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Proof Committee Hansard

**HOUSE OF  
REPRESENTATIVES**

STANDING COMMITTEE ON INDUSTRY, SCIENCE AND  
INNOVATION

**Reference: Research training and workforce issues in Australian universities**

WEDNESDAY, 17 SEPTEMBER 2008

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**HOUSE OF REPRESENTATIVES**  
**STANDING COMMITTEE ON INDUSTRY, SCIENCE AND INNOVATION**

**Wednesday, 17 September 2008**

**Members:** Ms Vamvakinou (*Chair*), Fran Bailey (*Deputy Chair*), Mr Bidgood, Mr Champion, Mr Cheeseman, Dr Jensen, Mr Johnson, Mr Ramsey, Ms Rishworth, Mr Symon

**Members in attendance:** Fran Bailey, Mr Bidgood, Mr Champion, Mr Cheeseman, Dr Jensen, Mr Ramsey, Ms Rishworth, Mr Symon, Ms Vamvakinou

**Terms of reference for the inquiry:**

To inquire into and report on:

1. The contribution that Australian universities make to research in Australia, including:
  - The contribution of research training programs to Australia's competitiveness in the areas of science, research and innovation;
  - The effectiveness of current Commonwealth research training schemes; and
  - The adequacy of current research training schemes to support Australia's anticipated future requirements for tertiary-qualified professionals in a wide range of disciplines.
2. The challenges Australian universities face in training, recruiting and retaining high quality research graduates and staff, including, but not limited to:
  - Adequacy of training and support (including income support) available to research graduates in Australia;
  - Factors for graduates that determine pursuit of a career in research;
  - Opportunities for career advancement for research graduates and staff;
  - Factors determining pursuit of research opportunities overseas;
  - Australia's ability to compete internationally for high quality researchers; and
  - Whether Australia's academic workforce is ageing, and the impact this may have on Australia's research capacity.

**WITNESSES**

**ANDERSON, Professor Warwick, Chief Executive Officer, National Health and Medical Research Council..... 14**

**BRUYN, Ms Miranda, Assistant Director, Research Investment Branch, National Health and Medical Research Council ..... 14**

**CLARK, Professor John Anthony, Private capacity ..... 1**

**MORRIS, Dr Clive, Chief Knowledge and Development Officer, National Health and Medical Research Council..... 14**



**Committee met at 10.06 am****CLARK, Professor John Anthony, Private capacity**

**CHAIR (Ms Vamvakinou)**—I declare open this public hearing for the inquiry into research training in Australia being conducted by the House of Representatives Standing Committee on Industry, Science and Innovation. The inquiry arises from a request to this committee by Senator the Hon. Kim Carr, the Minister for Innovation, Industry, Science and Research. Written submissions were called for, and 105 have been received to date. The committee is now conducting a program of public hearings and inspections. This hearing is the 13th for the inquiry.

I now welcome Professor John Clark. Although the committee does not require you to give evidence under oath, I should advise you that these hearings are formal proceedings of the parliament. Consequently, they warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that giving false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. We thank you for your submission and now invite you to make a brief opening statement before we proceed to questions.

**Prof. Clark**—Thank you. I am Professor of Asian Art History at the University of Sydney. That is recently the formal title for my post. I am also a professorial fellow of the Australian Research Council. I am in the position of somebody who did a PhD in an area entirely other than the one in which they have developed their career. I did it in political science. I actually did it on Japanese foreign policy analysis. But I have lived since 1973 as a teacher or a researcher in the area of art history and have attained some prominence in that field. In the course of that research I have learnt three Asian languages and from time to time I have taught the Japanese language, both at the School of Oriental and African Studies for a year in London and then at Sydney for four or five years when I moved there from ANU in 1992. My post in Sydney was art history and language.

So I have had quite a close awareness, both from a social science position and a humanities applied research position, about how language is communicated in the tertiary environment, how skills are developed, and how students who do research—and I have had more than 10 successful PhD students, some of them occupying important positions now—actually acquire their language skills, and the reason why I drafted this letter was that previously, under the previous government—it became apparent that that government might continue in office—I wanted certain problems about language training at the tertiary level to be addressed and to be placed on the agenda in a cross-party manner, because the issue is very important.

