

Manual
for
Craniofacial Fellow

Princess Sirindhorn Craniofacial Center



<http://www.craniofacial.or.th>

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ABOUT THE PRINCESS SIRINDHORN CRANIOFACIAL CENTER

Princess Sirindhorn Craniofacial Center was officially established in 2004 as “**Chulalongkorn Craniofacial Center**” to celebrate the 48th birthday of Her Royal Crown Princess Sirintorn. Prior to the establishment, it was previously the **Chulalongkorn Craniofacial Team** which is the first multidisciplinary craniofacial team in Thailand. This team was started in 1986, shortly after **Dr. Charan Mahatumarat**, one of the staffs in the Division of Plastic and Reconstructive Surgery, Department of Surgery, Faculty of Medicine, Chulalongkorn University, returned from fellowship training in craniofacial surgery at Australian Craniofacial Unit and at Nassau County hospital in New York. The team comprised of 12 specialists from different departments, i.e., plastic surgeons, neurosurgeons, pediatricians, orthodontist, radiologists, ophthalmologist, otolaryngologist, anesthesiologist, social worker, speech pathologist, psychologist, nurses. They had worked together in the same way as other famous international craniofacial centers. Dr. Mahatumarat used all his effort and skill in the long journey of almost 20 years to develop the best craniofacial institution in the Kingdom. Patients from all over the country and nearby region have been referred to him as Chulalongkorn is known to be the only place where all kinds of major craniofacial surgery can be done.



In 2001, Dr. Nond Rojvachiranonda returned from fellowship trainings in craniofacial surgery at Australian Cranio-facial Unit and Tampa Bay Craniofacial Center. He became the workhorse of the team in both service work and academic activities. He played an instrumental role in establishing a good treatment system, such as developing the Chulalongkorn Surgery Information System software (so called ChulaSurgery) for recording clinical data, setting up an office and personnel for the Craniofacial Team, first

using voice recording of clinical data, exposing the behind-the-back hard work to the public, which eventually turned the team into an official craniofacial center with self financial support by public donation.

The Princess Sirindhorn Craniofacial Center is located on the 14th floor of Queen Sirikit building which is called “**Teuk Sor Gor**” by local people. It is on the east side of King Chulalongkorn Memorial hospital where one of the nicest public parks, Lumpini park, can be easily visited.



King Chulalongkorn Memorial hospital is one of the best training schools in Thailand. It is tightly bound with the Faculty of Medicine, Chulalongkorn University which is a world-class university with the highest college entrance competition rate. Both institutions situate in the same boundary, right in Bangkok business center where sky train and underground trains are just next to.



Find our exact location on the Google Map: <https://goo.gl/maps/THWYpmhsYPq8RecR6>

About Division of Plastic and Reconstructive Surgery

Division of Plastic and Reconstructive Surgery is a long-history unit under the umbrella of the Department of Surgery, Faculty of Medicine, Chulalongkorn university. It is the place where authorities in plastic surgery in Thailand were born. It has been the most popular plastic surgery training center with the highest competition in residency matching.

Currently our training system allows one last-year resident to act as the leader of the team, so called “chief resident”. Chief resident manages all kinds of business of the Division including job assignment for the rest of residents, scheduling of surgery, ward bed management, etc. The fellow should be able to work in harmony with the chief resident and the rest of the team.

COURSE CURRICULUM

Course Name

Clinical Fellowship Training Program in Craniofacial Surgery

Head of the Program

Head of the Princess Sirindhorn Craniofacial Center

Description

A planned post-residency program that contains education and training in a focused area of the specialty. The focused areas include but not limited to: Cosmetic Oral and Maxillofacial Surgery; Oral and Maxillofacial Oncology; Pediatric Oral and Maxillofacial Surgery; Maxillofacial Trauma; and Craniofacial Surgery.

This program is designed to be at the standard conformed with the protocol of the International Society of Craniofacial Surgery (ISCFS).

