Residency program

Vision

Become No 1 ranked orthopedic department in Egypt, Middle East and Africa and a target for regional and international students

Goals

Publications – International with impact factor

Knowledge

Skills

Funding

Objectives

KNOWLEDGE

1 -well defined sources (comprehensive and relevant)

A. Basic sources
1. AAOS comprehensive orthopaedic review
2. Miller, review of orthopaedics 5th edition. Mark D. Miller
3. Campbell Orthopedics
4. Clinical orthopaedics examination. Ronald Mc Ree
5. Stanley and Hoppenfield in surgical exposure
6. Orthobullet website

B. Journals (Last 3 years)
1. J.AAOS
2. J BJS (Current concept review/ instructive course lectures)
3. J. Current orthopaedic and trauma

2 -well defined schedule for teaching and studying

3 -Internal system of continuous assessment

SKILLS

1 -Well defined schedule of required skills specified for each color group

2 -clinical, surgical and experimental skills definition

3 -continuous assessment system for skills acquisition

Publications

- Revision of research plan guided by a- utmost updates in each field
  b- current and expected resources
- Continuous open assessment and tracking of the progress of ongoing researches (Meeting every 3 months **(July-Octo-Jan-April)** for : 1- Protocol submission to department council
  2- Yearly assessment of ongoing researches
  3- Assessment of R1 residents in July/January
- Financial support for presentations and papers accepted for international conferences or journals

MOTIVATION AND PUNISHMENT

- Yearly or half yearly fully funded 2 weeks clinical attachment in one of the joint universities
- Financial support in conferences if speakers
- Well declared punishment list with full comprehensive illustration which can reach residency termination

FUNDING INSTITUTES

Unifying the pharmaceutical companies talks with only one person directly linked to the department head

VALUES

- Discipline and total submission
- Decent looking with (ID card with color code – Coat)
- Honesty
- Orthopedic scientific language
- Loyalty to department (yearly photo for whole department in formal costumes)

Details

Residency Period Structure

3m Brain Switching period ---- 6m Trauma ---- 9m groupA ----- 9m groupB ------ 9m C

3months Brain Switching period

Objectives

- Familiarity with new life style
- Full scientific preparation and getting used to scientific orthopedic language
- Full understanding of residency structure (periods/assignments/rights/motivation/punishment)

Details

They will be under full responsibility of one TRAINED assistant lecturer who will illustrate the following

1 Residency period structure

2 Orthopedic department ethics (how to talk to seniors and obey orders)

3 Motivation and punishment system

4 Scientific part: (Already collected in one book)

- ATLS Advanced Trauma Life Support (DCO and ETC) ***(ATLS book)***
- Orthopedic basic science (***Stanmore***)
- Communications skills (with patients and doctors)
- Consent taking (***Rules***)
- Surgical skills (suturing techniques/suture tips/haemostasis/blood transfusion principles/ operation room/wound dressing(ONLY OBSERVATION) NOT ALLOWED TO TOUCH ANY PATIENT/radiation protection/draping/sterilizing/scrubbing/anesthesia principles)
- Casting and reduction principles (***Mc Ree***)
- Recording skills (Operative sheet/Admission sheet/Discharge sheet)
- Consultation language and skills (Trauma classification systems ISS Mangled GCS/Mechanism of injury)
- Practical implementation with the assistant lecturer in (cast room/grand rounds/operating theater/consultation)
- Breaking bad news and medical ethics
- Statistics and publication principles

- ✓ Not allowed to touch any patient unless under assistant lecturer guidance
- ✓ At the end of the 3 months, an examination is set by Professor for fully understand all objectives during the regular research meeting.
- ✓ Small test by 1 BRIEF PUBLICATION AND STATISTICS QUESTIONS
  2 COMMUNICATION SKILLS SCENARIOS
  3 SENIOR CONSULTATION SCENARIOS **By assistant lecturer in front of the staff**

- ✓ Best candidate and his mentor assistant lecturer (depending on the professors' opinion) are handled a certificate during the regular research meeting in front of the whole residents and assistant lecturers. ALSO added to their evaluation record.

Trauma Group

11 Residents (or 9 plus 2 house officers)

Causalities 4 one is senior

1 main room and ICU

2 Casting

1 Minor surgeries and can be summoned in the morning to MUH

Operations 4 one is senior

2 for each room …. 2 can be substituted by house officers under AL guidance

Inpatient 3 one is senior

601/602 1 603/604/605 1 5th floor 1 2 can be summoned to MUH in the morning

- ✓ Each resident wears a label to indicate his group
- ✓ Each resident wears the color coded scrub depending on his level

Duties and desired knowledge and skills

Casualities group

Knowledge:

- ✓ All trauma classification systems
- ✓ ATLS DCO (Damage Control Orthopedics) & ETC (Early Total Care)
- ✓ Spinal cord injuries and assessment
- ✓ Patient communication skills
- ✓ Consent taking (Full including expected complication percentages)
- ✓ Reduction and casting
- ✓ Hand reconstruction principles

