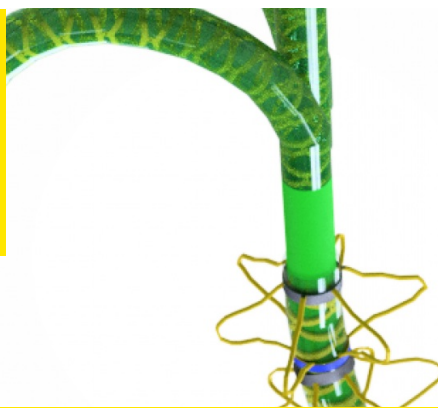




**UNSW**  
SYDNEY



## Advanced Flexible Surgical Robotics and Wearable Assistive Devices

**Flexible robotic systems for effective diagnosis and treatment of various cancers and cardiovascular diseases. Wearable devices can enhance the human sense of touch and can be applied to rehabilitation and healthcare sectors, entertainment and defence.**

### Competitive advantage

- World-leading technologies in soft robotics, wearable devices, and flexible surgical systems with multifunctionalities that can be applied widely in various applications
- Expertise in mechanical design, electronics, system modelling, functional materials and nonlinear control
- Experience in international patent protection

### Impact

- Improving the quality of human life with cutting edge technologies and using surgical robotics, soft robotics, and haptic systems to make early diagnosis and to treat cancers within the human gastro-intestinal tract, as well as the heart, lungs, and bladder.

### Successful outcomes

- World's first flexible endoscopic robot for gastrointestinal cancer treatment
- World's first multifunctional muscles and microtubule sensors for haptics and robotic applications

### Capabilities and facilities

- Full-scale experimental equipment for real-time control and characterisation of robotics and mechanical systems.

### Our partners

- Strong collaboration networks in USA, Singapore, and Australia.

### More Information

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