledge centre of medicine, without which all else is pretty hopeless.

What advice would you offer trainees?

1. Don't be afraid to ask for training that you need, even if it might seem inconvenient to your trainer.
2. Approach each case as though you were the consultant reporting it. This way you feel the joy of making the right diagnosis or the disappointment of being wrong – this will keep you alert and imprint the learning into your brain.
3. Strike the right balance between the cases you see: routine clinical care and rare conditions. Both are vital and the rare things are traps unless you have seen them before.
4. Never do anything that someone else should more appropriately do.

Recent College symposia: a review of...

Trainee representative Dr Stephen Winchester organised a 'Virology Training Day', a consultant-led, interactive educational event for virology and microbiology trainees. One of the delegates, Dr Mike Ankcorn, a specialist registrar in virology and infectious diseases, tells us about the day.

For those who braved the UK's traffic network in the heavy snow, a treat was in store at Carlton House Terrace for the Virology Training Day held on 18 January 2013. This virology-specific trainees day was not only fantastic for improving clinical knowledge, but also an opportunity to meet like-minded trainees from around the UK. After all, virology trainees are a rare breed!

Well attended by a mixture of virology trainees, microbiology trainees and clinical scientists, the day provided an opportunity to gain insight into the exciting new developments in virology during formal lectures, but also allowed interaction in smaller, more informal group sessions.

The symposium opened with the keynote lecture by Dr Ken Mutton, which included new developments in the field such as novel findings in zoonotic viruses (hantavirus being isolated for the first time in UK rodents) to the more everyday topics (an understanding of the role of rhinovirus in respiratory tract infections). The talk was a whistle-stop tour that really demonstrated how exciting the specialty of virology is, which was very energising for all who attended.

Dr Erasmus Smit discussing the mechanisms of resistance of cytomegalovirus (CMV) to anti-viral therapies at the symposium

Professor Paul Kellam, from the Wellcome Trust Sanger Institute, gave an inspirational lecture demonstrating how next generation sequencing in conjunction with phylogenetic analysis could be used in real-time epidemics to guide public health strategy. He also presented new data on how host genetic factors play a major role in susceptibility to severe complications of influenza.

The afternoon sessions gave the opportunity for small-group interaction. Trainees of all grades and experience were given the chance to reflect on the utility of electron microscopy and virus culture and its significance to 21st century virologists with Professor Dick Madeley. In another session, Dr Chris Smith (of 'Naked Scientist' fame!) facilitated fascinating case-based discussions on everyday clinical conundrums, and Dr Erasmus Smit provided a great introduction to the complex topic of antiviral susceptibility.

Overall, the day was a fantastic opportunity to learn from experienced virologists and meet fellow trainees. Despite the swift departure of many to ensure they were not stranded at the Royal College by the falling snow, it was most worthwhile and a day which I, for one, hope will be repeated.

Get involved with Trainees' notes?

Would you like to contribute to this section of The *Bulletin*? Let's hear it from the other side – who has been your biggest inspiration or motivator in pathology? What did you learn from them? Write an article and email us at tac@rcpath.org

Dr Emma Johnson

Vice-Chair of the Trainee Advisory Committee

Examinations results: Spring 2013

Successful candidates for the Part 1 examination

The following candidates have passed all components of the relevant Part 1 examination.

Clinical biochemistry

Dr Olivia Bacon
Dr Purba Banerjee
Mrs Helen Berry
Dr Anthony Francis Catchpole
Dr Michael Peter Cornes
Miss Emma Crouch
Mrs Michaela Diane Dowley
Miss Laura Ghandhi
Dr Sarah Jane Glover
Dr Kay Natalie Hunt
Dr Hewa Brahmana Varuni Sakunthala Jayasinghe
Dr Benjamin Jones
Dr Emily-Rose Leach
Dr Negar Maghsoodi
Dr Suzannah Phillips
Miss Elizabeth Mary Robinson
Dr Catrin Mair Searell
Dr Kate Elizabeth Shipman
Dr Jennifer Delyth Spencer
Dr Emma Jane Tuddenham
Dr Simon John Whitehead

Haematology

Dr Saad Zein Alabdin Mohammed Ahmed
Dr Said Yahya Ahmed Al Kindi
Dr Fahad Harib Khalifa Al-Ghafri
Dr Syed Yasir Altaf
Dr Seetharam Anandram
Dr Anita Arasaretnam
Dr James Aidan Aries
Dr Buddhika Badugama
Dr Vishnu Prasad Banmukala Madhava Rao
Dr Rachel Louise Brown
Dr Nikesh Dhiraj Chavda
Dr Kathleen Patricia Clarke
Dr Antony Francis Cousins
Dr Michael James Richard Desborough
Dr Ciara Freeman
Dr Catherine Garnett
Dr Niharendu Ghara
Dr Jacob Grinfeld
Dr Natalie Heeney
Dr Catherine Ann Hockings
Dr Deena Iskander
Dr Francesca Mary Elizabeth Jones
Dr Sabiha Kausar
Dr Barry Kevane
Dr Andrew John King
Dr Michelle Lannon
Dr I-Jun Lau
Dr Paul Michael Macocia
Dr Su Wai Maung
Dr Conal Eoghan McConville
Dr Ruth Medlock
Dr Nicola Christina Melville
Dr Arunodaya Mohan
Dr Muhammad Mohsin
Dr Hae Tha Mya
Dr Abida Naeem
Dr Charlotte Pawlyn
Dr Ying Ying Peng
Dr Elizabeth Helen Phillips
Dr Nita Prasannan
Dr Rebecca Pryor
Dr Moosa Rashid Qureshi
Dr Meghna Ruparelia
Dr Lucinda Sanders
Dr Shalini Solanki
Dr Jennifer Wan Kok Tam
Dr Sarah Kate Westbury
Dr Mark Williams
Dr Theingi Yin

Histopathology

Dr Mohammad Reza Abdollahi
Dr Lukasz Adamczyk
Dr Safina Ahmed
Dr Ahmad Fadhel Al Taleb
Dr Harith Albadry
Dr Doaa Alghamdi
Dr Ahmed Nabil Mohamed Ali
Dr Ana-Maria Avram
Dr Suet Chee Aw
Dr Ushra Azhar
Dr Thiagarajah Balamurugan
Dr Nesreen Mohammad Bataineh
Dr Sophie Philippa Ruth Beavers
Dr Iman Mahdy Mohamed Borghol
Dr Richard George Brice
Dr Stuart Brown
Dr Laura Louise Casey
Dr Richard Thomas Colling
Dr Leighanne Deboys
Dr Olena Dotsenko
Dr Abeer Abdalla Elsiddig
Dr Amany Abdulgader Fathaddin
Dr Virginia Louise Fitzpatrick-Swallow
Dr Kezia Lyndall Gaitskell
Dr Preethi Parvathi Gopinath
Dr Wael Hamarneh
Dr Yousef Moh Ali Hasen
Dr Harry Haynes
Dr Shauna Marie Hegarty
Dr Naquib Shafi Ahmed Inamdar
Dr Ban Jalil
Dr Zane Jaunmuktane
Dr Shalini Kalwani
Dr Maryam Faheem Khan
Dr Reena Khiroya
Dr Eva Kolson Kokohaare
Miss Malgorzata Kurzepa
Dr Prabha Kushwaha
Dr Chooi Mun Deborah Lai
Dr Eimear Lee
Dr Daniel John Lindsay
Dr Jiezhen Tracy Loh
Dr Thomas Francis Lynch
Dr Tamara Mary McNamee
Dr Reena Merard

Dr Luiza Moore
Dr Mustafa Mohamed
Dr Mohammed Nur Mutaz Ibrahim Elsiddig
Dr Ajit Nambiar
Dr Alia Nasir
Dr Aoisha O'Brien
Dr Abigail Sarah Oakley
Dr Andrew Prodromou
Dr Shreya Raman
Dr Muhammad Usman Rathore
Dr Muaaz Rizig
Dr Andrew George Robinson
Dr Anna Lucy Rycroft
Dr Victoria Lesley Jutta Salter
Dr Colin Geoffrey Saysell
Dr Manonmani Sengodan
Dr Aliaa Adel Salaeldin Mahmoud Shalaby
Dr Joseph Frank Shaw
Dr David Shustik
Dr Abigail Victoria May Speller
Dr Po Yin Tang
Dr Sharmina Vazhayil Parambath
Dr Prokopios Vogiatzis
Dr Olga Wise
Dr Andrew Wood
Dr Yvonne Louise Woods
Dr Amy Leanne Christina Young
Dr Davide Zardo
Dr Bashayer Mohammed Zein

Immunology

Dr Dilani Arnold
Dr Steven Hanson
Dr Shanti Suzanne Mahabir

Medical microbiology

Dr Paul Beckett
Dr Binutha Bharathan
Dr Jason Sanjay Biswas
Dr Colin Brown
Dr Aarti Chadha
Dr Amy Louise Chue
Dr Imogen Lucy Clarke
Dr Surjo Kiran De
Dr Rakan Fayez Fares El-Hamad
Dr Maria Mushtaq Gill
Dr Jenna Victoria Gillies
Miss Fenella Daisy Louise Halstead
Ms Carmel Hooton
Dr Gillian Jones
Dr Lewis Jones
Mrs Helen Ruth Kirk-Granger
Dr Rekha Lopez
Dr Sikolastika Makasinga
Dr Elijah Matovu
Dr Victoria Louise McCune
Dr Malik Osman Elhassan Mohammed Ahmed
Mr Marc-Oliver Niebel
Dr John William Shone
Dr Stephanie Jane Smith
Dr Cristina Suarez Fernandez
Dr Louise Clare Sweeney
Dr Julia Anne Vasant
Dr Nasser Salim Al Tamtami Wafa
Dr Robert Weir

Oral pathology

Dr Eranga Harshani Nissanka-Jayasuriya

Veterinary clinical pathology

Mrs Milena Firmanty-Tancock
Mrs Marta Teresa Gomes Pereira Filipe Da Costa
Mr Efstratios Papakonstantinou
Dr Eve Ramery
Miss Julie Clair Vickers

Virology

Dr Celia Jackson
Dr Stavroula Maria Paraskevopoulou
Dr Anna Alexandra Smielewska

Successful candidates for the Part 2 examination

The following candidates have passed all components of the relevant Part 2 examination:

Clinical biochemistry

Mrs Caroline Ann Addison
Mrs Olufunmilayo Akinlade
Mrs Helen Bruce
Dr Sean Costelloe
Mr Andrew Davison
Dr Hrushikesh Divyateja
Dr Elizabeth Fox
Dr Sumana Gidwani
Dr Neil Greig
Dr David G Housley
Dr Paula Marie Marchetti
Dr Therese Fadel Fawzi Michael
Dr Adrian Glen Miller
Dr Darren James Powell
Dr Manisha Sharma
Miss Helen Turner
Dr Susan Vickery

