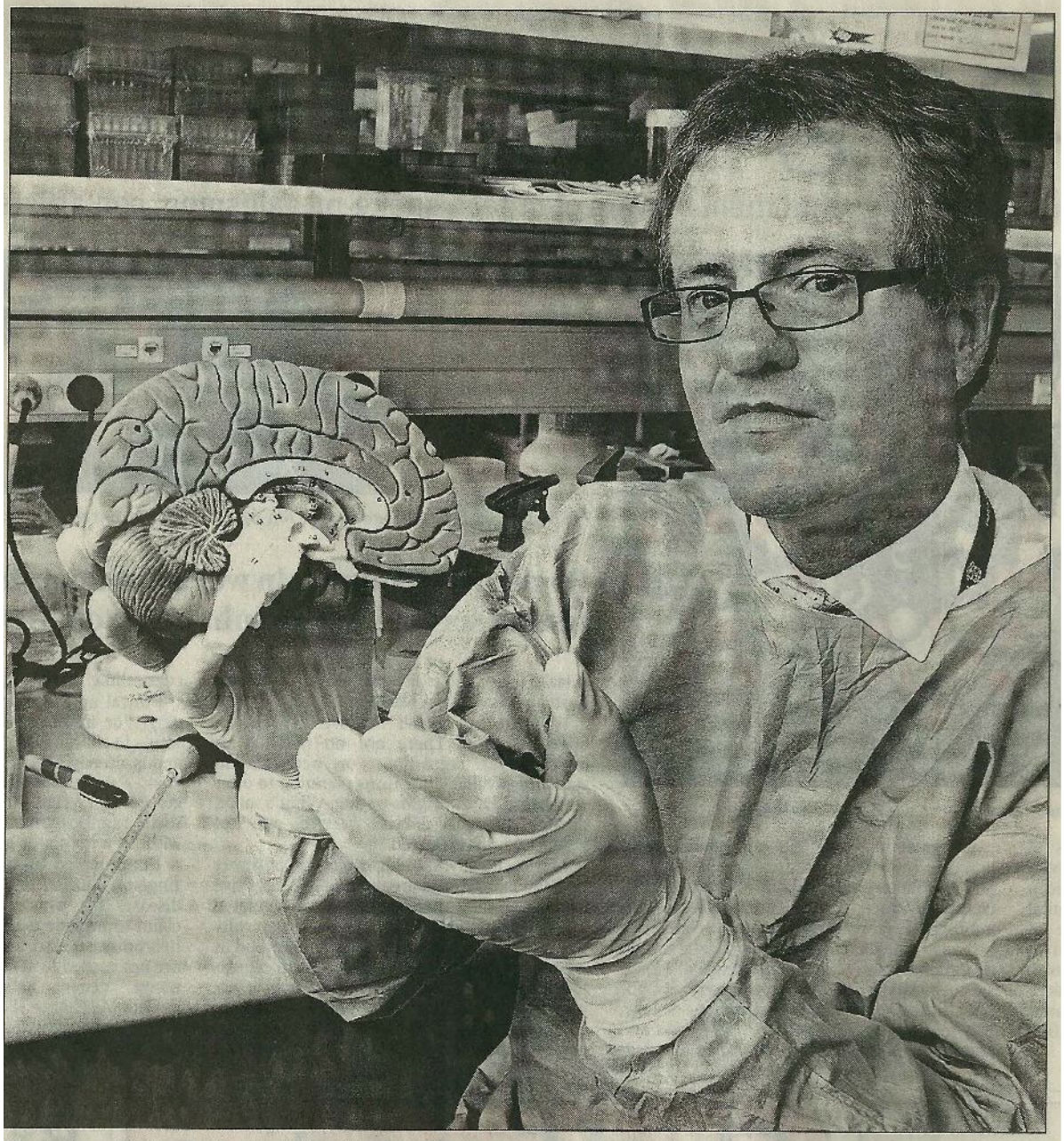

Hemisphere of influence: Simon Hawke, director of the new MS Brain Bank in Sydney Picture: Bob Finlayson

Brain bank to boost MS research

Adam Cresswell
Bernard Lane

A RADICAL rethink of what causes multiple sclerosis is expected to benefit from the first national brain bank dedicated to study of the disease.

"The whole of MS research is going through a re-evaluation," said Simon Hawke, director of the MS Brain Bank, which was launched in Sydney yesterday.

MS involves inflammation in the white matter of the brain and spinal cord, and a breakdown of the insulating myelin sheath that surrounds nerve cells. This demyelination disrupts the nerve cells' electrical signals, causing various symptoms, such as problems with speaking, movement or other functions, such as bladder control.

Professor Hawke, from the University of Sydney, said researchers had approached MS as an auto-immune disease and studied apparently analagous conditions in animals. But treatments emerging from this line of research had proved disappointing.

"There's obviously more to MS than just auto-immunity," he said.

"It's now understood that MS affects the whole brain, so although there might be local areas of inflammation, the whole brain is affected.

"Even the cortex of the brain looks like it's involved in inflammation. The only way we can get to grips with that is to study the brain itself."

Although Australia has a national network of brain banks, very few brains with MS had been stored in the past. The new, MS-specific bank was a first for Australia. Professor Hawke set up a similar bank in Britain.

Donations of both normal and MS-affected brains are being sought, so researchers can compare normal and diseased brain tissue.

Professor Hawke estimated that between 20 and 30 brains would be donated each year.

But it would be five to 10 years before patients could expect to benefit from any new treatments that might arise from the research.

John Pollard, professor of neurology at Sydney University and chairman of the MS interest group of the Australian Association of Neurologists, said the brain bank was "a big step forward".

"By and large (we have been) held back by the lack of being able to study the organ that's diseased," he said.