

## **Fundamentals of Pediatric Point-of-Care Ultrasound Certificate Curriculum**

| Online       | 3 hours per week |   |  |
|--------------|------------------|---|--|
|              | 5 Hours per Week | Trainees will have 4 weeks to complete 7 self-paced online units. |  |
|              | (4 weeks)        | The units are designed to provide learners with the knowledge of  |  |
|              |                  | fundamental diagnostic POCUS applications including:              |  |
|              |                  | 1.1 Introduction to POCUS and its applications                    |  |
|              |                  | 1.2 Basic ultrasound physics & knobology                          |  |
|              |                  | 1.3 Lung ultrasound   |  |
|              |                  | 1.4 Cardiac ultrasound  |  |
|              |                  | 1.5 Trauma ultrasound   |  |
|              |                  | 1.6 Soft Tissue   |  |
|              |                  | 1.7 Intussusception   |  |
|              |                  | Trainees are required to complete and pass all the online quizzes |  |
|              |                  | before Module 2. Trainees who fail to pass any of the online      |  |
|              |                  | quizzes will be given the chance to pass them before Module 4 in  |  |
|              |                  | order to proceed with the   |  |
|              |                  | program.  |  |
| Face to face | 8 hours per day  | Trainees will learn how to use POCUS machines, acquire, and       |  |
|              | (2 days)         | interpret images. Training will be conducted on MBRU premises.    |  |
| Learner's    | N/A              | Trainees will spend 14 weeks practicing the POCUS skills taught   |  |
| Workplace    |                  | in Module 1 & 2 in their own clinical workplace and upload        |  |
|              |                  | ultrasound scans on an e-portfolio for faculty review and         |  |
|              |                  | feedback.   |  |
|              | Learner's        | (2 days)  Learner's N/A   |  |

| #4 Skills      | Face to face | 8 hours per day | Trainees will have the opportunity to refresh their POCUS skills   |                          |  |
|----------------|--------------|-----------------|--|--------------------------|--|
| Refreshment    |              | (2 days)        | 2 days) and practice at MBRU premises on standardized patients a   |                          |  |
|                |              |                 | discuss cases from their portfolio.                                |                          |  |
| #5 Complete e- | Learner's    | N/A             | Trainees will have 30 weeks to practice the skills in their own    |                          |  |
| portfolio Wo   | Workplace    |                 | workplace setting. During this module trainees are required to     |                          |  |
|                |              |                 | complete and submit ultrasound scans via e-platform for review     |                          |  |
|                |              |                 | and feedback by faculty.   |                          |  |
|                |              |                 | Trainee must complete the required number of scans prior to        |                          |  |
|                |              |                 | Module 6.  |                          |  |
|                |              |                 | Ultrasound Application   | Required number of scans |  |
|                |              |                 | Cardiac ultrasound   | 30                       |  |
|                |              |                 | Lung ultrasound  | 25                       |  |
|                |              |                 | Trauma ultrasound  | 25                       |  |
|                |              |                 | Soft Tissue  | 25                       |  |
|                |              |                 | Intussusception  | 25                       |  |
| #6 Competency  | Face to face | 8 hours         | Trainee's mastery of the knowledge, technical and practical skills |                          |  |
| assessment     |              |                 | will be assessed in two ways: written exam & Objective Structured  |                          |  |
|                |              |                 | Clinical Exam (OSCE)   |                          |  |