

**ECONOMICS AND INDUSTRY  
STANDING COMMITTEE**

**INQUIRY INTO TECHNOLOGICAL AND SERVICE INNOVATION  
IN WESTERN AUSTRALIA**

**TRANSCRIPT OF EVIDENCE  
TAKEN AT PERTH  
FRIDAY, 12 FEBRUARY 2016**

**SESSION TWO**

**Members**

**Mr I.C. Blayney(Chair)  
Mr F.M. Logan (Deputy Chair)  
Mr P.C. Tinley  
Mr J. Norberger  
Mr T.K. Waldron**

---

**Hearing commenced at 10.18 am**

**Professor CHRISTOPHER HUTCHISON**

**Director of Research and Development, Murdoch University, examined:**

**Professor STEVE WILTON**

**Medical Researcher/Foundation Chair in Molecular Therapies, Murdoch University, examined:**

**Professor RICHARD JAMES HARPER**

**Leader of Agricultural Sciences, Murdoch University, examined:**

**The CHAIR:** On behalf of the Economics and Industry Standing Committee, I would like to thank you for your appearance before us here today. This hearing has been convened to enable the committee to gather evidence for its inquiry into technological and service innovation in Western Australia. You have been provided with a copy of the committee's terms of reference. At this stage I would like to introduce myself and the other members of the committee present today. I am Ian Blayney, the chair. With me are Hon Fran Logan, who has just ducked out for the moment, Hon Terry Waldron, and Peter Tinley. The Economics and Industry Standing Committee is a committee of the Legislative Assembly of the Parliament of Western Australia. This hearing is a formal procedure of the Parliament and therefore commands the same respect given to proceedings in the house itself. Even though the committee is not asking witnesses to provide evidence on oath or affirmation, it is important that you understand that any deliberate misleading of the committee may be regarded as a contempt of Parliament. This is a public hearing and Hansard is making a transcript of the proceedings for the public record. If you refer to any documents during your evidence, it would assist Hansard if you would provide the full title for the record.

Before we proceed to the inquiry's specific questions that we have for you today, I need to ask you the following. Have you completed the "Details of Witness" form?

**The Witnesses:** Yes.

**The CHAIR:** Do you understand the notes at the bottom of the form about giving evidence to a parliamentary committee?

**The Witnesses:** Yes.

**The CHAIR:** Did you receive and read the information for witnesses briefing sheet provided with the "Details of Witness" form?

**The Witnesses:** Yes.

**The CHAIR:** Do you have any questions in relation to being a witness at today's hearing?

**The Witnesses:** No.

<006> R/C [10:21:24 AM](#)

**The CHAIR:** We have got some questions for you, but I am wondering if you would like to make an opening statement before?

**Prof. Hutchison:** Yes, I guess I will make an opening statement on behalf of the university. My background, as you can probably tell, is that I am recently relocated from the United Kingdom. The reason that Murdoch asked me to come was because my background is actually in developing commercial opportunities from universities into either improvements for existing industries or new

opportunities for new businesses. The focus that I have in my role is very much around how we actually utilise the knowledge base within the university in order to integrate our activities with industry. I guess the strapline for Murdoch University is that it is an innovative university. It does not support a lot of blue skies research because a lot of its research is close to industry, and that is where we believe our competitive edge is within the community, particularly in agriculture. But Steve is here because he has interests in new therapies and new opportunities for future medicine, and we also have capabilities within the university in the renewable energy space and particularly in the way in which you use water, whether it be wastewater, whether it be contaminated waters. That is a business opportunity, because the stuff that is in that water is as valuable as the water itself. You can take it out, you can reuse it, you can repurpose it, and that in itself provides new and novel business opportunities.

