

KTPH Hand Surgery Fellowship

Singapore Medical Council Approved



The Hand and Reconstructive Microsurgery (HRM) service is provided in the Department of Orthopaedic Surgery at Khoo Teck Puat Hospital. The Department of Orthopaedic Surgery with 17 full time consultants, provides specialist medical and surgical treatment of all musculoskeletal diseases. We adopt a comprehensive and coordinated team approach to orthopaedic care, looking after our patients together with Sports Medicine physicians, occupational and physio therapists, podiatrists and other healthcare professionals. We provide an extensive range of specialty services including Arthroplasty, Sports surgery, Hand Surgery, Spine Surgery, Trauma Surgery and Foot & Ankle Surgery.

GOALS AND OBJECTIVES

The Singapore Medical Council Approved Hand Surgery Fellowship exposes the trainee to a wide range of general hand and reconstructive microsurgery in a busy general public hospital in Singapore which operates on about 1000 HRM cases per year. The HRM service includes outpatient management of common hand conditions and the evaluation and management of hand trauma both work related and accidents. We work closely with our trauma colleagues in providing hand trauma service for all hand fractures and difficult distal radius fractures and soft tissue cover for lower limb trauma.

The objectives of the Hand Surgery Fellowship are: to become familiar with the multi-disciplinary approach to the hand patients as practiced in Singapore; to acquire a special expertise in the evaluation and definitive management of hand trauma patients and their rehabilitation, and in managing common elective hand surgery problems. During this period the Fellow will have to complete 5 Learning Modules on hand surgery, at least one research project in either clinical research or basic science and production of at least one teaching resource in hand surgery.

CRITERIA FOR SELECTION OF TRAINEES

1. Fellows are required to have completed their basic medical degree AND completed the postgraduate training in Orthopaedics/general surgery/accident emergency medicine or plastic surgery in their home country before applying for the fellowship. This is to ensure basic skills and knowledge before embarking on the subspecialty of Hand Surgery. Prior experience in Hand Surgery is desirable.
2. Fellows are required to submit their current CV and two testimonials with a cover letter stating their reasons to apply for the fellowship. Applications can be made to the Program Director by email to careers@ktp.com.sg

Interviews will be required and can be done via video conferencing. Minimum period for the fellowship will be for 6 months and maximum will be not more than 1 year.

BASIC CURRICULUM – DUTIES AND RESPONSIBILITIES

The fellow is expected to be actively involved in patient care in the clinic, operating room, and hospital wards at the working level of a junior surgeon. Under the direct supervision of the consultant Hand Surgeon, the fellow is expected to manage an outpatient specialist hand clinic seeing new and follow up cases, manage a local hand surgery theatre list, support orthopaedic residents in managing hand cases and assist the Consultant in the general anaesthesia hand list.

Supplementing the surgical experience gained, there are thrice weekly didactic lectures and



teaching department meetings as well as regular national hand surgery teaching sessions. The fellow is expected to demonstrate improving surgical skills throughout the year and additional practice time in our microsurgery laboratory can be arranged as needed. As the fellow demonstrates increasing expertise in surgical technique, he or she will

progressively advance in the level of surgical case participation. The fellow will also have the opportunity both in the clinic, wards, and also while presenting the patients at surgical audits, and morbidity and mortality meetings. The fellow will be expected to be involved in teaching undergraduates and interns at the discretion of the Consultants. The fellow will be required to undertake at least one research project, related to the training.

FACULTY

Program Director	Vaikunthan Rajaratnam
Assistant Program Director	Tong Pei Yein

The Program Director, in consultation with the Head, Department of Orthopaedics will be overall-in-charge of the program.

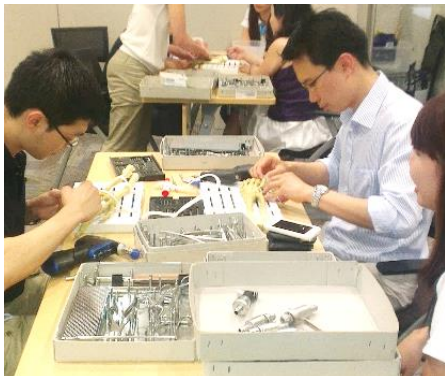
PROGRAM CONTENT AND TRAINING MODULES

Candidates will be expected to familiarise and gain proficiency in a wide range of common hand conditions and injuries and their management.

