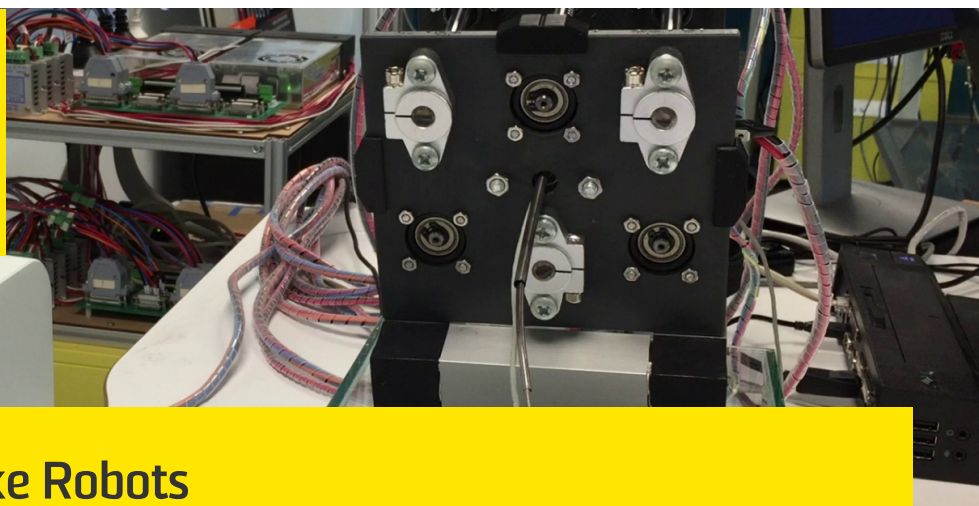




UNSW
SYDNEY



Intelligent Snake-like Robots

Intelligent snake-like robots are the next generation of surgical robots that will bring less invasive surgery and better outcomes to patients.

Competitive advantage

- Advanced expertise in robotic surgical instrumentation for minimally invasive surgery
- Innovative design and modelling of flexible snake-like robots
- Intelligent sensing to enable situational awareness
- Better design and implementation of human-robot interaction

Impact

- Less invasive surgery for patients through innovative design and fabrication
- More dexterity for the surgeon
- Larger accessibility through small incisions
- Safer operations with real-time sensing
- Easier surgical operations with better human-robot interaction

Successful outcomes

- Successful cadaveric trials in ear nose throat surgeries
- Successful cadaveric trials in orthopedic surgeries

Capabilities and facilities

- Capability of prototyping from scratch
- Advanced collaborative robotic arms
- Advanced tracking systems
- Portable ultrasound system for surgical guidance

Our partners

- St George Hospital
- Prince Charles Hospital
- Holy Spirit Northside Private Hospital

More Information

Dr Leo Wu

School of Mechanical and
Manufacturing Engineering

T: +61 (0) 478 160 316

E: liao.wu@unsw.edu.au

UNSW Knowledge Exchange

knowledge.exchange@unsw.edu.au

www.capabilities.unsw.edu.au

+61 (2) 9385 5008