

A.

***CURRICULUM VITAE*****Personal Data**

**Name** : Sherif Amr  
**Birth Place** : Alexandria, Egypt  
**Birth Date** : 31.3.1961  
**Nationality** : Egyptian  
**Address** : 63, King Abdel-Aziz El-Soud Str., Manial, Cairo, Egypt  
**P.O.Box** : 11451  
**Tel.** : 00202-23642805  
 e-mail: sherifamrh@hotmail.com

***I. Academic Degrees Obtained***

- 1996 : **M.D. in Traumatology and Orthopaedics**  
Faculty of Medicine, Cairo University, Cairo, Egypt
- 1989 : **M.Sc. in Traumatology and Orthopaedics**  
Faculty of Medicine, Cairo University, Cairo, Egypt  
Degree "Very Good"
- 1987 : **Permit to practise as a physician**
- 1985 : **M.B., B.Ch.**  
Faculty of Medicine, Cairo University, Cairo, Egypt  
Degree "Excellent"

***II. Stages of University Education***

- 1996-2000 : **Faculty of Law, Cairo University**  
Cairo, Egypt  
Law (civil law, penal law, islamic law, administrative law)
- 1997 (July-September): **Department of Biomechanics**  
Technical University Hamburg- Harburg (TUHH)Hamburg,  
Germany  
Experimental orthopaedic biomechanics
- 1992-1994 : **Department of Plastic and Reconstructive  
Surgery** Medical School Hannover, Hannover, Germany

Postgraduate microsurgery, brachial plexus surgery training program, surgery of peripheral nerves

- **1990-1996** : **Department of Orthopaedics and Traumatology** Faculty of Medicine, Cairo University, Cairo, Egypt  
Assistant lecturer

- **1987-1990** : **Department of Orthopaedics and Traumatology**  
Faculty of Medicine, Cairo University, Cairo, Egypt Residency training program

- **1985-1987** : **House Officer, Cairo University Hospitals, Cairo, Egypt**

- **1979-1985** : **Faculty of Medicine, Cairo University, Cairo, Egypt**

Medicine and Surgery (undergraduate studies)

### **III. Professional Background**

-2008: **Director**

The laboratory animal facility

Faculty of Medicine, Cairo University Cairo, Egypt

-2006: : **Professor**

Department of Orthopaedics and Traumatology,  
Faculty of Medicine, Cairo University  
Cairo, Egypt

- **2002** : **Assistant Professor**

Department of Orthopaedics and Traumatology,  
Faculty of Medicine, Cairo University  
Cairo, Egypt

- **1996-2001** : **Lecturer**

Department of Orthopaedics and Traumatology,  
Faculty of Medicine, Cairo University  
Cairo, Egypt

-**1990-1996: Assistant Lecturer**

Assistant Lecturer  
Department of Orthopaedics and Traumatology,  
Faculty of Medicine, Cairo University  
Cairo, Egypt

-**1987-1990 : Resident**

Department of Orthopaedics and Traumatology,  
Faculty of Medicine, Cairo University  
Cairo, Egypt

**- 1985-1987 : House Officer**

Faculty of Medicine, Cairo University, Cairo, Egypt

**- 1996 : Establishment of the Experimental Orthopaedic Biomechanics Research Laboratory** at the Department of Orthopaedics, Cairo University  
(together with the Department of Mechanics, Faculty of Engineering, Cairo University)

**IV. Periods of Study Abroad :**

**-1992-1994:**

-Department of Plastic and Reconstructive Surgery  
Medical School Hannover, Hannover, Germany

Purpose of stay : microsurgery, hand surgery, peripheral nerve surgery training program

**\* June 1997-September 1997**

Department of Biomechanics

Technical University Hamburg – Harburg, Hamburg

**Purpose of stay : research (experimental biomechanics); publication indicated number 11 (see list of publications)**

**V. Research Activities**

- Master Degree Essay was entitled :  
“**Biomechanics of Fractures**”

- Ph.D. Degree Thesis was entitled :  
“**Reconstruction of Digits Using Microsurgery**”

**\* M.Sc. essays supervised by us :**

- Ischaemia Reperfusion Injury in Free Flap Surgery
- The Osteoclast
- Stress-Shielding
- Foot Injuries

- Management of the Polytrauma Patient
- The Thoracic Outlet Syndrome
- Post-traumatic Avascular Necrosis of Bone

**\* M.D. theses supervised by us :**

. Management of the Hypoplastic Thumb

\*\*Together with the candidate (Hisham Abdel-Ghany; associate lecturer, Department of Orthopaedics, Faculty of Medicine, Cairo University), we have performed about 15 pollicizations up till now.