Skills:

- ✓ ATLS all exfix types
- ✓ Cut wrist skills
- ✓ Full swift spine injuries and trauma management
- ✓ Hand reconstruction

DUTIES by SENIOR

- ✓ Full admission sheet
- ✓ Full examination
- ✓ Consultation for emergent and urgent cases
- ✓ Full comprehensive discharge card
- ✓ Reduction and casting
- ✓ Full consent for urgent and emergent cases
- ✓ Inpatient medication prescription

Operation group

Knowledge:

- ✓ 1ry surgical skills
- ✓ Communication skills (patients/nurses/anesthesia)
- ✓ Complete awareness of available materials and implants with all available sizes (portable reports)
- ✓ Time-out guidelines
- ✓ Anesthesia related sciences
- ✓ Operation room setup

Skills:

- ✓ 1ry surgical skills
- ✓ According to the department accepted operation-level assignments

DUTIES by senior

- ✓ Receive the patient with the anesthesiologist and discuss with him
- ✓ Transfer the patient (Personally SUPERVISE)
- ✓ Keep an eye on sterilization
- ✓ Make sure implants and radiology are available
- ✓ Sterilize and drape
- ✓ TIMEOUT
- ✓ Full comprehensive operative sheet
- ✓ Transfer patient
- ✓ Adjust the treatment prescription

Inpatient group

Knowledge:

- ✓ Rehabilitation for all cases
- ✓ Outcome percentage for all cases

- ✓ Consent for elective cases
- ✓ Anesthesia related sciences
- ✓ Communication skills (patient/nurse/anesthesia)

Duties:

- ✓ Consent taking (FULL ILLUSTERATION)
- ✓ Prepare operative list with the Lecturer and AL in charge then inform the staff
- ✓ Operation preparation (Anesthesia/Blood/skin/site marking)
- ✓ Daily preparation of trauma meeting
- ✓ Make sure full xray available Pre Post
- ✓ Discharge sheet and card
- ✓ Consult for complications
- ✓ Planning for all cases on papers (Until software is available)

Overlap between groups

- Causality group senior is obliged personally to inform inpatient resident about each admitted patient and his room
- Causality group senior must make sure all primary care measures are completed before inpatient admission
- Operation resident must daily update the inpatient senior with the implants updates early before 6 pm to prepare the list with the staff
- Inpatient resident must PERSONALLY inform the operation resident about the (anesthesia/skin/blood) of the patients
- The operation group residents are allocated each for a group of patients by the ASSISTANT LECTURER guided by the protocol approved by the higher staff about the resident level required skill gaining
- Any conflict between the groups is reported to the AL in charge who has the full authority to solve the problem and the negative feedback is recoded immediately in the residents evaluation sheet which is available with each AL
- No. of monthly reports must be prepared as follows
    - Total consultation report: total number of orthopedic consultation/month
      Group in charge: casulalities group
    - Total admission report total number of orthopedic admission/month
      Group in charge: casulalities group
    - Morbidity report: Main pre and post operative morbidities/month + causes and measures taken
      Group in charge: inpatient gr.
    - Mortality report: Total mortalities/month + causes and measures taken
      Group in charge: inpatient gr.
    - Operative report: Total operations/month

        - Specification according to Implants or Regions (As approved by higher staff)
        - **Group in charge: Operation gp**
    - Operative mismatch reports:

    Mismatch between prepared cases and actually operated cases
    Appended by time of each operation start and finish
    Group in charge: operation group

- Aim of the reports is to evaluate (morbidity causes/mortality causes/operative delay)

- One week after each month, the trauma group prepares trauma meeting to discuss the 6 reports in POWERPOINT prepared by the senior + sample cases chosen by the Group Head.
- Each 10 days the groups make shift with each other. The youngest resident is available for retransfer on need after at least Lecturer consultation
- ***8:15am daily***, assistant lecturer round with the inpatient residents on charge except Friday
- ***Every cold day (Saturday-Monday-Wednesday) 6pm*** … Trauma meeting with an assigned assistant lecturer (not the AL in charge in operations that day) and the causalities and inpatient groups for 2 hours to discuss cases of previous 2 days (decision/opinion/results/outcome)
- The results of each meeting and round are weekly reported to the secretary to be presented to the head of the department about the performance for one week. If negligence detected, it is added to the evaluation sheet of each resident and AL.

