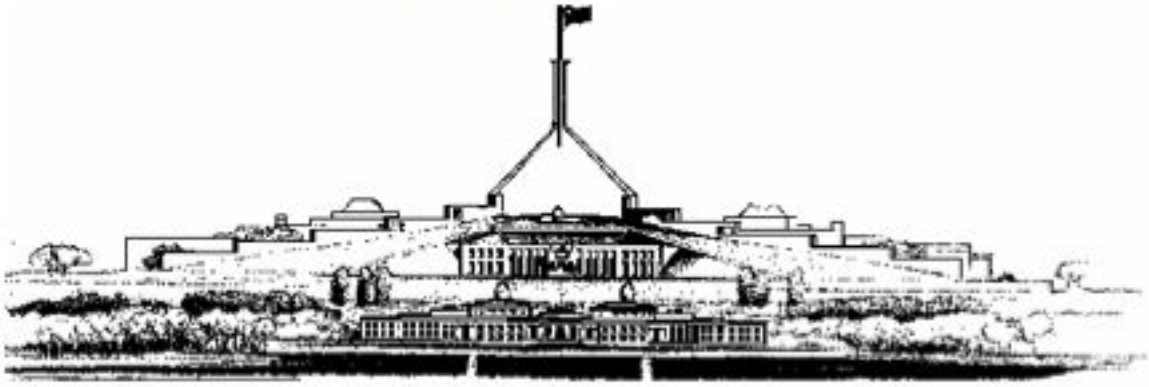
COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY DEBATES



HOUSE OF REPRESENTATIVES

Federation Chamber

GRIEVANCE DEBATE

Research and Development

SPEECH

Monday, 17 August 2015

BY AUTHORITY OF THE HOUSE OF REPRESENTATIVES

SPEECH

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Questioner		**Responder**	
Speaker	Prentice, Jane, MP	**Question No.**	

Mrs PRENTICE (Ryan) (18:25): I am going to continue in the theme of the member for Shortland, who will be delighted with more good news from Queensland when it comes to science research. Earlier this year I rose in this chamber to lament the lack of funding available for translational research in Australia, known in the industry as the valley of death. In that speech, I highlighted some of the amazing research being undertaken in Australia and lamented the policy and financial barriers that prevent much of this promising research from being commercialised into new treatments and cures that will change lives. Sadly, those barriers still remain. However, tonight I bring to the chamber's attention some positive news regarding a new treatment for chronic pain developed by researchers at the University of Queensland in my electorate of Ryan.

Just as the names Professor Ian Frazer and Gardasil are on everyone's mind, and just as Professor Mark Kendall and the Nanopatch bring great success and relief to many parts of the world, the new name on everyone's lips will be Professor Maree Smith. After 11 years of research, Professor Maree Smith and her team have recently experienced a tremendous success. Based on her research, UQ's commercialisation arm, UniQuest, founded a company called Spinifex Pharmaceuticals. That company has just been purchased by multinational firm Novartis for $260 million up-front—a deal that may be worth up to $1 billion. It is one of the largest venture capital success stories in Australian history. It dates back still to this century, when Maree Smith said, 'My God, it works.' Those were the four words that sprang and then stuck in Professor Smith's mind when she received the news in 2012 that her hypothesis on treating chronic pain, which she had come up with in 2003, had worked.

Professor Smith's drug is for people with neuropathic pain, which is a type of pain developed after a nerve injury. Unlike other chronic pain treatments, this drug works on a novel receptor called an AT2 receptor. Nerve injuries put pressure on sciatic nerves and the nerve fibres that feel the pressure and then fire off, constantly causing pain. This causes neoplastic changes in the spinal cord. Professor Smith's new drug shuts down this constant firing in the injured fibres. That is how it reduces pain. After the first proof of concept in a rat model generated at the end of 2004, UniQuest filed a provisional patent in May 2005, and on the basis of that they attracted venture capital to start up Spinifex Pharmaceuticals. The drug development journey is very long. Within Australia, over time—from mid-2005 to mid-2012—$20 million was raised for safety pharmacology and toxicology, as well as safety and tolerability studies.

