RESEARCH PROJECTS

TRANSCATHETER AORTIC VALVE REPLACEMENT

Aortic Valve Modelling
A minimally invasive intervention for patients with end stage calcific aortic valve disease
PLATELET ACTIVATION STUDIES

**Multiscale Modeling**

Modelling flow-mediated platelet response at the micro- and nano-scales

MECHANICAL CIRCULATORY SUPPORT DEVICE
**Total Artificial Heart**
A pulsatile bi-ventricular mechanical circulatory support device that replaces the heart in patients with end-stage congestive heart failure

**Left Ventricular Assist Device**
A centrifugal mechanical circulatory support device that support the left-ventricle in patients with end-stage congestive heart failure.