A/B/C group resident

Objectives:

- Learn history taking/ region specific examination/ How to present a case/ differential diagnosis
- Learn how to read and criticize scientific paper
- Learn how to make a presentation / write scientific paper
- Perform level-assigned operations (according to the schedule approved by higher staff)

Details:

Outpatient clinic

- No resident is allowed to take a clinic alone

- Resident sits to the computer beside (AL or Lec or Assistant prof or prof) and learn from him history taking and examination ----- His duty is to write down all the findings in the computer sheet while performed by his mentor.
- All the tools must be available (goniometer/measure tape/hammer/ms power calculator)
- Before attending the clinic , the senior resident must have an illustration of all the vacant, occupied and ready for discharge spots

Inpatient ward

- According the schedule prepared by higher staff, an assistant lecturer is assigned to make a round with the residents for evaluation and clinical examination education twice a week (Any negligence is reported and added to the evaluation sheet of each resident and AL)
- In the group grand round meeting, Each resident is responsible for a group of cases (FULL PRESENTATION… History..examination..radio..lab..decision

يتم تحديد الحالات لكل نائب عن طريق مدرس على الأقل

- Preparation for operation: FULL CONSENT with illustration to the patient/ anesthesia/blood/implant/site label/skin

Operations

As operation group of the emergency

During each group grand round the following is discussed:

1- Weekly paper presentation and criticism يتم اختيارها بواسطة أستاذ في الاسبوع السابق ويتم اعدادها وتقييمها بواسطة نائب و مدرس مساعد امام المجموعة
2- Choice of one patient by the professor. Resident and AL in charge do (Full history taking/full examination in front of the higher staff/then discussion) in front of the whole group.
3- All presentations and discussions are performed (IN ENGLISH) to prepare them to face the crowd in the conferences / and to meet expectations of international students targeted in our vision.
4- Students of Manchester protocol are to attend this meeting as marketing for later international fellowships

Continuous evaluation and assessment systems

(scientific evaluation/skill evaluation/conduct evaluation)

Each resident receives a logbook which is classified into:

Scientific: (Logbook)

Lectures/meetings/clinics/conferences/grand rounds …… enlisted and signed by high staff

Skills :***(Logbook)***

Each Residency level has skill assignments that must be fulfilled before upgrading to higher level>>>>>> assigned and approved by higher staff

R1>>>>> Rseidency age ?? >>>>> skills??

R2>>>>> Rseidency age ?? >>>>> skills?? And so on

Conduct: (One approved staff member in each group will be assigned in the department council for residents' conduct tracking)

- *One month before the end of each Residency level*, a sheet form for each resident is to be filled by the staff member assigned for conduct tracking in each group , then handled to the responsible secretary to keep it safe
- This form has specific values graded from 0 to 5
- Commitment/Obedience/communication skills/trouble making/activity/patient sympathy and counselling/Honesty/Dress code commitment
- Any specific incident is individually writtenly reported by extra sheet to the secretary responsible on the next day to be added to the residents file >>>>> whether good or bad
- Good… like extra ordinary care or commitment
- Bad …. Like abstaining from grand round meeting or major trouble making
- All these reports are delivered to the head of department to give his rank for each trainee

Each resident is ranked depending on (scientific/skills/values) evaluation to detect who deserved the clinical attachment reward

Sources for financial support

1- Main source especially in the primary period: Pharmaceutical companies.
The head of department assigns only one person to be in contact with all companies
The resources are directed to the department scientific activities, facilities supply and scientific rewards rather than food and drinks

Any member deals with a company IN MUH or EMERGENCY HOSPITAL outside the department council permission and vision is reported and punished

2- Fellowships revenues (Long term source starting five years from implementation of the program)
3- NGOs (Non Governmental Organizations) Depending on proposals

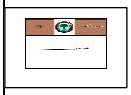
Funding Targets

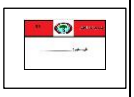
1- Open access to highest impact factor journals of each specialty specified by the professor of each specialty
2- Facilities and logistics (Open free wi fi/Research desks for students in specified places)
3- Scientific rewards by clinical fellowships
4- Support for residents and AL with accepted talks or papers in international conferences or journals.

Pillars of the Education Program

1) ***Resident core curriculum***
   The most important teaching activity for residents, the course has a five semester's curriculum.
2) ***Grand rounds***
   Held weekly for each group, the faculty presents grand rounds in cooperation with the house staff.
3) ***Journal club***
   Weekly discussion of one paper after the grand round as illustrated before.
4) ***Research seminar***
   Continuous open assessment and tracking of the progress of ongoing researches (Meeting every 3 months **(July-Octo-Jan-April)** for :
   1- Protocol submission to department council in front of the whole department
   2- Yearly assessment of ongoing researches
   3- Assessment of R1 residents in July/January (As will be illustrated later)

Residency Framework Starting in May or November

Year	Residency Rank	Color Gp لون بطاقة التعريف	Scrub	Months	Period	Teaching Module	Scientific assessment	Clinical Assessment	Conduct Assessment
1st year	R1 3 months	Green 	Sky blue 	3 May / June / July or Nov / Oct / Dec	Brain switching	Brain switching Book	Swift assessment in front of staff in research meeting		Evaluation sheets
	R2 3 months	Yellow 		3 Aug / Sept / Oct or Jan/ Feb/ Mar	ER	---		Revise logbook fulfillment of Upgrade requirements + evaluation records	Evaluation sheets
	R3 6 months	Orange 		6 Nov to Aprl or Aprl to Sept	A/B/ C	First part curriculum + 1st module	MCQ 1st part	Revise logbook fulfillment of Upgrade requirements + evaluation records	Evaluation sheets
2nd year	R4 6 months	Blue 	Dark green 	6 May to Oct or Oct to Mar	A/B/ C	2nd module	MCQ module	Revise logbook fulfillment of Upgrade requirements + evaluation records	Evaluation sheets
	R5 6 months	Brown 		6 Nov to Aprl or Aprl	A/B/ C	3rd module	MCQ module	Revise logbook fulfillment of Upgrade requirements +	Evaluation sheets