Learning & Teaching Methods

Reading assignments, participation in workshop, theatre, clinics, on call and literature reviews with work-based written assignments.

Module 1 - Hand & Wrist Fractures



The aim of this course is to provide the fellow with core knowledge of the common hand and wrist fractures and dislocations. It provides an understanding of common injuries, their mechanism, and classification, the various treatment options and expected outcomes. It also highlights principles of management of neglected fractures/dislocations and their management.

Learning Outcomes

- Able to list the common hand and finger fractures/ dislocations and their classifications.
- Describe their management, the expected outcomes and the management of poor outcomes.
- Describe the principles of rehabilitation.

Attend Hand and Wrist fracture workshop.

Module 2 - Tendon Injuries



This program provides foundation knowledge of the detailed anatomy and physiology of the flexor tendon and its healing. It provides an understanding of common injuries and their classification, the various treatment options and the expected outcomes. It also highlights principles of rehabilitation and management of neglected tendon injuries

and their management.

Learning Outcomes

- Able to describe the anatomy and healing of flexor tendons.
- Describe and classify common flexor and extensor tendon injuries and their management.
- Know the expected outcomes and the management of both poor outcomes and neglected cases of these injuries.

Attend Flexor Tendon workshop.

Module 3 - Nerve Injuries and their Management



This program provides the fellow with foundation knowledge of the detailed anatomy and physiology of the nerve and nerve injuries. It will provide for the understanding of nerve injuries, the repair process and their classification, the various treatment options, and the expected outcomes. It will highlight principles of management of neglected cases and

principles of reconstruction and rehabilitation.

Learning Outcomes

- Able to name and describe the micro anatomy of the nerve and its relation to healing.
- Describe and classify nerve injuries and describe their management including principles of rehabilitation.
- Know the expected outcomes and the management of both poor outcomes and neglected cases of these injuries.

Attend nerve repair workshop.

Module 4 - Common Conditions of the Hand in Clinical Practice

This course covers common conditions of the hand seen in the community, their presentation and their surgical and non-surgical management.

Learning Outcomes

- Able to list and describe the pathology and diagnosis of common hand conditions in the community.
- Describe the surgical and non-surgical management of these conditions.
- Describe WRULMSD and the ergonomic management of them.

Module 5 - Anatomy & Examination of the Hand

This course provides fellows with foundation knowledge of the anatomy and physiology of the hand including its social and physiological functions and how the anatomy relates to these functions. It also provides the basis for the examination of the hand in injury and disease.

Learning Outcomes

- Able to name and describe the skeleton of the hand and joints.
- Able to describe the anatomy and physiology of the tendons and nerves of the hand.
- Know and describe the vascular system of the hand and their role in flaps in the hand.



Attend and co-conduct hand assessment workshop

CLINICAL RESPONSIBILITIES

1. Fellows will be assigned to at least three operating lists per week.
2. Fellows will be granted one half day session for academic/ research activities.
3. Fellows may be rostered for night/on-call duties periodically as tag on-call with Orthopaedic on-call Team.
4. Clinic and preoperative assessment of patients will be part of the regular duties.
5. Fellow will be expected to maintain and update their log book regularly to track their work and experience.

RESEARCH

Opportunities will be available to participate in research activities, publications and presentations in scientific meetings, audits, initiate new projects, and formulate care plans/ protocols for patient management. All candidates are expected to undertake at least one research/audit project which must be represented either at a national or international meeting.

ACADEMIC ACTIVITIES

Candidates will be expected to participate in the department teaching program as well as the regular national hand surgery teaching sessions. They will be expected to present relevant literature review, case studies, and discussions. Opportunities will be made available to teach junior residents. All candidates are expected to produce one educational resource on hand surgery which will be posted on the department portal.

SUPERVISION

1. The Program Director will be overall in-charge of the fellowship program.
2. A doctor of Associate Consultant grade or above will be assigned to the fellow as direct Supervisor to ensure that the training needs are suitably met. The Supervisor will be responsible for monitoring the training and performance and will provide feedback to the fellow as well as the Program Director.
3. The fellow will be working under the supervision of a specialist at all times, during elective and emergency settings.

ASSESSMENT AND FEEDBACK

Feedback to the fellows from the Program Director and Supervisor will be conducted at three monthly intervals. Fellows can also provide feedback on their training opportunities and needs. Log books will be reviewed simultaneously.

19 Feb 2021