So I drafted a memo for the dean of my university, which is attachment B that you have, and then, based on that, I tried to generalise the problem to the university community and Australia at large in attachment A, a memo which was given to the then just MP, Malcolm Turnbull, after a discussion over lunch, and he passed it to the then minister of education, Brendan Nelson, who said that the matters raised in attachment A were being investigated by a committee of deans of arts or a subcommittee of deans of arts—I forget the exact nomenclature—who were involved with languages, and I believe that committee is still extant, because another colleague at Sydney is a member of it.

The concern that I face is, very simply, that when I was teaching Japanese at Sydney I found that the people who actually acquired research-level skills in Japanese in particular were of a particular and identifiable kind, which was that they had been at high school in a language exchange with Japan. They had spent a year in Japan, they had done four years of high school in Japanese and they were honours students. This gives you an idea, in the Australian academic context, of how much knowledge of Japanese they might have acquired and the way in which they had acquired it.

They had not acquired it in the way I acquired Japanese, or for that matter, Chinese later. I acquired Japanese in 1968, 1969 and 1970, and Chinese in—if I get the dates right—1982 and 1984. They had not acquired it by a one-year intensive course followed by six months or another year of less intensive training. This, by the way, is the kind of language training which all diplomats who have to have a language qualification, as far as I understand, in Australia actually receive.

So that kind of language training is not given to people who do research in Australia. It is given in a very piecemeal way over a very inefficient language learning process. Indeed, if you look at the data I have advanced for a higher Asian language—the scales normally come from the American Foreign Language Training Institute—for a level 4 language the average undergraduate leaving after three years receives a third of the time to learn, say, Japanese that I received as an intensive postgraduate student doing a nine-month intensive course in one year. They already receive over three years less time than somebody receives in a properly constituted intensive course, and I am sure if you asked for reports you would get them from the people at Point Cook on the way this is done for diplomats, or high-level diplomats—I am not quite sure what the hierarchy is—in Australia.

I was astonished, and I kept saying, ‘These people that you’re turning out, why are you bothering to teach them? There’s no point in teaching them. All they’re getting is cultural fluff.’ If they go to Japan for a year or if they get a job in Japan for two years, maybe with a bit of determination their language skills would improve, but it is only the honours students or the honours MA students who have been in Japan already for one year who are going to get anything like what I would call a usable research-level skill in this language.

Other inquiry also indicates that this is, with less time put into the equation, very similar for students of non-language background who, for example, in art history want to go and do Italian Renaissance painting or something. They do not really get properly trained in Italian unless they have done a full language course, and that language course is spread out over three years.

Furthermore, one of the decisions which seems to be piecemeal and not through the ministry of education—DEST or whatever it was called at the time—but seems to be widely spread in Australia, is that at a certain point language competence of a certain reading level, necessarily; but a certain level, a defined level, was once compulsory for honours students in Australia whatever they did, whatever they were going to do—certainly for arts faculties—and that was removed at some point in the 1980s, I think. I do not know exactly when.

So there is no foreign language requirement as part of, if you like, intellectual training at a university, particularly in arts faculties. I do not know if Sydney is the model you want to use to assess what an arts faculty is but, according to the *Times Higher Education* supplement, it is the

fifth-best one in the world. I do not know why that should be; it seems a bit strange to me. But, anyway, it is a fairly advanced arts faculty in Australia and certainly the highest research-earning arts faculty in Australia. Even in that faculty, knowing a foreign language is not part of the skills base of all the students who leave the arts faculty. It seems to me ludicrous.

Furthermore, when a student goes from a certain field to a research area where they require a language to a good reading level, if not a higher research level, to do their work, there is no funding provision for them. There is no funding in the APA for language learning. Language learning is taken as a given. This in fact has meant that, in three specific cases of my students, two of whom have now got jobs in universities and one of whom certainly will because she had the university medal in her year. They are the best students in the field, as it were, all of them and they had to suspend their APA in order to take bits of grants from foreign governments and take bits of time, two in Japan and one in Vietnam, to get their language up to research level. These are very good people. These are the people who should be given support.

So when I began to think about this issue in this previous submission I thought that there are various levels of support which can be given. One is an interim, medium level of support which will ensure that precisely this kind of student—probably on a competitive basis, but perhaps by awarding on a certain level some quotient to the honours graduates of each university—will receive support to learn the languages that they are going to require.