				to Sept				evaluation records	
3rd year	R6 6 months	Red 	Blueblack 	6 May to Oct or Oct to Mar	3m ER 3m A/B/C	module Revision	MCQ module	Revise logbook fulfillment Evaluation sheets of Upgrade requirements + evaluation records	Evaluation sheets
	R7 6 months	Black 		6 Nov to Aprl or Aprl to Sept	3m A/B/C 3m A/B/C			Revise logbook fulfillment of Upgrade requirements + evaluation records	Evaluation sheets

Modules will be revised and classified on subunit bases.

R1 Assessment

- ✓ At the end of the 3 months, an examination is set by Professor for fully understand all objectives during the regular research meeting.
- ✓ Small test by 1 Brief publication and statistics questions
  2 communication skills scenarios
  3 Senior consultation scenarios **By assistant lecturer in front of the staff**
- ✓ Best candidate and his mentor assistant lecturer (depending on the professors' opinion) are handled a certificate during the regular research meeting in front of the whole residents and assistant lecturers. ALSO added to their evaluation record.

R2-R7 Assessment

Defined levels of competence:

1 = Observe

2 = Assist

3 = Do under supervision

4 = Do without supervision

Operation	Starting Level	R2	R3	R4	R5	R6	R7
Wound closure, delayed primary or secondary	R2	4	4	4	4	4	4
Wound Debridement	R2	4	4	4	4	4	4
Closed management of fractures and plaster application	R2	4	4	4	4	4	4
Anterior dislocation shoulder closed reduction	R2	4	4	4	4	4	4
SN humerus pinning	R5	2	2	3	4	4	4
SN humerus ORIF	R7	1	2	2	2	2	3
SN humerus Hemiarthroplasty	----	1	1	1	1	2	2
Fracture diaphysis humerus POP +/- MUA	R3	3	4	4	4	4	4
Fracture diaphysis humerus ORIF plating	R6	2	2	2	3	3	4
Fracture diaphysis humerus IMN	----	1	1	1	1	2	3
SCH/LHC pinning	R4	1	2	3	4	4	4
SCH ORIF	R7	2	2	2	2	2	3
Dislocated elbow +/- fracture closed reduction	R4	3	3	4	4	4	4
Radial head / neck fracture ORIF	----	1	1	2	2	2	3
Fracture shaft radius / ulna MUA & POP	R3	3	4	4	4	4	4
Fracture distal radius MUA & POP	R3	3	4	4	4	4	4
Radius and ulna ORIF	R5	2	2	3	3	4	4
Fracture distal radius Pinning	R5	2	2	3	4	4	4
Fracture distal radius ORIF	R6	2	2	2	3	3	4
Carpal fracture / dislocation MUA & percutaneous wires/ MUA & POP/ ORIF	R5	2	3	3	3	4	4
Scaphoid fracture non-op	R2	3	4	4	4	4	4
Scaphoid fracture MUA & percutaneous wires	----	1	1	1	2	2	3
Scaphoid fracture ORIF	----	1	1	2	2	2	3
Metacarpal fracture / dislocation POP & MUA	R3	3	4	4	4	4	4
Metacarpal fracture / dislocation MUA & percutaneous wires	R3	3	4	4	4	4	4
Metacarpal fracture / dislocation ORIF	R6	2	2	3	3	4	4
Phalangeal fracture MUA +/- POP	R2	3	4	4	4	4	4
MCPJ fracture / dislocation MUA +/- POP	R2	4	4	4	4	4	4
MCPJ fracture / dislocation MUA & Percutaneous wires	R3	3	4	4	4	4	4
MCPJ fracture / dislocation ORIF	R5	2	3	3	4	4	4
Ligament repair hand	----	2	2	2	2	2	2
Finger tip reconstruction and hand soft tissue surgeries	R5	2	3	3	4	4	4
Hand compartment syndrome decompression	R5	2	3	3	4	4	4
Dislocated hip closed reduction	R3	3	4	4	4	4	4
Dislocated hip open reduction +/- fixation	----	2	2	2	2	3	3
Intracapsular fracture NOF ORIF	R5	2	2	3	3	3	4
Intracapsular fracture NOF arthroplasty	R7	1	2	2	2	3	3
Extracapsular fracture intramedullary fixation	R5	2	2	2	3	3	3