I guess in terms of the crux of what the committee is interested in, my first take on the Australian environment is that there are significant barriers in the country as a whole in terms of developing new business opportunities and particularly in terms of developing the knowledge base within universities into new businesses and improved business opportunities. Some of that is around the way in which we train our graduate workforce and our PhD workforce—they are not industry ready and they are too distant from industry in their student experience in order to understand the needs of businesses, and there are some very simple fixes around that. The other thing that is obvious is that the investment environment has gaps. For example, in the British environment there are a number of flows which leap from blue skies funding through to product development which can either support existing industry through product improvement or it can lead to spin-out opportunities. I guess the gaps are around where the government puts its money and where industry puts its money. In Britain, for example, there is a very well thought through throughput, so if I can refer to a little diagram that I have created and I can leave it behind.

The British environment assumes that there are going to be two types of product development out of university opportunity. One is for existing businesses and established businesses to improve their products and one is to lead through to a brand-new business opportunity. A typical product improvement pipeline will go from a research grant supported by a government agency through to a co-funded opportunity where 50 per cent of the money comes from industry and 50 per cent comes from the government. At that point, all of the research is directed by a university researcher. You then come to a gap, which is where you can apply for what is called follow-on funding. This is still government based and it is still based on an interest and a contribution from industry, and it provides you with an extra two years to prove your proof of concept. At the point at which you have proved your proof of concept, you go to a different funding body, which is called the technology strategy board. At that point, the industry partner leads the bid. At that point the academic has taken a back seat, the industry partner takes a front seat, the government, again, puts in about 50 per cent of the money, the industry commits to 50 per cent of the money, and at the end of that period of time, which is typically a two-year funding period, and it is typically themed around different types of product, then you are expected to have an industry improvement which will lead to either reduced costs and therefore increased profitability, or new products within an existing company so that they can expand their product range. I guess the gap that I see is that the technology strategy board or the equivalent is absent in the Australian environment. It is all based on tax incentives, which may or may not work, and the follow-on funding. The funding between the industry co-funded project and the proof of concept, that is also absent.

The other side of the chain is the start-up opportunity. That again starts with a research grant, but the product of the research grant is a patent or, better still, a portfolio of patents. Of course, that portfolio of patents can be the basis for a small start-up company, but quite often the patent is underdeveloped. The patent is based on an idea and it is based on novelty, but the concept is not necessarily proven. At that stage, the patent and the patent bundle lack value and, therefore, if you go straight to a venture capitalist, they are either going to ask you for an arm and a leg and

everything, or they are not going to fund it. There is a requirement for seed core funding to develop the proof of concept. In Britain, that usually comes through regional development agencies. The best example that I know of in Britain is Scottish Enterprise, which is very entrepreneurial, and they give cash sums of £200 000 to £400 000 in order to develop the proof of concept, which then matures the patent bundle so that the venture capitalists are more willing to fund it and they give the inventors better equity in the invention. So, it is more of a shared partnership. What that inevitably does is it drives the projects towards either a catapult centre or an innovation centre, because, actually, when the venture capitalists come in, they are perfectly happy for the inventor to provide input and advice at a very high level into the project, but they are less happy to let that person run the business.

<007> I/1

What they will do is they will put their own entrepreneur into the business to act as the CEO and the inventor will sit to the side, quite often as chief scientific officer. It is very unusual that the venture capitalist will allow the inventor to run the business because they do not have business acumen. They do not know when to stop, when to start and when to change the nature and direction of the program. Of course, the output of that is a new business and, again, there are some very, very good examples in the United Kingdom. Probably the best example is the Sussex University Innovation Park, where they claim that 70 per cent of their opportunities actually go to core businesses and full spinout.

[10.30 am]

**Mr T.K. WALDRON:** What was that—70 per cent?

**Prof. Hutchison:** Seventy per cent is what their website claims.

**Mr P.C. TINLEY:** If it is on the interweb, it cannot be wrong!

**Prof. Hutchison:** Absolutely!

**Mr P.C. TINLEY:** Can I just follow that? Steve, this is the first model that has been presented, if you like, by anyone, and given your experience, for the benefit of the committee, Professor Wilton has been leading a whole bunch of—I will say it completely wrong—boutique or bespoke genomic treatments for things like Duchenne and this sort of stuff. Please correct me if I got that wrong. Knowing a little bit about your work, how do you see a model like that? Would it have benefited or impeded?

