

**In the Name of God**

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

**Congenital Cardiac Surgery  
Degree: Fellowship**

**Program Description**

Congenital heart diseases have high complexities and require interventions by experts; in addition, the nature of congenital heart diseases and their interventions and treatments are completely different from those of adult heart diseases. Hence, congenital heart diseases need careful and special considerations. Their early detection leads to earlier and better management. Therefore, by commencing the congenital cardiac surgery fellowship, more specialized treatments will be provided to children with heart diseases, who are the future of the country and need a lot of attention. In IRI, pediatric cardiac surgery is performed exclusively in a few centers by a few cardiac surgeons in a specialized and advanced way. Therefore, by commencing this fellowship training program on congenital heart diseases for adult and pediatric cardiac surgeons, it will be possible to perform these surgeries in more centers across the country.

**Definition & Duration of the Training Program:**

Congenital cardiac surgery Training Program is a clinical program that is a subset of cardiac surgery, and the graduates are engaged in prevention, diagnosis, treatment, and care Provision for patients with congenital heart diseases.

The Duration is 18 months.

**Aim:**

To train specialists who are knowledgeable, competent, responsible, and sensitive to individuals and society health in the area of congenital heart diseases.

**Expected Competencies at the End of the Program**

**General Competencies\***

**Specific Competencies and Skills**

At the end of the program learners will be competent in performing following procedures:

- Closed heart surgeries, such as closure of the PDA
- PA banding
- Mod. BT. Shunt – Repair of COA
- Closure of VSDs, ASDs, and PAPVCs
- Repair of PAVSD and CAVSD
- Repair of TAPVC
- Repair of TOF and types of PSs
- PS, DORV, and Rastelli procedure
- Complex repair of the aortic arch (and types of LHHSs)
- Coarctation of the aorta

Arterial Switch and Atrial Switch  
Repair of truncus using allograft or other conduits  
Repair of congenital abnormalities of the mitral valve  
Repair of congenital abnormalities of the aortic valve  
Repair of other valves  
Congenital coronary artery anomalies  
Vascular malformations, such as vascular ring  
Other complex cardiac malformations (A combination of several diseases, complementary congenital cardiac re-surgeries, pacemaker, etc.)  
Surgeries for patients with single ventricle

### **Educational Strategies, Methods and Techniques\***

#### **Student Assessment (Methods and Types)**

##### **I. Assessment Methods:**

Written, Oral, DOPS, Logbook assessment, paper-based assessment

##### **II. Periods of Assessment:**

Written examination once a year

Log books continuously

Final assessment for confirming the final competency

### **Ethical Considerations\***

\*Note: The related document(s) can be found at <http://hcmep.behdasht.gov.ir/>.

**The overall structure of the course:**

Department, , unit, or setting	Syllabus- Measures	Duration (month)
<b>Clinic</b>	Outpatient visits, triage, filing medical records, and hospitalizing patients, participating in medical consultations and following up the expert consultations given to the patients, performing outpatient procedures, educating the lower-level classes, responding to expert consultations requested and other measures in accordance with organized programs of the ward, participating in the curricula according to the program organized by the ward	Two days a week during the course
<b>In-patients</b>	Visiting hospitalized patients, patient care, stabilizing the patients hospitalized in the ward, performing diagnostic-therapeutic procedures at the bedside, educating the lower-level classes, participating in shifts, medical consultations and curricula according to the program organized by the ward, other measures in accordance with organized programs of the ward	Every day during 18 months
<b>Operating room</b>	Participating in surgical procedures by observation, assisting or performing independently according to the program organized by the ward.	At least 4 days a week during the course
<b>Procedural room</b>	Participating in performing procedures by observation, assisting or performing independently according to the program organized by the ward.	4 days a week during the course

Seyed-Hassan Emami-Razavi MD  
 Secretariat of the Council for  
 Graduate Medical Education

Seyed Mansour Razavi MD  
 Secretary of the Supreme Council for  
 Medical Sciences Planning

Bagher Larijani MD  
 Deputy for Education  
 Ministry of Health and Medical Education