Extracapsular fracture other fixation DHS	R4	2	2	3	3	4	4
Subtrochanteric fracture plate/screw fixation CP DCS	R6	2	2	2	2	3	3
Subtrochanteric or shaft fracture intramedullary fixation	R4	2	2	3	3	4	4
Diaphyseal fracture in children traction or spica	R3	3	4	4	4	4	4
Diaphyseal fracture external fixator	R3	3	4	4	4	4	4
Diaphyseal fracture plating	R4	2	2	3	3	4	4
Supracondylar fracture (not intraarticular) other fixation methods	R5	2	2	2	3	3	4
Intraarticular fracture distal femur ORIF	R7	1	2	2	2	3	3
Acute ligament repair	----	2	2	2	2	2	2
Tibial plateau PC screws	R4	2	2	3	4	4	4
Tibial plateau fracture ORIF	R6	1	2	2	2	3	4
Diaphyseal tibial fracture MUA & POP	R2	3	4	4	4	4	4
Diaphyseal tibial fracture ORIF	R4	2	2	3	3	4	4
Diaphyseal tibial fracture IMN	R4	2	2	3	3	4	4
Ankle fracture / dislocation MUA & POP	R2	4	4	4	4	4	4
Ankle fracture / dislocation ORIF	R3	2	3	3	4	4	4
Pilon fracture with external fixator	R4	2	2	3	4	4	4
Pilon fracture ORIF	R7	2	2	2	2	3	4
Tendoachilles repair	R5	2	2	2	3	4	4
Calcaneal fracture ORIF	----	1	2	2	2	2	3
Talar, subtalar or midtarsal fracture/ dislocation MUA +/- POP +/-K wires	R4	2	2	3	3	4	4
Talar, Subtalar or midtarsal fracture/ dislocation ORIF	----	1	2	2	2	2	3
Lisfranc fracture ORIF	R6	2	2	2	2	3	3
Aspiration / injection joint	R2	3	4	4	4	4	4
Infected hand drainage (not tendon sheath)	R6	-	1	2	2	3	4
Infection tendon sheath drainage	R7	-	1	2	2	3	4
Biopsy bone – needle Biopsy bone - open	R7	-	1	1	2	2	3
Bursa excision	R5	-	1	2	3	3	4
Epiphysiodesis	----	-	1	1	2	2	3
Radial head replacement	----	-	1	1	2	2	2
Arthrodesis wrist (includes partial arthrodesis)	----	-	1	1	2	2	2
Ganglion excision at wrist	R5	-	1	2	3	3	4
Fusion of MCPJ or IPJ	----	-	1	2	2	2	3
Soft tissue reconstruction hand	----	-	1	1	2	2	2
Tendon transfer hand	----	-	1	2	2	2	2
Trapezium excision or replacement	----	-	1	1	2	2	2
Patella realignment	----	-	1	1	2	2	2
Arthroscopy ankle	----	-	1	1	2	2	2
CTEV correction non-operative	R4	1	2	3	3	3	4
Fifth toe soft tissue correction	----	-	1	1	2	2	2
Tendon decompression or repair	R4	-	1	2	3	3	4
Tendon transfer foot	----	-	1	1	2	2	2

Nerve repair	R7	1	1	2	3	3	4
Anterior fixation fracture / dislocation cervical spine	---	1	1	1	2	2	2
Cervical spine traction / tong traction cervical spine	---	1	1	2	2	2	2
MUA fracture / dislocation cervical spine	---	1	1	2	2	2	2
Posterior fixation fracture / dislocation cervical spine	---	1	1	2	2	2	2
Anterior decompression / fixation thoracic spine	---	1	1	2	2	2	2
Posterior decompression / fixation thoracic spine	---	1	1	2	2	2	2
Anterior decompression / fixation lumbar spine	---	1	1	2	2	2	2
Posterior decompression / fixation lumbar spine	---	1	1	2	2	2	2
Acetabular fracture ORIF	---	1	1	2	2	2	2
Pelvic fracture external fixator application	R6	1	1	2	2	3	3
Pelvic fracture ORIF	---	1	1	2	2	2	2
ORIF non-union clavicle fracture	---	1	1	2	2	2	2
Anterior dislocation shoulder open reduction +/- fixation	---	1	1	2	2	2	2
Acromioclavicular joint dislocation acute ORIF	---	1	1	2	2	2	2
Glenoid fracture ORIF	---	1	1	1	1	2	2
Non-union ORIF +/- bone grafting	R7	1	1	2	2	2	3
Dislocated elbow +/- fracture open reduction +/- fixation	---	1	1	2	2	2	2
Intra-articular distal humerus fracture ORIF	R7	1	1	2	2	2	3
Lateral condyle fracture ORIF	R6	1	1	2	2	3	4
Medial condyle / epicondyle fracture MUA/Kwire/ORIF	R6	1	1	2	2	3	4
Olecranon fracture ORIF	R5	1	2	2	3	3	4
Radial head / neck fracture MUA +/- K wire/ excision	R7	`1	1	2	2	2	3
Fasciotomy for compartment syndrome	R5	2	2	2	2	3	3
Fracture shaft radius / ulna MUA & percutaneous wires	R3	2	3	3	4	4	4
Fracture shaft radius / ulna ORIF	R5	1	2	2	3	3	4
Fracture distal radius external fixation	R6	1	2	2	2	3	3
Base of 1st metacarpal fracture/dislocation POP/Percutaneous wire/ORIF	R7	1	1	2	2	2	3
Extensor Tendon repair	R3	2	3	3	4	4	4
Flexor Tendon repair	R3	2	3	3	4	4	4
Nail bed repair	R3	2	3	4	4	4	4
Bipolar hemiarthroplasty	R7	1	1	2	2	2	3
Supracondylar fracture (not intraarticular) DCS / blade plate etc	R6	1	1	2	2	3	4
Acute haemarthrosis aspiration	R3	2	3	3	4	4	4