Clinical embryology

Miss Christine Leary

Haematology

Dr Charles Alderman
Dr Khalid Said Salim Al-Habsi
Dr Watutantrige Harshini Erangika Alwis
Dr Yu Sandar Aung
Dr Faisal Tirupattur Mohamed Basheer
Dr Vandana Bharadwaj
Dr Alison Clare Boden
Dr Jennifer Louise Bosworth
Dr Sara Boyce
Dr Richard Burt
Dr Jennifer Katie Buxton
Dr Jason Wai Mun Chay
Dr Anicee Danaee
Dr Vijayavalli Dhanapal
Dr Ireshe Dharmasena
Dr Hugh Edwards
Dr Inas El-Najjar
Dr Abdulhakim Eswedi
Dr Nadine Farah
Dr Adam Forbes
Dr Shreyans Gandhi
Dr Paula Lorraine Garland
Dr Julie Glanville
Dr Ellen Mary Gleeson
Dr Rajesh Mallik Gottipati
Dr Morag Meriel Griffin
Dr Simon Luke Hallam
Dr Joanna Haughton
Dr Erin Claire Hurst
Dr Saad Fainan Idris
Dr Anjum Bashir Khan
Dr Mari Frances Kilner
Dr Yuh Shan Lee
Dr Pu-Lin Luo
Dr Rajesh Mamadigi

Dr Ceri Marrin
Dr Ashish Narayan Masurekar
Dr Ranjana Mazumdar
Dr Mahalakshmi Mohan
Dr Maria Mushkbar
Dr Joel Allan Newman
Dr Catherine Ogilvie
Dr Sarah Poplar
Dr Gavin Charles Preston
Dr Preethi Ramachandran
Dr Senthil Kumar Ramesh Kumar
Dr Robin Sanderson
Dr Semira Nasreen Sheikh
Dr Jonathan Ian Sive
Dr Emily Symington
Dr Wai Keong Wong

Haematology (clinical scientist)

Mr David Marston Bloxham

Histopathology

Dr Maria Ahmad
Dr Nagoud Mohamed Omer Ali
Dr Alia Habes Abdulrahman Al-Mohtaseb
Dr Salih Bakhiet
Dr Mayuri Singh Basnet
Dr Najla Saleh Ben-Ghashir
Dr Ruth Helen Bentley
Dr Rajan Chopra
Dr Clare Anne D'arcy
Dr Noreen Dissi
Dr Rukma Doshi
Dr Maha Fouad Elgoweini
Dr Aaron Joseph Ervine
Dr Maysoon Farroha
Dr Thomas Fitzgerald
Dr Lucy Foster
Dr Noel Gatt
Dr Sarika Gupta
Dr Sampada Gupta
Dr Fiona Susan Hamilton
Dr Rand Hawari
Dr Usman Hassan
Dr Jingxiang Huang
Dr Hazem Ahmed Hamed Ibrahim
Dr Humaira Iftikhar
Dr Delaram Kermani
Dr Rashmi Lahiri
Dr Abigail Mary Lee
Dr Gareth David Leopold
Dr Aoife Maguire
Dr Khurshid Merchant
Dr Veena Nagaraj
Dr Wen Wei Ng
Dr Orla O'Mahony
Dr Aarti Patel
Dr Manisha Ram
Dr Faiza Rashid
Dr Rajesh Hariram Rawlani
Dr Gordon Reid
Dr Ashraf Sanduka
Dr Nina Schneider
Dr Osama Sharaf Eldin
Dr Anna Silvanto
Dr Fawzia Tahir
Dr Charles Tilley
Dr Man Hing Tsui
Dr Lynsey Dianne Whyte
Dr Junrong Yan

Medical microbiology

Dr Layth Alsaffar
Dr Nurul Huda Amir
Dr Sarah Bergin
Dr Aileen Elizabeth Boyd
Dr Katharine Elizabeth Cartwright
Dr Claire Cordina
Dr Shaktijit Dave
Dr Rachael de Nobrega
Dr Thushan De Silva
Dr Seema Desai
Dr Rebecca Edwards
Dr Ivo Elliott
Dr Helen Fifer
Dr Sulman Hasnie
Dr Lauren Marie Heath
Dr Emma Johnson
Dr Chloe Keane
Dr Joanna Catherine Macve
Dr Nitin Mahobia
Dr Aleksandra Stephanie Marek
Dr Claudia Meyer
Dr Benjamin John Parcell
Dr Trupti Patel
Dr Paul Anthony Randell
Dr Ruan Simpson
Dr Sarah Starkey
Dr Fozia Tariq
Miss Kerry Williams

Molecular genetics

Dr Ciaron McAnulty

Oral pathology

Dr Alica Carolina Torres Rendon

Veterinary pathology

Miss Katherine Hughes

Veterinary clinical pathology

Mr David Mark Buckeridge
Mr Francesco Cian
Miss Marta Dell'Orco
Miss Francesca Pitorri

Virology

Dr Haya D A M Altawalah
Dr Susan Feeney
Dr Malcolm Guiver
Dr Fouzia Jabeen
Dr Anupama Mutagi
Dr Gaia Nebbia

Successful candidates for the Certificate examinations

The following candidates have passed the Certificate in Higher Autopsy Training:

Dr Clare Anne D'arcy
Dr Rand Hawari
Dr Aoife Maguire
Dr Aarti Patel
Dr Joanna Rutledge
Dr Mia Wolozinsky

The following candidates have passed the Certificate in Higher Cervical Cytopathology Training:

Dr Kim Billingham FRCPath
Dr Jayson Wang FRCPath
Dr Pek-Choo Adele Wong FRCPath

The following candidates have passed the Certificate in Medical Genetics:

Dr Kate Deborah Baker
Dr Gabriela Emma Jones
Dr Francis Hugh Sansbury
Dr Vinod Cherian Varghese

Medical consultants: new appointment offers

The following appointments have been offered (as at 7 May 2013), and are naturally subject to acceptance by the applicants. The lists are prepared by the College's Workforce Department, on the basis of returns completed by College Assessors on Consultant Advisory Appointment Committees and submitted by the above date. (Please note, however, we receive no return following 20% of AACs.) Any forms received after this date will be published in the next issue. If doctors fail to take up their posts or have any additional information, they should inform the Workforce Department on **medicalworkforce@rcpath.org**. Whenever you move home or job, please remember to inform the College Membership Department too, sending your new details to **membership@rcpath.org**

Region	NHS Trusts/Health Authorities	Base Hospital	Appointee
Chemical pathology			
Northern & Yorkshire	South Tees	James Cook University	Dr Stewart J Pattman
Northern Ireland	Northern Health and Social Care	Antrim	Dr Brona V Roberts
Northern Ireland	Northern Health and Social Care	Antrim	Dr Janet E Chestnutt
London	Guy's and St Thomas'	Evelina Children's	Dr Radha Ramachandran
South West	Salisbury	Salisbury District	Dr Nicola M Meston
South West	Southern Devon	Torbay	Dr Aabha Sharma
Haematology			
Eastern	Bedford	Bedford	Dr Agapi Parcharidou
Eastern	East and North Hertfordshire	QE II Hospital	Dr Miriam Mitchison
London	Croydon	Croydon	Dr Betty Y Y Cheung
Lono	North West London	Northwick Park	Dr Fateha B Chowdhury
London	West Middlesex University	West Middlesex University	Dr Natasha M Wiles
London	West Middlesex University	West Middlesex University	Dr Jennifer J Thomson
London	Whittington Health	Whittington	Dr Ali R Rismani
North West	The Pennine Acute	The Royal Oldham	Dr Antonina G Zhelyazkova
Northern & Yorkshire	Bradford Teaching	Bradford Royal Infirmary	Dr Anshu Garg
Northern Ireland	Northern Ireland Blood Transfusion Service	Northern Ireland Blood Transfusion Service	Dr Kathryn A Maguire
South East	Hampshire	across sites	Dr Sarah E Mangles
Trent	Northampton General	Northampton General	Dr Alistair G E McGrann
Trent	University Hospitals of Leicester	Leicester Royal Infirmary	Dr Richard C Gooding
Trent	University Hospitals of Leicester	Leicester Royal Infirmary	Dr Katherine E Hodgson
Trent	United Lincolnshire	Lincoln County	Dr Caroline M Harvey
Histopathology/cytopathology			
Eastern	Mid Essex	Broomfield	Dr Sarah J Lower
Eastern	West Suffolk	West Suffolk	Dr Lia Campos
North West	Lancashire Teaching	Royal Preston	Dr Twesha Wahie
North West	Salford Royal and Wrightington, Wigan & Leigh	across trusts	Dr Kate Chillman
Northern & Yorkshire	The Leeds Teaching	across sites	Dr Joanna L Kelly
Northern & Yorkshire	York Teaching	York	Dr Matthew J Toy
South East	Hampshire	Hampshire	Dr Vishal J Mehta

South East	Maidstone and Tunbridge Wells	across sites	Dr Ann H Fleming
South East	Oxford University	across sites	Dr Stephen P Damato
West Midlands	Heart of England	Heartlands	Dr Sherin Jos Payyappilly

MM, CCDC, virology and epidemiology

Eastern	Norfolk and Norwich and James Paget University	James Paget	Dr Lasantha Ratnayake
London	Frimley Park	Frimley Park	Dr Mark C Atkins
London	Public Health England	Colindale	Dr Edward B Kaczmarski
London	University College London	University College London	Dr Frank M Mattes
South East	Western Sussex	across sites	Dr Csaba L Marodi
South East	Royal Surrey County and Frimley Park and Ashford St Peters	Frimley Park	Dr Pankaj Lal
South East	Royal Surrey County and Frimley Park and Ashford St Peters	Royal Surrey County	Dr Si Huei Tan

Professor Guy Rutty appointed to top international role

Professor Guy Rutty MBE, Chief Forensic Pathologist at the University of Leicester's East Midlands Forensic Pathology Unit and world expert in non-invasive autopsies, will lead the International Society of Forensic Radiology and Imaging (ISFRI).

The organisation aims to strengthen and develop the field of forensic radiology and imaging worldwide, promoting best practice and developing international quality standards and guidelines.

Professor Rutty was appointed Vice Chair of the organisation in May 2013 as part of a three-year post, which will see him become Chair (year 2) and Past-Chair (year 3). Initially he will work with the Society Board and current Chair/Past Chair and then in year 2 lead the group in its work promoting education, research programmes, regulations and guidelines in the field of radiology and imaging.

Professor Rutty has more than 25 years of experience of autopsy practice, and has become a world-leading expert in the field of non-invasive autopsy techniques – particularly post-mortem computed tomography (PMCT). He has also been active on many College committees and Council.

During his career he has assisted with war crime investigations in Bosnia and spearheaded the use of computed tomography for mass fatalities through work undertaken for the Home Office's mass fatality working groups.

He was a founding member of the Department of Health's National Imaging Board (NIB), which oversees all developments and advances in the application of cross-sectional imaging to autopsy practice. His work introduced the use of PMCT images as evidence in criminal trials in the UK.

He was a member of the joint collegiate working group which issued The Royal College of Pathologists' and Radiologists' guidance on the use of cross-sectional imaging in autopsy practice. He also assisted the Chief Coroner in drawing up guidance on the same subject.

He recently chaired the Department of Health-commissioned sub-group of the NIB, which considered how a national cross-sectional imaging service could be introduced to the UK as an adjunct – if not replacement – to autopsy practice. He was awarded an MBE in the Queen's Birthday Honours List in 2010.

