Undergraduate and Foundation Education Strategy

Background
Knowing the scientific basis of disease and disease processes is fundamental to effectively and safely diagnosing and treating patients. However, current arrangements for undergraduate medical teaching do not necessarily expose medical undergraduates to pathology as a potential and attractive career option, nor to potential consultant role models in pathology. In addition, although there are some “taster” and placement opportunities available for foundation trainees in some specialties in pathology, there are relatively few of these and they do not necessarily have transparent and clear learning outcomes. At present, there are widespread shortages of consultants in all pathology disciplines. Whilst this is likely to worsen over the next few years due to retirements, this is an exciting time to join pathology because we are on the verge of new technology and there is also an increasing capacity for new consultants.

One of the key elements of the RCPath’s Strategy is its mission to Promote excellence and advance knowledge in pathology practice. The College therefore clearly has a strong interest in the teaching of pathology to medical undergraduates and foundation trainees. In 2014 the College undertook an extensive exercise to define what should be included in a pathology curriculum for medical undergraduates. This process, led by the first RCPath Undergraduate Lead, used Delphi techniques to establish a strong consensus about the core items of the pathology curriculum using a panel involving approximately 150 pathologists. This curriculum is published on the College website and was launched with an event held in London in September 2014. Since then the curriculum has been circulated to all medical schools in the hope that this would lead to increased standardisation of the teaching of pathology curriculum across the UK. In addition, since 2014 the RCPath has hosted along with the Pathological Society, the British Division of International Academy of Pathology (BDIAP), the Association of Clinical Pathologists (ACP), the British Society for Haematology (BSH), the British Infection Association (BIA) and the British Neuropathological Society (BNS) have sponsored an annual pathology summer school. This remains an on-going opportunity to engage with medical undergraduates across the UK. It receives excellent feedback and enables a lively interaction between medical students interested in what pathologists do, and practising trainees and consultants across the UK, working in all pathology specialties. The summer school is usually oversubscribed and feedback from these programmes has been overwhelmingly positive. Finally, an undergraduate RCPath membership category was introduced in 2014 and currently has over 400 members. It is offered to all Summer School attendees and information about it is available on the College website.

The changes to medical training suggested in the Greenaway report on the Shape of Training, suggest that developments in the frameworks for undergraduate and postgraduate medical education will need to be coordinated. With the expansion in both the number of medical school places and the number of medical schools in the UK, as well as the introduction of the GMC’s MLA in 2022, review and curriculum redesign of undergraduate curricula are likely to take place, providing the opportunity for consideration of the role of formal pathology teaching. There are also possible synergies between undergraduate education in the medical, dental, scientific and veterinary areas and other healthcare professional groups.
Finally, the Foundation Curriculum for F1 and F2 trainees was updated in 2016 and is likely to require further review and updating in light of the *Outcomes for Undergraduates (2018, Shape of Training)* and the introduction of the GMC’s *General Professional Capabilities Framework*. This may provide important opportunities to promote a more structured approach to pathology learning and experience during foundation, either through tasters or longer attachments across the pathology specialities.

**Purpose of the Strategy**
The purpose of this strategy is to, within the context of the College’s Strategy 2018 - 2021, promote interest, learning, research and experience in the pathology specialties to undergraduate and foundation trainees in the UK.

**Aims of the Strategy**
This strategy is designed to support undergraduate and foundation trainees to ensure that they

- develop a solid and comprehensive scientific understanding of the underlying pathological processes of disease
- are provided with role models and mentors to better understand the work and contribution of pathologists to patient care and outcomes
- have opportunity to be inspired by the work of pathologists
- understand the range and choice of careers offered through the pathology specialities and consider these carefully as future career options
- increase the number of doctors applying for and being appointed to pathology training programmes.

