

# \$12m backing for anti-cancer drug project

A company that is developing a new class of anti-cancer drugs has received \$12m in commercial backing just two years after the initial research project began.

Pathway Therapeutics Limited has secured the funds from a syndicate led by Australian-based CM Capital Investments and GBS Venture Partners.

The cash will help the work, which started in 2006, to take potential anticancer therapeutics through to preclinical and clinical trials.

The therapy is in the early stages of development and is not yet proven – but the venture capital companies have seen the potential and are keen to help advance to trials.

A significant part of the early development of the drugs was funded by an HRC project grant awarded in 2006 to Associate Professor Gordon Rewcastle, Professor Peter Shepherd, Professor Bill Denny and Professor Bruce Baguley at the University of Auckland.

Professor Shepherd said: "This shows that investment in basic research can quite quickly lead to benefits for patients and also have positive economic outcomes - it does not take a hundred years."

The three-year project, PI3K inhibitors as targeted anticancer drugs, was successful in the HRC's 2006 funding round and also received funding from the Maurice Wilkins Centre.

It involved research to find novel therapies based on inhibitors of PI3 kinase, an enzyme involved in controlling cell growth and migration, and of particular interest as a potential cancer therapeutic target.

Professor Denny said: "Many tumours have higher than normal or mutated forms of PI3 kinase, and our research has led to the discovery of novel classes of compounds which inhibit the enzyme and have potential as anticancer therapeutics.

"This funding will be used initially to take these new compounds through preclinical development and enable clinical trials in humans, building on the strong track record of successful discovery of new cancer drugs at the Auckland Cancer Society's Research Centre at The University of Auckland."

Professor Shepherd said the drugs being developed resulted from research to understand the circuitry that control cells and what parts of this process can go wrong in cancer – cell signalling.

"Pathway is a company with the potential to provide a new treatment for people with cancer, in a new and very rapidly-developing area," he added.

"It is only by investing in such research that we are able to identify where to target drugs that could treat diseases like cancer."

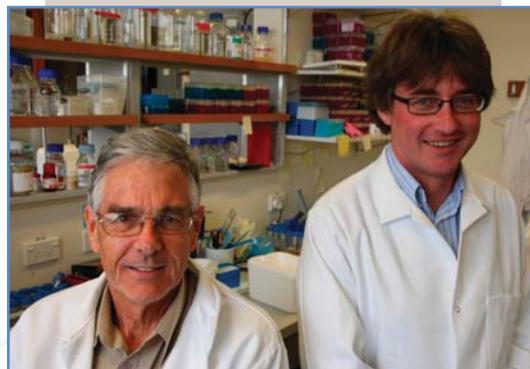
Pathway is a spin off from Auckland UniServices, the commercialisation arm of The University of Auckland. The \$12m investment will also be used to develop the company's intellectual property portfolio and hire research staff.

The team have a year of the HRC-funded project remaining and then plan to submit a further application to advance the work.

"It is so important to get the basic research going," said Professor Shepherd. "Then we can get results that show our capability and can lead to economic investment."

Dr Josh Funder of GBS Ventures and Pathway Director, said Pathway Therapeutics was an example of New Zealand leading scientific research and an opportunity for New Zealand to continue to build a successful drug development industry.

Dr Mark Harvey, of CM Capital and Pathway Director, added: "We are focused on helping talented entrepreneurs build great life science technology companies. We are impressed by the people and capabilities in The University of Auckland".



**Professor Bill Denny and  
Professor Peter Shepherd**

(Photo courtesy of The New Zealand Herald)

## **Key words:**

- Anticancer therapeutics, venture capital companies, PI3 kinase, cell signalling

## **Key facts:**

- Human cancers each have key individual characteristics, in many cases involving a change to a single enzyme, which are vital for their survival.
- Targeted anticancer therapy involves identifying such target enzymes, generally present in only a proportion of cancers, and designing specific drugs to inhibit them.
- A good example for such an approach involves enzymes called phosphoinositide-3-kinases, which play many important roles in the behaviour of the normal tissues of our body.

## **Aims of this research:**

- To develop new highly specific inhibitors of this enzyme that do not affect other family members and thus have minimal side effects and develop drugs for clinical trial.

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