

Clinical Fellowship program in Otology and Neurotology

(Training Curriculum for Certificate of Medical Proficiency in Otology and Neurotology)

Otology Neurotology Audiology and Balance Division

Department of Otorhinolaryngology, Siriraj Hospital, Mahidol University

Objective

Clinical Fellowship program aim to provide an advanced training in diagnosis, medical and surgical treatment of disorders and diseases in auditory system, vestibular system, temporal bone and its related structures as well as skull base.

Course length

1 year, start date 1st July

Eligibility

- A doctor who can communicate patients with Thai language
- Graduated of an accredited medical school and Otorhinolaryngology program, the international doctors have to register with Thai Medical Council before they are accepted in the program
- IELTS minimum over all 6.5 or TOEFL iBT > 78

Training provides

1. Patient care in both out-patient, in-patient and special clinics (ear surgery clinic, neurotology clinic and hearing aid clinic)
2. Medical knowledge and surgical skills:
 - Correlated basic medical science in Otorhinolaryngology
 - Anatomy/ Physiology of hearing and vestibular system, facial nerve, temporal bone and lateral skull base
 - Radiology of ear and temporal bone
 - Pathology of ear and temporal bone diseases

- advanced knowledge and investigation of the audio-vestibular system, which are
 - Auditory system investigation: evoked otoacoustic emissions, auditory brainstem response etc.
 - Hearing rehabilitation: hearing aids, cochlear implantation
 - Vestibular system investigation: computerized dynamic posturography, caloric test,

vestibular evoked myogenic potentials, subjective visual vertical test etc.

- Surgical training experiences:
 - Tympanoplasty
 - Mastoidectomy
 - Stapedectomy
 - Labyrinthectomy
 - Vestibular schwannoma surgery (Translabyrinthine approach)
 - Cochlear implantation
 - Facial nerve decompression
 - Temporal bone resection
 - Other otologic and neurotologic procedure

Fellows have to attend medical conference such as grand round, interesting case, journal club, topic review, ENT-Pathology conference, ENT-Radiology conference.

Fellows will be first assigned as an assistant in the operating room to gain surgical experiences to all neurotological cases, when available, may participate in neurotological cases under supervision of senior consultants. We also offer 1 elective month in hospitals around Thailand.

Schedule (may be adjustable)

Date/time		Monday	Tuesday	Wednesday	Thursday	Friday
7.00 - 8.00		Ward round				
8.00 - 9.00		Interesting case conference	Journal club conference	Planning VS Morbidity & mortality conference	Otology round (1 st week of month)	1 st week of month x-ray conference 2 nd week of month Pathology conference
9.00 – 16.00	Fist 6 months	Ear surgery clinic	Operating room (Dr. Siriporn)	Neurotology clinic (Dr. Kanthong)	Operating room Dr. Sarun	OPD (Dr. Kanthong)
	Last 6 months	Operating room (Dr.Kanthong)	Operating room (Dr. kanonkrat)	Neurotology clinic (Dr. Kanthong)	Neurotology clinic (Dr suvajana)	

Leave

Sick leave: not more than 10 days per year

Personal and vocational leave: not more than 10 days per year

On-call

Fellow is on-call 5 times per month under supervision of senior staffs

Staffs

Name	Qualification
Dr. Suvajana Atipas	Cert. in Otorhinolaryngology, Visiting clinician - hearing rehabilitation, Audiology Clinic, Macquarie University, Australia
Dr. Kanthong Thongyai	Cert. in Otorhinolaryngology, Cert. in Family Medicine, M.A. in Audiology (USA)
Dr. Sarun Prakairungthong	Cert. in Otorhinolaryngology, Observation Fellow in Neurotology (Canada)
Dr. Siriporn Limviriyakul	Cert. in Otorhinolaryngology, M.Sc. in Audio-Vestibular Medicine (University College London, UK)
Dr. Kanokrat Suvansit	Cert. in Otorhinolaryngology, Fellowship in Neurotology

Curriculum

1. Correlated basic medical sciences in Otorhinolaryngology

- 1.1 Anatomy/ Physiology of hearing and vestibular system, facial nerve, temporal bone and lateral skull base
- 1.2 Radiology of ear and temporal bone
- 1.3 Pathology of ear and temporal bone diseases
- 1.4 Audiology
- 1.5 Vestibular function test
- 1.6 Genetics of ear disorders
- 1.7 Hearing rehabilitation

2. Diseases and disorders in Otology and Neurotology: diagnosis, treatment, advice and rehabilitation in

Level 1: Common diseases and disorders of audiology, neurotology

- Otitis externa
- Otitis media
- Cholesteatoma
- Ear canal stenosis
- Eustachian tube disorder
- Conductive hearing loss
- Otosclerosis
- Sensorineural hearing loss
- Idiopathic sudden hearing loss

Facial nerve disorder

Peripheral vertigo

Tinnitus

Level 2: Uncommon diseases and disorders of audiology, neurotology

Central vertigo

Tumor of ear and temporal bone

CPA tumors

Jugular foramen tumors

Temporal bone fracture

Congenital anomalies of ear and temporal bone

Cochlear implantation

Complications of temporal bone infection

Level 3: Rare diseases and disorders of audiology, neurotology

Implantable hearing devices

Semicircular canal dehiscence syndrome

3. Special audio-vestibular investigation

Level 1: can do and interpret by self

Pure tone and speech audiometry

Acoustic impedance

Otoacoustic emissions

Facial nerve tests - topographic and electrical tests

Level 2: can manage and interpret

Evoked response audiometry

CT, MRI (related structures)

ENG,VNG

Posturography

Rotary chair

Level 3: can manage and apply for clinical evaluation

vHIT

VEMPs

SVV

4. Neurotological skills

Level 1: Can do

Tympanoplasty

Mastoidectomy, canal wall up/ canal wall down

Intratympanic injection

Vestibular rehabilitation (CRP, etc)

Hearing aids fitting

Level 2: Under supervision

Ossiculoplasty

Stapes surgery

Facial nerve decompression

Labyrinthectomy

Level 3: Assist

Facial reanimation

Cochlear implantation

Vestibular schwannoma surgery