



UNIVERSITY OF  
NEWCASTLE

# HEALTH INNOVATION LIVING LAB

Transforming Healthcare Through Collaborative Innovation

**The Hunter region's first purpose-built Health Innovation Living Lab is based at John Hunter Health and Innovation Precinct. The Living Lab is a partnership between the University of Newcastle, the Hunter New England Local Health District and the broader community. It brings researchers, clinicians, University students, startups, and industry and community members together to develop, test and deliver innovations that improve health outcomes for people in regional and rural communities. The Living Lab has a specific focus on digital health, sustainability in healthcare, medical technology, and healthcare operations and logistics.**

## PARTNERSHIP CAPABILITIES

- **Collaborative Innovation:** Bringing together diverse stakeholders, including researchers, clinicians, and community members, to address healthcare challenges.
- **Focus Areas:** Digital health, sustainability in healthcare, medical technology, healthcare operations, and logistics.
- **Innovation Development:** Supporting the ideation, testing, and implementation of health innovations.
- **Industry Partnerships:** Partnering with startups and established companies to accelerate deployment of healthcare solutions.
- **Real-World Testing:** Leveraging regional and rural healthcare settings to evaluate impact and effectiveness.

## PROVEN IMPACT

- Improved health outcomes through collaboration between healthcare professionals, researchers, and the broader community.
- Development of digital health tools tailored to regional healthcare systems.
- Advancements in medical technology and healthcare operations that streamline rural care delivery.
- Enhanced sustainability practices in healthcare settings, reducing environmental impact.
- Strong partnerships with stakeholders to drive solutions.

## REVOLUTIONARY 3D-PRINTING ADVANCES SURGICAL PLANNING

The Health Innovation Living Lab's new 3D-printing technology marks a significant advancement in surgical planning and medical education. This system creates detailed anatomical models from patient imaging data, using multiple materials to simulate various tissue types. The facility's high-resolution and large-format printers produce everything from intricate vascular networks to full-scale anatomical models, enabling surgical teams to practice complex procedures before entering the operating room. This technology has proven invaluable for cardiovascular procedures, pediatric surgeries, and tumor resections, while also supporting the development of biocompatible surgical guides and custom medical devices.



## CONTACT US:

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