



**UNSW**  
SYDNEY

# Smart Sensors: the Key to Early Diagnosis and Preventative Healthcare

**A suite of advanced sensors that can detect ultralow amounts of biomarkers and even count single molecules, has been developed. These sensors solve the challenge of being able to detect very rare species in biological samples such as blood and, through improving early detection, will improve survival rates.**

## Competitive advantage

- World-leading capability in sensor development
- Expertise in understanding how sensors work in a biological milieu
- Strong foundation in surface chemistry, which is vital for such interfacial devices
- Strong track record in publication and commercialisation

## Impact

- The detection of very low amounts of a biomarker is key to the early diagnosis of disease, the cure for cancer, the rapid diagnosis of infections and identifying the infective agent.

## Successful outcomes

- Involved in the commercialisation of a glucose sensor that sells in the millions each year
- Commercialised a 3D bioprinter which will revolutionise cancer research and has potential in personalised medicine

## Capabilities and facilities

- Extensive experience in surface characterisation, electron microscopy, fluorescence microscopy, including super-resolution microscopy, and nanofabrication

## Our partners

- Commercial in confidence

## More Information

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