The great advantage of that is that it stops tertiary knowledge being focused on English language sources. One of the things that is very clear about the so-called intellectual elite in Australia is that they are extremely focused on sources in English. They do not look at other languages. Why don't they do it: because they have never been trained, because knowing a foreign language has no prestige. Even if they thought it was important, the way that they could get that knowledge would be very difficult for them. It would require sacrifices of a career kind and also of a financial kind in order to acquire those skills, and taking risks with their career, which is not, generally speaking, what people who are going to be paid less than a plumber want to do.

I am paid less than a plumber—a professor in Australia is paid less than a plumber. Please bear that in mind. This is not a prestigious profession that they are going into. These are very intelligent people, going into a profession out of interest, out of some intellectual drive; out of some creative impulse very frequently as well. They are not being encouraged either by the education system or by the reward system, so they are taking lots of financial risks with their existence. That is one issue.

The other issue, which I did not refer to in the report, is the level of language skill which is available either to people who come from a community background or who do not come from a community background. It seems to me that there is a lesser level of time allocation and, obviously, fewer financial resources for European languages, but still it is the same problem: it is just a simple shifting of the gradient, but the cost is one to four, basically, between, say, Italian, Spanish, Japanese, Chinese, Thai. Once there are complicated scripts, different phonetic structures, a non-cognate vocabulary and so on, those complications are producing this gradation of difficulty and the amount of money you have to put into them or the time you have to put into them to get to a certain level.

One of the problems is people who come from a non-foreign-language-speaking background. We always talk about people who come from a non-English-speaking background, but we never talk about people who come from an English-speaking background who are not, it seems, given opportunities by the system to master a foreign language unless they have a particular goal, unless they are particularly stubborn, unless they are particularly privileged or particularly resourced by their families. So as a result of this system, only a very few people who do not have some kind of cultural linguistic background are ever going to get to this point where they can do research in these languages, and that skews the whole of the research output. It skews the whole of the intellectual atmosphere of universities if universities are significant for the production of knowledge, which is another question. We will just put that to one aside.

So I began to think a bit more about what happens at another stage in the system. Languages are learned less and less in high school. It takes a great deal of determination in a language environment—such as the primary school where my children go, a public school in Sydney—to say that, no, you will not let him do Greek. ‘Make him do Italian, since he did Spanish in kindergarten.’ He went to Montessori and now he has gone to a public school; both of them are doing Italian. My daughter, who is half Thai, is always top in her class in Italian.

So what also is happening here? Another thing which is happening is that people who are brought up bilingually have features of their intellect, of their learning curve, which privilege them inside the system. You may not see it because they just assess it as writers of English or drafters of computer programs in mathematics. They may have different kinds of other skills which they mobilise in their work performance. But the children who are properly taught the language of their background perform better in school. Sometimes indeed, as is the case at the Thai school which my children go to on a Sunday morning, some people who are not Thai at all but who have been in Thailand for some reason send their children to that school. Those children perform better in school.

The music teacher in the Thai school says that he went to Sydney Girls High—which some of you will know is a very difficult school to get into, a public selective high school—10 years ago and there was one person from a Thai background. There are now 15 in that same school who have a Thai background. This must have something to do with their bilinguality or their access to other language schools which have trained their brains in a certain way. So this is a great resource for the state, for the country, for all kinds of activities, but it has not really been focused on, and I am wondering whether or not people who do not come from such a language background—who, for better or worse, think inside an English-speaking mentality—realise what they are missing, and missing for their children who will then develop in the ways that we have seen.

This is another question for the committee perhaps, although it is slightly out of the committee’s grasp; it is an anecdotal empirical observation. I wonder whether the prominence of some of these children from bilingual backgrounds in public prizes awarded by states for reading and maths and so forth—you only have to look at the names sometimes to see, let alone the ethnic kind of background of the faces—is because some of these people go to language schools on a Saturday morning or a Sunday morning, which improves their intellectual ability because they are going to school for three more hours a week. There are no statistics. This is anecdotal. Forgive me, I should not perhaps do this as an academic. But you think, ‘Well, there might be

something in this. They might actually be learning to use their brains in a different way.' I think the same phenomenon would also have been observed if my children had done music training.

