

# Sir H. N. Reliance Foundation Hospital and Research Centre, Mumbai <u>Offers</u> <u>Institutional Fellowship in</u>

# Cardiac, Vascular and Thoracic Anaesthesia

# **Introduction**

Sir HN Reliance Foundation Hospital is a 360-bed, world-class, multispecialty tertiary care hospital offering technologically advanced complete care to all its patients.

Based on our achievements, we have been persistently ranked the best in Western India and among the top 3 in the country.

Our hospital's Advanced Cardiac Sciences program is among the country's best and most renowned. We are pleased to offer a Fellowship program in Cardiac, Vascular, and Thoracic Anesthesia to deserving, dedicated, and enthusiastic candidates who, after completing the course, will become masters in this highly skilled and ever-expanding field.

# <u>Goals</u>

- To increase knowledge, skill, and competency in this challenging field.
- To be aware of recent advances and developments in the field.
- To provide a structured training program through academic activities like specialty training, lectures, case discussions, and journal reviews.

# **Eligibility**

MD/ DNB/ DA in Anesthesia

## **Admission process**

- Submission of the eligible candidate's recent CV with any recent publications (last 5 years)
- Interview with the Director and Faculty of Cardiac Anesthesia
- Statement of Purpose (how the course would benefit you)

## **Course Director**

Dr Hemant Mehta

# **Course Teacher**

Dr Harvesp Panthakey

# **Teaching Faculty**

Dr. Daisy Jokhi Dr. Sandip Katkade Dr. Ameya Nalavade Dr. Jeril Kurian Dr. Rohit Bunage

# **Course fee**

A non-refundable fee of Rs 10000/- is payable at the beginning of the course.

## **Stipend and accommodation:**

A fixed sum of Rs 1.0 lakh will be given per month and no accommodation will be provided by the Institute.

## Annual Intake

One candidate annually, with the course commencing every May of the year.

# **Duration of course**

1 year

The candidate will compulsorily rotate in the following departments:

•	Adult cardiac OT	5 months
•	Advanced cardiac OT	1 month
•	Pediatric cardiac OT and ICU	1 month
•	Thoracic OT	1 month
•	Vascular OT	1 month
•	Cath lab & Structural Heart clinic	1 month
•	Echo lab (TEE n TTE) and Perfusion technology training	1 month
•	Adult ICU	1 month

Preoperative optimization and postoperative cardiac rehabilitation will be an ongoing process throughout the course.

During the entire tenure, the fellow will have hands-on training in inserting invasive lines, advanced monitoring equipment, and various cardiac drugs used for different procedures.

## <u>Syllabus</u>

### **Basic Sciences**

- 1. Anatomy of heart, coronaries, pulmonary and vascular structures
- 2. Physiology- cardiac cellular, cardiac function, haemodynamics, ANS, blood and coagulation function, cardiac arrhythmias, open and closed chest ventilation, one lung ventilation.
- 3. Pathophysiology- Heart failure, cardiopulmonary reserves, congenital defects, vascular pathology
- 4. Pharmacology- Anaestheand vasoactive drugs, anti arrhythmic drugs, TCA
- 5. Physics- Electronic medical records and state of the art monitoring equipment

#### **Clinical Sciences**

#### <u>Adult</u>

- Anaesthesia for IHD, Valvular heart disease, Vascular disease, and adult CHD.
- Electrophysiological and Arrhythmia surgery
- Anesthesia for lung surgery, CTEPH, one lung anesthesia, DLT, Bronchial blockers, thoracic epidural.
- Minimally invasive / Robotic surgeries for CABG, Valvular surgery
- Vascular surgeries like Bentall
- Hybrid procedures involving stents and surgeries. TEVAR, AAA
- Redo surgeries

#### **Pediatric**

- Anesthesia for palliative cardiac procedures
- Anaesthesia for complex neonatal cardiac surgery
- Redo pediatric cardiac procedures
- Diagnostic and therapeutic procedures in Cath lab like ASD, VSD, PDA closure, Coarctation, Pulmonary stenting

#### Advance cardiac

- Anesthesia for heart and lung transplant
- Anesthesia for LVAD, RVAD, and Ecmo procedures

#### Cardio pulmonary bypass

- Knowledge of CP machine with basic physiology
- Hypothermia tech and protocol
- Myocardial protection n cardioplegia
- Haemodiluion, anticoagulation
- PTCA and anesthesia management

#### Cath lab procedures

- Anesthesia for TAVR, TMVR, TPVR, Mitraclips
- Complex PTCA with Rotaablation, IVUS, FFR, FFA, Laser
- EP study, RF ablation
- PPI and AICD

#### **Basic and Advance Monitoring in anesthesia and ICU**

- ECG, ABP, CVP, PAP, Cardiac output monitoring, SV, CI, SVR, PVR, Echo TEE n TTE, IABP, ECMO.
- Neuro monitoring with BIS cerebral oximetry, Evoked potential monitoring
- PFT, ABG, Chest X-ray n CT
- Coagulation profile and TEG

#### ICU management

- Ventilatory care.
- Weaning from ventilator, inotropes, ECMO, IABP
- Preoperative and postoperative care
- Parenteral Nutrition, infection control
- ESRD and dialysis techniques
- Pain management

## **Research and logbook**

The fellow will maintain a detailed logbook of the total number of cases completed, with a special mention of interesting cases, on a monthly basis.

Complete at least one original research project as principal author and at least two publications in an indexed journal.

Present academic work at local, national, or international scientific meets.

Prepare a weekly lecture to be presented to the faculty and teach fellow department residents.

## Summative assessment at the end of the course

A theory and practical exam consisting of 2 cases and table viva will be conducted at the end of the course as an exit exam.

Logbook, research and academic activities will be taken into consideration.

# **Recommended Textbooks**

Kaplan Hensley Martin Carol Lake and Perloff for pediatric cardiac Perrino for TEE

## **Application for the course**

Kindly complete the online application form on the website Link or send request email on rfh.academics@rfhospital.org or on Jolly.coelho@rfhospital.org.

# Withdrawal from the course

Fees are nonrefundable once paid. In exceptional circumstances, the candidate may be asked to discontinue the course if he/she is facing disciplinary issues.