



From little things, big things grow

By Nyssa Skilton
 Medical and Technology Reporter

A giant “microscope on a wall” will uncover a world of high-definition images, some of which may help researchers understand Alzheimer’s disease.

CSIROvision, launched in Canberra yesterday, consists of a patchwork of 25 76cm liquid-crystal display screens, which can reveal a level of detail normally visibly only through high-powered microscopes.

The visualisation system can display video, data and images of more than 100 million pixels – almost 50 times the resolution of a high-definition television.

It is driven by 15 high-end computers, which act together like a supercomputer.

CSIRO will use the system to communicate with the public, to

collaborate with scientists and as a test bed for developing the visualisation technology.

Scientists will also use the system for research in fields such as climate change, water management and plant breeding.

A group of Alzheimer’s disease researchers hopes to use CSIROvision to look at fine details of the brain for a better understanding of how Alzheimer’s disease progresses. Gary Morgan, of the CSIRO’s information and communication technologies centre, said CSIROvision would help them see details in the brain that were previously inaccessible.

“It’s a real breakthrough being able to see the definition and the clarity,” he said.

CSIROvision is based on, and extends, the OptiPortal technology developed by the University of California in San Diego.

The system is one of seven in Australia and said to be the most advanced of its kind in the world.

The group executive at the CSIRO centre, Alex Zelinsky, said the visualisation system embraced a new chapter of scientific endeavour.

“The time has come: we are living in the petabyte age,” he said.

A petabyte is equal to one million gigabytes, or one quadrillion bytes.

The public can see CSIROvision in action at CSIRO Discovery, Black Mountain Laboratories, Clunies Ross Street, Acton.



CRYSTAL CLEAR: A close-up of an ant on the CSIROvision’s array of five by five LCD screens. The visualisation system can display video, data and images. Photo: CSIRO