



PMRF-ISSS100/II/2025

Introduction to Ultrasound Imaging

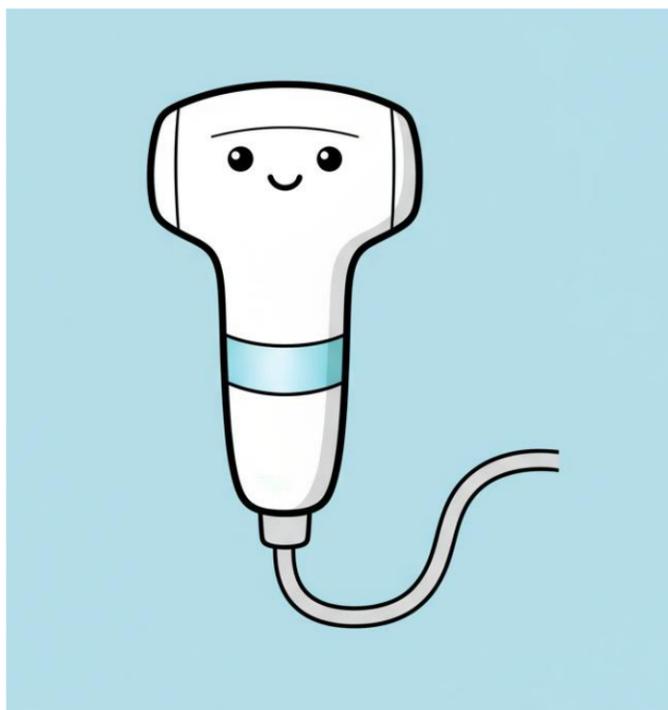
Name of the PMRF student

Saladi Pravallika, IISc

Details of the content of the module

Required background of the students taught

- Basic understanding of physics, signal processing, or medical imaging
- Interest in biomedical engineering, AI, or healthcare technology
- No prior experience with ultrasound required



1. Fundamentals of Ultrasound Physics and Instrumentation
 - Acoustic principles, transducers, imaging modes and artifacts
2. Image Acquisition and System Workflow
 - Scanning techniques, probe handling and data capture
3. Ultrasound Data Visualization
 - DICOM handling, 3D Slicer demonstration and annotations
4. Clinical Orientation: Obstetric Ultrasound
5. Understanding speckles and correlation and flow between images.
6. Hands-on Session
 - Guided exploration of ultrasound data from acquisition to interpretation

Schedule of the module

Start Date: 12th October 2025

End Date: 2nd November 2025

Timings: Sunday 2pm to 6:30pm, Thurs 6pm to 8pm
2nd November class time will be from 1pm to 7:30pm.

Meeting link : On MS Teams

[Link](#)

Contact email ID: issforum@gmail.com

Registration link:

<https://forms.office.com/r/KKtmxtYnza>