**Prof. Wilton:** It would have benefited. We have been approached by venture capital a number of times and I have always been very, very wary because of all the strings and the ties. I agree completely with the fact that I am not a person to run any company; I do not want to. The inventors have to stand back and let the businessmen drive to the market, and this is exactly what is happening now with our drugs. I was in Boston last month for a meeting with the FDA. It got cancelled because of a blizzard, so I am going back in April again for a one-day meeting with the FDA. They will hopefully be approving the drug within four weeks.

**Mr P.C. TINLEY:** Would you mind explaining just briefly your particular — I do not want to detract; it is a good example.

**Prof. Wilton:** No, in one way it is a good exemplar of not an improvement but a complete innovation, and this is what we are pushing for. More than 20 years ago I came up with this idea of using a genetic drug to change gene expression. With Duchenne muscular dystrophy, you have a gene that is not working properly. It was Glen Beasley who came up with the best analogy I have got so far: the drug is like a genetic whiteout, so with part of the bad disease-causing message, you put this whiteout, you make a shorter message. It works. This is in clinical trials. It has been going for over four years. I was just saying to Chris, there is a picture of a 15-year-old boy on the trial holding his arm, throwing a baseball. He should not be able to brush his teeth, so this is the data we are going to the FDA with to try to get this drug approved. This is for one rare disease; it is an

unmet need and we are hoping to bring this drug and a whole series of other genetic whiteouts for different mutations for this one disease to the market. We can apply this technology to other conditions, and we are looking at cystic fibrosis, spinal muscular atrophy and metabolic disorders. We have patents; I do not even know how many patents I have at the moment, but I am working with a company in Cambridge, Massachusetts called Sarepta Therapeutics. They have been the commercial driving part of this, and I am embarrassed and frustrated that we cannot get this drug in Australia yet. Sarepta are very focused on getting it done in America and then it will be Europe, and Australia will be way down the list. We have just signed a deal, a master agreement, with Sarepta to become a pipeline of drug development for them for other conditions.

**Mr T.K. WALDRON:** So that is a link between the industry and your university?

**Prof. Wilton:** Absolutely.

**Mr T.K. WALDRON:** That is the big issue. Everyone we have talked to and in every submission, that is an issue, but you have that worked out.

**Mr P.C. TINLEY:** It was not a clear pathway, is what I think —

**Prof. Wilton:** There is a very clear pathway now, and it is going to be an exchange of our stuff to Boston —

**Mr P.C. TINLEY:** Picking up on what Chris was talking about, particularly the model that you were proposing in 1991 —

**Prof. Wilton:** No, the contract was signed in October last year and it was only in the last couple of weeks that we have ratified some fine details for the funding exchange to start occurring. So the pipeline is in place, but I would love for them to actually have an office—more than just having some of their staff come into Murdoch, but to actually have a production facility in Western Australia. I was told—again, from the internet, so you have to believe it!—that the potential market for Duchenne muscular dystrophy in 2019 will be \$1 billion, and the drug we have will address 10 per cent of that. If we can bring more drugs to market, we will get a greater proportion.

**Mr P.C. TINLEY:** Stage 1 trials —

**Prof. Wilton:** Stage 3.

**Mr P.C. TINLEY:** Did we do 1 and 2 here?

**Prof. Wilton:** No, we have not done any trials here. Because of the lack of local support, the only trials were done in Columbus, Ohio.

**Mr T.K. WALDRON:** Can I just pick up there? You said lack of local support. Is that something that government should be jumping on?

