



UNSW
SYDNEY



3D Visualisation Aesthetics Lab (3DVAL)

Exploring the challenges of visual narratives and developing novel ways to navigate complexity using creative methodologies from the video game, 3D computer animation and Virtual Reality (VR) creative content industries.

Competitive advantage

- An award-winning cross-disciplinary research hub that explores arts-led approaches for visualising complex scientific and biomedical scan data
- Research team with diverse multimedia and scientific backgrounds, and considerable industry experience
- Proven ability to deploy design-led modes to the visualisation of complex scientific and biomedical data using 3D computer arts approaches, most recently VR Head Mounted Displays (HMD)

Impact

- Award-winning visualisations with real-world applications, including disease comprehension and rehabilitation.
- Successful applications
- VR Pain Management System provides effective distraction to hospital patients experiencing acute pain via a gamified exploration of virtual worlds. A collaboration with St Vincent's Hospital and Samsung
- 'Journey to the Centre of the Cell' project, which recreates a breast cancer cell, was nominated in the Best VizSim Project category for visualisations that have real-world applications, and for the overall Golden Cube award as part of the International 2016 Unity awards in Los Angeles, USA
- 'A fantastic voyage-travel inside your brain and visualise your own stroke' was awarded the 2016 St Vincent's Hospital Innovation & Excellence Award for clinical health engagement, allowing patients to explore personalised vascular scans

Capabilities and resources

- Wide range of VR/AR systems
- State-of-the-art 3D visualisation creative content studio
- 3D computer workstations
- Render farm systems

More Information

Professor John McGhee

UNSW Art & Design

T: +61 (0) 419 440 766

E: John.McGhee@unsw.edu.au

St Vincent's Hospital

Garvan Institute for Medical Research

ARC Centre of Excellence in
Convergent Bio-Nano Science &
Technology (CBNS)

UNSW Knowledge Exchange

knowledge.exchange@unsw.edu.au

www.capabilities.unsw.edu.au

+61(2) 9385 5008