The first clinical trial was in patients with post-herpetic neuralgia, a painful condition that can follow shingles, in August 2012. After that, Professor Smith said that they knew it worked. Spinifex then moved to America, raised a further $48 million—it is not easy to raise that sort of money in Australia—and did more clinical studies, mainly based in Australia. At the end of June this year, Spinifex was sold to Novartis for about $260 million, plus undisclosed clinical development and regulatory milestone payments. Final clinical trials will be done internationally by Novartis in approximately 10 different countries to get true research among differing populations. Professor Smith thinks it will be at least another two to three years of clinical trials before the drug is ready for approval from the regulatory bodies. In drug development terms, it is getting very close. Congratulations to Professor Maree Smith and her team.

On Saturday night I was at the Life Sciences Queensland inaugural Penelope Wensley AO oration. The guest speaker was the former ambassador to Australia from the United States of America, Jeffrey Bleich, who noted that, in fact, the first person to live to 150 has already been born. Therefore, more than ever, we need the sort of research that has been undertaken—particularly in Queensland—to support a population that is going to live that long. I want to pay tribute to Mario Pennisi and the team at Life Sciences Queensland, because they are absolutely relentless in promoting life sciences and this research, and they are putting Queensland and this research on the world map. Congratulations to everyone; it was a very special evening on Saturday night—more so because we could celebrate some of these great milestones.

As a small nation, our medical researchers face the additional challenges of a small population from which to draw trial participants and an undeveloped venture capital market. What this has meant in recent times is that, far

too often, promising research has fallen by the wayside for no reason other than a lack of funding. Researchers tend to refer to such projects as having entered the valley of death. For this reason, medical research in Australia has reached a crucial time in its development.

Our basic research is world-class; we have an abundance of well-qualified researchers, established research institutes and highly regarded tertiary institutions. But our medical researchers have become victims of their own success. With so many devoted and talented scientists generating so much promising research, the competition for funding is fierce. Only around 15 per cent of last year's grant applications to the National Health and Medical Research Council were successful in receiving financial support. That is not to say that the other 85 per cent of the proposals were not worthy of funding; there was simply a finite amount of funding to be distributed. We are losing our best and brightest researchers, along with their research, to other nations—or, worse, from the industry entirely—because, as a nation, we are not doing enough to support them to develop their research from the laboratory to the market.

That is why the government's Medical Research Future Fund is so important. That is why the Treasurer, in his remarks, referred to it as a game-changer for Australia and for Australians. The coalition government is not prepared to sit idly by and let the status quo continue. With this fund, we are committed to taking swift and decisive action to ensure that medical research in Australia has a long, sustainable and successful future.

It is always a pleasure to open the newspaper and read about Australian medical researchers making discoveries that will change people's lives. For the good of this country, I want them to be Australian researchers based in Australia, at places such as the Institute for Molecular Bioscience at the University of Queensland.

With the establishment of the Medical Research Future Fund, we have a historic opportunity to transform medical research in this country. We have a chance to end the brain drain of researchers heading overseas for want of local support. We have a chance to seize the skilled jobs and the flow-on effects to local industry generated by a vibrant medical research sector. With the establishment of the Medical Research Future Fund, in time we can do all of these things.

The acquisition of Spinifex Pharmaceuticals by Novartis is a great Australian medical research success story. It shows that, with a combination of the right idea, time, persistence and funding, Australian ideas and medical research can become international success stories. As I have said before, Professor Smith and her team are proof that we have the research talent here in Australia to achieve great things. What we need to do is to get government, the venture capital sector and the research community all pulling together in the same direction so that success stories such as that of Spinifex Pharmaceuticals are the norm and not the exception.

My sincere and genuine congratulations to Professor Maree Smith and her team, and to UniQuest and the University of Queensland. These success stories are going to continue to come out if we continue to support the medical research. We have the best talent and the best determination in the world. I look forward to many more great stories that I can present here in the parliament.