Aswan University Hospitals

Ph.D. Program

Plastic & Reconstructive Surgery Department

توصيف برنامج درجة الدكتوراه – جراحة التجميل

2022- 2020

Curriculum

Log Book

Programme Aims

1/1. To provide the candidate with an educational experience in recognition and treatment of plastic surgery related disorders. Upon completion of training, the graduate is expected to be a competent plastic Surgeon with independent practice.

1/2. To enable candidate to acquire a thorough knowledge of the basis of Plastic, reconstructive, craniomaxillofacial, hand surgery and Burn surgery, including its foundations in the basic medical sciences and to be exposed to research activities. The graduate will be able to access and apply relevant knowledge to clinical practice and provide effective consultation services with respect to patient care, education and medico-legal issues.

1/3. To acquire basic and skillful techniques in reconstructive surgeries, aesthetic surgeries, and Burn management.

Plastic Surgery Academic Curriculum

Principles

- History and innovation of plastic surgery in medicine.
- Ethics & patient safety in plastic surgery.
- Reconstructive principles.
- Photography in plastic surgery.
- Wound healing and scar management.
- Stem cells and regenerative medicine.
- Tissue engineering in plastic surgery.
- Principles and application of tissue expansion.
- Suture principle.
- Dressing; Types and characteristics.

Grafts

- Skin graft
- Tissue grafting, tissue repair and regeneration.
- Repair, grafting and engineering of cartilage.
- Repair and grafting of bone.
- Repair and grafting of peripheral nerve.

Flaps

- Classification and application.
- Pathophysiology and pharmacology.
- Vascular territories.

Microsurgery principles and applications**.**

Skin and soft tissue Tumors

- Benign and malignant tumors of the skin and soft tissue.
- Vascular anomalies.

Head & Neck reconstructive Surgery

Basic Principles

- Anatomy of the Head and Neck
- Head & Neck Anesthesia
- Anthropometry, Cephalometry, and Orthodontics of skull.
- Bone Grafting and substitutes
- Distraction Osteogenesis
- Oncologic & Reconstructive principles.
- Benign Tumors of the Head & Neck
- Nonepidermoid cancers of Head & Neck
- Local flaps for closure of Facial defects
- Reconstructive Lip & Oral cavity surgery.
- Pharynx and larynx Reconstruction
- The Eyelid, Nose & periorbital reconstruction
- Facial reanimation.
- Salivary glands Disorders

Craniomaxillofacial Surgery

- Concepts, Genetic, Growth and Dysmorphology
- Facial disproportion - Congenital and Acquired
- Adult & pediatric Craniomaxillofacial Trauma; Fixation principles
- Skull base; Orbit, Anterior, Lateral.
- The Maxilla & Midface; Reconstruction
- Mandibular Reconstruction.
- TMJ Dysfunction & Orofacial pain.
- Facial and dentoalveolar infection management
- Prosthetic surgery, osseointegrated implants, and Biomatrials.

Craniofacial pediatric Plastic Surgery

- Clefts:
    - Embryology of the craniofacial complex.
    - Unilateral cleft lip / Bilateral cleft lip.
    - Cleft palate.
    - Alveolar cleft.
    - Orthodontics in cleft lip & palate management.
    - Velopharyngeal dysfunction.
    - Orthognathic surgery.
- Craniofacial Clefts and other related deformities.
- Craniosynostosis: Syndromic & Nonsyndromic.
- Orbital Hypertolerism.
- Craniofacial tumors & Fibrous dysplasia.
- Craniofacial microsomia, Hemifacial atrophy, Pierre Robin sequence, Treacher- Collins syndrome.

Lower extremity surgery

- Lower extremity anatomy.
- Trauma management and reconstruction.
- Lymphatic diseases & reconstruction.
- Foot reconstruction.

Trunk surgery

- Trunk Anatomy.
- Chest reconstruction.
- Soft tissue of the back reconstruction.
- Abdominal wall reconstruction.
- Pressure sores.
- Perineal reconstruction.

