Working as a pathologist

New Zealand pathologists talk about the reality of working within this field

Why did you choose pathology and what do you like most?

Pathology is stimulating and challenging since it involves solving puzzles. The specialty incorporates aspects of many other fields in medicine and presents opportunities for teaching and research. On-call requirements are minimal and working hours are reasonably flexible.

What strengths and abilities make a good pathologist?

You need to have thorough knowledge and understanding of the underlying academic material. An excellent eye and discerning memory are important in anatomical pathology, which is very much a visual specialty reliant upon good attention to detail. You should be logical and methodical in your work and you need to be decisive – this is not the specialty for fence-sitters. It is important to be able to work independently and as part of a team.

As a specialist, can you describe a typical day?

Common to all subspecialty areas in anatomical pathology are the activities of making a diagnosis, communicating the findings to clinical colleagues and offering advice on prognosis. Morphological subspecialties involve interpreting changes in organs and tissues, both macroscopically and microscopically. Opportunities exist in all areas of pathology to make important contributions to knowledge of diseases. Subspecialty areas may involve the following activities:

Microbiology

One clinical microbiologist describes his job as having three facets: the patient, the microbe and the antimicrobial regimen. It is possible to take a specific interest in any one aspect - if you focus on the patient you will liaise with infectious disease physicians, if you focus on the microbe you will work with laboratory scientists, molecular biologists and laboratory technologists, if you focus on the antimicrobial treatment you will work with clinical pharmacologists. How each day is spent depends on your particular interests, but most clinical microbiologists deal with a combination of all three of these aspects.

Chemical Pathology

Tests in chemical pathology are generally performed by scientists, technologists or technicians using highly automated equipment. The role of the chemical pathologist is to ensure that the appropriate tests are done, that they are carried out accurately and that the results are correctly interpreted. Chemical pathologists liaise between the laboratory and the clinic. All trainees are required to undertake laboratory work during training and many choose to spend time on laboratory-based research towards an MD or PhD. There is also a clinical component to training, and some trainees work towards additional clinical qualifications, usually in internal medicine or paediatrics but sometimes in gynaecology or surgery.

Chemical pathologists are removed from the front line of medicine - they are doctors' doctors rather than patients' doctors. This allows for considerable flexibility and has enabled many chemical pathologists to take a broader role in laboratory management and information technology.

Haematology

Haematology is a specialty that interfaces with many others, so requires good consultation and communication skills. Much of the work revolves around interpreting automated laboratory results and reviewing blood film morphology. Sometimes a diagnosis will be apparent from the blood film, but otherwise it becomes necessary to consult with medical staff with regard to organising and performing appropriate laboratory testing. You may be needed to sort out difficult bleeding or coagulation problems for surgeons, advise on anticoagulant management, or treat patients with inherited bleeding disorders. Haematological oncology involves diagnosing lymphoma or leukaemia, discussing the diagnosis with the patient and prescribing treatment.

One of the most rewarding aspects of the joint clinical and laboratory training programme in haematology is that it provides the opportunity to see a patient in the ward or outpatient setting, make a clinical diagnosis, and then confirm or refute that diagnosis when you return to the laboratory. It is possible to undertake pathology-only training in haematology. Specialists who do not relish the clinical side can develop special expertise in transfusion medicine or immerse themselves in the world of diagnosis, working more closely with laboratory scientists, molecular biologists and cytogeneticists. (For further information please refer to the 'Haematology' section under 'Internal Medicine.')

Anatomical Pathology

One histopathologist described his day as a combination of cutting up specimens, deciding which items to sample, reporting results, attending meetings and making occasional visits to operating theatres. In addition the role may involve performing and diagnosing fine needle aspiration cytology, and carrying out post-mortem examinations (both hospital and forensic).

What do you think are the future challenges of pathology?

There is expected to be an increase in the role of molecular biology, with new diagnostic tests becoming available. It is probable that there will be an increase in population screening for early disease detection. As technology advances, medico-legal issues are likely to become more prominent.

What advice would you give someone thinking about a career in pathology?

All the pathology registrars and consultants surveyed highly recommend this specialty, although they emphasise that it is necessary to have aptitude for this kind of work.

What are future opportunities in pathology?

There are significant job opportunities in laboratories, and workforce projections are excellent in New Zealand, Australia and the United Kingdom.

What is the work/life balance like?

The College does not specify a maximum length of training, so training can be deferred if necessary. Job-shares are possible for specialists who wish to work part time, but may be difficult to arrange.

The hours are much better than for many specialties so the impact on family life for a consultant is not unreasonable. The training period, however, is demanding - pathology is a highly academic specialty with significant study requirements.

What are the disadvantages of the pathology?

The training programme is gruelling and the salary level for registrars is comparatively low. There is minimal patient contact in some subspecialties such as anatomical pathology, and staff shortages can mean that the hours are long.