

# Patan Academy of Health Sciences (PAHS)



## Fellowship in Paediatric Critical Care Medicine (FPCCM)

**PROSPECTUS  
ENTRANCE EXAM  
2022**

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**Note:**

- Please read the prospectus and instructions carefully before filling the forms.
- The fees will not be refunded for rejected forms.

## BACKGROUND

Pediatric Critical Care incorporates stabilization, diagnosis, and management of infants, children, and adolescents with life-threatening medical and surgical problems. Pediatric critical care emerged as a new specialty in the field of medicine as recently as the 1960s with the recognition that a separate subspecialty was needed to care for critically ill children. However, there has been a lag in this recognition in Nepal. It is just in the last few years that facilities for pediatric intensive and high dependency care are being established within hospital systems in Nepal. This is mainly precipitated by the large number of critically ill children, and the increasing recognition of the need to provide such care to these children. Additionally, there is a growing demand for such facilities because of the large pediatric population (over 40% of total population) in the country.

In spite of this growing demand for PICU in Nepal, there are less than ten pediatricians who have received at least 1 to 3 years training in the subspecialty. Studies have consistently shown that lack of trained manpower may actually increase the morbidity and mortality within pediatric intensive care (PICU) and high dependency care units (HDU), despite the availability of appropriate technology. In fact, without the pediatric intensivist and implementation of current therapeutic standards, use of invasive technology could actually lead to disastrous outcomes.

## MISSION OF THE FELLOWSHIP PROGRAM

The Pediatric Critical Care medicine (PCCM) fellowship program at Patan Academy of Health Sciences (PAHS) will be the first such program to train pediatricians in pediatric critical care and address the acute shortage of pediatric intensivist manpower in Nepal. Considering the fact that the pediatric intensivist may need to provide care to critical newborns in most hospitals outside (and some even within) the capital city, this program will have a neonatology concentration.

## GOALS OF THE FELLOWSHIP PROGRAM

The goal of the PCCM fellowship program at PAHS is to provide a comprehensive experience and training in pediatric critical care to produce competent pediatric intensivists who are accountable and adhere to the principles of medical ethics by respecting and protecting patients' best interests and who will:

1. Acquire and maintain cognitive knowledge, practical skills and use of technologies, and attitudes necessary to provide excellent treatment and care of infants and children in emergent, intensive care settings, and transport medicine.
2. Successfully complete the certification requirements for pediatric critical care medicine and become lifelong learners of critical care medicine.
3. Share critical care skills and critical thought processes in the final work place or environment and influence coworkers in a positive way so as to contribute towards decreasing morbidity and mortality of infants and children of Nepal.
4. Develop an empathetic, caring, and supportive attitude toward patient care, colleague, PICU team and other staff, and parental counseling in difficult times.
5. Develop expertise in organization, analysis, preparation, and presentation of data. Participate in ethical scholarly activity in the development and dissemination of innovative health care delivery in pediatric critical care medicine in Nepal.

## Desired Outcome

After completion of the fellowship program, the graduates are expected to acquire and maintain cognitive knowledge, practical skills, and attitudes necessary to provide excellent care for children with the most complex and critical conditions in emergent and intensive care settings to ultimately decrease the morbidity and mortality in PICUs and HDUs in Nepal. They will be encouraged to act as community resource for expertise in their field, and educating future generations of pediatricians.

## Competency of the Fellowship Program

The followings are the general Core Clinical Competencies expected from PAHS fellows:

Competency	Sentinel Habit
Professionalism	Demonstrates respect and responsibility.
Patient centered care	Incorporates the patient's experience and context into problem identification and management.
Clinical reasoning	Generates relevant hypothesis resulting in a safe and appropriate differential diagnosis. Manages with available best practices.
Procedural expertise	Follows the key features for doing procedures (consent, indication/contraindication, proper equipment, mental rehearsal, patient comfort, after care).
Communication	Uses clear and timely nonverbal, verbal and written communication.
Scholarship	Learns and teaches relevant and achievable objectives.
Leadership	Uses the moral authority derived from personal integrity to define and persist in accomplishing a shared vision.

By the end of the fellowship, the fellows are expected to have achieved all areas.

## Course Structure

The PCCM course will include rotations at Introductory block (Anesthesia), Pediatric Intensive care unit (PICU), Neonatal Intensive Care Unit (NICU), Cadiology and Radiology.

Fellows will be expected to take in-house calls twice a week at the respective institutions that they are at, at the time of their rotation

## CLINICAL ROTATIONS

Over the 18 months program, fellows will have following core rotations to gain clinical experience:

Rotation	Objectives	Duration
Introductory block (Anesthesia)	Anesthesia rotation: Review of basic anatomy of an airway Evaluation of airway and breathing Identification and management of difficult airway Bag and mask ventilation Intubation Laryngeal mask airway (LMA) insertion Central line/arterial line insertion	2 weeks

