A new joint training programme in infectious diseases and medical microbiology

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ABSTRACT **The increasing overlap between the disciplines of medical microbiology and infectious diseases prompted the Joint Royal Colleges Committee on Infection and Tropical Medicine to set up a working party to examine how trainees could obtain certification in both subjects. Following widespread consultations, a scheme was developed that entails six years of training and leads to the award of CCSTs in both microbiology and infectious diseases. Both Royal Colleges and the Specialist Training Authority have approved the scheme. Joint training will be demanding and will not be suitable for everyone; it represents an alternative approach to training in the infection disciplines that will run alongside the existing monospecialty training programmes.**

Although 'fever hospitals' were commonplace during the 19th century, the introduction of antibiotics led to a widespread view that infection was largely conquered: indeed, during the period 1950–1965 there was little emphasis on the specialties of medical microbiology, and in particular infectious diseases, in British medical practice. However, towards the end of the 1960s it became evident that this optimism was premature: not only was antibiotic resistance already beginning to emerge, but 'new' diseases such as legionellosis, and later of course AIDS and many others, provided considerable grounds for concern.

During the last ten years there has been much debate on how we should train doctors with special expertise in the diagnosis and treatment of infection, better to reflect the changing priorities in this fast-moving field. In 1990 a Joint Working Party of the UK Royal Colleges of Physicians and Pathologists was set up to report on training in infectious diseases[1]. Among their recommendations were:

- That infectious diseases teams should be established in every health district, and that these teams should consist of medical microbiologists, infectious diseases (ID) specialists, and infection control doctors
- That academic units in infectious diseases and microbiology should be created and expanded
- That ID physicians 'will be expected to gain experience' in medical microbiology, and that microbiologists 'should consider' a clinical post in infectious diseases, general medicine, paediatrics, sexually transmitted diseases or tropical infections.

It was becoming increasingly clear that there was a growing overlap between clinical microbiology and infectious diseases, and that many doctors who wished to practise in that environment were willing to obtain the necessary skills to do so. This, then, was the background that led to the Royal Colleges, by now represented by a single Joint Committee on Infection and Tropical Medicine, to look once again at training in infection related disciplines.

The existing model

Traditionally, microbiology has been a specialty overseen by the Royal College of Pathologists. It was seen as a laboratory based discipline, and technical skills which were a key component of the previous final practical examination are still acquired through relevant training and experience and are tested at the current Part 1 practical MRCPath examination. Clinical skills in managing individual patients with infection, and infection control practice, are now at the core of training and career grade microbiology posts. Microbiologists can go on to practise in hospitals as National Health Service consultants, as academics or in industry. In addition, some specialists in public health medicine who are practising as consultants in Communicable Disease Control (CCDC), and as regional epidemiologists in the UK, will have come from amongst those doctors trained initially in medical microbiology and are identified as such on the GMC Specialist Register.

In contrast, the infectious diseases track was overseen by the Royal College of Physicians, and has been regarded as the 'bedside' specialty. ID doctors could finish up working in clinical practice, academia or industry, and a small number would specialise in tropical medicine.

The Joint RCP/RCPath Committee in Infectious Diseases and Tropical Medicine recognised that there was increasing pressure from clinicians to provide a training course that would allow them to qualify in both medical microbiology and infectious diseases, and the committee therefore established a working party to take this forward. Following extensive discussion with many branches of the profession,

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Key Points

- The overlap between infectious diseases and medical microbiology has been increasing
- Many trainees and supervisors were keen to see a training programme that would lead to joint certification in infectious diseases and medical microbiology
- A new six-year scheme has been developed, with the approval of both Royal Colleges and the STA
- The scheme results in the award of two CCSTs
- Joint training will run alongside existing monospecialty training programmes

a scheme was developed, approved by both Royal Colleges and submitted to the Special Training Authority for consideration. The scheme was approved in August 1999, and the purpose of this paper is to describe how it will operate. The complete document describing the scheme is available from the JCHMT office at the Royal College of Physicians and from the Royal College of Pathologists.

The new joint training scheme

Principle

The purpose of this scheme is to allow trainees to obtain a CCST in both medical microbiology and infectious diseases. It is important to recognise that this is NOT a 'new' CCST in some hybrid specialty: the two CCSTs are exactly the same as those that would be gained by single-specialty certification, and the eligibility requirements are identical.

