AN American scientist may be a step closer to developing a “universal” flu vaccine after making an immunisation breakthrough.

A study published in the journal *Science* by Chih-Jen Wei, from the US Vaccine Research Centre, shows the trials on animals reveal the immune response can be broadened to protect against a wider range of flu types.

However, he says human trials are now needed to see how well the vaccine could be transferred from animals to the human population.

A universal influenza vaccine is often considered the “holy grail” of immunology.

Flinders University expert Professor Nikolai Petrovsky – who is also the research director of vaccine development company Vaxine – said the jab was probably not “universal” in the sense that it would work for all flu viruses, but was one that would last longer than just a year.

He said a “universal” vaccine would be a major medical breakthrough, while a broader vaccine is an admirable aim.

He said it was difficult to get funding for a vaccine that was not universal.

“Unfortunately no one's listening because they're either cynical because they don't believe a universal vaccine's possible, or they have this pipe dream that only a universal vaccine is any good,” he said.

“They won't back something in between.”

He said more money was being made by selling a seasonal vaccine.

Scientists hope that even a vaccine that lasts longer than a year would save money and increase general immunity, and would also stop the rush to get a vaccine out each year.

So far they have been unable to get far ahead of influenza viruses, which change each year and render previous vaccines useless.

Australian researchers yesterday claimed it was their idea first to come up with a universal vaccine.

National Centre for Immunisation Research and Surveillance Professor Robert Booy told reporters Australian research was denied the funding to develop a more general vaccine.