



The Hon Katrina Hodgkinson MP Minister for Primary Industries

MEDIA RELEASE

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NEW RESEARCH PARTNERSHIP TO FIGHT DISEASE THREAT

Minister for Primary Industries Katrina Hodgkinson today officially launched the Australian Centre for Genomic Epidemiology (Ausgem) - a partnership between the Department of Primary Industries (DPI) and University of Technology Sydney (UTS) to strengthen the State's capacity to identify and respond to biosecurity threats.

"Ausgem brings together leading scientists dealing with disease and those using the most advanced gene technology, to map the DNA of disease causing agents," Minister Hodgkinson said.

"Their work with genome sequencing has the potential to help us understand how pathogens cause disease, how they switch hosts, how they become resistant to antibiotics and why they keep changing."

"This collaboration will help our industries fight disease threats and safeguard the State's \$12 billion primary industries sector."

Minister Hodgkinson said the incidence of infectious disease continues to grow both globally and in Australia.

"Hendra and rabies are examples of diseases first seen in animals that over time have become infectious for humans, often becoming virulent and lethal.

"We know that the health of humans, animals and the environment are intrinsically linked, and to best manage the risks we must bring together scientists with expertise in all three areas.

The NSW DPI and UTS scientists are building intelligence on the DNA of disease causing agents, such as bacteria and viruses, to develop new treatments and vaccines, and to halt increasing rates of resistance to antibiotics, antimicrobials and pesticides.

Work being conducted by DPI and UTS scientists includes:

- Fighting anti-microbial resistance in E coli, ensuring the deadly pathogen doesn't get into our food chain;
- Understanding *Clostridium difficile*, a neo-natal disease of piglets, foals and potentially humans;
- Tackling vibriosis and theileriosis, diseases affecting our livestock;
- Improving diagnostic testing to more rapidly and accurately identify plant pathogens; and
- Developing probiotics for sterile fruit flies to recharge their gut bacteria after irradiation and improve survival rates.

Director of the UTS ithree institute, Professor Ian Charles, said that the alliance with DPI embodied the university's commitment to collaborative research.

"UTS prides itself on its vision of combining innovation, creativity and technology in a way that impacts the community and the world around us," Professor Charles said.

"The ithree institute is building a reputation for excellence in infectious disease research and this alliance with DPI underlines our belief in the importance of multi-disciplinary and multi-institutional research collaborations," Professor Charles said.