Genital defect reconstruction / Gender identity disorder surgery**.**

Burn & Expholiative disorders

- Acute management of burn / electrical injuries.
- Chemical / Cold injury.
- Burn reconstruction in face, upper limb, and lower limb.
- Expholiative disorders.

Hand & Upper Extremity

- Anatomy and biomechanics of the hand.
- Examination of the upper extremity.
- Imaging.
- Principles of internal fixation applied to hand and wrist.

Trauma of the upper extremity

- Nail and fingertip reconstruction.
- Hand fractures and joint injuries.
- Flexor tendons injury and reconstruction.
- Extensor tendon injury.
- Thumb and digital reconstruction.
- Mutilated hand reconstruction.
- Replantation & revascularization.

Non-traumatic disorders

- Benign and malignant tumors of the hand.
- Infections
- Occupational hand disorders.
- Dupuytren's disease.

- Osteoarthritis, hand and wrist rheumatologic disorders.
- Nerve entrapment syndromes.
- Stiff, spastic, ischemic hand disorders.
- Complex regional Pain syndrome in the upper extremity.
- Vascular anomalies the upper extremity.

Congenital disorders

- Embryology, Classification, Principles.
- Disorders of formation (transverse and longitudinal arrest).
- Disorders of differentiation and duplication.
- Disorders of overgrowth, undergrowth, and generalized skeletal disorders.

Paralytic disorders

- Peripheral nerve injury of upper extremity.
- Nerve transfer.
- Tendon transfer.
- Free functioning muscle transfer.
- Brachial plexus injury.
- Restoration of upper extremity functions in tetraplegia.

Rehabilitation of Upper extremity

Breast

- Breast anatomy.
- Reconstructive breast surgery
    - Congenital anomalies of the breast.
    - Breast cancer; diagnosis therapy & oncoplastic techniques.
    - Partial breast reconstruction: local flaps, fat grafting and others.
    - Total breast reconstruction.
    - Expander- Implant breast reconstruction.
    - Nipple/Areola reconstruction.
- Cosmetic Surgery of the breast
    - Reduction mammoplasty.
    - Mastopexy.
    - Breast augmentation.

Aesthetics

General Aesthetic Surgery

- Liposuction.
- Abdominoplasty.
- Lower body lift.
- Upper limb contouring.
- Post-bariatric reconstruction.
- Buttock augmentation.

Aesthetics of the head and Neck

- Anatomy of the aging face.
- Non-surgical rejuvenation.
- Forehead rejuvenation.
- Blepharoplasty.
- Facelift.
- Neck rejuvenation.
- Rhinoplasty.
- Otoplasty.
- Skeletal augmentation.
- Hair restoration.

Anatomy curriculum for plastic surgery

No.	Topic
1.	Anatomy of the skull and mandible, temporal, infratemporal, orbital, frontal area.
2.	Anatomy of the scalp, lip, nose , eyelid and auricle
3.	Anatomy of face; muscles, neurovascular, ligaments, attachments, and facial planes.
4.	Anatomy of cranial nerves.
5.	Anatomy of the neck
6.	Anatomy of the chest wall, breast and anterior Abdominal wall
7.	Anatomy of the hand
8.	Anatomy of the upper limb
9.	Anatomy of the lower limb
10.	Anatomy of the back muscles, and buttock region.

كراســـــــة المهام التدريبية اللازمة لحصول المتدرب على درجة الدكتوراة في جراحة التجميل والإصلاح – كلية طب جامعة أسوان

Log Book content

NO	SUBJECT	PAGE
1	Personal data	
2	Instructions to the use of logbook	
3	Program aims and curriculum structure	
4	First part Essential Courses 1- Course 1 Statistics and computing 2-Course 2 Research methods 3- Course 3 Medical reporting and Medical ethics	
5	Second part: Course 4 (Plastic Surgery and burn) Plastic surgery Surgical Anatomy Applied Pathology	

6	**Program Formative assessment**	
7	**Declaration:**	

Plastic Surgery Logbook

Photo

Trainee Name:

Date of birth…….