Pediatric Intensive Care Unit (PICU)	Manage and attend to all children admitted to PICU/HDU Daily PICU/HDU rounds Attend consultation for sick children admitted in wards, OPD and emergency department when required Transport of critically ill infants and children Procedural sedation Management of the trauma/burn patient Manage neonates in the PICU: All out-born neonates and some overflow from PAHS NICU are admitted to the PICU	61 weeks
Neonatal Intensive Care Unit (NICU)	Diagnosis and management of conditions commonly seen in critical term and preterm newborns Intubation, placement of umbilical lines, surfactant administration Attend and manage high risk deliveries Newborn resuscitation	4 weeks
Sahid Gangalal hospital, Bansbari	Diagnosis and management of cardiac problems in children Cardiac OPD/ER Inpatient management of cardiac patients ICU: management of postoperative cardiac patients as well as sick children Echocardiography: basics of echocardiography, assessment of ejection fraction, contractility, inferior vena-cava, etc. Procedures: Pericardiocentesis	8 weeks
Radiology department	Basics of ultrasonography: identification of pleural/pericardial effusion, pneumothorax and ascites, identification of vascular structures and solid organs Basics of CT/MRI: identification of signs of raised intracranial pressure	2 weeks
Exam	Summative Exam	1 week

Fellows will be expected to take in-house calls twice a week at the respective institutions that they are at, at the time of their rotation.

Vacation as per PAHS standard requirement.

## Evaluation

In accordance with PAHS postgraduate assessment and evaluation, the methods of assessment for PCCM fellows will include Formative assessment, and Summative assessment. These will include evaluation in all 7 competencies.

**Formative Assessment:** This is the end-of-rotation one-on-one evaluation completed and documented by supervising faculty. Formative assessment will be based on fellow performance during the rotation including management decisions, procedure log, knowledge, documentation, and presentations. Mid rotation constructive feedback will be provided by the faculty to the fellow on aspects that may need improvement.

- i. Field notes: 1/3 months
- ii. Mini-/Clinical examination (Mini-/CEX): 1/month
- iii. DOPS for assessment of procedural skills: 1/month
- iv. Case based discussion (CBD): 1/month
- v. Journal club: 1/month]
- vi. Grand round: 1/18 months
- vii. Review of portfolio/learning log and core content review: 1 every 3 months
- viii. Review of log book and sign off by faculty: 1 every 3 months
- ix. Feedback from various presentations, teaching activities, staff: 1 every 3 months
- x. Progress on research projects and scholarly activities: 1 every 3 months
- xi. End of rotation evaluation: 1/month

**Summative Evaluations:** This is an evaluation of the fellow by the fellowship program director or designee comparing the fellow's performance against the program goals and objectives. The summative evaluation will be based on:

- i. Formative evaluations submitted by faculty after individual rotations
- ii. Examinations: MCQ and OSCE at 9 months, 18 months and at exit exam
- iii. Global evaluation by fellowship programme committee: once every 3 months
- iv. At the end of fellowship, before annual exam, the overall performance of fellow will be discussed within Pediatric department along with fellowship programme committee/review committee and Dean.

End-of fellowship summative evaluation after the 18 months of training will be cumulation of all summative evaluations. The decision to allow graduation or additional training will be based on this summative assessment.

## Repetition of the course

Repeating resident shall pay fees as follows:

1. Tuition Fee: 15% of the total tuition fee
2. All other fees: 100% as mentioned in the prospectus

## Leave rules

Leaves will be as per rules of Patan Academy of Health Sciences.

## Accommodation

The candidates must manage their own accommodation.

## Allowance

Stipend for the Fellows will be paid as per PAHS rules and regulations.

## ADMISSIONS

### Eligibility Criteria

1. Successful completion of MBBS or equivalent from a medical college/ university recognized by Nepal Medical Council
2. Successful completion of 3-year MD pediatrics from a medical college/university recognized by Nepal Medical Council
3. Preference will be given to competitive candidates with exposure and experience in the PICU
4. Successful completion of written entrance examination

### Duration of Training

The duration of Paediatric Critical Care Medicine Fellowship will be of **18 months**.

### Available Seats

- There will be a total of **2 seats**.

### Types of Seats

- Institutional sponsored candidates (1seat)
- Open candidates (1seat)

If there are no institutionally sponsored candidates, both the seats will be for open candidates.

### Selection Process

Fellowship Candidates will be selected on merit basis based on the scores of written examination consisting of multiple choice questions (MCQs).

### Fee Structure

SN	Particulars/Headings	Fees in NPR	Remarks
1	Application Fee	5,000.00	
2	Tuition Fee	2,00,000.00	
3	Other Fees:		
	3.1 PAHS Registration Fee	5,000.00	
	3.2 Security Deposit	20,000.00	Refundable on completion of course
	3.3 Health Insurance	3,000.00	Annual
	3.4 Nepal Medical Council fee	5,000.00	As per the Council
Total Fee Payable at the Time of Admission		2,33,000.00	
Additional Fees:			
4	Rotational Clinical Placement:		
	4.1 Within the country	7,000.00	Per Week
	4.2 Outside the country	To be borne by candidate	
5	Supplementary Exam	15,000.00	Per attempt

**Note:** The fees, once paid, shall not be refunded and is subjected to change or reviewed.

## How to Apply

Candidates must submit his/her application to PAHS office, Sunday to Friday from 8 am to 3 pm, except Wednesday, Saturday and on government holidays, along with following documents:

- Curriculum Vitae
- Post graduate degree certificate
- NMC Specialty registration
- MBBS certificate
- Citizenship
- Bank Voucher

Candidates can obtain application forms from Academic Administration.