Quadriceps tendon repair	R6	2	2	2	2	3	3
Patella tendon repair	R6	2	2	2	2	3	3
Patella dislocation closed reduction +/- open repair	---	1	1	2	2	2	2
Patella fracture ORIF	R5	1	2	2	3	4	4
Ilizarov Tibia	R7	1	2	2	2	3	4
Diaphyseal tibial fracture external fixation	R3	2	3	3	4	4	4
Fasciotomy for compartment syndrome	R4	2	2	3	4	4	4
Ankle fracture / dislocation ORIF	R4	2	2	3	4	4	4
Metatarsal fracture ORIF	R5	1	2	2	3	3	3
Phalangeal fracture MUA +/-K wire +/- ORIF	R4	1	2	3	3	4	4
Amputation toe / ray for trauma	R5	1	2	2	3	4	4
Benign tumor excision (not Exostoses)	R6	1	2	2	2	3	3
Cyst bone curettage +/- bone graft	R6	1	2	2	2	3	3
Malignant tumor excision	---	2	2	2	2	2	2
Drainage of acute infection of bone and joints	---	2	2	2	2	2	2
Anterior decompression +/- fixation/ fusion (C2-C7)	---	2	2	2	2	2	2
Atlantoaxial fixation +/- fusion	---	2	2	2	2	2	2
Biopsy cervical spine	---	2	2	2	2	2	2
Excision cervical / 1st rib	---	2	2	2	2	2	2
Nerve root / facet joint injection cervical spine	---	2	2	2	2	2	2
Occipito-cervical fusion +/- fixation	---	2	2	2	2	2	2
Posterior decompression +/- fixation/ fusion (C2-C7)	---	2	2	2	2	2	2
Anterior decompression +/- fixation/ fusion	---	2	2	2	2	2	2
Biopsy thoracic spine	---	2	2	2	2	2	2
Posterior decompression +/- fixation/ fusion	---	2	2	2	2	2	2
Scoliosis correction – anterior release +/- instrumentation	---	2	2	2	2	2	2
Scoliosis correction – posterior fusion +/- instrumentation	---	2	2	2	2	2	2
Caudal epidural injection	---	2	2	2	2	2	2
Decompression lumbar spine with fusion +/- fixation	---	2	2	2	2	2	2
Decompression lumbar spine without fusion (not discectomy alone)	---	2	2	2	2	2	2
Discectomy open / micro	---	2	2	2	2	2	2
Nerve root / facet joint injection lumbar spine	---	2	2	2	2	2	2
Acromioclavicular joint excision- arthroscopic / open / lateral clavicle	---	2	2	2	2	2	2
Acromioclavicular joint reconstruction (e.g. Weaver Dunn)	---	2	2	2	2	2	2
Acromioplasty open	---	2	2	2	2	2	2
Anterior repair for instability arthroscopic/open	---	2	2	2	2	2	2
Arthroscopic subacromial decompression	---	2	2	2	2	2	2
Arthroscopy diagnostic	---	2	2	2	2	2	2