Address……

Place of work……

Telephones……

E mail……

Training Hospital:

Training Period: From / / to / /

Name of hospital	Period of work	Hospital director signature

Academic Information

MBBCh ……/……/…… University…… Grade ……

Master ……/……/…… University…… Grade ……

Others grade ……/……/…. University…… Grade ……

تاريخ التسجيل لدرجة الدكتوراة:

Aim of the activities' book

To provide one source of evidence for the assessment committee that you attained the desired level of competency required to gain the award. In this book you will document all clinical, academic, experiences and skills you attained during your training.

Sections of the book for each module / course / rotation

You should fill the following sections: -

1- Clinical case log

1- You will first find list with all required cases in the concerned module and the minimum number of cases you must get exposed to and level of participation you should achieve for each type of cases.

2- You should record all clinical cases in the module and each case should be signed by you trainer.

2- Procedures / Operations log

1- You will find a list for required procedure, diagnostic – therapeutic operations and level of desired performance you should achieve at the end of training.

2- You will find empty tables to write down the procedure, your level of participation and date and signature of supervisor.

3- Clinical case presentation log

Record the cases related to the module that you have presented in a seminar of the activity.

4- Rotation / attendance proof

You should have evidence of achievement the required training hours within each module. For the whole program fill the following sections.

1- Academic activities

Document all academic activities e.g. lecture, journal clubs, workshops, conference, services attended. This documentation should include the level of participation "attendance, preparation, presentation".

2- Academic achievements

Document all outcomes you achieved in the field of:-

- Audit participation
- Research "clinical trial" participation.
- Evidence- based medicine "generation of guidelines" protocols

3- Formative assessment log

This document all types of formative assessment attended e.g.:- clinical examination and assessment.

Programme Structure

Time Table: Duration of program is up to 4 years divided into:

Part 1

Program-related essential courses

- Statistics and computer.
- Research Methods.
- Medical reporting and Medical Ethics.

Students are allowed to sit the exams of these courses after 6 months from applying to the MD degree.

Part 2: Minimum 2 years

Program –related academic and specialized science courses.

Students are not allowed to sit the exams of these courses before 2 years from passing the examination of the first part.

Part 3: Thesis and at least one published research from the thesis. Discussion and acceptance of the MD thesis is not allowed except after passing 2nd part exams, not before 24 months from registering the MD thesis. Students have to pass the final written exams to be eligible to set the oral and clinical exams. If the student fails to pass the clinical and oral exams for 4 times, he has to repeat the final written exam again. Final written exams degrees and the case solving are all added together.

Research methods

Requirements

- Attendance of at least 30 hour for lecture and 18 for training.
- Minimal rate of attendance 75% of lectures and 75% of training.

Medical reporting and Medical Ethics

Requirements

- Number of hours (18) hours lecture and (10) hours practical.
- Minimal rate of attendance75% of lectures and training.

Medical statistics Course Lectures

Date	Attendance	Topic	Signature

Medical statistics Practical skills

Date	Attendance	Topic	Signature

Research methods Course Lectures

Date	Attendance	Topic	Signature

Research methods Practical skills

Date	Attendance	Topic	Signature

Medical reporting and medical ethics Course Lectures

Date	Attendance	Topic	Signature

Medical reporting and medical ethics Course Practical skills

Date	Attendance	Topic	Signature

Second part: Course 4 - Plastic Surgery

Rotation / attendance proof "multiple pages"

الأماكن التي تدرب بها

أسم المستشفى التي تدرب بها	توقيع رئيس القسم	توقيع مدير المستشفى

Unit 1 & 2

Clinical case log and Operation Log.

Requirements

- Number of hours Lecture 690, practical 3540 total 4230
- Minimal rate of attendance 75% of training and lectures
- Attendance of at least 60% of clinical rounds.
- Practice with clinical cases for at least Three years in the department.

