POSITION DESCRIPTION

FELLOWSHIP in HAND SURGERY
Regional Hand Service, Auckland

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DEFINITION:

“Hand surgery” is variously defined, as to where exactly the hand starts. Our definition is both broad and proximal. As much as 50% of our work involves injuries of the wrist, soft tissue injuries of the forearm and elbow and all acute and reconstructive nerve surgery up to and including the brachial plexus. Some limited elbow reconstructive surgery, is also available.

A “Fellow” is defined/expected to be a trainee who has completed (or virtually so) their advanced orthopaedic or plastic training and who now wishes to sub specialise in hand surgery/surgery of the upper limb.
BACKGROUND:

The Auckland Regional Hand Service is the largest hand centre in New Zealand, providing the majority of the hand services for the city and region (a population of 1.5 million).

The Regional Hand Service is part of the Department of Plastic, Burns and Hand Surgery based at Middlemore Hospital. Elective operating and clinics are held at the nearby Manukau Surgery Centre, and outreach clinic and surgical services are occasionally organised at the other major hospitals (Greenlane and Auckland City Hospital) in the region.

The service comprises:

1. The **Orthopaedic Hand Team** made up of:
   - Four consultant Hand surgeons
   - Two Hand Fellows
   - Two Orthopaedic surgical trainees (one advanced and one junior) and one Plastic surgical trainee
   - Two house surgeons

2. The **Plastic Surgeons of the Plastic, Hands and Burns Department** of whom, four are specialist hand trained plastic surgeons and the remaining twelve are generalist plastic surgeons who cover basic acute hands on call.

The Orthopaedic Hand Team is the only sub specialised hand team and performs the majority of elective surgery and approximately 50% of the acute service. This team is not involved in congenital, free/major pedicle flap surgery or microvascular tissue transfers, e.g. toe to hand, but all other areas of hand and wrist surgery are covered.

The hand specialised plastic surgeons provide the soft tissue reconstructive expertise and the congenital service.

We have a very busy hand trauma service with average admissions of 10 -15 patients per day. These range from minor fingertip injuries to major mutilating accidents or replants. Hand trauma is processed, on a daily basis, through usually 2 general anaesthetic main operating theatres and a 2nd, local anaesthetic list run through the emergency department. There is also the
facility to transfer some acute patients to acute arranged lists, when numbers demand this.

Elective and reconstructive surgery is performed in both the public and private sector and the Fellows have ample opportunity to participate in this work.

The department is accredited with the Royal Australasian College of Surgeons.

OBJECTIVES OF THE FELLOWSHIP:

GENERAL: The primary objective is the provision, to the Fellow, of a comprehensive experience in acute and elective hand surgery. At the completion of the 12 months with our unit, the Fellow will be suitable trained for two future career paths.

The Fellowship is sufficiently specialised to produce a pure Hand surgeon if that is the Fellow’s ultimate goal. Alternatively, the experience gained will be sufficiently varied for the Fellow who intends to be a generalist orthopaedic or plastic consultant with a subspecialty interest in the (distal) upper limb.

SPECIFIC: At the completion of the Fellowship, the Fellow will be expected to have gained proficiency in the treatment of the followings:

TRAUMA SURGERY

1. All tendon injuries of the upper limb and hand ranging from simple repair of sharp tendon division to grafting and two stage tendon reconstruction.
2. Nerve repair and reconstruction. Microscopic repair of large nerve division is commonplace but experience will also be gained in the grafting of segmental injuries, brachial plexus reconstruction and in tendon transfers for nerve reconstruction.
3. Bone and joint trauma of the hand. The Hand surgeons of the department have, generally, an aggressive approach to fracture fixation in the hand and almost all displaced fractures are internally fixed usually according to AO principles.
4. Bone/joint trauma of the wrist. Extensive experience can be expected in distal radial fracture surgery and proficiency in all other aspects of wrist trauma, e.g. scaphoid fixation and reconstruction, acute and chronic ligamentous injuries of the wrist (e.g. acute lunate and peri-lunate dislocation repairs and sub-acute Brunelli reconstruction), triangular fibro-cartilage surgery (arthroscopy and ulna shortening).

5. Soft tissue trauma of the hand and wrist. An orthopaedic Fellow would develop practical expertise in local flap surgery, e.g. rotation and advancement flaps, cross finger flaps and so on, but not in free flap procedures. However as our service is a combination of plastic and orthopaedic disciplines, a comprehensive understanding of the principles of soft tissue cover would be achieved. A plastic surgical Fellow with much training in this field already, would have the opportunity, if desired for furthering this, with the plastic surgical hand surgeons of the Regional Hand Service.

