



FAST LAB

Future Art Science and Technology Laboratory

**Professor Paul Egglestone, University of
Newcastle**

Talk: We believe in the Power of Imagination



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

WHO WE ARE

A translational research hub at the University of Newcastle Reveling in creating order from chaos

FASTLab is the creative industry's vehicle for connecting across the Australian Government's Science, Technology, Engineering and Maths (STEM) focused research priority centres.

We recognise that STEM research is key to discovery and that this is associated with practical quantitative research challenges. However, the socialization of human behaviour that enables these discoveries to be used effectively in society are part of our unique approach in the creative industries.



WHAT WE THINK

In a post-industrial era, competition is not just about the pursuit of efficiency. Attaining sustainable economic growth and balanced social and environmental development needs a paradigm shift In how businesses, government and NGOs can create value through creativity and innovation.

This level of innovation involves breaking free from conventional thinking about what kind of researchers should be involved in problem solving particular issues.



WHAT WE DO

Our research focuses on human centred interactions. It harnesses human imagination, empathy, cooperation, co-design, design thinking, visualization, playfulness and creativity.

It enables a better understanding of the underlying systems of creativity, and motivations of humans. It provides new opportunities to solve Australia's most important challenges.



PARTICIPANTS UNITED:

FASTLab is passionate about engaging the community in research.

We explore the potential of human emotion, happiness and play, open doors for non-traditional collaborators, and commercialise lateral thinking.

Unique in Australia, we are a translational research hub, specialising in providing opportunities for community and industry partners to participate in research projects that provide tangible outcomes and solutions to real-world problems quickly.



New tech:

TECH PLUS KNOW-HOW

Providing the technology and know-how to explore and develop new technologies in the creative industries and health and medicine to benefit humans everywhere.

This includes drones, sensor technology, wearables and medical devices.

Our priority is human-centred design, putting humans at the centre of research. We don't need more technological solutions looking for a problem.



Co-creating transformational health outcomes

The ARC Research Hub for Connected Sensors for Health is a collaboration between universities and industry involved in cutting edge research seeking to position Australia at the forefront of connected health.

Our goal is to **co-design, verify, and certify sensor technology** to transform health care in Australia by enabling new approaches to diagnosis, monitoring, predictive treatment and prevention of disease.



Wearables:

Connected Sensors for Health

Cutting edge research collaboration to co-design, verify, and certify sensor technology to transform health care in Australia.

Focused on enabling new approaches to diagnosis, monitoring, predictive treatment and prevention of disease.



Data:

City Pulse

How do we meet the rising democratic challenge to enable individuals to analyse and interpret an increasing volume of data?

City Pulse will create an approach to data visualisation that weaves data into people's ordinary lives.



Catherine McAuley
Catholic College
MEDOWIE



Gamification: THE HOUSE WE BUILD

Gamifying a public consultation process for urban planning in the City of Newcastle

Development of a digital portal with defined goals where players create virtual homes, parks and other assets in the live-able environment.

Engaged with participants in the local community.



Socially engaged: **LIVING LANEWAYS**

In partnership with the Singleton local council

Activate the town through a series of curated experiences

Four laneways with successive installations
Aimed to stimulate collaborative dialogue
between citizens and the council. Including:

- Encouraging citizens to buy local
- Physical engagement and social interaction in the town, post COVID-19
- Changing the perception of art regionally



Internet of Things NIGHT TIME SPACES

Commissioned by the City of Newcastle and delivered in partnership with local SME's Design Anthology, SAPHI, D+I, VEARA, and the City Art Gallery - this project was initiated in response to community safety concerns around non-domestic violence-related assaults and malicious damage in commercial precincts, and community perceptions of risk and danger associated with the city's night-time economy.

Henges are experiments in the transformative potential of play, engaging with the local 'smart city' agenda.



 FASTLAB

THANK YOU

● Start Over ● Print



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