



**UNSW**  
SYDNEY



## Eye Infection and Contact Lenses

**Strategies for improved medical device compliance and patient involvement in research, and expertise in genomics, immunology, microbiology, image analysis and mathematical modelling to improve the diagnosis and management strategies for corneal infections.**

### Competitive advantage

- A consortium of interdisciplinary local and international researchers committed to providing better health for wearers of contact lens medical devices, and other individuals prone to corneal infection
- Strong strategic partnerships with regulators, industry, basic scientists, mathematicians, clinicians and patients
- Expertise in epidemiological genomics, immunology, microbiology, tissue imaging, mathematical modelling

### Impact

- Improved contact lens safety
- Understanding of patient genetic and immunological susceptibility and response to corneal infection

### Successful outcomes

- Demonstrated that some contact lens wearers are genetically predisposed to corneal infection
- Identification of contact lens solution responsible for an outbreak of severe infection, leading to its subsequent withdrawal from market
- Co-design of "Patient Information" for severe infection with a consumer advocate
- Champion of consumer-designed imaging for healthy contact lens wear

### Capabilities and facilities

- Proven patient recruitment and involvement in research
- Broad range of basic science, imaging and clinical data integration
- Translation of research into practice

### More Information

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