There is something about the structure of primary and high school training which is ignoring this other feature of the education environment of these children. Of course, in terms of foreign languages, unless as an Anglo-Australian you send your kids to a Chinese language school—or Italian; I don't mind!—on Saturday mornings you are not going to get this background. There could be very definitely a particular cultural preference of a particular family but, unless you make the effort, you are not going to have this kind of background for your children. That is the way I think about it. At that point, I think I have said enough.

**CHAIR**—Thank you. I enjoyed that because I can relate to most of it, and I think I may even have some answers to some of the questions that you posed about why language in Australia has not been available to everybody. I think that basically there has not been the appropriate political leadership and understanding of the value of other languages in this country, not just in recent years but over a period of time—perhaps 30 or 40 years. There is a whole series of questions that I would like to ask you. I do not want to hog the questions from my colleagues but there are two that I want to go to directly.

Part of the committee's inquiry is to look at the future needs of this country and its capacity to compete internationally as well, and certainly our deficit in language capability will become more obvious as we need to become more competitive. What impact do you think our largely monolingual education system may have on our research sector in the future and our capacity to compete and so forth? Do you think that students who are doing higher degree research and who are competent in a foreign language have a future in Australia or do they generally tend to go overseas, as the two that you have referred to have done, and, indeed, be assisted in developing their language skills by scholarships from overseas universities?

**Prof. Clark**—I have spent a lot of time in France. I speak German; I lived in Germany a bit and I have German friends. There is nothing more monolingual than a German provincial town: they have not been occupied by the Americans; they have had 40 or 50 years of Turkish Gastarbeiter and whatever. There is nothing more monocultural, monolingual, than a south German town. Where is the rest of the world, please, let alone where is the rest of Europe. So I do not think we should get too obsessed with this problem of monolinguality and think that it is particularly an Australian problem. It is a problem of all cultures. To some extent, we are shielded from the full consequences of that because we speak 'the' language, which happens to be the international language of our time. It might be different if you were a priest in Slovakia in the 1770s and could read Latin when Latin was already going out, but people in the intellectual world still read it. For higher research needs, so long as a properly intensive, properly motivated—how can I put it—prestige-awarded environment was created for those who needed to learn the language for their research, you could get around the problem of monolinguality.

The problem of monolinguality is not a problem solely with the relationship of Australia to the outside world. It is problem with the relationship between Australians and the spaces of Australian cultural life and the kinds of things which go on with them and how those different spaces talk to one another. This became very clear to me when I went to the ABC three years ago with a Philippine colleague who had just given a lecture. They wanted to talk to him, and I just tagged along. This was when they still had arts programs on the radio.

There were 20 faces on the wall outside the studio. They were all the well-known faces of Australian ABC broadcasting. There was not one Asian among them, in a city where a third of the population—or parts of the city, certainly—is of Asian origin. That does not seem to me to be right, or there seems to be at least some big disjunction between the kinds of life experiences those people who are living in that city are having and the way they are able to represent it to themselves and to other Australians through the public spaces that are available. One of the simplest of public spaces is television. When did you last not see a female blonde newsreader on Australian TV?

**CHAIR**—Helen Kapalos, Channel Ten.

**Prof. Clark**—Sorry. Thank you. There is Helen, yes. And there is SBS.

**CHAIR**—I thought you might have meant commercial as well. It is a big breakthrough on commercial.

**Prof. Clark**—I did not mean SBS, although SBS is looking increasingly like the others with this deleterious policy of advertising. But we cannot do much about that—although we could complain. The mediascape is very Anglo, and in cities where there is a large population of non-Anglos—to put it in a bit more appropriate street language—they are still not there in the public spaces.

**FRAN BAILEY**—I very much enjoyed listening to your presentation, Professor Clark. I have one daughter who has just finished an intensive Italian language course at Bologna university and I have another daughter who works in Brussels. While she had a working knowledge of French, it really was not quite up to par to be doing business so the company that she worked for paid for her to do an intensive course. So I have one daughter who paid for it all herself and another daughter whose company paid for her to get her language skills up to par.

