Working in immunology and allergy

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

Why did you choose immunology and allergy and what do you like most?

The immune system has an impact on all other systems throughout the body. It is complex and intricate and the diseases that result from its disturbance are fascinating. Diagnosis requires the integration of laboratory and clinical aspects and is commonly not clear-cut. One immunologist chose immunology because of its lack of confinement to any one organ system and its broad spectrum of disease manifestations, especially the systemic inflammatory type such as vasculitis and connective tissue disease. Another was attracted by the academic challenge of undertaking original laboratory research.

What strengths and abilities make a good immunologist?

Clinical skills are vital - you need to be able to take a good history and perform a thorough examination. You should possess good general medical knowledge and be able to think laterally and deal with uncertainty since many diseases have no 'gold standard' diagnostic test. Being able to judge the significance of laboratory results in the context of each case is also important. An interest in pathology and laboratory testing is helpful if you wish to train in both pathology and clinical medicine however joint training is not necessary.

As a specialist, can you describe a typical day?

In New Zealand, the work primarily involves outpatient or ambulatory care and consultative work. Care of inpatients is usually a component of the role in Australia, particularly in hospitals where patients are admitted under subspecialists. Supervising laboratory activities, interpreting test results and providing advice are also significant components for those trained in pathology, although the extent of this role will depend on the individual laboratory. A number of the tests overlap with other pathology specialties - LabPlus has a collaborative approach where clinical oversight is shared closely with related disciplines. For example protein work is done in the immunology laboratory but interpreted by chemical pathology. Flow cytometry for primary immune deficiency disorders is done by haematology but interpreted by the immunopathologist.

What do you think are the future challenges of immunology and allergy?

Immunology and allergy is relatively new in New Zealand and is currently grossly under-serviced. There is a major need to improve the education of medical students and GPs in this area, since management of patients could be improved at the primary level. Another challenge is to keep up-to-date with developments, as the molecular natures of diseases are increasingly recognised and new treatments that target precise abnormalities become available (for example monoclonal antibodies to various cytokines and gene therapy).

What advice would you give someone thinking about a career in immunology and allergy?

This is an exciting field of work. Because it is not sufficiently established in New Zealand, at least some training should be obtained overseas where the experience is vast and broad and the specialty is well established. You should undertake training that covers clinical and pathological aspects because much of immunology is laboratory based. Dual training will keep your options open but the greatest demand is in the clinical field.

What are future opportunities in immunology and allergy?

There is a vast unmet need in New Zealand currently. Three specialist positions have become available in the past couple of years and there is huge need in both public and private sectors.

What is the work/life balance like?

Training for the dual fellowship and undertaking overseas training requires a significant time commitment, although interruptions to training are possible. Travel can be part of training - many registrars from Australasia spend time in the United Kingdom or United States. You will need to travel internationally for conferences once you are established in practice as a specialist. Since the specialty is emergent and has undergone recent expansion, specialists are (on average) younger than those in many other disciplines so there may be greater understanding displayed towards parental leave. One immunologist said that she has had no problems arranging parental leave in Australia or New Zealand and that the job lends itself to flexible or regular part time hours because of the predominance of ambulatory care.

Some weeks are very busy with frequent demands made for activities such as talks or manuscript reviews (as there are few people to share these responsibilities with at present) resulting in a heavy workload that requires substantial after-hours input. However, this is compensated by the minimal call and weekend work requirements that allow for uninterrupted time with family. In certain parts of Australia (such as Sydney) general medicine as such does not exist, so individual subspecialties provide continuous rosters. This can mean that registrars and specialists are very busy, particularly with the heavy HIV caseload.

What are the disadvantages of immunology and allergy?

Dual training for FRACP and FRCPA is only one year longer than for FRACP alone, so the time commitment is not excessive in comparison with other subspecialties. The funding situation in New Zealand and knowledge with regard to this specialty is improving and there is reason for optimism. Immunology and allergy has evolved into an exciting and broad specialty in Australia thanks to the perseverance of its pioneers.

Any comments on the current training?

Basic training and one or two years of advanced training could be done in New Zealand, but you should be prepared to go further afield after that, for example Sydney offers broad clinical training that includes the fields of allergy, HIV medicine, primary immunodeficiency, connective tissue disease, vasculitis and laboratory immunology. The various teaching hospitals in Sydney also offer a good immunology tutorial programme which trainees from all hospitals are able to attend, thereby

increasing the breadth of experience and allowing collegiality to develop between registrars at different hospitals.