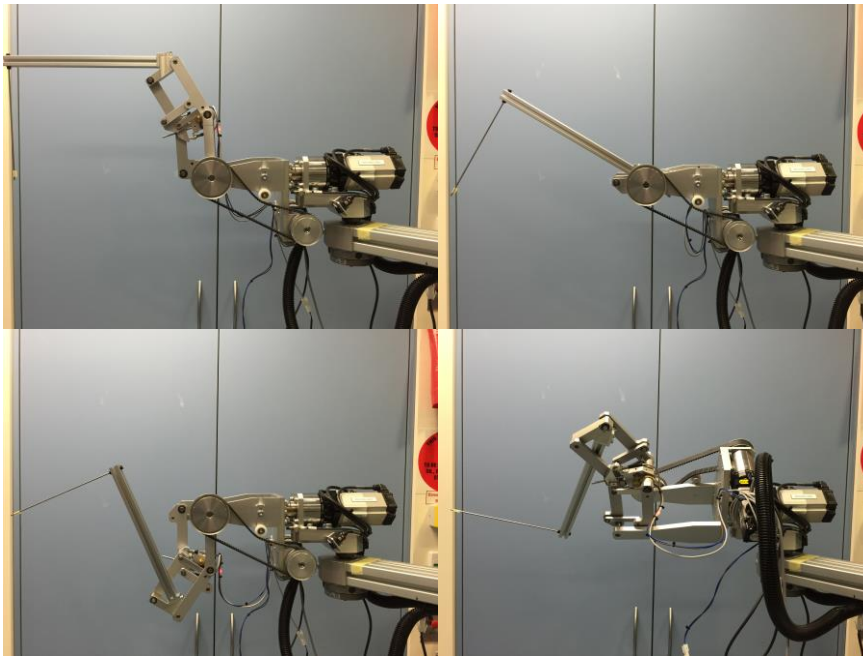


# Laboratory of Motion Generation and Analysis

## Robotic Surgical Arm with Remote Centre of Motion



- Robot-assisted minimally invasive surgeries (MIS) are increasingly performed to replace the conventional open-form surgeries or human-operated MIS
- Remote centre of motion (RCM) robotic manipulators pivot around the incision ports to prevent damage on tissue
- This project targets to develop a surgical robot based on LMGA's novel RCM mechanism

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## Robotic Surgical Arm with Remote Centre of Motion

### Students

- Mr Shao Liu, PhD candidate

### Collaborations

- Dr Bernard Chen, MAE, Monash
- Prof Laurence Harewood, University of Melbourne

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## Robotic Surgical Arm with Remote Centre of Motion

### Journals Articles

- Shao T. Liu, Laurence Harewood, Bernard Chen, and Chao Chen, A Skeletal Prototype of Surgical Arm Based on Dual-Triangular Mechanism, accepted by ASME Journal of Mechanisms and Robotics, Jan 2016

### Conference Papers

- S Liu, C Chen, B Chen, and L Harewood, Novel Linkage with Remote Centre of Motion, Proc. 14th IFToMM World Congress, Taipei, Taiwan, Oct. 2015.