It occurs to me, in listening to you, that one of the aspects that we have been impressed with throughout this inquiry is the need for greater flexibility in both the funding model and in aspects of higher levels of research. I wonder if you can suggest any ideas to us as to how we might include this, and perhaps an industry partnership. In the past some people have said, ‘Look, students should be able to attend international conferences and there should be greater levels of cooperation between international universities and Australian universities.’ If we are looking at making recommendations about a more flexible model, what would be some of the suggestions that you would have to include language training in that?

**Prof. Clark**—Think of the figure that you want the federal government to come up with. You need to actually think back from the amount of money that you are going to get. \$5 million is the figure I worked out on the back of an envelope. Obviously it is not quite adequate but we will use it as a working figure. If you work back from the \$5 million, you are going to get maybe 200 language fellowships for the first year of their research, followed by their APA, and you are only looking at a very small group of the people who actually do higher degrees and research, because I think, roughly speaking, half of the people who do higher degrees—my ARC colleague who is present may have a different figure—are self-funded or funded by other than APAs. They may be funded by university scholarships.

When I learnt Japanese—and the Australian universities have been very entrepreneurial about this—in Sheffield intensively for nine months, we had one person from the Foreign Office, five future academic researchers—economic history, political science, geography, as soon as I remember, and other fields—and three businessmen, albeit they were sent by the most wealthy businesses. They were sent by Shell or banks or something like that. So there is no reason why you cannot combine the actual delivery of the language skills with funding of places by multiple sources: people funded under some postgraduate research scheme for the government; people funded by businesses under what they think is a requirement for their skills base for their executives—although they are presumably going to be fairly high level executives.

What I would suggest is to try and get recognition of the skills delivery system in universities, which I have already said is parlous—certainly in the Asian languages it is. In effect, it is not related to what they actually need. It might be okay to a certain level, but it is ineffective by the time you get to the level of research unless they have had this particular high school and honours background. Then get universities to recognise different levels of language and then different levels of skill input and also package the damn thing so that people can learn the languages in an intensive period. Business companies are not going to pay for executives to leave for two years, but they might pay for them to leave for eight or nine months, and pack them off to Tokyo or Peking or wherever it is they wanted them to work.

Unfortunately, language learning is very individual specific. There are generalities, but some people can have any amount of money put into their language skills and not get anywhere and some people can have very little money put into their language skills and get a long way very quickly because they talk to the people in their office. I have seen this, and you must know this from DFAT. Some people really just learn the languages and they interact with people. So it does depend on something like perhaps—and here we come into the difficult area—some kind of national language institute with grades of skills which are universal across all the sectors of education and those skills being delivered by different providers in different ways. It could be a single-language language school; it could be a university taking the students up to level 3, or whatever it was.

The other thing that is good to remember here, very importantly in the research area, is that the best language schools in Chinese and Japanese are American. It is basically the Ivy League. It is the inter-university school in Yokohama run by Stanford. It used to be in Taiwan, which is where I learnt Japanese, and it is now in Beijing. Those language schools will accept foreign students, sometimes on a fee-paying basis and sometimes on a part-funded basis, but they will not accept them at beginner's level. Increasingly, with particularly Asian languages, the higher level linguistic and research skills delivery institutions will not take beginners and, if they have not been brought to an intermediate level by the time they get there, they are not going to get in. I confess to having learnt Chinese at the age of 33, and my tones were the worst they had ever heard.

**CHAIR**—They are getting better, no doubt.

**FRAN BAILEY**—With the number of federal departments in particular that run graduate programs—like DFAT and Defence—do you have any idea whether they include further language training as part of ongoing study?

**Prof. Clark**—I do not know. One or two ambassadors have told me that they spent nine months at Point Cook in the military language school. I do not know if that is a suitable place for our ambassadors to learn language, but there we are! They got nine months intensive language school.

**FRAN BAILEY**—I have been there. It is quite separate from everywhere else. It is a real language laboratory.

**Prof. Clark**—Presumably, it is quite good at doing what it does.

**CHAIR**—We might follow up on that.

**Prof. Clark**—Yes, so you must have data from them.

**FRAN BAILEY**—Yes. I just thought you might have known.

**Prof. Clark**—No, I do not. I know the standard drill is a year in intensive language school, a year in a language school in Japan and then five years in the embassy, generally, in most countries.