Table 1. How the proposed combined training aligns with existing monospecialty programmes.

Infectious diseases track	Combined training track	Microbiology track
Yes	**Year 1** Laboratory Medical microbiology	Yes
	Year 2 6 months medical microbiology 6 months virology	Yes
Yes	**Year 3** Clinical infectious diseases	
Yes	**Year 4** Clinical infectious diseases	
Yes	**Year 5** Clinical/lab project	Yes
Yes	**Year 6** 6 months microbiology 6 months infectious diseases	Yes

Obviously then, trainees opting for this route will recognise that the demands are considerable and that the time needed to obtain the necessary experience will be longer than that needed for single specialty certification. We anticipate that a minimum of six years will be needed, although in individual cases it may be longer.

Details of the programme

Details of the programme are available from the JCHMT; an outline of the scheme is shown in Table 1. In brief, the entry requirements will be two years of general professional training, with at least 18 months of direct experience of acute medicine including six months of the care of unselected emergencies. Trainees will also need to have passed the MRCP(UK). Some experience of an infection-related discipline will be advantageous, but not essential.

The first two years are mainly concerned with training in microbiology. They will probably be largely laboratory based, and trainees will learn the basics of laboratory safety and practice, and methods of microbial identification. They will also spend six months studying virology. Years 3 and 4 focus primarily on clinical infectious diseases. Trainees will need to spend significant periods gaining experience of the management of acute community acquired infections, and in addition will begin to acquire experience in at least some of the specialist areas such as HIV medicine or ICU consulting. Year 5 is designed to accommodate the requirements for the MRCPath, which asks for a period of relevant research in the form of a dissertation or laboratory project. This year offers considerable flexibility, especially for trainees who wish to undertake a higher degree. Finally, the sixth year is intended to 'plug the gaps'. Six months will be spent in microbiological work and six months in a clinical field, the intention being that trainees and their supervisors will, wherever possible, be able to plan this period to ensure that a complete spectrum of experience has been obtained and consolidated.

Although this six year programme sets out a framework for completion of the dual accreditation process it is not intended to be restrictive. For instance, the order in which the experience is gained can be varied, and indeed, it may be appropriate for some trainees to spend longer than six years in training.

At the end of training, trainees will be eligible for a CCST in both medical microbiology and virology, and in infectious diseases. They will be in possession of both MRCP and MRCPath (providing they have passed the examinations!), and, if they chose to do so, a higher degree. It should be noted that they will not have a CCST in general (internal) medicine. There is no theoretical reason why they should not do the additional training required to obtain this, but it will lengthen the training by about 18 months, and doctors who wished to do this would need to make individual arrangements with the local postgraduate dean.

Process

We anticipate that regions that are interested in offering these schemes and that have the necessary local expertise at consultant level will establish complete rotations, and that these will be advertised as such. No new NTNs have been created to support this programme: rotations will need to be developed within existing resources. It should be emphasised that this joint training programme is not intended to replace existing 'monospecialty' training in microbiology or in infectious diseases. It will still be possible to train in either alone, and the joint training track simply represents an alternative option. So far as 'retrospective' recognition is concerned (i.e. asking for time spent previously in posts approved for single specialty training to be recognised for the dual training track), our present understanding is that this is unlikely to be approved, although trainees will need to discuss their case with their training supervisors and the local postgraduate dean, and with the Royal Colleges.

The future

This joint training track is not for everyone. It will be rigorous and demanding, and it will take longer than monospecialty training. We do not know at this stage if there will be a 'market' for these trainees: only time will tell. What is clear, however, is that there is much enthusiasm for this approach, both amongst trainees and supervisors. It is just one possible way forward for a training in infection, but we believe that it is responsive to changes that are taking place in the delivery of health care and we are hopeful that it will prove to be the basis of an exciting and challenging career in medicine, and will also represent an improvement in care for our patients.

Acknowledgements

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References

1 Training in Infectious Diseases. Report of a joint working party of the Royal College of Physicians and the Royal College of Pathologists. *J R Coll Physicians Lond* 1990; **24**:161–6.

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