

# Cardiac Imaging in Practice

## “CIP – CT and CMR”

16<sup>th</sup> – 21<sup>st</sup> October 2017

Fairmont Heliopolis, Cairo - Egypt

### Course Director:

**Sarah Moharem-Elgamal**, MD, CBCCT

### Faculty:

**Ahmed Asfour**, MD, CBCCT (Egypt)

**Santhi Adigopula**, MD (USA/UAE)

**Ashraf Badawi**, MD (Egypt)

**Anna Baritussio**; MD (UK)

**Chiara Bucciarelli-Ducci**; MD, PhD, FESC (UK)

**Mahfouz Elshahawy**; MD, FACC, FSCCT (USA)

**Oliver Gaemperli**, MD, FESC (Switzerland)

**Sahar Gamal El-Din**, MD, CBCCT (Egypt)

**Julia Grapsa**; MD, PhD, FESC (UK/UAE)

**Heba Kamal** MBBCh, MSc (Egypt)

**Gianluca Pontone**; MD, PhD, FESC, FSCCT (Italy)

### CT workshop

Monday October 16<sup>th</sup>, 2017

<b>8:00</b>	<i>Registration</i>		
<b>9:00</b>	<i>Welcome &amp; Intro</i>	<b>Sarah Moharem</b>	15 min
<b>9:15</b>	<i>Data Acquisition</i>	<b>Sarah Moharem</b>	15 min
<b>9:30</b>	<i>Discussion</i>		5 min
<b>9:35</b>	<i>Data Reconstruction &amp; Post processing</i>	<b>Ahmed Asfour</b>	15 min
<b>9:50</b>	<i>Discussion</i>		5 min
<b>9:55</b>	<i>Radiation Risks &amp; How to Avoid?</i>	<b>Ahmed Asfour</b>	15 min
<b>10:10</b>	<i>Discussion</i>		5 min

**10:15 – 10:30**

**Coffee Break**

<b>10:30</b>	<i>Indications, Contraindications &amp; Patients' Preparation</i>	<b>Mahfouz Elshahawy</b>	25 min
<b>10:55</b>	<i>Discussion</i>		5 min
<b>11:00</b>	<i>Cardiac CT Anatomy</i>	<b>Ashraf Badawi</b>	25 min
<b>11:25</b>	<i>Discussion</i>		5 min
<b>11:30</b>	<i>Calcium Scoring</i>	<b>Mahfouz Elshahawy</b>	25 min
<b>11:55</b>	<i>Discussion</i>		5 min
<b>12:00</b>	<i>Coronaries Part 1: Normal &amp; Anomalous</i>	<b>Sarah Moharem</b>	25 min
<b>12:25</b>	<i>Discussion</i>		5 min
<b>12:30</b>	<i>Coronaries Part 2: Lesions &amp; Plaque Characterization</i>	<b>Ahmed Asfour</b>	25 min
<b>12:55</b>	<i>Discussion</i>		5 min

**13:00 – 13:45**

**Lunch Break**

<b>13:45</b>	<i>Coronaries Part 3: Stents &amp; Grafts</i>	<b>Ashraf Badawi</b>	25 min
<b>14:10</b>	<i>Discussion</i>		5 min
<b>14:15</b>	<i>Coronaries Part 4: aneurysms, CTO &amp; intramyocardial course</i>	<b>Ahmed Asfour</b>	25 min
<b>14:40</b>	<i>Discussion</i>		5 min
<b>14:45</b>	<i>Interactive Cases</i>	<b>Sarah Moharem</b>	30 min

<b>15:15</b>	<i>Workstations hands on</i>	<b>Sahar Gamal</b>	60 min
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**15:15 – 15:30                      Coffee Break**

<b>15:30</b>	<i>FFR-CT</i>	<b>Oliver Gaemperli</b>	25 min
<b>15:55</b>	<i>Discussion</i>		5 min
<b>16:00</b>	<i>Interactive Cases</i>	<b>Sahar Gamal</b>	30min
<b>16:30</b>	<i>Workstations hands on</i>	<b>Sarah Moharem</b>	60min

