



UNSW
SYDNEY



Tissue Regeneration

Developing biomaterials for regenerative medicine, including: organ specific scaffolds for three dimensional cell culture in vitro; organ specific microcarrier for high throughput cell culture and secretome production; implantable biomaterials and drug and cell delivery systems; and materials for immunobiomodulation in situ.

Competitive advantage

- The first group in the world to develop a low-cost methodology to produce organ-specific, low immunogenic and highly biocompatible tissue scaffolds.

Impact

- Improved healing in recalcitrant wounds
- Biologically accurate tumour models for drug development and nanomedicine
- Animal-free early drug testing in organ-specific and disease-specific microenvironments

Successful outcomes

- The approach is in the early stages of clinical translation in the area of regenerative and veterinary medicine.

Capabilities and facilities

- Customisable, scalable and affordable production of organ-specific biomaterials.

Our partners

- Royal North Shore Hospital
- Garvan Institute
- Sechenov University Hospitals

More Information

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