**Prof. Hutchison:** It is a facility.

**Prof. Wilton:** It was not accurate that there was no local support. The state government was going to give \$600 000 for us for clinical trials here. I could not get the drug, so the money was never used. It is sitting in Department of Health and some little account somewhere; I am not sure where. We could not physically get the drug here to start trials. One of the advantages of Australia is that the TGA, the Therapeutic Goods Administration, is very amenable to innovation. They are a bit more flexible than the FDA. Australia could be an absolute hotbed for clinical trials, given enough support. Clinical trials are very expensive and there are clinical trial facilities with Linnea here, but we still have to get the drug from Sarepta Therapeutics and it is an expensive drug, so we have designed it —

**Mr P.C. TINLEY:** We have designed it, but we have to go and buy it off them?

**Prof. Wilton:** Yes, but we cannot make it here. There are very limited production facilities for this type of whiteout.

**Prof. Hutchison:** It is possible to actually develop a chemical process here which would produce something that was different but as good, so if you had the right facility, you could actually do it.

**Mr P.C. TINLEY:** Synthesised.

**Prof. Wilton:** Yes, and again, I have been pushing Sarepta. I have actually had these guys come out to visit Perth and they are very impressed with the facilities and the environment here. It is very politically and geologically stable, and there are some good wines down south! It would be wonderful to try to set up a link for having production facilities here. The company will have problems, if it is approved, making enough of the drug.

**Mr P.C. TINLEY:** There are 28 hectares out the back of Murdoch!

**Mr T.K. WALDRON:** Could I just go back? Chris, when you talk about what you are doing and this map, I noticed in the submission you talked about Innovate UK. Is that what this is?

**Prof. Hutchison:** This is part of what Innovate UK does. Innovate UK takes the pipeline from anything which is downstream of either follow-on funding or patents. Innovate UK runs the Technology Strategy Board; it is responsible for that. It runs the Catapult Centres, and it runs educational programs, so it encourages and embeds entrepreneurship in PhD training programs. Actually, if you look at their website, there are five clear things that they do; I have only described three of them. Basically there are about 250 people. They are linked to the Research Council, RCUK, in Swindon, so everybody is together in the same place in a funny little town in the south west of England, but those 250 people have all been selected from business, so they are not people who are inexperienced. They have all come in from business, they have a clear business focus, but they are sitting right next to the United Kingdom Research Council. So there is that direct link between the businesspeople and the funders, and I guess the major difference between the funding panels in the United Kingdom and the funding panels in Australia is that 50 per cent of the members of the funding panels in the United Kingdom are from business, so they have a business focus. You will not get a grant unless you can clearly state what the impact of that research is going to be in terms of business opportunities.

<008> Q/3 [10:39:35 AM](#)

[10.40 am]

**Mr T.K. WALDRON:** With Innovate UK, which you have mentioned here, should it be something we should be looking at and adapting it? Obviously you could not plant it here because there will be different circumstances, but is the basis of it a way to go?

**Prof. Hutchison:** Yes, I would say so. I would say at the moment the ARC are resistant to that—The Australian Research Council. They are very, very blue skies, Go8 focused.

**Mr T.K. WALDRON:** They are resistant to what? Is that because of business involvement, or what?

**Prof. Hutchison:** That is because of clear lack of business involvement, I would say, and their panels and their structures.

**Mr T.K. WALDRON:** That is what I mean, yes.

**Prof. Hutchison:** At a state level, I think where you should probably be thinking of looking at is examples of regional development agencies which provide some funding. I can give you good examples of that and bad examples of that. The Scottish enterprise zone is very, very successful, very innovative, and they take risks. North east of England had a very risk averse equivalence and they put so many barriers in the way to accepting their money that actually, people did not accept their money because they wanted a guarantee on everything and you cannot get a guarantee on

everything. To me, that is where the state might look at models of regional government agencies, what level of investment that actually means and what level of risk that actually holds for the investor.

**The CHAIR:** I was actually on the board of the Centre for Rhizobium Studies at Murdoch for a year or two. It is sort of interesting that you have put a bit more work into agriculture because it is an area where governments seem to be getting out of, so I would have thought the pot is getting smaller rather than bigger. Do you want to tell us a bit about that?