Professor Rutty said: "The International Society of Forensic Radiology and Imaging is the only international world organisation for everything to do with autopsy radiology imaging. This is the top post in the world, and one I am very proud to obtain. Radiology and imaging is a very important area for forensic pathology, as it allows autopsies to be much less invasive than traditional methods."

Professor Jo Martin appointed National Clinical Director of Pathology Services

Professor Jo Martin has been appointed by Professor Sir Bruce Keogh to the NHS leadership team as the new National Clinical Director of Pathology Services at the Department of Health

Professor Martin will work alongside patients, clinicians, healthcare scientists, policy-makers and management to spearhead positive change across the country's pathology services. She took up her new leadership position in April 2013 and will devote one day a week to the role, alongside her continuing work as Health Director at Barts Health NHS Trust and Professor of Pathology for Queen Mary, University of London.

Professor Martin qualified from Cambridge University and the London Hospital Medical School and has a PhD in cellular pathology in motor neuron disease. She also has a Masters degree in Leadership and a range of management experience including divisional director of clinical and diagnostic services. As a consultant histopathologist at The Royal London Hospital in Whitechapel, she runs a clinical specialist practice in renal pathology and has a research interest in disorders of bowel motility.

Professor Martin has previously worked at Guy's Hospital, St Thomas's Hospital and as a Medical Research Council and Wellcome Trust Research Fellow at the Institute of Psychiatry. She is an active College Fellow.

Professor Martin said: "I am delighted to take on this new challenge and I look forward to working with a wide range of NHS stakeholders to ensure all patients, wherever they are in the country, have access to pathology services of the highest quality. Pathology services play a vital role in analysing and identifying disease, its causes and appropriate treatment and I would like to see these services embedded in every aspect of patient care."

New Year Honours 2013

We note the conferment of honours to the following and warmly congratulate them on their achievements.

Knights Bachelor
Professor Michael Stratton
Professor Stephen O'Rahilly

Commander of the Order of the British Empire
Professor Hugh Pennington

Officer of the Order of the British Empire
Dr Patricia Wilkie

Deaths

The deaths of the following Fellows were announced at the March and June 2013 Council meetings. We extend our condolences to those who grieve for them.

Rosemary Rogerson Ashby	Fellow overseas
Margaret Haire	Fellow UK
David Hampton	Fellow UK
Walford John Harrison	Fellow UK
Susan Leong	Fellow overseas
John Morton	Fellow UK
Louise Olwen Neville	Fellow UK
William Alexander Reid	Fellow UK
Harvey Wacks	Fellow UK
Albert Logan Wells	Fellow UK

We welcome your letters. Please mark correspondence for the attention of the Editor of *The Bulletin*, and email it care of the Publications Department at **publications@rcpath.org.** The copy deadline for the October 2013 issue is **2 August 2013.**

False normal B12 results and risk of neurological damage

Dear Editor

B12 assays may be vulnerable to interference resulting in normal values despite severe cobalamin deficiency. Where there is a discordance between the clinical features of neuropathy – parasthesiae, loss of joint position sense, or megaloblastic anaemia and a "normal" B12 result clinicians are advised to request storage of serum for further testing and are advised to treat the patient with B12 replacement therapy. Further testing may include repeat testing by an alternative B12 assay, (Roche or Abbott), holotranscobalamin assay, serum methylmalonic acid and measurement of intrinsic factor antibody. Treatment with B12 should not be delayed to avoid progression of neurological damage.

I think it is important to ensure that clinicians are aware of this issue, to avoid patients having delay in effective treatment.

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Patients' voices

Dear Editor

The President says in the April 2013 issue of The *Bulletin* that doctors and managers must aim to put the best care of patients at the centre of their work for the NHS.

Yes, but 'best' to managers means cost-effective care to a reasonable standard for defined populations of patients, whereas to doctors it still means care of a high standard to individual patients.

These aims are not necessarily irreconcilable, but they are not the same. Managers' constant challenges to doctors' power need more careful analyses than they always get, so that doctors can consider whether some of their assumptions and practices may have to be relinquished in exchange for retaining and developing the fundamental aspects of medical professionalism.

To patients, it sometimes seems that doctors are relinquishing the wrong things. So patients' voices, too, need a place in these 'small p' political analyses and debates, as indeed the College's Lay Advisory Committee can in its own way offer.

Charlotte Williamson OBE MA PhD
Founder member, Lay Advisory Committee
Recipient of a College Medal, 2004

BOOK REVIEWS

Death, Dying and Organ Transplantation: Reconstructing medical ethics at the end of life

Franklin G Miller and Robert D Truog
Oxford University Press USA, 2011, £37.50, 208 pp
ISBN 978 0 19973 917 2

Currently, there are no cures for whole organ failure and many treatments are debilitating. This is why transplantation of a replacement organ from another person was seen as a life-saving development over 60 years ago.

Apart from kidney (and infrequently a lobe of liver) donation by a living person, which now occurs in about half of all transplants done in the UK, transplantation is usually reliant on organs retrieved from the deceased. Whilst establishing that death has occurred is an obvious prerequisite to removal of organs for transplantation, the medical and legal definition of death has no relationship to what might happen after death, including organ donation and transplantation. However, Miller and Truog pursue the thesis that the success of organ transplantation is heavily reliant on optimising retrieval of organs from a deceased person and currently, at least in the USA in 2011, there is room for significant improvement.

A solution proposed is to review how death is defined and to recognise that removal of organs should take place at the earliest possibility. This has to be morally, societally, ethically, legally, medically and publically acceptable; a considerable challenge. In the UK in recent years, much effort has been made to prevent additional injury to retrieved organs by minimising *ex-vivo* storage by addressing perplexing logistical issues. Perhaps this technical development should be more widely adopted in the first instance?

This book is a challenging read and, at first sight, might be of interest only to those actively involved in ethical, legal and clinical aspects of organ transplantation. However, death is the only issue of relevance to all of us! No doubt anyone who enjoys a thought-provoking and morally challenging issue will be stimulated.

Over 175 pages and eight chapters, the authors relentlessly pursue the challenge of establishing the precise moment in time when death has occurred. In reality, death is a process that commences when life begins. In some cases presented for discussion in the book, there is an exact time of death, the clearest example being decapitation. In most cases, the final stages of death take place over a longer time – which may be minutes, hours or days, as will be understood by clinicians who have encountered dying patients and by their families.

At the present time in the UK, there is discussion as to how the later stages of the dying should be managed. The 'Liverpool Care Pathway' has been widely adopted to allow, primarily, a good death to take place. Some families are unwilling to accept this protocol, reflecting a diversity of opinion in the general population sometimes founded on a lack of knowledge that is needed at a time of ultimate crisis. We are naturally reluctant to discuss death and dying, although the situation is changing.

The arguments presented and reviewed by Miller and Truog focus on the situation in the USA but most are applicable worldwide, with some important differences relating to cultural and religious heterogeneity. However, the reader is provoked to think deeply about this important issue, presented in the context of a need for organs for transplantation, but increasingly applicable to other issues including euthanasia, end-of-life care and the involvement of the patient and their family in medical treatment.

What becomes clear is that death is a process, which some are able to accept has a definite 'point of no return', identified clinically as 'futility', whereas others seek to maintain intervention and grasp at any sign.

The book concludes with the direct statement that currently society accepts a fudged legal and medical procedural situation and that effective debate should now consider allowing removal of organs at earlier stages in the dying process. This challenge could be negated if effective prevention through lifestyle behaviour, cures and treatments for organ failure can be developed.

Professor Phil A Dyer
Consultant Clinical Scientist (retired)
Professor in Transplantation Science, University of Manchester

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The Patient Paradox – Why sexed up medicine is bad for your health

Margaret McCartney
Pinter and Martin, 2012, £9.99, 335 pp
ISBN 978 1 78066 000 4

Wandering through my memory, I vividly remember the moment I was asked to swear the Hippocratic Oath on behalf of all the newly registered doctors, in the local *Ordine dei Medici* in Pisa. It is customary for the youngest newly qualified doctor to take the Oath, in its modern version, on behalf of all the others, at the first general assembly, and in 2004 that doctor was me.

"Aware of the importance and solemnity of the act that I make and the commitment that I take, I swear: to practice medicine in freedom and independence of judgement and behaviour avoiding any undue influence; ... to refrain from any diagnostic and therapeutic futility; to promote a therapeutic alliance with the patient based on trust and mutual information, respecting and sharing the principles that inspired the art of medicine; ... to respect and facilitate the right to a free choice of the doctor; ....

I remember being quite emotional and conscious of the importance of the words that I was going to pronounce. As a young, just-qualified doctor, who was not yet completely aware of the difficulties and uncertainties of the medical profession, I naively thought it was going to be easy to observe and abide by those commandments. After all, for me, doctors were just those people that made other people get better... as simple as that.

Well, ten years after, I can tell you it is not that simple. And that's not only true for me, I am sure.

The author of this book, Margaret McCartney, is a GP in Glasgow. She started writing for the press after being infuriated by an article in a newspaper which claimed that CT body screening was the way to stay well.

In *The Patient Paradox*, her first book, she embarks on a trip to analyse what modern medicine does, and how much evidence there is behind doctors' decisions.

One of the first stations on this trip is the increasing medicalisation of healthy patients. Screening tests (for any condition, from ovarian cancer to abdominal aortic aneurysm) have become increasingly available, and people are continuously made aware of the importance of those screenings by a number of charities and groups. Screening tests come with a price though (remember Hippocrates? "*First do no harm...*") and Dr McCartney explains the scientific evidence behind them, and their epidemiological and statistical implications. How many false positive Ca-125 test results are produced in order to detect early one ovarian cancer? And how much distress do patients go through when they receive a positive Ca-125 result, probably not knowing – or not having been clearly informed in advance – that only less than 1% of those positive results will actually imply having ovarian cancer?

What is the evidence behind most of the current 'medical check-up' myth? Would the general public be willing to commit themselves to repeat screenings if they knew how little risk the disease represents to them, and how 'sure' they are of getting the disease?

Medical uncertainty is another stop in Dr McCartney's trip. The quality of evidence of scientific studies, and how this is ranked, is explained in good details. What is the 'real' risk of cardiovascular disease in patient with a level of cholesterol above normal levels? And what is a 'normal' cholesterol level? How does this justify the recent generalised use of statins in primary care? Uncertainty rules the medical profession, and this is not because doctors are no good at making medical diagnosis, but because the process of making medical diagnosis is a typical Bayesian thinking, where every little additional piece of information adds to the previous ones, in determining the likely diagnosis. The general public may think doctors are novel George Clooneys in *ER*, while in the end they are not. Neither are pathologists; they still are able to make more comprehensive and perfect diagnosis, nevertheless they need to rely on appropriate clinical details – we all know this too well.

Is the "accurateness of the medical uncertainty" communicated appropriately and effectively to the patients? How much is this communication process driven by politicians, and to what extent are doctors part of this process? Better information is our last and final stop. Patients do not need more information, they need better information, Dr McCartney argues, even if this may mean more men refusing PSA screening. Patients should be treated as autonomous adults, and politicians should drive action in the NHS on the basis of the scientific evidence available, and be ready to provide information on evidence-based medicine (not politics) to their electors.