**Strategic Approach**
There are 3 key activities which will underpin this strategy

1. *Influencing key stakeholders*

In order to explore the College’s concerns over undergraduate and foundation training in pathology the President of the RCPath and the Vice President (Learning) will seek to engage directly with

- the GMC
- Medical School Council of Deans and
- Conference of Postgraduate Medical Deans
- Academy of Medical Royal Colleges


The College already has a strong track record in producing e-learning resources. It has

- coordinated the production of over 20 learning modules for the e-Learning for Healthcare website. ([https://www.e-lfh.org.uk/](https://www.e-lfh.org.uk/))
- produced an e-learning resource digitising the historic collection of specimens at the Gordon Museum in London with audiovisual podcasts narrated by members of the College. This digital collection is housed at a stand-alone website ([http://www.e-pathpots.org.uk/](http://www.e-pathpots.org.uk/)) and has proved a very popular and useful resource for medical undergraduates.
- a College membership which includes members from all the pathology disciplines and has a suitable infrastructure which enables the college to recruit members from those disciplines to produce educational resources.
- Identified resource and expertise to provide leadership in developing eLearning resources to support the teaching of and independent learning of pathology, based on the RCPath’s undergraduate curriculum.

Further, this strategy will take into account the many specialty based undergraduate curricula that have been designed around integrated problem-based learning, enabling students to have a definitive source of information about pathology processes that they can refer to when working
through their problem-based exercises. The e-learning aspects of this strategy should also help to avoid much duplication in the development of resources at individual medical schools in the UK, providing them with a rich resource which they can integrate into their own programmes of teaching.

Finally, it is anticipated that this strategy will support learning for the General Medical Council’s Medical Licensing Assessment (MLA) in 2022, which all medical undergraduates will need pass in order to register with the GMC. It is anticipated that one element of the MLA will be an applied knowledge-based assessment (MCQs) - which is highly likely to contain pathology as an explicit component - and the other an assessment of clinical and professional skills (through OSCEs).

3. Leadership and Communication

Three Joint Undergraduate/Foundation Leads have recently been appointed by the College. Together with the Vice-President (Learning) they will be responsible for:

- supporting the implementation and co-ordination of this Undergraduate/Foundation Education Strategy
- providing leadership and strategic development for Undergraduate/Foundation educational activities in the pathology specialties
- keeping up to date with changes in medical, dental, veterinary and scientific training and standards, and providing advice accordingly
- working closely with other relevant post-holders to support the development and implementation of this strategy.

To facilitate this work, each of the Joint Undergraduate/Foundation Leads will have a focus and responsibility on a particular aspect of the work and provide leadership, expertise and communication in one of the following areas:

**Undergraduate/Foundation Lead (Education)**
- during 2019 ensuring that the undergraduate medical curriculum remains fit for purpose through formal review of the 2014 curriculum, including a content review, mapping to the GMC’s *Outcome for Graduates* (2018) and *Generic Professional Capabilities Framework*, alignment of the undergraduate curriculum with the new postgraduate pathology curricula (e.g. outcomes based) and the Greenaway Report.
- open discussions with the GMC about formal recognition of the undergraduate curriculum and its role in undergraduate curricula.
- involvement in discussions around the assessment of pathology in the MLA on behalf of the RCPath.
- develop and sustain a network of undergraduate educators in pathology across the UK to support the objectives of the College.
- develop and implement a programme of engagement with undergraduate members of the College.
- support the development of the e-learning programme being designed to provide learning mapped to the undergraduate curriculum.
- work with the non-medical pathology specialties to assist with the development of undergraduate curricula, as appropriate.

**Undergraduate/Foundation Lead (Engagement)**
- agree the Summer School timetable with associated societies, across the range of medical pathology specialties, developing and expanding the event and ensuring appropriate College engagement.
- working with other professional organisations, reviewing with them their undergraduate activities and develop these relationships with respect to undergraduate/foundation training, identifying synergies with the RCPath.
- develop a wide programme of undergraduate activities.
• develop and implement a programme of engagement with undergraduate members of the College.
• wider communications, e.g. through social media and advising on the material for inclusion on the College website material.
• develop increased awareness of the pathology specialties in those graduating from UK medical schools and foundation training, in order to facilitate a culture of increased cooperative working with pathologists, and increased popularity of the specialties in career aspirations.

Undergraduate/Foundation Lead (Foundation)
• undertake a survey on the availability of:
  ▪ tasters in pathology
  ▪ placements of 1 week or more in the pathology specialties.
• analysis of findings and action plan to increase development/uptake.
• coordination of available foundation taster/placements
• review and revision of previous RCPath guidance on pathology foundation placements
• involvement in Foundation Curriculum on behalf of the RCPath.
• foundation trainer network.