

# The New Zealand Herald

## Molecule to improve blood machines

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By SIMON COLLINS science reporter

A former worker in the Auckland Blood Centre has developed a molecule that could improve the accuracy of thousands of blood-group testing machines around the world.

Former technician Steve Henry, now a professor at the Auckland University of Technology, has sold a licence to commercialise the molecule to Australia's biggest biotechnology company, CSL.

Science Minister Pete Hodgson will witness the licence being signed tomorrow by Professor Henry's uncle, former Fletcher Fishing chief executive Eric Henry, and CSL immuno-haematology group manager Tim Carroll.

Eric Henry chairs a company founded by Professor Henry called Kiwi Ingenuity. The company has a profit-sharing agreement with AUT and operates from an AUT laboratory, but has raised money from 15 private shareholders.

Professor Henry said a fail-safe method of testing the accuracy of blood-group testing machines was vital because giving a patient blood of the wrong group could be fatal.

He spent seven years working on a method of extracting a natural molecule from blood and then attaching it to other blood cells to test the machines' accuracy.

Last year, to his own surprise, his group found a way to make the molecule in the laboratory - removing the need to take it from human blood.

"We didn't expect to get there for many years," he said. "We were fortuitous enough that what we designed did the job. The synthetic molecules actually work better, because we are able to make them in an unnatural form which gives them better performance than the natural form."

Auckland Medical School Associate Professor Graeme Woodfield, who was director of the Blood Centre when Professor Henry worked there in the 1990s, said the breakthrough was "a major improvement in upgrading the quality of blood testing".

"These new controls are stable and can be used for a long period. Otherwise we have to make up new cells all the time," he said. He said Professor Henry started as "a very junior technician" at the Blood Centre with just a medical laboratory technologist's qualification.

"He used to ask me difficult questions. I thought a technician shouldn't ask questions like that," Dr Woodfield said.

"Eventually I realised he had a unique talent for investigation and research and we supported him to do an MSc and then a PhD, and then he went overseas and got another PhD.

"I've taken an interest in his career since then because he was perhaps the brightest researcher in the whole department."

Professor Henry declined to say what CSL would pay for its licence, which is for Australasia with world rights if it chooses to buy them later. But he said the potential market was the "many thousands" of blood transfusion centres.