



**The Hon Andrew Stoner MP**  
**Deputy Premier of NSW**  
**Minister for Trade and Investment**  
**Minister for Regional Infrastructure and Services**

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**MEDIA RELEASE**

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**WORLD-FIRST MICROSCOPE TECHNOLOGY  
UNVEILED IN SYDNEY**

The University of Technology, Sydney has unveiled the world's first super-resolution imaging system showing real time footage of living cells interacting with infectious diseases.

The groundbreaking new video coverage, which shows how the human body deals with invading germs, will help researchers better understand how to tackle some of the world's worst diseases.

Deputy Premier and Minister for Trade and Investment Andrew Stoner said UTS's ithree institute was invited to help develop and be the world's first commercial site for this new technology by US-based Applied Precision Inc, a GE Healthcare company. The NSW Government provided UTS with \$200,000 to help secure the project.

"Researchers at UTS are the first in the world to access this technology, positioning NSW at the global forefront of scientific imaging research," Mr Stoner said.

"The technology uses high speed, high resolution camera technologies so researchers can effectively watch events as they occur inside living cells – for example, how tumour cells react to anti-cancer drugs.

"Until now it has not been possible to capture this footage on video because the cells would have been irreparably damaged by the laser power in other microscopes.

"This remarkable technology will enable researchers to examine interactions between micro organisms and living cells, and better understand how bacteria, viruses and diseases such as malaria cause infection.

"The NSW Government provided \$200,000 through the Science Leveraging Fund to help UTS secure this new technology, which will help to develop new treatments for life-threatening diseases. It also has broader applications for industry within the medical, pharmaceutical and biotechnology areas.

"The work being undertaken at UTS is a great example of the State's world-class research sector.

"The University secured the world-first commercial site because of their high-calibre research and extensive network of research and industry partners, who will work with UTS to develop and improve the technology.

“It will also help NSW secure more national and international collaborations in science and medical research and attract increased investment to the State,” Mr Stoner said.

Director of UTS's ithree institute Professor Ian Charles said the system, called DeltaVision OMX® Blaze, will be offered to scientists, research organisations, industry and companies in Sydney and further afield.

“UTS is playing a pioneering role in proving the new microscopy technology in Australia and internationally, both with the predecessor OMX 3D SIM device and the new OMX Blaze,” Professor Charles said.

“This new imaging platform is truly amazing. We are at the forefront of being able to actually see infectious disease processes at the sub micron level, in living cells.

“It will pave the way to insights that have simply never been possible until now,” Professor Charles said.

The ithree institute at UTS conducts research into infectious diseases in humans and animals. For more information and to watch the footage visit [www.uts.edu.au](http://www.uts.edu.au)