The Patient Paradox is an enjoyable read, for both doctors and patients. It explores many of the grey areas that surround our profession, criticises aspects that could be improved, describes possible solutions and improvements, and reminds us of our limits. As Dr Rosenbaum would say: "There is no such thing as an infallible doctor".

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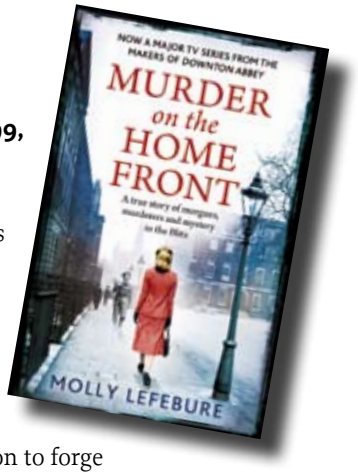
Murder on the Home Front

Molly Lefebure
Sphere (Little Brown), 2013, £7.99, 278 pp
ISBN 978 0 75155 204 1



Molly Lefebure's memoir was originally published in 1954 and chronicles her work as secretary to the acclaimed forensic pathologist, Dr Keith Simpson, during World War 2. The author, now in her nineties, trained as a journalist and went on to forge a successful career as a children's author and biographer.

The book has been republished to tie in with the broadcast of an ITV1 series based on events in the book. The book cover is quite clear about its target audience, with the headline "Now a Major TV Series from the Makers of *Downton Abbey*". Before I began to read the book, I cynically assumed that the content would be frivolous, ill informed and even sensationalist. But once I got stuck in, I found the book very easy to read and hard to put down.

The book is essentially written in chapters that are devoted to the different cases that Molly was involved in with Dr Simpson. What I found absolutely fascinating was the insight into the social conditions of the wartime living and the attitudes of society, the hardships faced by ordinary people trying to exist in wartime Britain and ending up either as victims or perpetrators of crime . The shadow of capital punishment looms large and part of a chapter describes what Albert Pierrepoint, the last Chief Executioner, was actually like. From Molly's description, he sounded like quite a nice bloke!

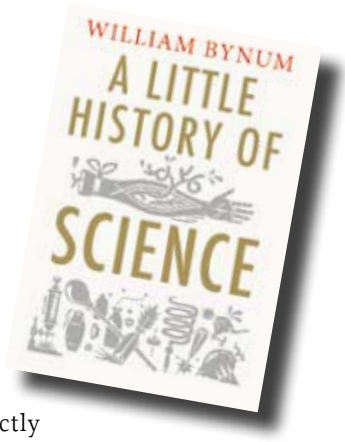
Nowadays, health and safety, quality assurance and audit play a significant part in the work of forensic pathologists in mortuaries and the practices described in the book (for example taking dictation from Dr Simpson in the PM room, with no mention of protective garments or hand gel) would now not be tolerated.

I found the style of writing very good. At times it seemed quaint, but nevertheless totally in keeping with the era in which the book was written. I thoroughly enjoyed the book and can recommend it to anyone seeking a glimpse into the recent history of forensic medicine and day-to-day life and death in wartime Britain. I hope the television series remains faithful to the book, because I'd like to see some of the characters come to life on screen (no pun intended), but I am not holding my breath! I'd also love to have the chance to meet Molly Lefebure and ask her lots of questions about her work with Dr Simpson.

Charlotte Balazs
Committee Administrator
RCPath Forensic Pathology Sub-committee

A Little History of Science

William Bynum
Yale University Press, 2012, £14.99, 263 pp
ISBN 978 0 30013 659 3



I was asked to review this book as a little bit of light relief following my Part 2 examination, and I have to say that I am very glad that I agreed. This is a great little book. The author does exactly what he says in the title, taking the reader through a timeline of scientific advances starting from the age of the Babylonians and Ancient Egyptians and travelling through to the digital age. Whereas this might seem impossible in a 256-page book, Bynum achieves it with ease. The book is split into 40 separate chapters, each dealing with a different topic, from early astronomy and the development of the compass to steam engines, atomic particles and genetics. This structure makes the book extremely easy to dip in and out of when time permits and the writing style is accessible to all. Having said that, it is a factual book. If you are looking for engaging storytelling, it may appear a little dry.

One other thing this book is not, and does not claim to be, is a fully comprehensive history of everything, which I think does it great favours. Whilst you are never going to be able to write a thesis on Hippocrates or Darwin using only this book as reference material, there is enough information to excite the interest of those reading it to go on and read further about specific topics, without losing others in mounds of facts and figures.

I would recommend this book to anyone interested in the history of science and medicine. It is aimed more at the younger reader as it is very much an introduction to the topic, and I found the lack of in-depth discussion of the impact of the discoveries a little disappointing, but I cannot really fault it as it is what it says it is: "a little history of science".

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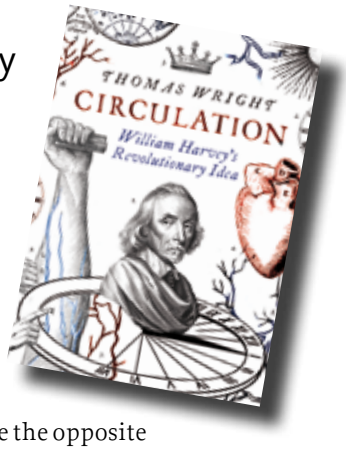
Circulation: William Harvey's Revolutionary Idea

Thomas Wright
Chatto & Windus, 2012, £16.99, 246 pp
ISBN 978 0 70118 573 2



I should perhaps confess that I do not generally enjoy biographies and this is the first one that I have read from cover to cover. I was pleasantly surprised, and found it to be quite the opposite of the onerous plod that I was expecting.

In explaining the science behind Harvey's contribution to medicine, Wright carefully discusses the revolutionary academic advances that characterised the Renaissance period. Although these are described in a way that is comprehensible to the lay reader, there is still sufficient scientific detail to make it interesting to professionals.

Perhaps the most difficult task here is adequately setting the scene so that we can fully understand the difficulties that Harvey faced and the magnitude of his achievements. Wright does this very well. As we take Harvey's theories to be the cornerstone of our understanding of circulation today, it is easy to forget the controversy that would have surrounded his work at the time of its publication. Harvey is generally held in high esteem in the modern era but Wright carefully demonstrates the risks that he took when challenging the prevailing beliefs of his time. I certainly had no idea of the animosity that he would have faced and the professional ruin that threatened to overtake him.

While in the modern era we can formulate scientific hypotheses without being encumbered by religious doctrine or philosophical values, in Harvey's time these processes were inextricably linked. Thus Harvey did not merely upset some of his fellow doctors by suggesting that the physiological framework upon which they practised medicine was incorrect, he attracted hostile criticism from a variety of philosophers and theologians with no medical background at all. Harvey had to satisfy them all to get his theory accepted. I am sure he would have been in quite a quandary as he considered himself to be a natural philosopher of the same stock as those whose teachings he now questioned. He was understandably loathe to contradict some of the core values on which his own medical education had been based. Nevertheless, he felt that his conclusions were incontrovertible and that his duty was to re-educate his peers. Several of them were of a quite different opinion. Clearly, bravery is as important a prerequisite for scientific discovery as ingenuity.

If there is one area that I felt Wright has neglected, it is in explaining the historical context in sufficient detail. Harvey was an ardent royalist and enjoyed the patronage of his monarchs. Despite this, he appears to have come through the Civil War relatively unscathed. I would have enjoyed reading some ideas as to how he managed this. Perhaps some further discourse on the turmoil that the country was going through would have been useful as, even for someone as focused on science as Harvey, the conflict must have been a little distracting.

This is a minor gripe and does not detract from the value of this book. Overall, it is a thoroughly entertaining and informative piece of writing.

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Darwin's Ghosts

Rebecca Stott
Bloomsbury, 2012, £20, 383 pp
ISBN 978 1 40880 908 2

Starting to read this book sent me back to my yellowing copy of *The Origin of Species* to read the preface, 'An Historical Sketch', in which Darwin acknowledges the many individuals who had

formulated early versions of the theory of evolution. If I read it in my youth I had forgotten it, but there Darwin attempts to credit all those who went before. In this book, Rebecca Stott expands on that list of forerunners and in looking back at 2000 years of evolutionary history she brings the various contributors to life within their time and culture.

She begins with Aristotle and his pupils in 344 BC, collecting and recording facts and figures about the wildlife on Lesbos, and from this accumulation of data formulating theories about the gradation of nature. These observations, collected in the book, *The History of Animals*, contributed much to an understanding of life, but ultimately Aristotle was convinced of the fixity of species rather than true evolution. In the 9th century AD, the Islamic scholar Al-Jahiz read Aristotle's writings in Arabic translation and expanded on his work in his own publication, *The Book of Living Beings*. The striking aspect of Al Jahiz's work was his perception of the interdependencies of life, which foreshadows Darwin's 'entangled bank' metaphor to describe an ecosystem.

These early thinkers were fortunate that their work did not bring them into conflict with the orthodoxies of their time, but those who followed in studying the origins of life put themselves in danger from state and church, and at risk of heresy.

Benoit de Maillet, the French consul in Cairo in 1708, believed he had discovered the origin of earth and species and collected facts and documentation to allow him to publish his findings. When he did put pen to paper, the book purported to be conversations with an Indian philosopher, Telliamed (an anagram of de Mailett), in order to distance himself from the heretical ideas within. Telliamed states that he was "absolutely sure that all species might have come into being through adaptation and transmigration without divine intervention". However, his firm belief in the existence of mermen and women perhaps undermines some of his credibility. The book was eventually published in English and it is known that Darwin read it, albeit after the publication of *The Origin of Species*.

Denis Diderot promulgated the theory that species were not created by God, but had mutated from shapeless forms over millions of years and was imprisoned and persecuted for his views in 18th century Paris. Lamarck, with his theory of the inheritance of acquired characteristics, was similarly regarded as a heretic. It is perhaps an indication of my naivety that, despite being aware of the vilification of Darwin when his theory was published, I had never thought of these early scientific thinkers as courageous. But this was indeed what they were. The anonymous publication of Robert Chambers' *Vestiges of the Natural History of Creation* created a scandalised backlash, which convinced Darwin to delay the writing of his own book for fear of a similar reception. It was the realisation in 1858 that Alfred Wallace was writing along the same lines that made Darwin finally complete his paper.

This book covers a wide sweep of evolutionary thinking in a very engaging and entertaining style, breathing life into the philosophers and scientists of the past. And when I got to the end, I found the search of my bookshelves to have been unnecessary; Darwin's historical sketch is reproduced there!

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Consultant Clinical Scientist
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Transfusion and Transplantation Science

Robin Knight (editor)
Oxford University Press, 2012,
£29.99, 304 pp
ISBN 978 0 19953 328 2

This book is part of 'The Fundamentals of Biomedical Science' series and is produced in collaboration with the Institute of Biomedical Science. Its contents are principally aimed at biomedical scientist trainees and draw on a range of learning features, encompassing both the theory and practice of transfusion and transplantation.

