

International Short Course Training in Pediatric Interventional Cardiology
Pediatric Cardiology Unit, Division of Pediatrics, Faculty of Medicine,
Prince of Songkla University

1. Course Title:

International Short Course Training in Pediatric Interventional Cardiology

2. Certificate Title:

Certificated in Short Course Training in Pediatric Interventional Cardiology

3. Course Owner:

Pediatric Cardiology Unit, Division of Pediatrics, Faculty of Medicine, Prince of Songkla University (PSU)

4. Program director:

Assistant Professor Supaporn Roymanee, MD

5. Mission of training:

Pediatric Interventional Cardiology, one of important cores in pediatric cardiology, involves basic and advanced knowledge and practices in interventional treatment of congenital, valvular, and structural heart disease which tends to have more role in current and future managements in these fields. It includes fundamental aspects (angiography, hemodynamics, vascular access, etc.), key concepts of cardiac catheterization procedures in each disease (valves, septal defects, fistula, etc.) and emphasizes on understandings in indication, patient selection and complications. Nonetheless, many countries and areas still lack interventionists and supporting system to deal with patients with congenital defects which could be potentially treated with transcatheter management.

Regarding pediatric interventional cardiology, PSU has been recognized to be one of the leading centers in Thailand and Asia-Pacific region which has been experienced in interventional treatment of congenital heart diseases for a decade. This short course aim to train pediatric or adult cardiologists who is interested in this field and contributed themselves to transcatheter treatment or pediatric cardiac interventionists who is in early career period and want to gain more experiences.

6. Scope of training:

Pediatric interventional cardiology involves practical aspects of interventional treatment in congenital and structural heart disease which requires an integrated knowledge of basics in cardiac catheterization and practical techniques in procedures. However, we aim to focus on practical techniques and integrate only important theoretical parts to the participants in this short course training.

7. Program contents:

This is a 1 to 3-month training course for the international trainee or in-country trainee. The course divides into two levels to ensure that trainees could receive appropriate experience to learn and build up their skill.

- Level 1: 3-4 weeks. This will be covered with practices involving basic procedures in patients with simple lesions which is under supervision of the corresponding staff.
- Level 2: 8-9 weeks. This will be covered with practices in more complex procedures under supervision of the corresponding staff.

Activity schedule

Date	Time	
	9.00-12.00	13.00-16.00
Monday	OPD cardio and echo clinic (Pre-cath evaluation and F/U)	1 st , 3 rd week: Grand round 2 nd , 4 th week: Intervention conference
Tuesday	Cardiac catheterization	
Wednesday	OPD cardio and echo clinic (Pre-cath evaluation and F/U)	OPD cardio (case follow up)
Thursday	Cardiac catheterization	
Friday	Echo clinic (Post-cath evaluation)	Conference by schedule

Academic schedule

Date	Time	
	8.30-9.00	13.00-16.00
Monday	-	1 st , 3 rd week: Grand round 2 nd , 4 th week: Intervention conference
Tuesday	Pre-cath case briefing	-
Wednesday	-	-
Thursday	Pre-cath case briefing	-
Friday	-	1 st week: Topic review 2 nd week: Journal club 3 rd week: Lecture 4 th week: Morbid and mortality conference/Radiology conference

8. Knowledges which would be covered in short course training of pediatric interventional cardiology:

1. Evaluation and management before and after catheterization
2. Hemodynamic evaluation of congenital heart disease
3. Diagnostic catheterization

4. Balloon valvuloplasty: PBPV, PBAV, balloon angioplasty
5. Defect closure: ASD, PDA, VSD
6. Stents esp. PDA stent
7. Troubleshooting in the cath lab

9. Common procedures in pediatric interventional cardiology

This is a list of procedures that trainees are aimed to perform or observe during training period. The numbers of each procedure could be adjusted depending on situations and trainee skills.

Skill	Observer	Perform
1. Transthoracic echocardiogram		/ (50 cases)
2. Transesophageal echocardiogram		/
3. Pericardiocentesis		/
4. Balloon pulmonary valvuloplasty		/
5. Diagnostic cardiac catheterization		/ (10 cases)
6. Device closure: ASD, VSD, PDA, PFO or others		/ (10 cases)
7. Valvuloplasty and angioplasty		/ (5 cases)
8. Stent placement		/ (3 cases)
9. Balloon atrial septostomy		/ (3 cases)
10. Advanced cardiac intervention (e.g., PPVI, TAVI or hybrid operation)	/	

10. Numbers of international trainees and application process

1. Numbers of international trainee: 1 trainee/period of 1-3 months
2. Eligible applicant: An international or in-country doctor certified in pediatric cardiology or adult cardiology.
3. Application process:
 - Send your curriculum vitae including academic degree and working experience and introduction letter to program director: Assistant Professor Supaporn Roymanee at jjewsr@yahoo.com

- The trainee must declare the support funding from their countries and enclose an official letter from the sponsor.

- After acceptance for training, the faculty will send a confirmation letter for the visa application. The trainee will require a visa to enter Thailand. The faculty cannot influence any visa application, except the issue of the letter of acceptance for training and working in our institute.

- The training fee and organization fee must be paid by the trainee. Currently, the training fee for all international fellows is 200 \$/month. The faculty will provide accommodation during training period. However, the cost of living and accommodation fee must be paid by the trainee.

11. In-training trainee evaluation:

During training period, there are in-training assessments to evaluate clinical competency including

1. Direct observation procedural skills (DOPS) in clinical practice: assessed by attending staff
2. Logbook evaluation
3. Long case examination in the last month of training to assess competency of trainee whether they could apply knowledge with patient care, discuss risks and benefits, plan and perform the procedure and follow post-procedure care.

After passing the final evaluation, the trainee will receive a certificate of short course training in Pediatric Interventional Cardiology from the Division of Pediatric Cardiology, Faculty of Medicine, Prince of Songkla University. If the trainee does not meet the evaluation criteria, the training facility will not issue a certification.

12. Research:

Research and research presentation is not required in this course.