Objectives

At the end of the training program, the trained fellow should be able to: -

1. understand the treatment process for patients with craniofacial deformities
 - a. Diagnosis
 - b. Preoperative evaluation
 - c. Detection and treatment of complications
 - d. Postoperative care and follow-up
2. academically communicate with involving personnel, e.g. residents, medical students, nurses
3. appraise and criticize medical information related to craniofacial surgery appropriately
4. finish at least one research study in any topic related to craniofacial surgery for publishing in a medical journal listed in ISI database
5. gain more skill up to the level of self-confidence to do common craniofacial procedures on his/her own

Contents

- 1 Basic sciences

1.1 Pre-and post-natal development of the craniofacial structures

1.2 Anatomy, anatomic aberrations and biomechanics of the craniofacial structures

1.3 Physiology of craniofacial organs

1.2 Congenital craniofacial anomalies

1.3 Maxillofacial injuries

1.4 Craniofacial oncology

1.5 Cosmetic craniofacial surgery

Learning experience

1. Academic activities

a. Topic review – 1 time/2 months

b. Journal club – 1 time/ month

c. Ward round/Grand round – 3 times/week

d. Inter-hospital/Inter-departmental conference – 1 time/month

2. Clinical work

a. Inside the Chulalongkorn hospital – at least 10 months

i. Outpatient

ii. Inpatient

iii. In the operating rooms

b. Outside the Chulalongkorn hospital – not more than 2 months

3. Research work

a. Conduction of a research study

b. Presentation of the finished research work in an international medical conference

Instructors

1. Craniofacial surgeons

2. Plastic surgeons

3. Pediatricians

4. Neurosurgeons
5. Orthodontists
6. Radiologist
7. Ophthalmologists
8. Otolaryngologists
9. Anesthesiologist
10. Psychiatrists/psychologist
11. Speech pathologists

Training period

12 months

Assessment

1. Formative evaluation during the training
2. Surgical case log by using a log book
3. Evaluation of the finished research work
 - a. Conduction of the study
 - b. Finished paper ready for publication

ASSIGNMENTS

Clinical workshop

Outpatient

The fellow shall stay with a craniofacial surgeon throughout the whole outpatient session to learn the whole process of outpatient care. However, it is also recommended that the fellow should find a chance to learn from other specialists of the craniofacial team who attend the clinic at the same time.

Fellow's responsibility - recording of clinical data.

Inpatient

The fellow shall do morning and evening ward rounds for all craniofacial patients. Due to language barrier, the fellow needs to make agreement with residents of the Division of Plastic and Reconstructive Surgery for the place and time to begin ward round in the morning and evening.

Fellow's responsibility - recording of clinical data.

Surgery

The fellow shall attend all surgery for craniofacial patients on each surgery day. This training program encourages full participation unless prohibited by necessary reasons. However, all surgical procedures to be performed by the fellow must be authorized by the Center specialists in all situations.

Clinical recording

Recording of clinical information, such as history, symptoms and signs, result of investigations, operative finding, clinical course, complications, is very important for both the fellow and the institution. Maintenance of such database is the best way that can help to self improve the treatment protocol and surgical skill as well as to produce academic works.

The fellow can help by recording the clinical data every time when seeing a patient at both outpatient and inpatient departments and when a patient is discharged from the hospital. Recording technique can be either simple writing on a piece of paper or voice recording

Once a recording is made, the recording media should be sent to the secretaries of the Center who will type out for verification of correctness. The verified version should be returned within a week.

Format of Recording

Because recorded clinical data will be kept in custom-made computer software by non-medical personnel, one needs to make it: -

- easy to read or transcribe

- conformed to the software format

Clinical data from outpatient and inpatient care (in the following order)

Date	- date of recording
Clinical findings	- symptoms and signs, clinical progression, complications (in descriptive fashion), discharge summary
Plan	- treatment to be done or already done

Result of important blood tests or investigations (in the following order)

Date	- when the investigation is done
Type	- what the investigation is
Result	- reports or result of the investigation

Result of radiological study (in the following order)

Date	- when the x-ray is done
Type	- which kind of x-ray
Findings	- description of findings
Diagnosis	- diagnosis or summary of the findings including the radiologist's name
Place kept	- where the films are kept i.e. ward, center, patient

Result of pathological examination (in the following order)

Date	- when the examination is done
Specimen	- examined specimen
Microscopic findings	- description of microscopic findings
Diagnosis	- diagnosis or summary of the findings including the pathologist's name

Clinical data from surgery (in the following order)

Date	- date of surgery
Time start, stop	- time when the first incision is made and the last incision was closed
Diagnosis	- final diagnosis from operative finding
Operation	- name of all procedures that have been done
Surgeon	- the primary surgeon
1 st assistant	- the first or main assistant (can be more than one)
Assistant	- other assistants (can be more than one, note only plastic surgery residents)
Findings	- description of all operative findings in outlined fashion (should be informative, do not use routine general sentences that will not be beneficial for future analysis or research study)
Procedures	- description of all surgical steps in outlined fashion (should be informative, do not use routine general sentences that will not be

	beneficial for future analysis or research study)
Complication	- only if there is complication
Treatment for complication	- only if there is complication

Results of investigations, x-ray, pathological examination can be photocopied, not necessarily rewritten.