Each chapter starts with a list of "learning objectives" and ends with a chapter summary. The text is accompanied throughout by coloured boxes that outline and draw attention to methods, key terms and points, case studies, clinical correlations and cross references. An 'Online Resource Centre' that contains additional materials for students, trainees and lecturers also accompanies each book in the series. This online resource also provides answers to the self-help questions in each chapter, a useful feature for the student. Most of the interactive features are in Windows format and not Mac compatible, which is unfortunate in view of the widespread use of iPads by students. For this particular volume in the series, it is also a shame that so few of the online features are applicable to transfusion and transplantation.

The book itself is multi-authored, which does cause problems as there is a significant amount of repetition and also some contradictions. There are also some errors, the iliac crest being located at the top of the femur, HLA being referred to as both human leucocyte and human lymphocyte antigen, leucodepletion being variously described as introduced to remove prions in one chapter and retroviruses in another. There are also typographical errors – chelates, pluripotent and methyl prednisolone are all spelt incorrectly in various chapters.

The general format of the book and the information it contains is comprehensive and useful, covering all the basics needed for an understanding of the subject. The format of the book and the addition of online features enhance the usefulness of the content to both the student and the postgraduate. The widespread inclusion of clinical cases and clinical correlations enhances the value of this volume to medical graduates involved in the subjects and, more importantly, provides an understanding of the clinical importance of the work done by its principal readers: biomedical scientists. The 'further reading' recommendations included at the end of each chapter enhance the value of the book and point the reader to current guidelines and other resources for the practitioner of transfusion and transplantation science.

The contents, format and interactive features of this volume in the series make it useful reading material for both undergraduate students and postgraduates working in the field of transfusion and transplantation science.

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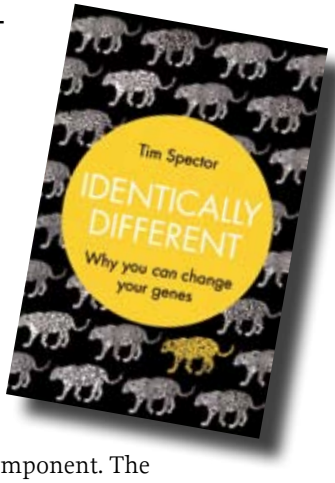
Identically Different – Why you *can* change your genes



Tim Spector
Weidenfeld & Nicolson, 2012, £20, 338 pp
ISBN 978 0 29786 631 2

In 2013, it is impossible to be unaware of the huge resources that are being pumped into understanding the way the human genome works. Most diseases and complex traits are now known to have a genetic component. The 'risk alleles' are being 'rounded up' as I write this review. However, many of them have small effects and all the indications are that factors other than allelic variation play a part in determining human traits.

In his book, *Identically Different*, Professor Tim Spector takes the reader on a journey through current genetics focussing on those "other factors", i.e. nurture and the science of epigenetics. This is an excellent and well-informed text, written for the educated public with an interest in science, but also suitable for medical practitioners and scientists at all levels, from undergraduate through the various stages of postgraduate training. It is, however, not a textbook nor is it a science review, and not all readers will agree with the ideas set out in the book. Like all good scientists, Professor Spector asks more questions than he answers and he does not shy away from controversial subjects.

The book, as the title suggests, concentrates on twins and identical twins in particular. The author draws on a cornucopia of published works and ideas to illustrate each chapter with a mix of reports from his own group and those of others. The text is supported throughout by a sizable bibliography, which is useful for those who need or wish to delve deeper.

The subjects covered in the book are broad and include the search for the happiness gene, the talent gene, the god gene and others. The author discusses some controversial topics, for example the gay gene, and although this is done with respect and balance, there may be some who will be offended by the comments in the book. This is true of other chapters too and many readers will disagree with the author. However, the author does not set out to do this. Instead he seems to want to draw the reader into the discussion – and as a scientist, this is a good thing.

There are many light moments in the book. For example, we are told that 10% of Americans think that Joan of Arc was Noah's wife (page 91 and reference 5 for chapter 4). The chapter on the 'fat gene' is particularly interesting, especially when the author discusses diets and fads and 'debunks' the use of dietary supplements. This brings to mind the potential societal impact of all of these observations and the need to be precise in what we claim to have found. Of course, not all of the chapters are confined to their subject heading, for example over half of the 'cancer gene' chapter discusses autism and a very interesting discussion it is too – but autism is not cancer and the link is tenuous.

As the book progresses, it becomes clear that genetics alone is not the solution to understanding complex traits in our population. Clearly genes play a role, however epigenetics and the environment can be just as important. It is of particular interest how strong the influence of different bacteria may be in some human traits.

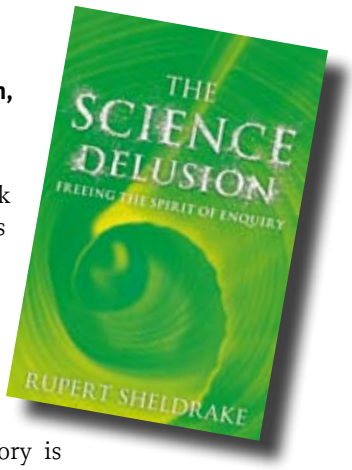
In 2013, we have only just begun to understand the genetic complexity of human traits. Professor Spector states that we can now "rewrite irreversibly at least four genetic doctrine based on epigenetics". Certainly our genetic models need to be reconstructed to include epigenetics and the environment (nurture). Epigenetics and nurture are the other side of the biological coin – when we have mapped all the risk alleles, identified the epigenetic effects and have a clear picture of the impact of other environmental factors, we will be better able to understand and modify human traits. We also need to build redundancy into those models and allow for complex interactions within biological systems. Only when we have done all of these things, will we fully understand the role of 'nature and nurture' in complex human traits.

Human biology is complex. We should not be surprised by much of what Professor Spector tells us and we should question many of his assumptions. He himself openly questions many of the ideas in the book. If you are looking for a simple answer, then this is not the place to look. But if you are looking for a text that opens doors in your mind or helps you to understand nature versus nurture, this is an excellent place to start.

Finally, we should perhaps remember the words of the satirist and philosopher, Hugo Menchen, who said "for every complex human problem there is a neat and simple answer that is wrong". Professor Spector's book illustrates this concept beautifully. That does not mean we should not keep looking. On the contrary, it is exactly why we should continue to delve into this subject. The potential societal impact from this work justifies the effort and expenditure on this subject, and the time I hope that you will spend reading it.

Dr Peter Donaldson
Senior Lecturer – Molecular Genetics
Institute of Cellular Medicine, University of Newcastle

The Science Delusion



Rupert Sheldrake
Coronet/Hodder and Stoughton, 2012, £19.99, 392 pp
ISBN 978 1 44472 792 0

When I was given this book to review, I was on two minds about it. I must say that I am a committed materialist, but I cherished the idea of reading a book that challenged my beliefs. Sheldrake challenges the fact that reality is all material and physical. His theory is that science itself is being constricted by assumptions that have become dogmas.

Sheldrake tries to argue that the laws of nature do change, that matter is increasing, that minds extend beyond the brain – to mention a few topics that are discussed in this book. I must say

the more I read, the more I became convinced that the author's arguments were weak and nothing more than assumptions. For example, in the chapter on inheritance, the author argues the debate between Lamarck (who placed a strong emphasis on the role of behaviour in evolution) and Darwin (who was very much in favour of genes as the vehicle for inheritance). Whilst very much in favour of the former, the author tries to put scientific explanations to his beliefs by using the "morphic resonance theory" and argues that genes are overrated and that this has been shown by the disappointment that followed the Human Genome Project. Sheldrake argues that this discovery did not lead to a full understanding of the functioning of genes. This is not surprising, in my view. Although we have discovered the building blocks of the human body, we are still in the infancy of understanding cell regulation and differentiation, and only the scientific method will discover the ultimate goal of cellular life cycles, differentiation and behaviour. Discovering all the materials that make up a car – complex as it may be – will never tell you what makes the car run and how it is controlled.

In the chapter entitled 'Are minds within the brain', Sheldrake quotes "Despite the theories of academic scientists and philosophers, most people do not accept that all their experiences are located inside their heads". He does not provide an iota of evidence or proof to substantiate this statement but goes on to describe what, to me, are fictional theories. For example, he states that Velmans suggests that images might be like a kind of neural projection hologram. I got completely lost. This seems fanciful to me – period.

The more I read the book, the more annoyed I got at the repetitive nature of the arguments that the author uses, without ever providing any concrete evidence. Each chapter ends in a series of questions, to challenge materialists. However, the arguments in each chapter are nothing more than ideas, with very little basis. It may be that if I had been less of a 'hardened' materialist, I may have been more amenable to the author's theories.

Although the book is well referenced and researched, I would like to turn things around and ask a series of challenging questions to the author and perhaps let him write a second book, trying to answer them in the scientific method.

Dr George Galea
Scottish National Blood Transfusion
Protein Refraction Centre, Edinburgh

Atlas of Oocytes, Zygotes and Embryos in Reproductive Medicine

Marc van den Bergh, Thomas Ebner, Kay Elder
Cambridge University Press, 2012, £85, 272 pp
ISBN 978 1 10700 464 1

The dictionary defines an 'atlas' as a book of maps or charts or as the name of a mythological Greek titan who supported the heavens. This atlas incorporates both of these definitions. First and foremost, it is a book of charts from anonymised couples who have undergone infertility treatment. Second, it is written by three titans in the field of clinical embryology. They may not support the heavens, but they know clinical embryology inside out, having written numerous manuscripts on the subject (I know, because I've read most of them!).

This atlas comprises over 100 individual cases studies for couples undertaking a cycle of IVF. Photographic images are provided of the eggs (oocytes) and the zygotes (fertilised oocytes, where the male and female genomes are visible as pronuclei but have not yet mixed). Further images are provided of the divided embryos that were eventually transferred to the female partner's uterus. Best of all, we are also told if these embryos caused a successful pregnancy.

The cases are from two clinics: one in Switzerland and one in Austria. The first section of the atlas covers 80 cases from the Swiss clinic; the second section covers 40 cases from the Austrian clinic.

Why two clinics? Well, the Swiss Law on Medically Assisted Procreation, which came into force in 2001, is one of the most restrictive in the world. This law prohibits the development of more than three embryos outside the woman's body and the cryopreservation of embryos that have divided beyond one cell. As a consequence of this restriction, the featured Swiss clinic has recorded numerous, highly detailed images of the oocytes and zygotes. These are used to assist the selection process regarding which zygotes to keep fresh *in vitro* to divide and eventually transfer to the woman.

The Austrian clinic does not have this legal restriction, so all zygotes are allowed to develop *in vitro*. This allows the best dividing embryo(s) to be selected for transfer from the complete cohort. As a result, the Austrian clinic has more images of embryos in the later stages of development, up to the Day 5 blastocyst stage.

The authors have presented the cases in sections relating to the cause of infertility. This is useful as oocyte, zygote and embryo appearance can be compared for patients with similar clinical histories. Further tables are provided that group the cases according to the semen parameters, stimulation protocol, gonadotrophin dose, final oestrogen level and the outcome.

Each case is presented over two facing pages, providing clinical details such as the previous treatment history, the couple's ages and lifestyles, the basal endocrine profile and a basic semen analysis.

