



**Foundations of CMR – A Level I.5 Workshop**  
**September, 2024: Day 1**  
**University of Pennsylvania/Children’s Hospital of Philadelphia**

<b>Philadelphia PA USA</b>	
<b>7:00 – 7:30 AM</b>	<b>Breakfast and Registration</b>
<b>7:35 – 7:55 AM</b>	<b>Welcome and Intro</b>
<b>8:00 – 8:40 AM</b>	<b>CMR Physics and Pulse Sequences</b>
<b>8:45 – 9:25 AM</b>	<b>MRI contrast agents; mechanisms and applications</b>
<b>9:30 – 10:10 AM</b>	<b>Flow Imaging and Quantitative Analysis of Velocity-Encoded Images</b>
<b>10:10 – 10:25 AM</b>	<b>Break</b>
<b>10:25-11:05</b>	<b>Tissue Characterization: Myocardial Infarction, Scarring, and Viability Assessment</b>
<b>11:10 AM – 11:50 PM</b>	<b>CMR of Right and Left Ventricular Function</b>
<b>11:55 AM - 12:35 PM</b>	<b>CMR of Valvular Heart Disease</b>
<b>12:35 – 1:15 PM</b>	<b>Lunch</b>
<b>1:15 – 1:55 PM</b>	<b>Cases</b>
<b>2:00 – 2:40 PM</b>	<b>Stress Testing: Pharmacologic and Ergometry</b>
<b>2:45 – 3:25 PM</b>	<b>Vascular Pathology</b>
<b>3:25 - 3:40</b>	<b>Break</b>
<b>3:40 – 4:20 PM</b>	<b>CMR techniques for infants, children and fetuses</b>
<b>4:25 – 5:05 PM</b>	<b>CMR and devices</b>
<b>5:10 – 5:50 PM</b>	<b>Cardiomyopathy/Heart Failure/Myocarditis</b>
<b>5:55 – 6:30 PM</b>	<b>MRI Safety</b>
<b>6:30 PM</b>	<b>Wrap up and adjourn</b>

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**September, 2024: Day 2**

**University of Pennsylvania/Children’s Hospital of Philadelphia**

<b>Philadelphia PA USA</b>	
<b>7:00 – 7:45 AM</b>	<b>Breakfast</b>
<b>7:45 – 7:55 AM</b>	<b>Logistics for Day 2</b>
<b>8:00 – 8:40 AM</b>	<b>Simple congenital heart disease</b>
<b>8:45 – 9:25 AM</b>	<b>TOF/TGA</b>
<b>9:30 – 10:10 AM</b>	<b>Single ventricle and complex congenital heart disease</b>
<b>10:10-10:25 AM</b>	<b>Break</b>
<b>10:25-11:05</b>	<b>Cardiac tumors across the lifespan</b>
<b>11:10 AM – 11:50 PM</b>	<b>Coronary Imaging – Normal and Congenital</b>
<b>11:55 AM - 12:35 PM</b>	<b>Pericardial disease</b>
<b>12:35 – 1:15 PM</b>	<b>Lunch</b>
<b>1:15 – 1:55 PM</b>	<b>Live scanning*</b>
<b>2:00 – 2:40 PM</b>	<b>Start your own CMR program</b>
<b>2:45 – 3:30 PM</b>	<b>Pulmonary hypertension</b>
<b>3:30 – 3:45 PM</b>	<b>Break</b>
<b>3:45 – 5:00 PM</b>	<b>Post processing</b>
<b>5:05 – 5:45 PM</b>	<b>The future: newer techniques</b>
<b>5:50 – 6:00 PM</b>	<b>Questions and closing remarks</b>