**Tuesday October 17<sup>th</sup>, 2017**

<b>8:30</b>	<i>CT-Perfusion</i>	<b>Oliver Gaemperli</b>	30 min
<b>8:55</b>	<i>Discussion</i>		5 min
<b>9:00</b>	<i>Valvular Heart Disease</i>	<b>Ahmed Asfour</b>	40 min
<b>9:25</b>	<i>Discussion</i>		5 min
<b>9:30</b>	<i>Vascular (Aorta, pulmonary arteries &amp; Veins)</i>	<b>Sarah Moharem</b>	25 min
<b>9:55</b>	<i>Discussion</i>		5 min
<b>10:45</b>	<i>Interactive Cases</i>	<b>Sarah Moharem</b>	45min
<b>10:45</b>	<i>Workstations hands on</i>	<b>Ahmed Asfour</b>	45min

**11:30 – 11:45                      Coffee Break**

<b>11:45</b>	<i>Incidental Findings</i>	<b>Ashraf Badawi</b>	20 min
<b>12:05</b>	<i>Discussion</i>		5 min
<b>12:10</b>	<i>Congenital Heart Disease</i>	<b>Sarah Moharem</b>	35 min
<b>12:45</b>	<i>Discussion</i>		5 min

**12:50– 13:35                      Lunch Break**

<b>13:35</b>	<i>Workstations hands on</i>	<b>Sahar Gamal</b>	60 min
<b>14:45</b>	<i>Masses</i>	<b>Ahmed Asfour</b>	20min
<b>15:05</b>	<i>Discussion</i>		5 min
<b>15:10</b>	<i>Interactive Cases</i>	<b>Heba Kamal</b>	45 min
<b>16:05</b>	<i>Workstations Hands on</i>	<b>Sarah Moharem Heba Kamal</b>	60min

**Wednesday October 18<sup>th</sup>, 2017**

<b>8:30</b>	<i>Image Artifacts; How to Mitigate Them</i>	<b>Sarah Moharem</b>	<i>25 min</i>
<b>8:50</b>	<i>Discussion</i>		<i>5 min</i>
<b>8:55</b>	<i>Workstations Hands on</i>	<b>Sahar Gamal Sarah Moharem</b>	<i>60 min</i>

**09:55 – 10:10**

**Coffee Break**

<b>10:10</b>	<i>Workstations Post-Processing</i>	<b>Sarah Moharem</b>	<i>60 min</i>
<b>11:10</b>	<i>How to Train in CT? Interactive discussion</i>	<b>Sarah Moharem and Oliver Gaemperli</b>	<i>20 min</i>
<b>11:30</b>	<i>Quiz</i>		<i>30 min</i>
<b>12:00</b>	<i>Review</i>		<i>10 min</i>
<b>12:10</b>	<i>Course Adjourn</i>		

**CMR workshop**  
**Thursday October 19<sup>th</sup>, 2017**

<b>8:00</b>	<i>Registration</i>		
<b>9:00</b>	<i>Welcome &amp; Intro</i>	<b>Sarah Moharem &amp; Chiara Bucciarelli</b>	10min
<b>9:10</b>	<i>Physics of CMR Applications</i>	<b>Anna Baritussio</b>	20 min
<b>9:30</b>	<i>Discussion</i>		5 min
<b>9:35</b>	<i>CMR Pulse Sequences &amp; Tissue Characterization</i>	<b>Santhi Adigopula</b>	15 min
<b>9:50</b>	<i>Discussion</i>		5 min
<b>9:55</b>	<i>CMR Safety &amp; Contraindications</i>	<b>Sarah Moharem</b>	15 min
<b>10:10</b>	<i>Discussion</i>		5 min

**10:15 – 10:30                      Coffee Break**

<b>10:30</b>	<i>Cardiac Anatomy</i>	<b>Ahmed Asfour</b>	25 min
<b>10:55</b>	<i>Discussion</i>		5 min
<b>11:00</b>	<i>CMR protocols: planning and scanning</i>	<b>Sarah Moharem</b>	25 min
<b>11:25</b>	<i>Discussion</i>		5 min
<b>11:30</b>	<i>Assessment of LV/RV function</i>	<b>Sarah Moharem</b>	25 min
<b>11:55</b>	<i>Discussion</i>		5 min
<b>12:00</b>	<i>Workstations hands on</i>	<b>Ahmed Asfour</b>	60 min