I have found this book particularly useful for trainees by asking them to talk through individual cases. This inevitably generates further discussion, such as why a couple's lifestyle or occupation might affect their gamete quality and which embryo they would choose to transfer. Incidentally, a DVD is also included, which contains over 2000 digital images of the oocytes and embryos from all of the cases, allowing further opportunities for discussion.

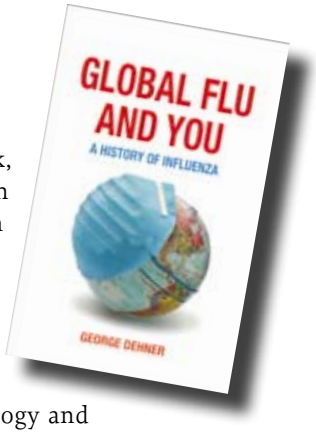
But the real strength of this book lies in the images. So if you ever wondered what a vacuolated oocyte looks like, how a blastocyst develops within an oval zona pellucida, or if a Robertsonian translocation affects an embryo's appearance, this atlas has the answers!

In summary, this is a great new book for embryologists, although it may also be of interest to all people working in reproductive medicine, and patients too. It may even have a place on the staffroom coffee table. If you are new to the field of clinical embryology, then the adventure begins here.

Dr Bryan Woodward
Consultant Embryologist
IVF Consultancy Services, Leicester

Global Flu and You

George Dehner
Reaktion Books, 2012, £20, 256 pp
ISBN 978 1 78023 028 3



In this very readable short book, Professor Dehner, a historian at Witchita State University in Kansas with a special interest in the pandemic influenza, provides us with a chronicle of flu's emergence as a global health threat. He first skilfully guides the reader through the basic virology and pathogenesis of the human influenza viruses and describes how new strains can arise from the zoonotic reservoir. He goes on to detail how, during the 19th century, the growth of empires, the Industrial Revolution and the expansion of large cities connected by improved transportation links initially lead to the export of cholera from the Ganges Basin across the world. These developments in human society subsequently allowed the emergence of pandemic influenza. The Russian influenza pandemic of 1889 is described with little gems of detail, including how readers of the BMJ were urged to track the pandemic in real time as it swept the country. It was also during this pandemic that Richard Pfeifer postulated that *Haemophilus influenza* was the likely cause of flu.

In the description of the way Spanish flu repeatedly crossed the world between 1918 and 1920, I was struck by the scale of recent revisions to the numbers of people killed by this illness. Modern estimates now calculate that between 50 and 100 million died worldwide during this pandemic. Public health advice in the United States at that time included advising cabinet makers and carpenters to make coffins and recommended using street labourers to dig graves. Normal life was suspended as Spanish flu swept across America.

The book includes an entertaining account of how viral research in the 1920s was run by enthusiasts reliant on financial support from readers of The Field magazine, to investigate the cause of canine distemper that affected hunting dogs. The work of these early pioneers lead to the production of the first influenza vaccines, made using crude formaldehyde extracts of mice lungs. They eventually went on to develop vaccines with fewer side effects by culturing viruses in chick embryos.

The book describes the effectiveness of influenza surveillance and vaccination programmes, which have been used as the main stay of public health influenza strategies since the 1940s. By examining several major influenza outbreaks such as Asian flu (1957) and Hong Kong flu (1968), the author describes how influenza spread too fast to allow vaccination programmes to prevent pandemics. He cites occasions when authorities rushed into costly and, as it turned out, ineffective mass vaccination programmes. He cites one case when the wrong vaccine strain was used, leading to a man-made flu outbreak. He does, however, detail how the authorities in Hong Kong successfully contained a potentially highly deadly H5N1 bird flu outbreak, by a combination of closing live bird markets and mass slaughter of infected flocks. The book concludes with a warning that influenza is likely to outwit our efforts to prevent its regular emergence as a pandemic illness.

I found this book very engaging and well written. It has an extensive reference section for those wishing to explore the topic further. To increase the book's appeal in the competitive popular science market, I believe the text would have benefited from a dozen or so illustrations. As a more specialised reader, I also feel the book missed opportunities to explore some topics in more depth. For example the last chapter, which deals with the global flu H1N1 pandemic of 2009, is only ten pages long and since it is now over three years since H1N1 emerged as a pandemic virus, there is plenty of material on which to draw.

Dr Layth Alsaffar
Registered Trainee in Medical Microbiology
University Hospital of Wales, Cardiff

Atlas of Human Infectious Diseases

Heiman FL Wertheim, Peter Horby and John P Woodall (editors)
Wiley-Blackwell, 2012, £84.99, 280 pp
ISBN 978 1 40518 440 3

As a microbiologist, *The Atlas of Human Infectious Diseases* has become a prized addition to my collection of reference books. It provides an exceptional, quick and easy guide, not only for infectious diseases clinicians and microbiolologists, but for all those interested in studying the epidemiological patterns and clinical manifestations of infectious diseases, their management as well as prevention. The well-written text makes the book easily understandable for non-medical readers also.

The atlas is divided into five sections:

- infectious disease drivers
- bacterial infections
- fungal infections
- parasitic infections
- viral infections.

Within each section, diseases are arranged alphabetically, making the book very reader friendly. All the disease maps are arranged on the left-hand page with a factual and to-the-point summary of the disease on the right page, including modes of transmission, incubation periods, clinical features, management and prevention. Key references for each disease provide the reader with additional information, should the need arise. The book also provides a code to download the book easily, giving the reader access to an electronic version of the text and maps.

The maps provide much-needed epidemiological information about infectious diseases under one cover. Data has been collected from a range of authorities and sources, including the World Health Organization and the *Control of Communicable Diseases Manual*. For diseases where maps were not already available, a literature search strategy has been adopted to develop maps. The data on these maps have been meticulously collected and comprehensively displayed to provide an indispensible tool for epidemiologists and clinicians alike.

Almost immediately as one starts skimming through the book, one notices a pattern to disease distribution that is clearly reflected in the text on the adjacent page. The authors have attempted from the onset to clarify that the geographical patterns of infectious diseases is a dynamic and perpetually evolving

phenomenon and, bearing this in mind, the key environmental, economical and climatic factors that contribute to these changes have been addressed consistently throughout the book. The first section delivers an easy-to-understand and coherent look into the key elements that drive disease distribution including the effects of population, climate, vaccination, etc.

I would definitely recommend the book to anyone interested in, or working within the field of infectious diseases and public health, as an invaluable asset to their collection.

Dr Huma Changez
SpR Medical Microbiology
Cardiff, Wales

Opium: Reality's Dark Dream

Thomas Dormandy
Yale University Press, 2012, £25, 352 pp
ISBN 978 0 30017 532 5

I wasn't quite sure what to expect from this fairly hefty-looking account of opium by Thomas Dormandy. As it turns out, the book tells the story of opium literally through the ages, from pre-history to ancient Egypt, through the middle ages and industrial revolution, and right up to the present day.

It is obvious that Dormandy loves history, which comes across in the enthusiastic and thorough way that the story is told. Amongst the first few chapters is an interesting section on poppy cultivation and opium harvesting. Use of opium by the ancient Greeks, Romans, and Byzantines, and its role in the rise of Islam – and a hint of some of the medical advances that Islam brought with it – follow. The introduction of opium into Europe by the crusades gave its inhabitants another way to get intoxicated. At that time, "drunkenness was probably the customary state of humanity", as Dormandy puts it. Once established in Europe, opium started becoming available in a variety of forms, and Dormandy traces the background and consequences of each.

And so the book continues, with opium following tuberculosis around the world, medical procrastinations about whether it was a miracle or menace, and the growing influence of the British in the trading of opium. Indeed, the behaviour of the British with respect to opium and their treatment of, for example, the Chinese, with whom two 'opium wars' were fought, during the days of the Empire is laid bare and is quite shocking, though sadly not isolated.

The reader is then gradually brought up to date, via the isolation of morphine and the synthesis of heroin, the World Wars, the role of the CIA and the mafia, and the various attempts at effective control that rumble on to this day.

What is remarkable throughout is the influence on the very fabric of culture and society that opium has had, and indeed continues to have. Poets, politicians, leaders, composers, scientists, philosophers – you name it, they've taken it! What is also striking is the number of times throughout history that opium (and derived products) has been 'overlooked' in terms of control, because of the profitability of continued trade.

Dormandy's accounts of addiction through history are factual, but told in such a way that the desperation of the addict to be free of their fix is all too apparent. Dormandy's style of writing though, combined with small text, made the book hard to read in many places. The text is rich in quotes from books, letters and diaries, and in some places the extreme, almost obsessive detail, disrupts the reader's flow. Dates are plentiful, though I can't vouch for their absolute accuracy.

Despite the written style, the relatively short chapters provide a feeling of swift progression, and Dormandy writes with wit and genuine insight. It's not the kind of book I would class as 'easy' or 'light' reading, nor is it an academic reference. Stick with it though, and ultimately it is highly informative, interesting and a real eye-opener.

Dr Phillip Morgan
IDM Laboratory
Institute of Liver Studies
King's College Hospital, London

Endocrine update

The College hosted a joint meeting with the Association for Clinical Biochemistry on biochemical endocrinology in March. A balance of lectures and interactive teaching sessions provided many learning points to influence clinical and laboratory practice.

Thyroid function tests

Dr Graham Beastall began with an update on the work of the International Federation of Clinical Chemistry towards the standardisation of thyroid function tests (TFTs). Despite being part of routine laboratory services for over 30 years, method-dependent differences remain significant. Dr Beastall highlighted the impact this has on public confidence in the use of TFTs to diagnose and manage thyroid disease. Recalibration would improve concordance across methods, but alignment to the conventional reference measurement procedure for free T4 (fT4) would involve a significant shift in reported fT4 values.

Dr Julian Barth then asked 'What are abnormal TFTs?' and showed that nationwide variation in TSH reference intervals cannot be fully explained by differences in assay performance, and population values follow a remarkably similar distribution across multiple methods. Harmonisation of TSH reference ranges should therefore be achievable. However, the most clinically relevant upper-limit-of-normal remains controversial. The data suggested harmonisation of fT4 reference ranges is likely to be particularly challenging with current between-method differences.

Anti-Müllerian hormone (AMH)

Professor Richard Andersen gave an update on the clinical utility of measuring AMH in women. He explained that much of the evidence for its use stems from studies in assisted reproduction, and it is not yet certain whether AMH can fulfil its potential as the 'crystal ball' of female reproduction. AMH is an effective biochemical predictor of response to ovarian stimulation, and is also an independent marker for the overall success of assisted reproduction cycles. This has promoted its reputation as a marker of ovarian reserve, so it was interesting to note that high AMH levels are in fact linked to a delayed time to pregnancy in healthy young women, which may reflect patients with polycystic ovarian syndrome (PCOS). Furthermore, although there is a link between AMH and age at menopause, wide variability limits its use in predicting menopause for individuals. Improvements in assay performance will be required if AMH is to be used routinely in this area.

