



**UNSW**  
SYDNEY



## Bionic ASICs

### Design of Application Specific Integrated Circuits (ASICs) and systems for biomedical implants.

#### Competitive advantage

- Expertise in research and development of integrated circuit and system designs over a wide range of Complementary Metal-Oxide-Semiconductor (CMOS) technologies for a broad range of applications with cross-disciplinary design constraints.
- Particular expertise with implanted electronics design includes:
- Tailored functionality – better performance, longer battery life
- Systems architecture
- Custom safety systems
- Risk mitigation with coexisting function implementations

#### Impact

- Reduced-size implanted systems
- Better therapeutic outcomes
- Clinical research support

#### Successful outcomes

- Many patents filed with collaborators
- Bionic eye electronics

#### Capabilities and facilities

- Industry standard design software suite
- Comprehensive electronics testing facilities
- Expertise in integrated circuits and systems design

#### More Information

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