**Prof. Harper:** I think agriculture is slightly different to other areas because you have got the industry R&D funds, so you have got GRDC—grains research—and Meat & Livestock, so there is a whole range of industry funds which are co-funded between the commonwealth government and producers. I do not have the numbers in front of me, but I think things like GRDC has almost got as much money as the Australian Research Council.

**The CHAIR:** It has got about \$200 million a year.

**Prof. Harper:** Yes, so there are quite substantial amounts of money. I think across the Western Australian universities, there is generally quite good funding for agricultural R&D. It is true that the state government share and how it is tackling the area is changing with the changes in the department of agriculture, for example. CSIRO, obviously, sort of make their decisions about how they are going to work in this space as well. For the universities, I think we are probably the sector that is relatively well served with existing arrangements. One area that I think is perhaps a stronger area for the state government is getting ahead of the game in Canberra when the priorities of the funding bodies are set by representation, I guess, from the Premier down with COAG, COAG committees, and public servants across the whole spectrum basically playing the Canberra game and setting the priorities so they better reflect Western Australian conditions rather than those on the east coast. I think it is potentially a very strong role for the state government to intervene.

**Mr P.C. TINLEY:** Lobbying?

**Prof. Harper:** Lobbying, basically, yes. Lobby and get the ideas into the —

**Mr T.K. WALDRON:** Get the focus on what we need to do here and the funding to follow-up. Is that what you are saying?

**Prof. Harper:** Yes, precisely. I was with the state government for 20 years and I went to Canberra many times. I guess it would be from Queensland, for example, and Tasmania, and basically I guess the mood was one of the roles was clawing back the Western Australian dividend, or the Queensland dividend, or whatever. I suspect that is an area that we could do better in. It is not without cost, but it is certainly an area where there are examples in the past when the Western Australian agenda has been put on the national agenda and paid dividends.

**Mr T.K. WALDRON:** Just getting back to the industry and academia collaborating and what you guys are talking about, and the fact that we rank I think last in the OECD for industry and academic collaboration. What is the reason for that? What is the role of the Australian Research Council? Are they partly to blame for that?

**Prof. Hutchison:** I think the Australian Research Council is very focused on the needs of the Group of Eight. The Group of Eight, by and large, will contain traditional academics who want to do what they want to do. It is interesting because we were looking at what is called the post-DRA analysis; this is our performance in excellence in Research Australia. We are looking at that yesterday with Richard's veterinary and life sciences school.

**Mr T.K. WALDRON:** Could you just explain that to me—excellence in Research Australia?

**Prof. Hutchison:** That is a government audit which occurs every three years. It is meant to measure the research quality of each university in certain discipline codes.

**Prof. Harper:** It is run by the Australian Research Council.

**Mr T.K. WALDRON:** It is run by them?

**Prof. Harper:** Yes.

**Mr T.K. WALDRON:** Righto. I just get confused; it takes me a while!

**Prof. Hutchison:** We do get comparator analysis and the two places which actually were very strange was our veterinary college and our animal production people. If you looked at the distribution of funding for those two areas, the amount of money that was coming from industry for the vet school and the animal production people was about five times the national average. If you compare it to any other similar discipline in Western Australia, we were getting about five times more money from industry than other universities. I think that is an attitude. My colleagues in the vet school expect to work with industry and if you expect to work with industry, you know those industry partners and you do. It is not an endemic problem in Australia. It is a problem with the way in which people expect to go and get their money. I guess in Murdoch we do not expect to go and get our money from the ARC so we look for industry partners. Richard will tell you about how to forge those relationships, and it works.

**Mr T.K. WALDRON:** One of the things—I do not know what the other members think—that seems to come across to me is all the time is for a lot of the submissions of different people across different things we have been talking to; that is the big issue. You guys seem to concentrate on working with industry.