Vitamin D deficiency

Professors Bill Fraser and Naveed Sattar discussed some of the 'knowns' and 'unknowns' of vitamin D deficiency, emphasising the lack of convincing evidence for a causal role in many chronic diseases. Professor Fraser showed data demonstrating that parathyroid hormone (PTH) levels vary widely with vitamin D concentration, illustrating the problem of using PTH as a surrogate marker for vitamin D status. Vitamin D requests continue to increase and many are inappropriate.

Hyperandrogenism and PCOS

Dr Danielle Freedman led an interactive session on hyperandrogenism and PCOS. Diet and lifestyle should be considered the mainstay of treatment for PCOS, as illustrated by a case of markedly raised testosterone and hirsutism in a female, which improved dramatically following weight loss. We were reminded of the link between PCOS and hyperinsulinism, and that metformin can help regulate menstrual cycles.

Dr Claire Higham gave an update on the current best treatments for acromegaly, and pointed out the dependence on standardised growth hormone and IGF-1 assays for assessing response, with current changes to IGF-1 assays being a particular concern. There was an interactive session with Dr Kevin Deans and Dr Freedman presenting cases of ectopic ACTH-driven Cushing's syndrome and a case of primary hyperparathyroidism in pregnancy.

The day ended with a debate entitled: 'This house believes that the future of hormone measurements lies with tandem mass spectrometry, not immunoassay', with Dr Sandra Rainbow speaking in favour of, and Dr Richard Chapman against, this motion. Opinion in the room was almost equally split at the outset and remained so after two informative talks.

The meeting was an excellent update on current topics in biochemical endocrinology. The issues discussed highlighted the importance of assay performance in clinical decision-making and emphasised the role of the laboratory in guiding rational test requesting and in leading initiatives towards result harmonisation.

David Church and Olivia Bacon
Addenbrooke's Hospital

September 2013

Current Challenges in Primary Antibody Deficiencies

Thursday 5 September 2013

6 CPD credits

The aim of this symposia is to provide an update in the diagnosis (laboratory and clinical aspects) and management of primary antibody deficiency disorders, specific areas to be covered are specific antibody deficiency/pneumococcal vaccination used as a tool–interpretation of results plus common variable immunodeficiency (complications and management) aimed at clinical immunologist, consultants and trainees as well as clinical scientists in immunology.

Liver Biopsy in the Assessment of Medical Liver Disease

Monday 23 September 2013

5 CPD credits

This course will provide a practical diagnostic approach to reporting medical liver biopsies, focusing on the importance of clinico-pathological correlation in assessing common patterns of liver damage. Recommended for senior trainees in pathology and hepatology and consultant histopathologists and gastroenterologists who are regularly involved in liver biopsy assessment (without necessarily working in a liver unit).

October 2013

Genital Tract Pathology

Monday 14 – Tuesday 15 October 2013

10 CPD credits for the two day event

This course is aimed at histopathologists with an interest in urological or gynaecological pathology who wish to receive an update on the pathology of diseases affecting the male and female genital tract from recognized experts in these fields.

Conference Dinner - Monday 14 October from 5pm £30 per head, spaces are limited for this dinner so please book early. Bookings must be made when registering as part of the online conference booking process only.

Surgical Site Infections: An update

Friday 18 October 2013

5 CPD credits

This engaging and informative programme will progress during the day from providing an overview of surveillance systems for monitoring surgical site infection (SSI) to a review of the evidence for current SSI prevention strategies before moving on to examining current practice and challenges in managing infection related to individual surgical specialties. The aim is also to provide a focus on shaping future development in those various clinical areas. It is hoped that this programme will be of interest and relevance to the practice of microbiologists, infectious disease physicians and surgeons.

Molecular Pathology Conference

Wednesday 23 October 2013

6 CPD credits

This meeting will provide an update on the progress in molecular pathology across a wide range of areas of relevance to all members of the College, whatever their specialty. For the first time, it also provides an opportunity for members to present their own work as posters and short oral presentations.

November 2013

Science and Practice of Head and Neck Pathology

Wednesday 6 November 2013

6 CPD credits

This meeting will be of interest to trainees and to consultants who are interested in current concepts of the science and practice of head and neck pathology. A distinguished faculty of national and international experts will discuss topical issues in the first part of the day. The afternoon programme incorporates the Head and Neck Pathology EQA Review meeting; registrants for the meeting who are trainees or who are not EQA participants are welcome to attend this session as observers.

Dermatopathology Study Day

Friday 22 November 2013

5 CPD credits

The aim of this meeting is to provide an update in dermatopathology; the meeting will provide a practical guide in how to deal with lymphomas and there will be an update on some common skin tumours including a topical review of genetic aspects of melanoma. There will also be an update on newer inflammatory dermatoses.

Senior and Retired Fellows Luncheon

Wednesday 25 September 2013 from 12.30 pm

Invitations will shortly be automatically sent to all Fellows over the age of 60 and those registered as 'Retired', so please keep the date free if you wish to attend.

Conference application form and proforma invoice

Surname:..... Initials:..... Title:.....

Address:.....

.....

Postcode:..... Specialty:.....

Telephone:.....Fax:.....Email:.....

Place of employment (if different from above):.....

.....

Diet/special requirements:.....

2013 REGISTRATION FEES
Please tick appropriate registration fee. Concessions – Trainees, Students, Nurses, IBMS and Retired

2013 One-day events

Early bookings (one month prior to the event date)

Members/Fellows £205 ☐ Concessions £102 ☐ Non-members £255 ☐

Late bookings

Members/Fellows £225 ☐ Concessions £144 ☐ Non-members £275 ☐

2013 Two-day events

Early bookings (one month prior to the event date)

Members/Fellows £360 ☐ Concessions £185 ☐ Non-members £438 ☐

Late bookings

Members/Fellows £386 ☐ Concessions £206 ☐ Non-members £465 ☐

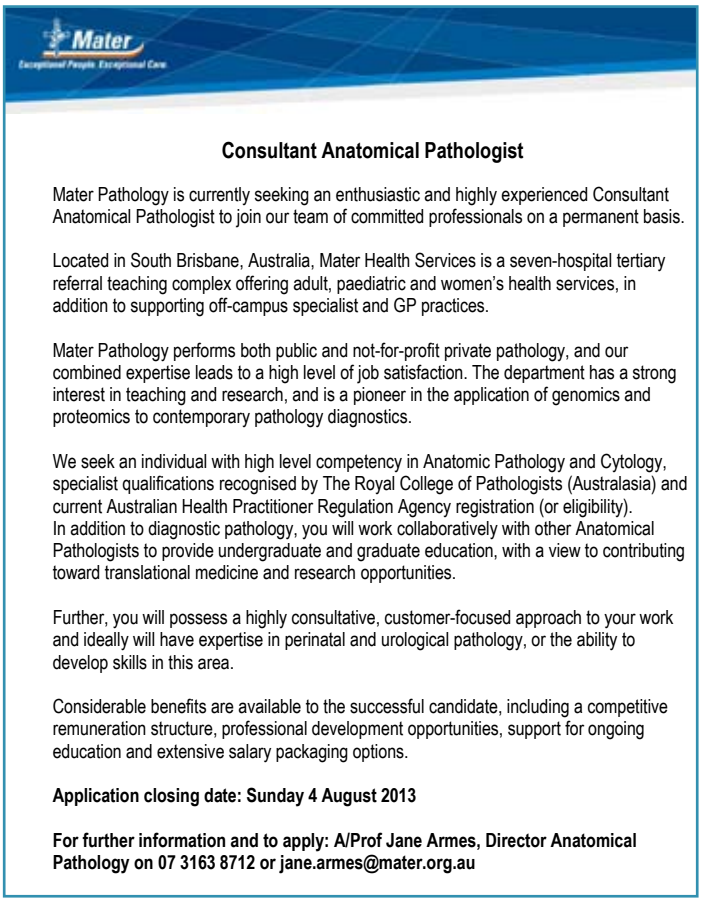
Conference title:.....

Total payment enclosed £.....

Cheques should be made payable to The Royal College of Pathologists – please note that cheques should be in £ sterling drawn on a UK bank. Cancellations are subject to a £20 administration charge. No refunds will be made for cancellations notified within seven days of the event, but substitute delegates will be accepted at any time.

Please note
If you are forwarding a copy of this application form to your finance department for payment, please ensure a copy is faxed to the College's Conference Department on 020 7451 6702 to reserve your place and that they quote the title of the conference and your full name on all cheques or payment advice slips.

Please copy and return this form to:
Conference Department, The Royal College of Pathologists, 2 Carlton House Terrace, London, SW1Y 5AF. Tel 020 7451 6715; Fax: 020 7451 6702; email: meetings@rcpath.org



Mater

Exceptional People. Exceptional Care.

Consultant Anatomical Pathologist

Mater Pathology is currently seeking an enthusiastic and highly experienced Consultant Anatomical Pathologist to join our team of committed professionals on a permanent basis.

Located in South Brisbane, Australia, Mater Health Services is a seven-hospital tertiary referral teaching complex offering adult, paediatric and women's health services, in addition to supporting off-campus specialist and GP practices.

Mater Pathology performs both public and not-for-profit private pathology, and our combined expertise leads to a high level of job satisfaction. The department has a strong interest in teaching and research, and is a pioneer in the application of genomics and proteomics to contemporary pathology diagnostics.

We seek an individual with high level competency in Anatomic Pathology and Cytology, specialist qualifications recognised by The Royal College of Pathologists (Australasia) and current Australian Health Practitioner Regulation Agency registration (or eligibility).
In addition to diagnostic pathology, you will work collaboratively with other Anatomical Pathologists to provide undergraduate and graduate education, with a view to contributing toward translational medicine and research opportunities.

Further, you will possess a highly consultative, customer-focused approach to your work and ideally will have expertise in perinatal and urological pathology, or the ability to develop skills in this area.

Considerable benefits are available to the successful candidate, including a competitive remuneration structure, professional development opportunities, support for ongoing education and extensive salary packaging options.

Application closing date: Sunday 4 August 2013

For further information and to apply: A/Prof Jane Armes, Director Anatomical Pathology on 07 3163 8712 or jane.armes@mater.org.au

For more listings, see our website at www.rcpath.org/conferences and click on 'External conferences'.

If you would like to advertise a course or service in this section (free of charge), please email brief details to **publications@rcpath.org by 2 August 2013, for publication in the October 2013 issue.**

Techniques and Applications of Molecular Biology: A Course for Medical Practitioners
15–18 July 2013, Warwick
For details please email Charlotte.Moonan@warwick.ac.uk or visit www.warwick.ac.uk/go/lifescienceshortcourses).

6th International Conference on Colonic Spirochaetal Infections in Animals and Humans
5–6 September 2013, Guildford
For details please visit www.surrey.ac.uk/spirochaetes2013

Histopathology Of The Bone Marrow
20 September 2013, London
For details please visit www1.imperial.ac.uk/medicine/teaching/postgraduate/shortcourses/courses_haemo/

The following events are organised by Euroscicon. There are discounts of 20% off the registration fee for College members, using the code RCPAT20, for all meetings. All Euroscicon meetings have CPD accreditation.

