

Singapore National Eye Centre
ADVANCED SURGICAL/CLINICAL GLAUCOMA FELLOWSHIP PROGRAMME

PROGRAM DIRECTOR

A/Prof Shamira Perera
Dr Yap Zhu Li

DURATION OF FELLOWSHIP: 1 YEAR

TRAINING OBJECTIVES

The SNEC Glaucoma Fellowship programme encompasses clinical and surgical training including research in the all aspects of glaucoma. It is expected that on completion of the fellowship programme, competency in surgical and laser management of glaucoma patients should be attained. The fellowship programme also includes participation in the various clinical trials and research projects that are undertaken by the Glaucoma Service as well as involvement in glaucoma clinical audit. Active participation in national and international multi-centre basic and clinical research projects will also be encouraged. The Glaucoma fellow will spend time with the supervisors in their subspecialty clinics at SNEC (Glaucoma department & General Ophthalmology Department) and CGH (Eye department) as well as see and manage patients under supervision.

MINIMUM ENTRY REQUIREMENTS

- MMed (Ophthalmology), FRCS or its equivalent and would have completed 2 years of advance training rotations in general ophthalmology.
- Must be experienced in most aspects of clinical ophthalmology.
- Should have participated actively in teaching, research with an acceptable record of publication.
- Leadership qualities to work independently and to multi-task
- A good command of English
- Eligibility Criteria for International Fellowship applicants can be found in the **SNEC International Clinical Fellowship Prospectus**

FELLOWSHIP PROGRAMME OUTLINE & SPECIFIC OBJECTIVES

1. Clinical Aspects

- Primary Open Angle Glaucoma, Acute Angle Closure Glaucoma, Chronic Angle Closure Glaucoma and Secondary Glaucoma – Management and treatment
- Visual Field Analysis
- Optic Discs Analysis, Stereo photography and Nerve Fibre Analysis
- Ultrasound Biomicroscopic examination of the Anterior Segment+ ASOCT

2. Research Projects and Opportunities

- Epidemiology of Glaucoma
- Surgical Trials
- Laser and medical Glaucoma Management studies

- Glaucoma Audit Studies
- AI in glaucoma
- Neuroprotective Drug Trials

These projects aim for international standards of that will enable presentation in international ophthalmic and glaucoma journals and meetings such as ARVO (Association for Research and Vision in Ophthalmology, AAO (American Academy of Ophthalmology) and AOGS (Asian-Oceanic Glaucoma Society), as well as local and regional ophthalmic meetings.

3. Glaucoma Surgery

The Glaucoma Fellow shall actively assist and perform glaucoma procedures under the direct supervision and training of the principal and associate fellowship supervisors. There shall be two glaucoma surgery sessions per week where the Glaucoma Fellow will be attached to the supervisors.

The fellow shall be trained in the following glaucoma procedures:

- Trabeculectomy with antimetabolites
- MIGS
- Combined Phacoemulsification and Trabeculectomy
- Seton implants
- Cyclo-destructive procedures – Cyclo Diode Laser TCP and MPTCP

In addition, the fellow will be attached to the Laser Clinic of the Principal Fellowship Supervisor to be trained in the following glaucoma laser procedures:

- Laser Peripheral Iridotomy
- Laser Iridoplasty
- Selective Laser Trabeculoplasty
- Laser Suturelysis

4. Glaucoma Audit

The Glaucoma Fellow shall be inducted into the Glaucoma Audit subcommittee as a member and participate in the collection and analysis of the audit data.

5. Optic Nerve Analysis and UBM

The Glaucoma Fellow will be trained in the use of OCT and the Ultrasound Biomicroscope. These instruments are a good adjunct in suspicious cases and are also good research tools to look into various aspects of glaucoma.

6. Visual Field Analysis

Visual field charting and analysis is a principal aspect of glaucoma diagnosis and management and the glaucoma fellow must be familiar with the workings and strategies involved in the Humphrey Visual Field Analyser. Opportunities in research into newer machines and different field strategies may also be present for the fellow to participate in.

7. Advanced surgical/clinical fellowship outcomes

- Role: Senior candidates who are expected to have already had adequate training in cataract surgery (>400 phacos). Focus is on improving on current management skills in clinic, glaucoma surgery and complex/combined cataract procedures.
- Based in: Singapore National Eye Centre and SNEC@Chang General Hospital
- Projected roster and estimated numbers
 - Clinic/OT/research 2 OT sessions, 6 glaucoma clinics, 1 general clinic, 1 research session.
 - Consider paed's glaucoma clinic if interested
 - No. of Surgeries 30 – 50 GFS/GDD/combined procedures
 - 100 phaco/phacomigs
 - 50 lasers
- a. The Glaucoma Fellow will be responsible for observing, examining and treating glaucoma patients in conjunction with the glaucoma Consultant and the glaucoma Registrar. Substantial personalised training and exposure in the management of different types and aspects of glaucoma will be available.
- b. The Glaucoma Fellow will work under the supervision of the consultant and will perform the relevant procedures. He will be expected to achieve competency in laser iridotomies, iridoplasties, and Yag capsulotomies.
- c. The Fellow will be assisting the Consultant in their operating list and would be operating on cases under the supervision of the Consultants. Discussions on the management and indications for surgery will be made. The Fellow will be expected to achieve competency in glaucoma filtering surgery, combined cataract extraction with filtering surgery, cyclo destructive procedures and Seton surgery. He/ She is also expected to be closely involved in the post-operative care and management of the patient.

8. Ward Duties

The Glaucoma Fellow will be directly responsible for following up all glaucoma patients admitted to the Eye Ward and be actively involved in the day-to-day management of the patients whilst in the ward, in conjunction with the Glaucoma Consultant and Glaucoma Registrar.

9. Clinical and Basic Research Projects

A minimum of 1 research sessions per week will be dedicated to the Fellow for him/her to pursue meaningful research projects during his/her 1-year fellowship program. This may take the form of epidemiological studies, clinical trials or basic research projects. Several major glaucoma research projects are currently ongoing and the Fellow will be expected to play to part in them as well. The consultants will be able to guide the Fellow as to further project that he/she can pursue.

SUPERVISION METHOD WHEN FELLOW IS ROTATED

Fellow will be assigned to 1 specified Supervisor from the Glaucoma Dept, SNEC and when the trainee is rotated to General Ophthalmology Department in SNEC & CGH. The rest of co-supervisors will feedback to the program director. The program director will be the one in charge of assessing the fellow.

ASSESSMENT METHOD

(eg. logbook, monthly meeting with supervisor)

1. The fellow will keep procedure logs and verification of conferences, journal clubs, lectures, and other meetings throughout the duration of the fellowship.
2. Regular meeting with supervisor (3 monthly)
3. Feedback to supervisor from other faculty members
4. SMC online assessment.

CRITERIA FOR EARLY TERMINATION OF TRAINEES FROM THE PROGRAMME

The institution/hospital reserves the right to terminate the training programme in the event of unsatisfactory performance.

No certificate will be issued if training is prematurely terminated.

FEEDBACK MECHANISM FOR TRAINEES

1. Direct feedback to supervisor
2. Indirect feedback to Fellowship Programme Director