Operative Log

R: Recommended Points

O: Number of operation in which you are Observer (1 case = 1 point)

A: Number of operations in which you are Assistant (1 case = 2 points)

P: Number of operations you Performed independently (1 case = 3 points)

N.B: Recommended points should be collected from at least 50% of the items included in each title.

	R	O (1 Point)	A (2 Points)	P (3 Points)	Total Points
Skin and Soft Tissues	**140**				
Repair of traumatic skin and soft tissue injury					
Scar revision					
Benign skin tumors					
Cutaneous melanoma					
Soft tissue sarcoma					
Cutaneous carcinoma					
Hemangioma and vascular malformations					
Burn	**400**	O	A	P	Total
Burn resuscitation					
Burn wound dressing					

Escharotomy					
Burn wound debridement					
Management of inhalation injury					
Burn wound coverage					
Head and Neck	**280**	O	A	P	Total
Unilateral Cleft Lip					
Bilateral Cleft Lip					
Cleft Palate					
Secondary cleft lip repair					
Cleft palate fistula					
Craniofacial anomalies					
Facial osteotomies					
Facial trauma					
Midfacial fractures					
Frontal bone fracture					
Oral cavity tumors					
Jaw swellings					
Craniofacial tumors					
Lip reconstruction					
Oral commissure reconstruction					
Cheek reconstruction					
Nose reconstruction					
Eyelid reconstruction					
Ear reconstruction					
Scalp reconstruction					
Facial paralysis					
Cervical masses					
Aesthetic Surgery	**600**	O	A	P	Total
Blepharoplasty					
Forehead and eyebrow Lift					
Face Lift					
Neck Lift					
Facial Contouring					
Dermabrasion, Chemical Peel, Laser					
Rhinoplasty					
Aesthetic Surgery of the Ears					
Hair restoration surgery					
Body contouring					

Obesity Surgeries (Bariatric surgery)					
Liposuction					
Botox injection					
Fillers injection					
Augmentation Mammoplasty					
Reduction Mammoplasty					
Mastopexy					
Gynecomastia					
Breast and Chest	**40**	O	A	P	Total
Breast reconstruction with expander and implant					
Latissimus Breast reconstruction					
TRAM Breast reconstruction					
Microsurgical Breast reconstruction					
Nipple-areola reconstruction					
Chest wall reconstruction					
Genitalia	**100**	O	A	P	Total
Hypospadius					
Epispadius					
Congenital deformities of female genitalia					
Gender reassignment surgery					
Necrotizing infection					
Trauma to male genitalia					
Microsurgery	**60**	O	A	P	Total
Arterial anastomosis					
Venous anastomosis					
Nerve anastomosis					
Hand	**140**	O	A	P	Total
Post burn deformed hand					
Congenital hand deformity					
Fingertip and nail bed injury					
Tendon injury of the hand					
Dupuytren's Disease					
Tumors of the hand					
Thumb reconstruction					
Hand infection					
Fractures and dislocations of the hand					
Trunk and Lower Extremity	**240**	O	A	P	Total

Pressure sores					
Lymphedema					
Diabetic foot ulcer					
Foot reconstruction					
Leg reconstruction					
Knee reconstruction					
Thigh reconstruction					
Groin reconstruction					
Back reconstruction					
Abdominal wall reconstruction					

WORK DIARY
OPERATION RECORD
(To be photocopied as required for full record)

Trainee Name:

Training Hospital:

Date	Patient Name	Hospital Number	Age	Operation	O A P	Consultant Signature

O: Observer **A: Assistant** **P: Performed independently**

Unit 3

PRESENTATIONS AT SCIENTIFIC MEETINGS

Date	Meeting	Presentation

Unit 4

ACADEMIC RECORDS

Instructional Courses attended

Date	Course

Unit 5

Published work

Title and Publication (Journal):

1-

2-

3-

4-

5-

Postgraduate student's program
Rotation in training assessment

* ***Name:***

**** Period of training From:***

To:

**** Site:***

****Rotation***

General skills	could not judge (0)	strongly disagree(1)	(2)	(3)	(4)	(5)	(6)	strongly agree (7)
Demonstrate the competency of continuous evaluation of different types of care provision to patients in the different area of his field.								
Appraise scientific evidence.								
Continuously improve patient care based on constant self-evaluation and life-long learning.								
Participate in clinical audit and research projects.								