**Mr SYMON**—Professor, you have spoken about the virtual dearth of opportunity for postgraduates to study languages. Has there ever been funding in that area? Is there something we used to do that has dropped off?

**Prof. Clark**—Didn't Whitlam have Asian language scholarships? But they were actually Asian studies scholarships; they were not Asian language scholarships.

**Mr SYMON**—I was at primary school then so I might have missed it.

**Prof. Clark**—I have been a citizen since 1996, so forgive me, I was not here. One of the ways it has been done in the past—and it was also done in the UK, and maybe there was some learning from the UK system here; I have no idea—is to have specialised scholarships. Major's state studentships, as they were called in the UK, are for postgraduate research on specified cultures with a one-year language learning component at the beginning. It is very useful for universities because it means you can fund a couple of good lecturers and high-level language teaching, which then spills over into the rest of your program. But as far as I know, short of that, there has not been any funding.

The problem in Australia seems to be more fundamental than whether there has been dedicated funding. If you look in any of the universities' handbooks for honours students, they say, 'It is desirable that you have a level.' It does not say you have to pass French 1 or Reading French 2 or whatever it happens to be. There are plenty of ways you could do it: just require it of the university student, for instance. What would happen if you did make it compulsory for all honours students or all MA students graduating to have a language qualification? You might shift the financial burden to another part of the educational process at a tertiary level, as we know. So to be sincere about this move, you would have to input some funding into it.

**Mr SYMON**—I expect so.

**CHAIR**—Yes.

**Dr JENSEN**—John, you have raised some very interesting points, particularly about ways of thinking with different languages and so on. I will put another proposition to you and that is that what we are seeing in Australia is simply the way of the world. For instance, in my field, in physics, in the first half of the 20th century it was pretty necessary for physicists to have some sort of working knowledge of German, whereas now everything is English. For instance, in aviation it is all English.

**Prof. Clark**—Yes.

**Dr JENSEN**—So the first question is: isn't this just a reflection of what is going on worldwide? The second question is in relation to language education. My wife is a primary teacher and there are a lot of monolingual teachers. Where you do get second languages at school, it tends to be the language that a teacher or teachers in that school happen to know. The problem is that once those teachers move on you then have a problem with keeping those kids going in that language. How do we address that issue?

**Prof. Clark**—One of the simplest ways of addressing that issue, which would have appeared across a number of non-Anglo-European communities, is to specify and say, 'We can't teach all European languages at primary school but we will make sure that training is available in this language in this area.' That could be done. It would be something like the German and Austrian music college system where you do not put the skills into the school; you put them into institutes and the students go to those institutes for those particular kinds of skills acquisitions. I do not know if you know the musical training system in Austria and Germany.

**Dr JENSEN**—No.

**Prof. Clark**—They have what they call Musikhochschule, a kind of high school with lower levels for music—they have the same thing in Holland—where people go and do courses which then take them up to certain levels, but they do not do it in their school. The state or local education committee provides those—

**CHAIR**—Is that done in addition to the schooling or do they become specialised schools?

**Prof. Clark**—It is done in addition to ordinary schooling. There is music teaching in primary school. There is none in middle school and high school, but that is provided at those centres, which provide a very high level of training, certainly in music. I do not know about the provision of language.

Certainly a resource problem is: how many languages are you going to teach? Where are you going to teach them? If you had a national language institute with a primary and secondary organisation, you could put your Chinese language teaching in, say, Glebe, because that is near where a lot of the Chinese people work or whatever—I am talking about Sydney, excuse me, because I do not know Melbourne very well—and you could put your Italian teaching in Leichhardt, where there is already an Italian institute. Instead of trying to put Italian in all the schools where they wanted it you could put it in one designated place for Italian in that area, and you could say, 'Friday afternoons is Italian time,' or whatever. You could make a curriculum

allocation or a time allocation to that. That is one way of doing it. I am sorry, what was your other point?

**Dr JENSEN**—The broader question about the anglicisation of the world and the fact that what we are seeing is simply a microcosm of what is happening internationally anyway.