Rotator cuff repair (open or arthroscopic) +/- acromioplasty	---	2	2	2	2	2	2
Total shoulder replacement	---	2	2	2	2	2	2
Elbow arthroscopy	---	2	2	2	2	2	2
Arthrotomy elbow	---	2	2	2	2	2	2
Excision radial head +/- synovectomy	---	2	2	2	2	2	2
Tennis / golfer elbow release	---	2	2	2	2	2	2
Ulnar nerve decompression /transposition	R7	1	2	2	2	2	3
Carpal tunnel decompression	R4	2	2	3	3	4	4
De Quervain's decompression	R4	2	2	3	3	4	4
Excision distal ulna	---	2	2	2	2	2	2
Ulna shortening	---	2	2	2	2	2	2
Ulnar nerve decompression at wrist	R7	2	2	2	2	2	3
Trigger finger release	R4	2	2	3	4	4	4
Trigger thumb release	R4	2	2	3	4	4	4
Arthrodesis hip	---	2	2	2	2	2	2
Arthrotomy hip (drainage)	---	2	2	2	2	2	2
Excision arthroplasty hip (e.g. Girdlestone)	---	2	2	2	2	2	2
Open reduction for DDH	---	2	2	2	2	2	2
Osteotomy hip - pelvic for DDH	---	2	2	2	2	2	2
Osteotomy hip - proximal femoral for DDH	---	2	2	2	2	2	2
Revision of Hip Replacement	---	2	2	2	2	2	2
Slipped upper femoral epiphysis pinning	R6	2	2	2	2	3	4
THR cemented/ hybrid/ surface replacement/ uncemented	---	2	2	2	2	2	2
Amputation above knee	---	2	2	2	2	2	2
Femoral lengthening	---	2	2	2	2	2	2
Proximal femoral osteotomy (not for DDH)	---	2	2	2	2	2	2
ACL reconstruction	---	2	2	2	2	2	2
Revision ACL reconstruction	---	2	2	2	2	2	2
Arthroscopic lateral release	---	2	2	2	2	2	2
Arthroscopic partial meniscectomy	---	2	2	2	2	2	2
Arthroscopic meniscal repair	---	2	2	2	2	2	2
Arthroscopic removal loose bodies knee	---	2	2	2	2	2	2
Arthroscopic synovectomy	---	2	2	2	2	2	2
Osteotomy distal femoral	---	2	2	2	2	2	2
Osteotomy proximal tibial	---	2	2	2	2	2	2
Unicompartmental knee replacement	---	2	2	2	2	2	2
TKR	---	2	2	2	2	2	2
Revision TKR	---	2	2	2	2	2	2
Articular cartilage repair surgeries	---	2	2	2	2	2	2
Amputation below knee	---	2	2	2	2	2	2
Tibial lengthening	---	2	2	2	2	2	2
Arthrodesis ankle	---	2	2	2	2	2	2

Arthrotomy ankle	---	2	2	2	2	2	2
Decompression tendons at ankle	---	2	2	2	2	2	2
Tendoachilles lengthening	---	2	2	2	2	2	2
Amputation toe / ray	---	2	2	2	2	2	2
Calcaneal osteotomy	---	2	2	2	2	2	2
CTEV correction operative	---	2	2	2	2	2	2
First metatarsal osteotomy	---	2	2	2	2	2	2
First MTPJ arthrodesis	---	2	2	2	2	2	2
First MTPJ excision arthroplasty	---	2	2	2	2	2	2
First MTPJ soft tissue correction	---	2	2	2	2	2	2
Hind-foot arthrodesis	---	2	2	2	2	2	2
Wedge tarsectomy	---	2	2	2	2	2	2

R2 (3m-6m)

- Wound closure, delayed primary or secondary
- Wound Debridement
- Anterior dislocation shoulder closed reduction
- Plaster application and closed management of fractures
- **Closed management of:**

  -Scaphoid fracture non-op

  -Phalangeal fracture MUA +/- POP

  -Metacarpal fracture / dislocation POP & MUA

  -MCPJ fracture / dislocation MUA +/- POP

  -Diaphyseal tibial fracture MUA & POP

  -Ankle fracture / dislocation MUA & POP

R3 (6m-12m)

- **Closed management of:**

  - Fracture diaphysis humerus POP +/- MUA

  - Fracture shaft radius / ulna MUA & POP

  - Fracture distal radius MUA & POP

- Diaphyseal fracture in children traction or spica

- Dislocated hip closed reduction
- Metacarpal/**phalangeal** fracture / dislocation MUA & percutaneous wires
- MCPJ fracture / dislocation MUA & Percutaneous wires
- Diaphyseal fracture external fixator **(Tibia & femur)**
- Fracture shaft radius / ulna MUA & percutaneous wires
- Nail bed repair
- **Joint aspiration/injection**

R4 (1y-1.5y)

- Dislocated elbow +/- fracture closed reduction
- **Fracture distal radius Pinning**
- **Metatarsal fracture pinning**
- Ankle fracture / dislocation ORIF
- Diaphyseal fracture plating **(Tibia & femur)**
- Extracapsular fracture (DHS)
- **Extracapsular fracture intramedullary fixation**
- Tibial plateau PC screws
- Diaphyseal tibial & femur fracture IMN **(Other than upper, lower or segmental fractures)**
- CTEV correction non-operative
- Fasciotomy for compartment syndrome
- Carpal tunnel decompression
- Trigger finger release
- Trigger thumb release
- Platting ulna

R5 (1.5-2y)

- Bone graft harvest
- **SCH/LHC pinning**

- SN humerus pinning
- Radius **(shaft, dorsal approach)** and ulna ORIF
- Intracapsular fracture NOF ORIF
- **Subtrochanteric intramedullary fixation**
- Supracondylar femoral fracture (not intraarticular) fixation
- Olecranon fracture ORIF
- Patella fracture ORIF
- **Pilon fracture with external fixator**
- Finger tip reconstruction and hand soft tissue surgeries
- Hand compartment syndrome decompression
- Tendoachilles repair
- Bursa excision
- Dorsal wrist ganglion excision
- **De Quervain's decompression**
- Amputation toe / ray for trauma
- **Extensor Tendon repair**
- **Flexor Tendon repair**

