



In the Name of God

Islamic Republic of Iran
Ministry of Health and Medical Education
Deputy Ministry for Education

Spinal Surgery

Degree: Fellowship

Introduction

Treating spinal disorders, including deformities, congenital disorders, tumors and spinal fractures, disc disorders with spinal instability, spinal canal stenosis, and severe spondylolisthesis are among the diseases that requires skills, expertise, and experience. Now that there are enough specialists in Iran, we are prepared for training Fellowships in this course. This course aims to relieve the suffering of patients through a proper treatment and prevent the consequences of high expenditures imposed on them in healthcare system by taking advantage of the latest findings in the world. To this end, the relevant authorities of the Ministry of Health and Medical Education established a committee composed of specialists in neurosurgery and orthopedics for developing a spinal surgery curriculum. The committee developed this curriculum using the curricula implemented by accredited universities, expert opinions, and valuable local experiences.

Definition and Duration of the training Program:

Spinal Surgery fellowship is a joint training program between Orthopedics and Neuro surgery for treatment and rehabilitation of patients with spinal lesions including: Spinal traumas, pediatrics and adults spinal diseases and malformations, Metabolic and Degenerative diseases, tumors infections, congenital lesions and disc diseases.

Also interventions for resumption of spinal health in general population will be designed.

The duration of this course is 18 months.

Aims:

1.To train specialists who are knowledgeable, competent, efficient, effective, and liable in the area of spinal surgery

2.In the next 10 years, we will be ranked among the top countries in the Middle East in achieving the international educational standards, science production, and providing the society

with the most appropriate services

Admission Requirements

- M.B.B.S./M.D. and specialty or equivalent certificates
- Certificate of Internship or Certificate of Practice

Language Requirements:

- Language requirements: Evidence of English Proficiency on the TOEFL or IELTS tests. The minimum score for TOEFL PBT, TOEFL iBT and IELTS is 533, 72 and 5.5 respectively.
- Applicants from Persian (Farsi) Speaking countries (They shall both speak and write in Persian) who have applied for graduate Degree-based programs may be exempted, based on the decision of the department, from submitting any certificates regarding their English Language Proficiency. Nevertheless, they are required to hand in their English language certificate which meets SUMS' minimal language proficiency requirements, within one year from commencing their studies at SUMS.

Specific Competencies and Skills

(Diagnostic-therapeutic procedures):

| Skill |
|---|
| Performing diagnostic and therapeutic blocks, such as facet block, etc. * Percutaneous Radiofrequency Technique (PRT) |
| Myelography at different levels* |
| Discography |
| Different types of spinal casting* |
| Different types of spinal stretching* |
| Performing surgical procedures on neural elements, such as nerve release, closure of membrane defects covering the spinal cord, spinal and neural decompression, peripheral nerve grafting* |
| Performing surgeries on intervertebral discs, anterior or posterior Discectomy, Endoscopic and microscopic discectomy* |
| Performing surgeries on bone tissues, such as different types of laminectomy, vertebrectomy, removal of osteophytes, correction of defects* |
| Performing surgeries for stabilizing and correcting the curvature of the spine, such as installation of spinal stabilization equipment through anterior, lateral, or posterior approaches* |
| Performing surgeries for removing spinal tumors (extradural) * |

* This procedure is optional.

Overall Structure of the Course:

| Educational ward, unit, or setting | Syllabus- Measures | Duration (month) |
|--|---|------------------|
| Neurosurgery ward Orthopedics ward (according to the relevant fellowship) | Visiting patients daily, participating in educational activities, preparing patients for diagnostic-therapeutic procedures and surgeries, providing medical consultations, preparing the necessary medical reports, such as examination, operation report, and medical file summary, educating patients and their relatives, performing other measures according to the curriculum of the ward. | 10 months |
| Clinic | Outpatient visit, following up the patients treated whether through medical treatment or surgical procedure, preparing patients for hospitalization, educating patients and their relatives, participating in research programs | |
| Operating room | Performing preparatory measures prior to surgery, such as positioning, observation and participating in performing the surgery, completing surgery documentation, such as operation reports and copying images and graphs | |
| Rotation | For orthopedic and neurosurgery fellowships and vice versa | 6 month |
| Thoracic surgery ward | Observation and practice opening and closing the thorax, insertion of different types of chest tubes, identification of different parts of the thorax | 1 month |
| Optional ward, including Thoracic surgery Radiology Pathology General surgery Orthosis Rheumatology Microsurgery laboratory | Among the wards listed, the students choose 3 months in coordination with the head of the ward. | 1 month |

Important Notice:

The above features the curriculum of the Orthodontics Program designed and approved by the Iranian Ministry of Health and Medical Education. Given the fact that Shiraz University of Medical Sciences is constantly improving and updating itself to meet the international academic standards and the state of the art, and based on the availability of facilities, devices, ward, laboratories, etc. at SUMS, all the SUMS curricula are approximately 20% subject to change.