

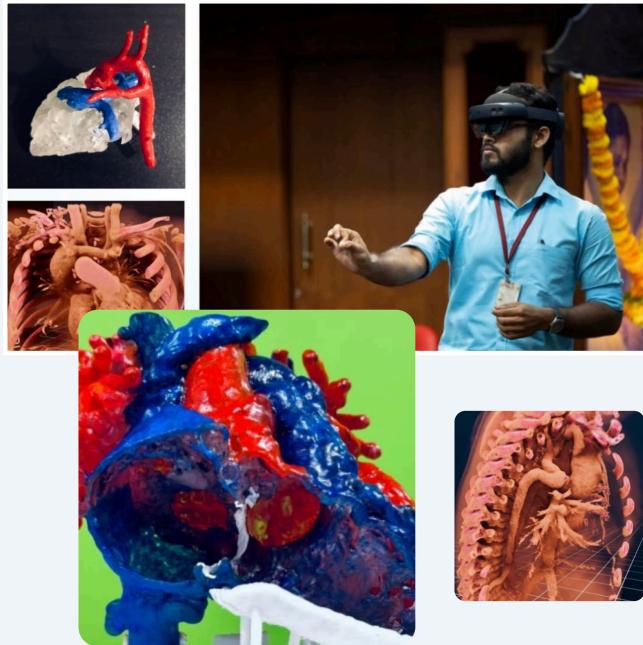


# PCSI 2024

## Cardiac Morphology & Advanced Imaging Workshop

14th Nov 2024

**Venue: Amrita Institute of Medical Sciences, Kochi**  
(G Block-11th Floor, Amrita Clinical Skills Simulation Centre)



### Faculty:

- **Dr. Joseph Vettukattil**, Helen Devos Childrens Hospital, Michigan, USA
- **Dr. Mahesh Kappanayil**, Amrita Institute of Medical Sciences, Kochi
- **Dr. Saurabh Gupta**, All India Institute of Medical Sciences, New Delhi
- **Dr. Harikrishnan KN**, SAT Hospital, Government Medical College, Thiruvananthapuram
- **Dr. Dinesh Raja**, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram

**Coordinator : Dr. Harikrishnan KN**

9:00-9:10 am Hall 1	<b>Introduction</b>
9:10-10:30 am Hall 2	<b>Cardiac Morphology</b> Wet Lab <ul style="list-style-type: none"><li>• Chamber recognition</li><li>• Intricacies of atrial and ventricular septum, valves, outflow tracts</li><li>• Correlation with transthoracic and transesophageal echocardiographic views</li></ul> <i>Echo loops of normal and complex cardiac defects</i>

<b>10:30-10:45 am</b>	<b>Tea Break</b>
<b>10:45-12:00 am</b> <b>Hall 1</b>	<p><b>Stereoscopic 3D projection</b></p> <p><i>Volume rendered CT data -Virtual Dissection</i></p> <ul style="list-style-type: none"> <li>• Normal heart anatomy</li> <li>• Sinus venosus ASD</li> <li>• TOF, Transposition of great arteries</li> <li>• Aortic arch anomalies, TAPVC</li> <li>• Tricuspid atresia, Post univentricular palliation</li> </ul>
<b>12:00-1:15 pm</b> <b>Hall 1</b>	<p><b>3D printing</b></p> <ul style="list-style-type: none"> <li>• Basics of 3D printing</li> <li>• Tangible and hard models of complex cardiac anatomy</li> <li>• Intervention simulation in CHD models-Sinus venosus ASD covered stent exclusion</li> <li>• 3D printing in device development</li> </ul>
<b>1:15-2:00 pm</b>	<b>Lunch Break</b>
<b>2:00-4:15 pm</b> <b>Hall 1</b>	<p><b>Virtual reality / Augmented Reality</b></p> <p><i>Immersive cardiac morphology visualization</i></p> <ul style="list-style-type: none"> <li>• Double outlet right ventricle- simple to complex</li> <li>• Heterotaxy, Complex AV canal defects</li> <li>• Corrected Transposition of great vessels</li> <li>• Superoinferior/Criss cross hearts</li> </ul> <p><i>Virtual Simulation of interventions/ surgeries</i></p> <ul style="list-style-type: none"> <li>• Baffle simulation, Complex intraventricular tunneling</li> <li>• Percutaneous valve implantations</li> <li>• Stent/device simulation</li> </ul> <p><b>Cardiac CT visualization made easy- Tips and tricks</b></p>
<b>4:15-4:30 pm</b>	<b>Discussion and Feedback</b>