**Prof. Hutchison:** With industry, yes. I am not sure I am allowed to tell you the resources company because the deal is not quite signed yet, but we are just about to sign a deal with one of the resources companies which will effectively give Murdoch \$400 000 of company money a year, for 20 years, in order to make sure —

**Mr T.K. WALDRON:** For 20 years?

**Mr P.C. TINLEY:** That is the beauty of it.

**Prof. Hutchison:** Yes. It is in order to guarantee that their activities in certain islands off the west coast of Australia are environmentally safe. That has all arisen because the guy that is directing the funding in that industry is an adjunct professor at Murdoch. He understands and he trusts the environmental scientist in Murdoch and they have a track record of delivering for industry. It is all about relationships.

<009> B/3

[10.50 am]

**Mr T.K. WALDRON:** It is really interesting. It is the use of the word “trust”. I have seen that in a couple of submissions. Sometimes there is a lack of trust. The key thing to building that trust is linkages between the two. It is really positive to hear that.

**Mr P.C. TINLEY:** Picking up on this industry connection. I agree with you certainly about ag science, which is close to industry. I am trying to get a sense of your view on innovation vouchers. A lot of the jurisdictions have them. We have them. Having been in business myself, if I had known about them, I would have benefited from them to get a particular technical problem solved. Do you think they are of benefit where the government provides an innovation voucher to industry and industry finds they collaborate in the research and development areas of need to apply that research money? Do have you a view on whether that is a workable solution?

**Prof. Hutchison:** It is a workable solution. Certainly, Innovate UK uses the same voucher system. It is a voucher-based system where you can buy an academic’s time or you can second someone to an academic environment and it is subsidised. It clearly works in the UK. I guess the thing about UK and Germany is that there is a density of expertise so that even in the north of England there is



something called the northern eight universities, and they are a cluster of highly research-intensive universities which are no more than one and a half hours from the furthest point to the furthest point. The clustering in the UK helps. I think this could be a strength of Perth because there is as cluster of universities here. By and large, despite the rhetoric, the universities work together very well, so it is something that actually could work in Perth, I think.

**The CHAIR:** In 10 or 20 years, where would you think, ideally, Murdoch would be in terms of your connection with industry? Are there particular areas? Obviously, biotechnology is something you have been in for a long time now, is it not? That is an obvious one.

**Prof. Wilton:** If we can bring these drugs to market, there will be royalty streams coming in. I was sort of hoping this master agreement would make sure I did not have to write another grant. I submitted one to the muscular dystrophy association of America two weeks ago and sent it off. I am working on my largest ever NHMRC grant. If the arrangement with Sarepta comes through and the drugs are approved, we will become a pipeline for development. It could almost become self-sustaining with just the royalty streams coming in and the milestone payments. Again, two per cent of a \$1 billion market would be quite nice, and that is just for one disease. There are 7 000 inherent and genetic diseases out there and we are looking at trying to address a lot of them. The big problem we have got with the NHMRC grant is the focus. No-one will agree on the focus. If you can start to set things in place, I think it has got a tremendous future, coming from the aspect that we are working on.

**Prof. Hutchison:** I think Steve's is an example of where we see our partnerships. I think in Murdoch we do not see our partnerships with the eastern states. We see our partnership with Europe, the United States of America and South-East Asia. I guess one example in the agricultural field is that we are developing a very, very strong grains group. We have a whole bunch of Chinese professors who come into Murdoch. They breed grain for the bread industry, so improve protein production, and they breed grain for the beer industry. Something like 60 per cent of the beer grain in China comes from Western Australia. It is all developed from strains developed by a single professor at Murdoch University. The way I guess we would want Murdoch so sit in 20 years is that we would be the preferred industry partners across the globe or a small number of things. We are not a large university so we cannot be over-ambitious, but in the grains industry we see ourselves as the preferred partners going north, drug development in Europe and the United States. I guess it is areas of sustainable development like water purification, water usage—again north to south. My boss, David Morrison, who could not be here today, has a bit of a dream in that because we produce the strains of barley that make the beer in Tsingtao Brewery, which is the sixth largest brewery in the world, we are in the middle of developing a relationship with them which will bring the brewery to Murdoch. That big excellent piece of land—the first cab off the rank—may well and brewery.