General skills	could not judge (0)	strongly disagree(1)	(2)	(3)	(4)	(5)	(6)	strongly agree (7)
Practice skills of evidence-based Medicine (EBM).								
Educate and evaluate students, residents and other health professionals.								
Design logbooks.								
Design clinical guidelines and standard protocols of management.								
Appraise evidence from scientific studies related to the patients' health problems.								
Apply knowledge of study designs and statistical methods to the appraisal of clinical studies.								
Use information technology to manage information, access on-line medical information; for the important topics.								
Master interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals, including: - • Present a case. • Write a consultation note. • Inform patients of a diagnosis and therapeutic plan • Completing and maintaining comprehensive. • Timely and legible medical records. • Teamwork skills.								

General skills	could not judge (0)	strongly disagree(1)	(2)	(3)	(4)	(5)	(6)	strongly agree (7)
Create and sustain a therapeutic and ethically sound relationship with patients.								
Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.								
Work effectively with others as a member or leader of a health care team or other professional group.								
Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.								
Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.								
Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.								
Work effectively in health care delivery settings and systems related to specialty including good administrative and time management.								
Practice cost-effective healthcare and resource allocation that does not compromise quality of care.								

General skills	could not judge (0)	strongly disagree(1)	(2)	(3)	(4)	(5)	(6)	strongly agree (7)
Advocate for quality patient care and assist patients in dealing with system complexities.								
Design, monitor and evaluate specification of under and post graduate courses and programs.								
Act as a chair man for scientific meetings including time management								

Surgical Anatomy

Requirements

- Attendance of at least 45 hour

- Minimal rate of attendance 75% of lectures

Lectures schedule and ILOs

Demonstrate Anatomic details of Reconstructive and Aesthetic Surgery including:

- Surgical Anatomy of Plastic Surgery of the Integument
- Surgical Anatomy of Plastic Surgery of the Head and Neck
- Surgical Anatomy of Plastic Surgery of the Upper Extremity
- Surgical Anatomy of Plastic Surgery of the Trunk and Breast
- Surgical Anatomy of Plastic Surgery of the Lower Extremity
- Surgical Anatomy of Plastic Surgery of the Genitourinary System

Surgical Anatomy Course Lecture

Date	Attendance	Topic	Signature

Surgical Pathology

Requirements

- Attendance of at least 45hour

- Minimal rate of attendance 75% of lectures

Demonstrate pathologic details of Reconstructive and Aesthetic Surgery including:

- Surgical Pathology of Plastic Surgery of the Integument
- Surgical Pathology of Plastic Surgery of the Head and Neck
- Surgical Pathology of Plastic Surgery of the Upper Extremity
- Surgical Pathology of Plastic Surgery of the Trunk and Breast
- Surgical Pathology of Plastic Surgery of the Lower Extremity
- Wound Healing
- Pathology of Benign and Malignant skin Tumors
- Pathology of burns

Surgical Pathology Course Lectures

Date	Attendance	Topic	Signature

Program Formative assessment

MCQ Assessments

- One MCQ examination at the second half of the second year in Plastic and Reconstructive surgery

- One MCQ examination at the first half of the third year IN Burn management

Date	*Grade	Signature of Head of the department

Degree: **A- Excellent. B- Very good. C- Good. D- Pass**

Declaration

Course Structure Mirror	Responsible Course Coordinator Name	Signature	Date
First Part			
Course 1			
Course 2			
Course 3			
Second Part			
Course 4 Plastic surgery Surgical anatomy Surgical pathology			
- MD Thesis Acceptance Date:			
- Fulfillment of required prior to final examination			
Plastic surgery MD Principle Coordinator: Prof. Dr.			
Date approved by Plastic surgery Department Council			

اعتماد رئيس القسم