The NUHS Cardiothoracic Surgery (CTS) Residency Programme is a six-year programme which strives for excellence in all aspects of residency training to train and produce high quality and skilled cardiothoracic surgeons.

Our mission is to provide dedicated education and training to our residents in all areas of knowledge, clinical and surgical skills, and professional attitudes related to CTS. We aim for the residents who exit our programme to be able to practise CTS independently in either an academic institution or in private clinical practice.

**Outstanding Features**

1. The curriculum will increasingly include simulation programmes so that residents could acquire sufficient operative skills before performing the procedures on a real patient.

2. In addition to rotating through the conventional CTS subspecialties, this integrated programme will include rotations in minimally invasive coronary artery bypass grafting and valve surgery, and endovascular surgery, e.g. TAVI. It will provide our residents with background and experience of using these new tools in order to build a career as future cardiovascular specialists. We believe that having the entire curriculum dedicated to what the residents will be doing for the rest of their careers will be more gratifying and fulfilling for the residents and produce better trained surgeons.

3. One integrated training site with exposure to all essential CTS subspecialties and diverse caseloads including adult cardiac, congenital cardiac, general thoracic, transcatheter valve therapies and minimally-invasive surgery.

4. Strong research heritage in our university department, with opportunities in basic science, clinical and translational research.

5. Either before embarking on the requisite clinical training in CTS or after completing the clinical training in CTS, residents may opt to pursue laboratory or clinical research culminating in a graduate degree in a related or ancillary field (e.g. MSc, or PhD).

6. NUHS is an Academic Medical Centre (AMC) thus residents will receive excellent assistance from AMC in preparation for grant applications.

7. With proximity to top research facilities both within NUS, such as the Centre for Life Sciences and Biomechanical Engineering, and beyond, such as Biopolis and Fusionopolis, we are in a very optimal position to collaborate with these institutes and impart research skills in our residents.
## Programme Structure

<table>
<thead>
<tr>
<th>Year</th>
<th>Rotation</th>
<th>Location</th>
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| R1   | 10 months of General Surgery Rotations  
      2 months of Vascular Surgery | NUHS     |
| R2   | 3 months of EMD  
      3 months of Anaesthesia / Critical Care  
      3 months of Cardiothoracic Surgery  
      6 weeks of Cardiology  
      6 weeks of Respiratory Medicine | NUHS     |

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<th>Month</th>
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<tr>
<td><strong>Cardiac Surgery Track</strong></td>
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<tr>
<td>R3</td>
<td>Cardiac Surgery (Basic)</td>
<td>Thoracic Surgery (Basic)</td>
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| R4    | Paediatric Cardiac Surgery | Elective posting :*  
      General Thoracic  
      Adult Cardiac  
      ICU  
      Vascular & Endovascular surgery  
      Respiratory Medicine  
      Interventional Cardiology |
| R5    | Cardiac Surgery (Advanced) | Thoracic Surgery (Advanced) |
| R6    | Cardiac Surgery (Advanced) | Thoracic Surgery (Advanced) |

| **Thoracic Surgery Track** |
| R3    | Cardiac Surgery (Basic) | Thoracic Surgery (Basic) |
| R4    | Paediatric Cardiac Surgery | Elective posting :*  
      General Thoracic  
      Adult Cardiac  
      ICU  
      Vascular & Endovascular surgery  
      Respiratory Medicine  
      Interventional Cardiology |
| R5    | Cardiac Surgery (Advanced) | Thoracic Surgery (Advanced) |
| R6    | Thoracic Surgery (Advanced) | Thoracic Surgery (Advanced) |