**Mr P.C. TINLEY:** I have no problem with that whatsoever!

**Mr F.M. LOGAN:** That is the sort of science we want!

**Prof. Hutchison:** It is quite an inventive idea because the idea is that there is a demonstration brewery where people can come from the hospital and see the young scientists doing their stuff. The Chinese actually want a brewery brewery so they can sell their beer in Australia.

**Mr T.K. WALDRON:** They love our barley, don't they?

**Prof. Hutchison:** Yes.

**Mr F.M. LOGAN:** What you were discussing now was a question I was going to ask about specialisation. There was a time in the noughties where it appeared that the five universities were going to specialise in different fields and then it sort of dropped away but you have now highlighted Murdoch's goals, which does show a level of specialisation. I raise this because of the competition

for funding and competition for partnerships. If you look at mining, for example, you have got research going on by UWA, Curtin and ECU, to a certain extent, all competing for the same people.

**The CHAIR:** They teach metallurgy at Murdoch. Did you know that?

**Mr F.M. LOGAN:** No, I did not.

**Prof. Hutchison:** Just a little bit but that is not where we would see our contribution to mining. We would see our contribution to mining in the reuse of the land.

**Mr F.M. LOGAN:** That is right, but it is a specialisation of a subsector of mining. With your experience with the UK, do universities there specialise or do they collaborate for research?

**Prof. Hutchison:** They do both. They do collaborate. Again, the funding system forces them to collaborate. What the funding agencies have done is they have gone away from small grants to big grants, which are easier to administer but which involve multiple universities. Even in your doctoral training programs, you cannot get one unless you have partner universities, and even then those partner universities cannot get at doctoral training program unless they have industry collaborators. It is actually forced by funding decisions by the government.

**Prof. Harper:** There is an industry university CRC program called river research program. I do not know the number exactly. A couple of hundred have been funded since that commenced, with commonwealth funding but Western Australia has done not particularly well out of that. I think we have headquartered a couple of CRC programs put on hold. It is quite a poor take compared to other jurisdictions. Queensland, for example, with their Smart State program, they had a real effort to bring CRCs into Queensland.

**Prof. Wilton:** I would like to add that one thing the state government is doing, which I think is absolutely essential, which has to be commended is the MHRIF funding scheme. This is where infrastructure funds are awarded in proportion to amounts of peer review grants brought in. This money is just essential for keeping labs running. It is for maintenance of equipment where you cannot apply to get an MHRC to have something fixed—a new fridge or a new piece of basic equipment. I want to acknowledge the importance of that.

**Mr P.C. TINLEY:** Don't worry; Roger Cook has banged on about it.

**Prof. Wilton:** It is very much appreciated.

<010> M/C [10:59:36 AM](#)

[11.00 am]

**The CHAIR:** I would like to thank you for your evidence before the committee today. A transcript of this hearing will be forwarded to you for the correction of minor errors. Any such corrections must be made and the transcript returned within 10 days of the date of the letter attached to the transcript. If the transcript is not returned within this period, it will be deemed to be correct. New material cannot be added via these corrections and the sense of your evidence cannot be altered. Should you wish to provide additional information or elaborate on particular points, please include a supplementary submission for the committee's consideration when you return your corrected transcript of evidence. There is a chance we might want to send you some follow-up questions; is that okay? Are you all right with that?

**The Witnesses:** Yes.

**The CHAIR:** I would like to thank you very much for your time today.

**Hearing concluded at 11.00 am**

Research Grant



BBSRC LINK



Follow on Funding



Technology Strategy Board



Product Improvement

Research Grant



Patent



Regional Development Agency Funding



Venture Capital



Catapult Centre or Innovation Centre



New Business