R6 (2-2.5y)

- Diaphyseal fracture tibia IMN (segmental, upper and lower third)
- Fracture diaphysis humerus ORIF plating
- Fracture distal radius ORIF
- Metacarpal/**phalangeal fracture** / dislocation ORIF
- Subtrochanteric fracture plate/screw fixation CP DCS
- Supracondylar femoral fracture (not intraarticular) DCS / blade plate etc
- Clavicle fracture plating
- Radius shaft fracture plating (Volar approach)
- Tibial plateau fracture ORIF **(without articular elevation)**
- Lisfranc fracture ORIF
- Lateral condyle fracture ORIF

- Medial condyle / epicondyle fracture MUA/Kwire/ORIF
- **Fracture humerus external fixator application**
- Fracture distal radius external fixation
- Slipped upper femoral epiphysis pinning
- Quadriceps tendon repair
- Patella tendon repair
- Infected hand drainage (not tendon sheath)
- PC Tenotomy procedures (Adductor, hamstring, tendoachilis)

R7 (2.5-3y)

- Base of 1st metacarpal fracture/dislocation POP/Percutaneous wire/ORIF
- Radial head / neck fracture MUA +/- K wire/ excision
- SN humerus ORIF
- SCH ORIF
- **Intracapsular fracture NOF arthroplasty**
- Bipolar hemiarthroplasty
- Intraarticular fracture distal femur ORIF
- Pilon fracture ORIF
- **Proximal radius fractures ORIF**
- Tibial plateau fracture ORIF **(with articular elevation)**
- **Pelvic fracture external fixator application**
- Intra-articular distal humerus fracture ORIF
- Ilizarov Tibia
- Non-union ORIF +/- bone grafting
- Infection tendon sheath drainage
- Nerve repair
- Ulnar nerve decompression /transposition
- Ulnar nerve decompression at wrist

Dress code policy

Each resident is committed to wear:

- His ID with color code 24/7
- His group matched scrub in the operation room or under the coat in the emergency hospital
- His coat outside the operation room (clean and tidy)
- No T shirts nor sporty shoes allowed in department and clinics … Only classic costumes with coat
- Always carrying 2 pens (Red/Blue) and a note
- Totally prohibited to get outside the hospital with scrub. If reported, a huge misconduct event will be plotted in the evaluation record.

Disciplinary action policy

A committee is constituted by the head of department (under his presidency) and is called for decision making in: (Disciplinary action committee لجنة الانضباط)

1- Periodic review of the Logbook and Evaluation sheets prior to MCQ exam entry decision and progression to the following residency year (twice a year)
2- Any extreme behavioral misconduct to take a crucial decision

Incidents requiring disciplinary action policy:

Academic Deficiency: The Resident is not meeting one or more of the Residency program Core Competencies, as revised from time to time.

Examples of academic deficiencies, include, but are not limited to:

- Issues involving knowledge, skills, job performance or scholarship;
- Failure to achieve acceptable exam scores within the time limits identified by the training program;
- Unprofessional conduct;
- Professional incompetence including conduct that could prove detrimental to Mansoura University Hospital patients, employees, staff, volunteers, visitors or operations.

Misconduct:

Conduct by a Resident that violates workplace rules or policies, applicable law, or widely accepted societal norms.

Examples of misconduct include, but are not limited to:

- Unethical conduct, such as falsification of records;
- Illegal conduct (regardless of filing of criminal charges or criminal conviction);
- Sexual misconduct or sexual harassment;
- Workplace violence;
- Unauthorized use or disclosure of patient information; فيسبوك
- Scientific misconduct.

Types of Disciplinary Actions:

- ***Dismissal***: A permanent separation of the Resident from the program.
- ***Non-Promotion to the Next R Level***: A lack of promotion of the Resident to the next level of training unless or until Resident's performance improves to the required level.
- ***Suspension:*** A period of time in which the resident is not allowed to take part in all or some of the activities of the program. Time spent on suspension may not be counted towards the completion of program requirements. During the suspension the Resident will be placed on administrative leave with, or without, or with pro-rated pay as appropriate depending on the circumstances. تعليق كل شئ .. التدريب و الدراسة

  This can be legally achieved by reporting him invalid for the semester exam.
- ***Probation:*** A temporary modification of a Resident's participation in or responsibilities within the training program; these modifications are designed to facilitate the Resident's accomplishment of program requirements.

  Generally, a Resident will continue to fulfill training program requirements while on probation, subject to the specific terms of the probation. The Program Director shall have the authority to place the Resident on probation (and shall identify the resident's status as "on probation") pursuant to this policy and have wide discretion based on his professional judgment to determine the terms of probation. خفض مستوى النائب تدريبيا مؤقتا مع الحفاظ على السينيوريتي

  Probation may include, but is not limited to, special requirements or alterations in scheduling a Resident's responsibilities, a reduction or limitation in clinical responsibilities, or enhanced supervision of a Resident's activities.

Suspension holds seniority while Probation doesn't.