. Physiotherapy following Pollicization of the Thumb

\*\*Together with the candidate (Manal Ismail; associate Lecturer, Faculty of Physiotherapy, Cairo University) and the Department of Biomedical engineering, we have developed a virtual reality computer-based rehabilitation program (both software and hardware) for the cases of pollicization performed by us.

. Design and Implementation of a new Internal Fixation Device for Burst T12-L1 Fractures

\*\*Together with the candidate (Ashraf Anbar; associate Lecturer, Department of Orthopaedics, Faculty of Medicine, Cairo University), Prof. Dr. Youssry El-Hawary (Professor of Spine Surgery Department of Orthopaedics, Faculty of Medicine, Cairo University), Misr Medical Company and the Department of Mechanical Engineering, Cairo University, we have developed an internal fixation device for burst T12-L1 fractures of the spine, and we are currently testing it on calf-spines.

-Design and Implementation of a new Internal Fixation Device for Pelvic and Acetabular Fractures

- Repair of brachial plexus injuries by artificial nerve grafts.

- Sural nerve side grafting and a chitosan-laminin scaffold bridge gaps and bypass injury zones in spinal cord injuries especially at

the cauda equina level and enhance the effect of mesenchymal stem cell derived neural stem cell-like cell transplantation; a clinical case series study.

## **VI. Scientific Activities**

### **- Main Surgical Activities**

Microvascular surgery; brachial plexus surgery and surgery of peripheral nerves; use of free muscle flaps; surgery of musculoskeletal oncology; use of free vascularized grafts to bridge defects after tumour excision, osteomyelitis and congenital pseudoarthrosis; hand surgery.

- In 1994, I founded together with the Department of Mechanical Engineering an Orthopaedic Biomechanics Unit at the Department of Orthopaedics, Cairo University. This is based on my studies of mathematics, physics and mechanics (particularly the theory of elasticity), which I pursued as a hobby during the years of medical education. The main activities of this unit include : experimental stress analysis, the finite element method. We have just developed an internal fixation device of the spine, and we are currently testing it on calf-spines. At the present time, we have agreed with the Tribology Section, the Department of Mechanical Engineering, Cairo University to start a research project entitled "Wear in Joint Arthroplasty".
- Spinal cord transplantation
- Laboratory animal science

## **VII. Affiliations**

- Egyptian Medical Syndicate (from 1987 till now)
- Egyptian Society for Experimental Surgery
- Egyptian Center for Preservation of Musculoskeletal Tissue (Bone Bank)
- Quoted in Who's Who in Medicine and Who's Who in Science

## **VIII. Spoken Languages** : Arabic, English, German, French, Spanish

**B.****List of Publications****Published Articles in Journals**

Amr SM, Gouda A, Koptan WT, Galal AA, Abdel-Fattah DS, Rashed LA, Atta HM, Abdel-Aziz MT. Bridging defects in chronic spinal cord injury using peripheral nerve grafts combined with a chitosan-laminin scaffold and enhancing regeneration through them by cotransplantation with bone-marrow derived mesenchymal stem cells; a series of 14 patients. J. of Spinal Cord Medicine 2013 ( in press).

**Amr SM, Essam AM, Abdel-Meguid AM, Kholeif AM, Moharram AN, El-Sadek RE. Direct cord implantation in brachial plexus avulsions: revised technique using a single stage combined anterior (first) posterior (second) approach and end-to-side side-to-side grafting neurorrhaphy. J Brachial Plex Peripher Nerve Inj. 2009 Jun 19;4:8.**

**Amr SM, Moharram AN, Abdel-Meguid KM. Augmentation of partially regenerated nerves by end-to-side side-to-side grafting neurotization: experience based on eight late obstetric brachial plexus cases. J Brachial Plex Peripher Nerve Inj. 2006 Dec 5;1:6.**

**Amr SM, Moharram AN. Repair of brachial plexus lesions by end-to-side side-to-side grafting neurorrhaphy: experience based on 11 cases. Microsurgery. 2005;25(2):126-46**

**Abdel-Ghani H, Amro S. Characteristics of patients with hypoplastic thumb: a prospective study of 51 patients with the results of surgical treatment. J Pediatr Orthop B. 2004 Mar;13(2):127-38.**

Amr SM, Abdel-Meguid KMS, Kholeif AM, Mortada AM, Abdel-Mohsen AW: Valgus malunion of the talar neck: a report of three cases. Medical Journal of Cairo University 2004; 72 (suppl.):227-235..