6. Mutilating injuries of the distal upper limb. Despite improvement in occupational health and safety, major mutilating injuries are still relatively common and the fellow would gain good experience in the assessment and management of these problems. Cases of amputation for replantation occur not uncommonly; sufficient for an orthopaedic trained Fellow to gain expertise to cope with a digital replant at, for example, a zone 2 level.

7. Brachial plexus injuries/reconstruction. Two surgeons in our department provide the brachial plexus service for much of the North Island of New Zealand, so if the fellow has a particular interest in this field, reasonable exposure to acute and reconstructive procedures of the brachial plexus is available.

**ELECTIVE SURGERY**

Elective surgery is performed in both the public and private sector and the Fellow has ample opportunity to participate in this. In the public sector, the Fellow has regular operating initially as the assisted surgeon, but later, independently, in the following pathologies:

1. Dupuytren's contracture
2. Surgery for osteoarthritis (joint fusion/replacements, trapezeectomy)
3. Surgery for rheumatoid arthritis (joint fusions, MCP joint replacements, tendon reconstruction, wrist fusions/replacement/distal radio-ulna joint surgery)
4. Benign and malignant tumours
5. Compressive neuropathies.

The elective area not specifically provided in this Fellowship is that of Congenital Hand surgery. However if the Fellow has a special interest in this field, arrangements may be made for him/her to participate in a Congenital Hand service at the Children’s Hospital at Auckland City.

As well as operating with the consultant surgeons, the Fellow will also have opportunity for independent operating with designated Fellow’s list on a regular basis. As experience grows, it is expected that the Fellow undertakes increasing complex surgery, according to his/her capabilities.

TEACHING PROGRAMME

The teaching for registrars and fellows comprise the following:
1. Ongoing one to one teaching with the consultant hand surgeon in theatre, clinics and on ward rounds.
2. Weekly scheduled departmental hand teaching sessions (Friday’s 0730-0830). These are clinical meetings – patient/cases are presented and junior staff are then quizzed on assessment and management etc.
3. a monthly Hand/Wrist Radiology meeting
4. Informal difficult case discussion within the team 1100-1200hrs every Friday.
5. Morbidity, Mortality meetings and Audit according to College guidelines.
6. Half day teaching sessions (monthly).
7. A Hand Society annual meeting

REQUIREMENTS/RESPONSIBILITIES

It is expected that the Fellow, as a qualified orthopaedic or plastic surgeon, take appropriate responsibility and demonstrate initiative
and independence in his/her role as the most qualified of the junior staff.

The on-call commitment is variable. The fellow is expected to cover acute work in the capacity of a senior registrar, with weekend call on approximately a 1 in 6 rota; weekday call is less with the Fellow usually only covering for absent colleagues rather than on a regular basis. Acute days are invariably busy until around 1800 hrs but only true emergency operating occurs later through the night. The latter is not common but the Fellows are, in those cases contacted, and hopefully are available to attend.

Not infrequently, especially as the fellowship progresses, the Fellow is expected to substitute for a consultant. This principally involves elective work such as e.g. during as SMO's annual leave, ensuring continuity of clinics, operating lists etc. On occasions, however, on some acute days, the Fellow may be required to act as the Hand Consultant on-call. For such an event, the Fellow will always have a senior medical officer available for assistance and medico legal responsibility.

The Fellow is expected to take an active role in teaching, both in the formal teaching program (as recipient and, at times, as provider) and in the surgical training of more junior colleagues.

TIME TABLE

The Two Fellows work a rotating weekly schedule which is summarised as below:

WEEK 1 – TRAUMA WEEK

The Fellow, after the 0700/0730hrs handover, operates all day on acute hand problems, finishing work at around 1630-1700hrs or thereabouts. Each day the Fellow is under the auspices of the on-call Hand Surgeon for assistance, advice and teaching, as necessary. By being the Trauma Fellow for the whole week, the Fellow provides continuity for the hand trauma service.
WEEK 2 – ELECTIVE WEEK

Elective operating, both supervised and solo, in public and private, usually involve approximately two days of the week. Clinics, both follow up and new patient, fill a further day or so. The main weekly ward round, teaching and general team organisation occurs on a Friday morning with that afternoon hopefully being dedicated to research.

RESEARCH

The recently appointment of a research coordinator, to our team, is expected to expand the opportunities for quality research. It is generally expected that the Fellow is involved with at least one research project to present at a national/international meeting or publish.

REMUNERATION

The salary is similar to that of an equivalent level registrar/resident. Details of this can be provided by management as required

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