The 2013 three Rs Event: Toll like receptors (TLRs),RIG-like receptors (RLRs) and Nod-like receptors (NLR)
19 Sept 2013, London
www.regonline.co.uk/TOLL2012

Pseudotype viruses – applications and troubleshooting
2 October 2013, Stevenage
www.regonline.co.uk/pseuVirus2013

Analysis of autophagy regulation: Discussion of recent research and new technologies
3 October 2013, Stevenage
www.regonline.co.uk/autophagy2013

Cell Cycle Analysis: best practice, better technology and clean results
4 October 2013, Stevenage
www.regonline.co.uk/cellcycle2013

In Situ Hybridisation Symposium 2013
10 October 2013, Stevenage
www.regonline.co.uk/insitu2013

The 4th Improving Immunohistochemistry Discussion Forum
11 October 2013, Stevenage
www.regonline.co.uk/IHC2013

The Immunology of a successful pregnancy
16 October 2013, Stevenage
www.regonline.co.uk/ImmPreg2013

Biomarkers for a successful pregnancy
17 October 2013, Stevenage
www.regonline.co.uk/BiomarkPregnanct2013

Gestational diseases and disorders in pregnancy: prevention, identification, treatment and control
18 October 2013, Stevenage
www.regonline.co.uk/gestation2013

Exploiting bacteriophages for bioscience, biotechnology and medicine (the 5th in a biennial series)
23 January 2014, London
www.regonline.co.uk/bacteriophage2014

CPD credits for *Bulletin* articles

Want to write an article for the *Bulletin*?

You can claim 4 CPD credits for writing a previously unpublished article that is subsequently published in the *Bulletin*. The article should be a minimum of 1500 words. Please upload a copy of the article to your online CPD portfolio as evidence of the activity.

For further information regarding CPD, please contact Shane Johns on cpd@rcpath.org or 020 7451 6732/5

Association of Clinical Pathologists

27th ACP Management Course

run by pathologists for pathologists

4–6 September 2013

Hardwick Hall Hotel, Sedgefield, County Durham

This is a wide ranging, residential, 3 day course introducing management issues relevant to the running of a modern pathology service. It is intended for specialist registrars and trainees in pathology in their final year of training, clinical scientists and those who have held their first consultant post for less than 2 years.

Course organisers: Dr Gavin Spickett, Dr Helen Bourne and Dr Catherine Stroud.

The course will address the following subject areas:

- The NHS reforms
- Funding and structure of the NHS
- Clinical governance
- Role of PCTs, SHAs
- Financial management
- Business planning
- Demand management
- Managing staff
- Appraisal, job planning and revalidation
- Self management
- Future organisation of pathology services in the UK

Course fee is £595.00 for ACP members and £620.00 for non members. This includes a pre-course folder, course information handbook, en suite accommodation, all meals, refreshments and course dinner. The hotel is set in the grounds of an 18th century country park. The 2012 course was heavily oversubscribed so early application is encouraged.
Full details from Paulene Horrocks, Association of Clinical Pathologists, Tel: 01273 775700 Fax: 01273 773303
Email: office@pathologists.org.uk, Application form: www.pathologists.org.uk

Laboratory Haematology: preparing for the FRCPath examination

Thursday 17 October 2013

The Royal College of Pathologists, London, SW1 5AF

This one day meeting is aimed at trainees who are preparing for the FRCPath examination. It covers all the areas of laboratory practice that have been identified as having been answered poorly by previous candidates. Topics include morphology, immunophenotyping, quality control, quality assurance and laboratory accreditation, automated haematology , principles and types of coagulation assays, neonatal transfusion and transfusion safety.

Registration fees
ACP Trainees: Free of Charge
Non ACP Trainees: £50

For further information and a registration form please visit our website:
www.pathologists.org.uk
Telephone: 01273 775700
E-mail: info@pathologists.org.uk

Connect with the College on Twitter, Facebook and Linkedin!

Tweet us!

If you are on Twitter you can follow us @RCPath, where you can find out all the latest news from the College, as well as being able to send us your feedback and suggestions on any area of College life.

Link up on LinkedIn

Our overseas members can link up and share conversations, ideas and experiences on the College Linkedin profile at www.linkedin.com/in/globalpathology

Like us on Facebook

We're also on Facebook at ww.facebook.com/NPWUK. Aimed mainly at the public, our Facebook page posts updates about the College's Public Engagement work programme, daily news articles about pathology, quirky stories from the world of science and even what pathology-related programmes are going to be on TV!

Legacies

The objectives of the College are to advance the science and practice of pathology, to educate the public in matters relating to pathology and to promote study and research work in pathology and related subjects and publish the result of such study and research. Financially, the College aims to match activities to projected income. The College is funded from subscriptions, examinations and related fees, investment income, grants from outside bodies and charitable donations.

Bequests or legacies are always gratefully received. Leaving a gift to charity in your will is a very special way of helping to secure the future for organisations such as The Royal College of Pathologists. Legacies to the College have the added benefit of being exempt from inheritance tax. An open legacy may be made toward the general purposes of the College. This is preferred because it allows the College to apply the funds donated where the need is greatest at the time the legacy eventually becomes available. This can be quite different from the perceived need when a will is made. However, you may legally oblige the College to spend the money in a particular area of College work or for a specific purpose by making a restricted legacy.

The College undertakes many educational initiatives. We are actively developing an outreach programme that will spread the awareness of pathology throughout the UK and abroad. This includes the successful National Pathology Week that we have run for the last three years, which will be developed into National Pathology Year for 2012, the College's 50th anniversary.

No other UK college has committed so much to the future of our profession in terms of time and resources. This will begin to promote the importance of pathology to the grass roots of this country through schools, colleges, hospitals and many other sites where the general public can have access to important healthcare information. If we are to safeguard the future of our profession in the face of increasing competition from other medical and science career opportunities, it is vital that we commit ourselves to the promotion and awareness of pathology, and continue to train our young professionals to the very highest standards.

This public engagement programme will require financial support from the College for many years to come and we hope very much that we can build upon the tremendous support you have already given and ask if you would consider leaving a legacy.

Additions to your existing will can be made using a 'Form of codicil', printed on the following page. Please note that witnesses should be present when you sign the form, but it should not be witnessed by a College member or the spouse of a College member. As a general point, we always recommend consulting a solicitor or qualified will-writer before making a will; they should give you all the legal and tax advice that you require.

If you are considering including a legacy to the College in your will, we would very much appreciate being informed of your generous act. To inform us of your bequest or for specific advice on legacies to the College, please contact me.

Daniel Ross
Chief Executive
020 7451 6789
daniel.ross@rcpath.org

Form of codicil

(Please photocopy and complete in block capitals)

I .....(name) of .... (address) declare this to be a Codicil which I make this ..... day of ..... 20..... to my Will which bears the date ..... day of .....(month) .....(year).

I give to The Royal College of Pathologists ('the College'), registered charity number 261035, the sum of £..... (amount in words) ..... free of all taxes whether payable in the United Kingdom or in countries overseas for the general purposes of the College and I declare that the receipt of the Honorary Treasurer for the time being of the College shall be sufficient discharge to my executors.

In all other respects I confirm my said Will. In Witness thereof I have hereunto set my hand the day and year first written above.

Signed by the Testator/rix: ..... (signature) as a Codicil to his/her last Will in our joint presence and by us in his/hers.

FIRST WITNESS: .... (signature of first witness)

Name and address: .....

.....

.....

SECOND WITNESS: ..... (signature of second witness)

Name and address: .....

.....

.....

Pathological Society of Great Britain and Ireland

The Pathological Society of Great Britain and Ireland offers several grant schemes, namely:

EDUCATIONAL GRANTS	**DEADLINES**
Bursaries for undergraduate elective or vacation studies	28 February and 31 May
Educational Grant	1 April & 1 October
Intercalated Degree	31 March
Seminars for Students	1 June & 1 December
RESEARCH GRANTS	
Career Development Fellowship	1 April
Equipment Scheme	1 April & 1 October
International Collaborative Award	1 October
Pathological Society/Jean Shanks Foundation Pathological Research Training Fellowship	1 October 2013
PhD Studentship	1 November
Sino-European Collaborative Award	1 October
Small Grants	1 April & 1 October
Visiting Fellowships	1 April & 1 October
OTHER GRANTS	
Open Scheme	1 March, 1 June, 1 September & 1 December
Pathological Society Meetings Bursaries	1 June & 1 November
Public Engagement	1 March, 1 June, 1 September & 1 December
Travel & Conference Bursaries	Open

Full details are available on our website: www.pathsoc.org or from:
Miss Julie Johnstone, Deputy Administrator, Pathological Society of Great Britain and Ireland
julie@pathsoc.org

Pathological Society of Great Britain and Ireland forthcoming meetings

Pathological Society Winter School

13–17 January 2014

Holiday Inn, Kings Cross/Bloomsbury, London

Further information available from Joint Meeting website www.path.org.uk

Surgical Site Infections: An Update

Friday 18 October 2013

Organised by Dr Prema Singh
5 CPD credits

To be held at
The Royal College of Pathologists
2 Carlton House Terrace
London SW1Y 5AF

This engaging and informative programme will progress during the day from providing an overview of surveillance systems for monitoring surgical site infection (SSI) to a review of the evidence for current SSI prevention strategies before moving on to examining current practice and challenges in managing infection related to individual surgical specialties. The aim is also to provide a focus on shaping future development in those various clinical areas. It is hoped that this programme will be of interest and relevance to the practice of Microbiologists, Infectious Disease Physicians and Surgeons.

Early/online bookings*

RCPath Members/fellows £205

Concessions £102 (Trainees, Nurses, Retired, Students)

Non-members £255

Regular bookings - * Early booking discount

RCPath Members/fellows £225

Concessions £144

Non-members £275

** Early booking – one month prior to event date*

Book online at
www.rcpath.org/meetings/book-now
Or contact Conference Department
Tel 020 7451 6715
Email meetings@rcpath.org

09.00	Coffee and registration
	Chairpersons: Dr Prema Singh/Dr Jane Stockley
09.30	Welcome and opening remarks **Dr Prema Singh**
09.35	SSI Surveillance – principles, practice and problems **Dr Jennie Wilson**
10.15	Preventing SSIs – review of the evidence **Professor Stephan Harbarth**
10.55	Refreshments
11.20	Vascular surgical infections – current challenges **Professor Mo Baguneid**
12.00	Microbiological aspects and Endograft infection database **Dr Barbara Isalska**
12.40	Panel discussion **Dr Prema Singh/Dr Jane Stockley**
13.00	Lunch
	Chairpersons: Professor Kate Gould/Dr Barbara Isalska
14.00	Infections in colorectal surgery **Mr Janindra Warusavitarne**
14.30	Neurosurgical infections – approaches in management **Professor Roger Bayston**
15.00	Refreshments
15.30	Prosthetic joint infections – recent developments **Professor Andrej Trampuz**
16.00	Breast implant infections **Mr Joe O'Donoghue**
16.30	Panel discussion **Professor Kate Gould/Dr Barbara Isalska**
16.45	Summary and closing remarks **Dr Prema Singh**
17.00	Close

The Royal College of Pathologists
Pathology: the science behind the cure

A photographer will be taking pictures during this event of speakers and delegates throughout the day – if you have any objections to this please contact the Conference Team on meetings@rcpath.org