**13:00 – 13:45                      Lunch Break**

<b>13:45</b>	<i>Acute Ischemic Heart Disease</i>	<b>Gianluca Pontone</b>	20 min
<b>14:05</b>	<i>Discussion</i>		5 min
<b>14:10</b>	<i>Chronic Ischemic Heart Disease</i>	<b>Santhi Adigopula</b>	20 min
<b>14:30</b>	<i>Discussion</i>		5 min
<b>14:35</b>	<i>Stress CMR</i>	<b>Chiara Bucciarelli</b>	25min

**15:10 – 15:30                      Coffee Break**

<b>15:30</b>	<i>Interactive Cases</i>	<b>Sarah Moharem</b>	40 min
<b>16:10</b>	<i>Workstation Post processing</i>	<b>Ahmed Asfour</b>	40min
<b>16:55</b>	<i>Tissue Contrast mapping techniques: T1/T2</i>	<b>Chiara Bucciarelli</b>	20 min
<b>17:15</b>	<i>Discussion</i>		5 min

**Friday October 20<sup>th</sup>, 2017**

<b>8:30</b>	<i>Pericardium</i>	<b>Julia Grapsa</b>	20 min
<b>8:55</b>	<i>Discussion</i>		5 min
<b>9:00</b>	<i>Non Ischemic Cardiomyopathies</i>	<b>Sarah Mohareem</b>	45 min
<b>9:45</b>	<i>Discussion</i>		5 min
<b>9:50</b>	<i>Interactive Cases</i>	<b>Ahmed Asfour</b>	30 min
<b>10:20</b>	<i>Interactive Cases</i>	<b>Sarah Mohareem</b>	25 min
<b>10:45</b>	<i>Discussion</i>		5 min
<b>10:50</b>	<i>Workstations</i>	<b>Chiara Bucciarelli &amp; Sarah Mohareem</b>	60 min

**11:35 – 13:00**

**Coffee Break and Friday Prayers**

<b>13:00</b>	<i>Interactive Cases</i>	<b>Chiara Bucciarelli</b>	35 min
<b>13:35</b>	<i>Masses</i>	<b>Anna Baritussio</b>	20 min
<b>13:55</b>	<i>Discussion</i>		5 min

**14:00 – 15:00**

**Lunch Break**

<b>15:00</b>	<i>Flow and Valvular Heart Disease</i>	<b>Gianluca Pontone</b>	40min
<b>15:40</b>	<i>Discussion</i>		5 min
<b>15:45</b>	<i>Congenital Heart Disease</i>	<b>Sarah Mohareem</b>	30min
<b>16:15</b>	<i>Discussion</i>		5 min
<b>16:20</b>	<i>Workstations</i>	<b>Gianluca Pontone &amp; Ahmed Asfour</b>	60 min

**Saturday October 21<sup>st</sup> , 2017**

<b>8:30</b>	<i>Vascular</i>	<b>Santhi Adigopula</b>	<i>20 min</i>
<b>8:50</b>	<i>Discussion</i>		<i>5 min</i>
<b>8:55</b>	<i>Image Artefacts</i>	<b>Gianluca Pontone</b>	<i>20min</i>
<b>9:15</b>	<i>Discussion</i>		<i>5 min</i>
<b>9:20</b>	<i>Incidental Findings</i>	<b>Julia Grapsa</b>	<i>20 min</i>
<b>9:40</b>	<i>Discussion</i>		<i>5 min</i>
<b>9:45</b>	<i>Interactive Cases</i>	<b>Gianluca Pontone</b>	<i>45 min</i>
<b>10:30</b>	<i>Workstation post processing</i>	<b>Santhi Adigopula</b>	<i>60 min</i>

**11:30 – 12:00**

<b>12:00</b>	<i>How to train in CMR?</i>	<b>Sarah Moharem Gianluca Pontone</b>	<i>20 min</i>
<b>12:20</b>	<i>Discussion</i>		<i>5 min</i>
<b>12:25</b>	<i>Quiz</i>		<i>30 min</i>
<b>12:55</b>	<i>Review</i>		<i>10 min</i>
<b>13:05</b>	<i>Course Adjourn</i>		