Challenge of selling big ideas

Jane Fynes-Clinton

THEY have been called the invisible midwives: the experienced, tender hands that help take something precious and new and present it to the world.

In the case of the University of Queensland's Institute of Molecular Bioscience, the midwives are the staff at IMBcom — the body that helps make commercial use of the findings that come out of IMB.

Their stock in trade is not babies, but the fruit of scientific research and their job is to safely, smartly convey it from the brain to the bank.

But Peter Isdale, IMBcom's chief executive officer, says there is a shortage of people to turn the work into a commercial success.

"We have been enormously successful in providing training and we incubate people at IMBcom, but we have also come to accept that we lose staff," Dr Isdale says.

"We train them so well and give them such experience that they almost inevitably move on to better paid jobs in the commercial sector."

The University of Queensland will introduce a graduate certificate in research commercialisation next year.

Commercialisation awareness and skills are also embedded in PhD studies for every student. It is hoped these moves will ease the shortfall.

Many young graduates work for the companies invested in commercialisation of the university's research findings, such as UniQuest and IMBcom.

"We are handling Queensland taxpayers' dollars, and funds from the university and investors and the projects are always collaborative commercialisations," Dr Isdale says.

Dr Isdale says a strong factor in IMB's success has been the cohesion that came with integrating a commercial arm into the development of IMB from the start.

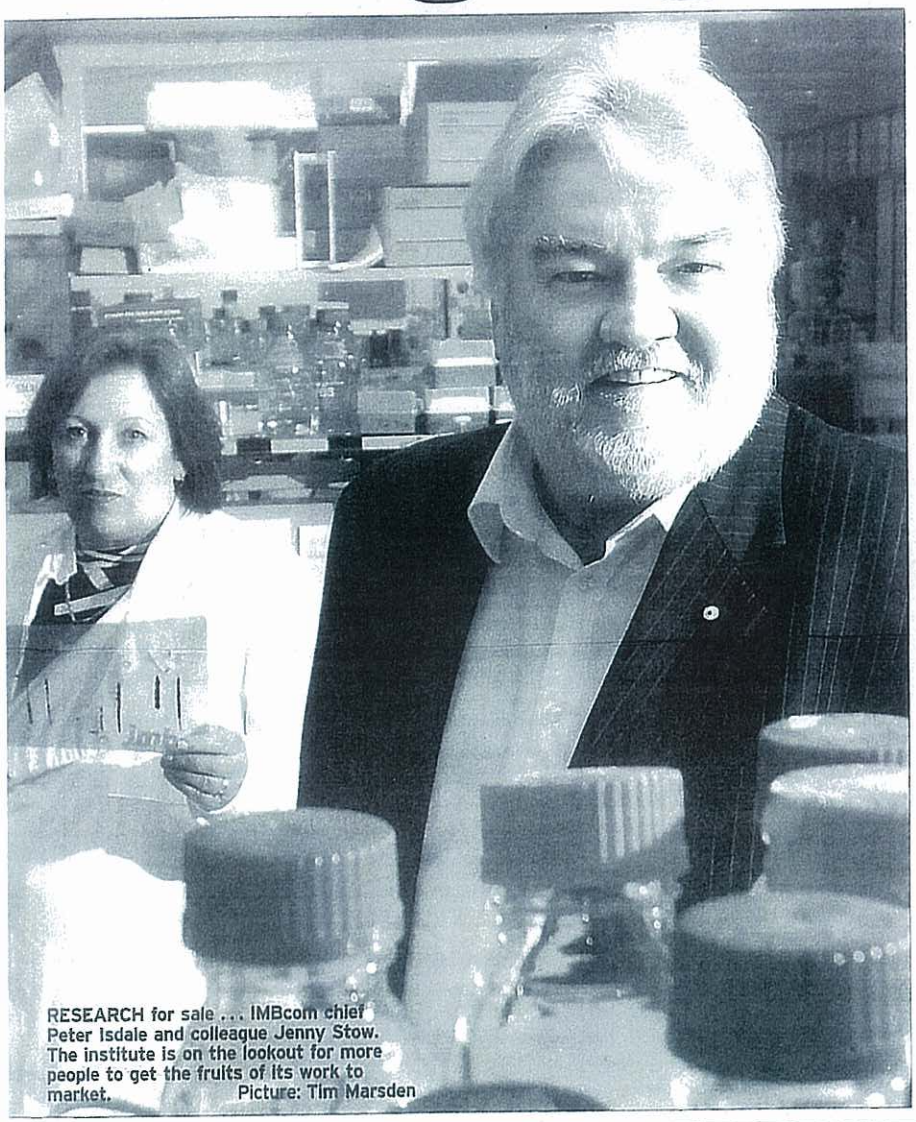
IMBcom was established seven years ago and has a board of directors — including the cream of the financial, investment and medical industries — pivotal to its success.

Its purpose is to protect the discoveries of the IMB researchers, to build alliances with organisations to promote them, and to build partnerships with investors.

IMBcom's success of working symbiotically with a scientific institute has inspired many other commercial ventures. The Australian Institute of Bioengineering and Nanotechnology, Queensland Brain Institute and the new Diamantina Institute for Cancer, Immunology and Metabolic Medicine (all based at UQ) follow the same model.

"Discoveries in biotechnology move so quickly and we are very confident we have the science right," Dr Isdale says. "But there are steps needed to go through to make research bankable and that takes time and needs expertise.

"We are under enormous pressure to keep up with the patents, which are essential to look after the discoveries and allow scientists time for research."



RESEARCH for sale ... IMBcom chief Peter Isdale and colleague Jenny Stow. The institute is on the lookout for more people to get the fruits of its work to market. Picture: Tim Marsden

Award for sex study

IMB's Dr Peter Koopman recently received the GlaxoSmithKline Australia Award for Research Excellence for his work in understanding the complex network within sex organs that determine the gender of babies.

Dr Koopman discovered SRY, a gene that sets an embryo down the pathway of male development, and has been probing deeper into the developmental systems that tell cells whether to become sperm or eggs.

Dr Koopman and his team hope to find other genes important for male sex determination and testis development and learn more about the development of the ovaries.

New way to deal with stroke

RESEARCH from an international scientific team has identified a new therapy for stroke that is likely to be more effective than current treatments.

The team, which includes Dr David Fairlie from the IMB, found that administering immunoglobulin directly into the veins via intravenous injection protected brain cells against the effects of stroke.

Immunoglobulin is a class of protein manufactured by the blood to fight off foreign substances in the body.

Dr Fairlie is the only Australian scientist on the team. The team's research was published in the *Proceedings of the National Academy of Sciences* late last month.

Strokes reduce the flow of oxygenated blood to the brain, causing tissue death. The team found that immunoglobulin treatment reduced the amount of dead tissue.

Smart work on cells wins recognition

IMB's Dr Jennifer Stow was awarded a Smart Women: Smart State award last week for her work on cells, which may lead to new treatments for inflammatory disease.

Dr Stow's research looks at immune cells and how they function in releasing proteins called inflammatory mediators. The work Dr Stow and her team are doing will lead to greater understanding about how these inflammatory mediators malfunction in inflammatory disease and cancer.

The team's discoveries have identified new drug targets and new approaches for developing drugs to treat inflammatory diseases and also to combat inflammatory mediators in cancer.