**Amr SM, EI-Mofty AO, Amin SN: Anterior versus posterior approach in reconstruction of infected nonunion of the tibia using the vascularized fibular graft: potentialities and limitations. Microsurgery2002;22(3):91-107.**

**Amr SM, Abdel-Meguid KMS, Kholeif AM: Neurologic injury caused by fracture of the iliac wing (Duverney's fracture): case report. J Trauma. 2002 Feb;52(2):370-6.**

Amr SM, Abdel-Meguid KMS, Kholeif AM: Injuries of the sciatic nerve; management and results based on 17 cases. Medical Journal of Cairo University 2001; 69 (suppl.):179-220..

Amr SM, Abdel-Aziz MK: Established Volkmanns Ischaemic Contracture : a report of 15 cases. Medical Journal of Cairo University 2001; 69:227-240.

Amr SM, Abdel-Meguid KMS, Kholeif AM, Abou-Shady N: The neglected cut wrist: impairment and disability evaluation following operative repair (presented at the First International Congress on Ergonomics and Rehabilitation, Cairo, Egypt 26-29.3.2001, Kasr El-Aini Medical Journal 2001; 7(4): 421-446).

**Amr SM, EI-Mofty AO, Amin SN: Further experience with the free transfer of the upper head of the fibula Handchir Mikrochir Plast Chir 2001; 33: 1 - 9.**

**Amr SM, EI-Mofty AO, Morsy AM, Amin SN, EI-Malt OM, Abdel-Aal HA: Reconstruction following resection of tumours around the knee: role of the free vascularized fibular graft. Microsurgery 2000, 20:233-251.**

Amr SM, Abdel-Meguid KMS, Kholeif, AM.: Allo-and xenotransplantation of vascularized spinal cord segments together with or without the attached plexus of nerves (lumbosacral plexus). A possible solution to spinal cord injuries. A review article . Medical Journal of Cairo University 2000; 68:239-267.

Amr SM: Traumatic brachial plexus palsy; a report of 30 cases.

Medical Journal of Cairo University 2000; 68:111-125.

Amr SM, Abdel-Aziz MK: Suggestion of a modified technique for resection of huge tumours of the thoracic vertebrae. Medical Journal of Cairo University 1999; 67:567-574.

**Amr SM: Transverse subgluteal-ilioinguinal approach to the acetabulum. Microsurgery 1998, 18:432-441.**

El-Gaidy IT, Abdel-Aziz MK, Amr SM,: Management of fractures of the distal fibula associated with disruption of the deltoid ligament of the ankle; fracture stabilization with non-operative treatment of the deltoid ligament. Kasr-El-Aini Medical Journal 1996; 2:99-113.

*Published Contributions to Academic Conferences*

Placzek R, Birken LMO, Knopf U, Amr S, Morlock MM, Ruether W, Schneider E: Mechanical Properties of cylindrical implants with different diameters for intervertebral fusion (presented at the Fracture-healing Congress in Davos"Biomechanica" 28.20.2997, p. 15).

Amin SN, Ebeid WA, El-Mofty AO, Amr SM: Reconstructive options for bone defects resulting from tumour resections in the upper limb (presented at the First International Congress on Hand Surgery, Cairo, Egypt 20-23.11.1999, p. 91).

**M.D. Degree Thesis**

M.D. Degree Thesis was entitled "Reconstruction of Digits Using Microsurgery" ; submitted to Cairo University in March 1995.

**M.D. Degree theses supervised by us :**

Hisham Abdel-Ghany : Management of the hypoplastic thumb; submitted to Cairo University in May 2000.



**Manal Ismail : The effect of computer simulation enhanced training on hand functions in children after reconstruction of the hypoplastic thumb; submitted to Cairo University in September 2000.**

**Ashraf Anbar: Design and implementation of a new internal fixation device for burst T12-L1**

fractures ; submitted to Cairo University in September 2001

Sherif Khaled: Design and implementation of a new internal fixation system for pelvic and

acetabular fractures; submitted to Cairo University in 2002.

### **Unpublished Contributions to Academic Conferences**

Ashraf Anbar , Sherif Amr: Mechanical testing of the spine; presented at the First Annual Meeting of

Egyptian Spine Surgeons at Nasser Institute, Cairo, Egypt in March 1999.

Sherif Amr: Modelling of the spine using the finite element method; presented at the First Annual Meeting of

Egyptian Spine Surgeons at Nasser Institute, Cairo, Egypt in March 1999.