Log Book

The fellow must keep a log of all surgical procedures he/she has attended. The log book can be of any form, digital or paper. It can be copies of operative record, notebook, excel file, word file, image file, or records in the Center database system.

Minimal subjects that should be collected are: -

- patient identification information
- date and time of surgery
- operative diagnosis
- operation name
- role of the fellow
- relevant surgeons

Academic Activities

There are 4 activities that the fellow will be responsible for or conduct.

1. Textbook Appraisal – every second and fourth Friday afternoon
2. Journal Club – every fourth Wednesday
3. Craniofacial Conference – every third Wednesday
4. Topic Review – at least 2 topics/year on a Friday afternoon
5. Surgery Planning – every second Friday afternoon

WORKING SCHEDULE

Craniofacial Timetable

	Monday	Tuesday	Wednesday	Thursday	Friday	
7.00-8.00	Ward round	Ward round	Ward round	Ward round	Ward round	
8.00-9.00		OR			Craniofacial discussion <i>Sor Gor 14</i>	
9.00-10.00				OR	Teaching round <i>Sor Gor 14</i>	
10.00-11.00	OPD <i>Sor Gor 14</i>					
11.00-12.00						
12.00-13.00						
13.00-14.00	OPD <i>Sor Gor 14</i>				Surgery Planning (2 nd wk) <i>Sor Gor 14</i>	
14.00-15.00			Craniofacial conference (3 rd wk) <i>Sor Gor 14</i>	Journal club (4 th wk) <i>Sor Gor 14</i>		
15.00-16.00					Textbook appraisal (2 nd + 4 th wk) <i>Sor Gor 14</i>	Topic review ≥ 2/year <i>Sor Gor 14</i>
16.00 onward	Ward round	Ward round	Ward round	Ward round	Ward round	

Textbook appraisal, journal club, craniofacial conference, and topic review are to be conducted by the fellow.

Free time is for self studying, research work, and clinical database maintenance.

Textbook appraisal

The fellow will choose any standard textbooks and cover the following topics: -

- 1 Pre-and post-natal development of the craniofacial structures
- 2 Anatomy, anatomic aberrations and biomechanics of the craniofacial structures
- 3 Physiology of craniofacial organs
- 4 Congenital craniofacial anomalies
- 5 Maxillofacial injuries
- 6 Craniofacial oncology
- 7 Cosmetic craniofacial surgery

Journal Club

At least one article related to craniofacial surgery will be selected from any journals by the fellow. Journal of Craniofacial Surgery is recommended.

Topic Review

Topic review can be similar to, but not limited to, the contents as in Textbook appraisal. However, content to be presented to audiences must be comprehensive and deep after reviewing all sources of textbooks and journals. It should cover history, current and future or trend of that particular subject.

Plastic Surgery Timetable

	Monday	Tuesday	Wednesday	Thursday	Friday
6.00-7.00	Ward round	Ward round	Ward round	Ward round	Ward round
7.00-8.00				Teaching round <i>Jong Kol Nee</i>	
8.00-9.00	Burn conference <i>Jong Kol Nee</i>	Teaching round <i>Jong Kol Nee</i>	Picture Conference <i>Jong Kol Nee</i>		
9.00-10.00	Teaching round <i>Jong Kol Nee</i>	OR	OPD <i>Por Por Ror 6</i>	OR	Teaching round <i>Sor Gor 14</i>
10.00-11.00	OPD <i>Por Por Ror 6</i>				Topic review <i>Jong Kol Nee</i>
11.00-12.00					
12.00-13.00					
13.00-16.00	Craniofacial clinic <i>Sor Gor 14</i>		Journal club (wk 1) Textbook review (wk 2, 4)		OR Minor <i>Por Por Ror 5</i>
16.00 onward	Ward round	Ward round	Ward round	Ward round	Ward round

General plastic surgery activities can be attended only if there is no craniofacial work in contention.

RESEARCH WORK

At least one research study should be finished at the end of the training. Manuscript should also be prepared in an appropriate format that is aimed for publishing in an international journal, especially those in the ISI database. Journal impact factor should be considered.

FINAL WORDS

This training program aims at providing environment for postgraduate improvement of knowledge and skill of a plastic surgeon who is interested in craniofacial surgery and commits to do so. If there is feedback, please do not hesitate to show it up.

Enjoy your stay!