**Prof. Clark**—The idea that the world is being anglicised is a very appealing one for people who already speak English or who only speak English, but it is not what is happening. What is happening is that there is a structure or media for representation which is required for intercommunity communication, which happens to be occupied in many countries by English, or between countries by English, as the medium of communication.

But it is not how the knowledge is generated. It is not how communities of speakers actually relate to English. It is just that you cannot hear it because you do not hear them talking about you speaking English unless you walk down a street in Canton and they call you ‘gweilo’—foreign devil. You hear them talking about you as a foreigner, as a gweilo—and these are people who speak English, by the way. So, no, I think that is a rather dangerous argument.

**CHAIR**—The best way to put it is that the world is actually speaking English in addition to their own language and maybe two or three others as well. Effectively, we get locked out.

**Prof. Clark**—The Anglos get locked out.

**CHAIR**—Get locked out of a world that actually speaks in many different languages.

**Prof. Clark**—But also, have you noticed that the kind of information and the kinds of knowledge structures which the English you are talking about carry are not the effective structures of those cultures? The belief structures, the things that people think are valuable, the way they mark their experience historically in their families or in the past, are not carried by English.

**CHAIR**—No.

**Prof. Clark**—English is one of those tools you just have to master. That is all. So if you said, ‘Well, we don’t have to bother because, after all, we’re only interested in formulae for jet engines,’ or whatever, you would not be able to understand why the people wanted jet engines.

**Mr BIDGOOD**—Thank you, Professor Clark. Like you, I come from the UK. I did my degree in social science and I did it through the Open University over six years by correspondence. I did an honours degree and I was going to go on and do a masters by research. Part of that was the Australian-Indonesian regional security complex and part of that was going to be learning Indonesian. I am not a natural linguist. I only speak English and a bit of schoolboy French, but it was suggested to me that Indonesian was the best Asian language to start with because it was easier for someone who speaks English to approach. Obviously it is the closest country to Australia. In the UK the first language you do learn at school, more than likely, is French, followed by German and possibly Spanish.

With Australia's engagement with Asia and with our becoming a real player in the neighbourhood, do you think Indonesian would be a good starting point for English-speaking students—as you call for in your paper here—in the social sciences and art history et cetera? Do you think that is a good starting point with Indonesian as the basic bedrock?

**Prof. Clark**—There are many functions with learning languages. They are not only where you would start and what is relevant because it is the closest country. There are many functions. One is for knowledge transmission. Lots of knowledge in Chinese and Japanese, for example, is not in the English language sources. With regard to Indonesian, is this an easy language to learn? I have never learnt it, but I have got some books in it. It has the attraction of having a script which is roman, so that removes a large barrier. But I think this notion that certain languages are easier to learn because they are written in roman script does not really apply. The problem with all languages—indeed, like the crazy phonetic system we use for writing English—is learning how a particular system's signs apply to a particular utterance or a particular kind of meaningful sentence, for example.

There are many very good reasons for a lot more of us knowing Indonesian. I have no doubt about that. Whether it is easier to learn or not because the language is written in a Latin script is something I would have to take on notice, having tried to learn Thai and failed to learn and read it properly, but to have learnt Chinese and managed. This is often to do with when you learn it, with what intensity and with what level of resource you are able to learn.

**Mr BIDGOOD**—You made a good point when you said that you yourself learnt Chinese at the age of 33.

**Prof. Clark**—I think it was 33, yes; perhaps 35.

**Mr BIDGOOD**—And you said you had the worst tonal range. I, too, at the age of 49, have been trying to learn Mandarin and it is hard going.

**Prof. Clark**—It is very hard going.

**Mr BIDGOOD**—How would you encourage people? Unless you come from a background that speaks a language other than English and you grow up in a bilingual or trilingual home, as some do, what is the best way to encourage degree students, PhD students, to take on a language? What can we do to encourage them? What can we do to help them, rather than put them off and perhaps even stop their studies?

**Prof. Clark**—The obvious answer is to provide resources which you do not provide at the moment. APA students get no time for learning languages. They have to take time off and get the money from foreign governments, in three cases I know, to get the language skills. So it would help if you said, 'We'll give an allowance to every APA student who's got to learn a foreign language for their research needs.' Maybe it becomes more competitive because there is a resource constraint. You make that allowance in the APA structure. That is the simplest way of doing it.

A more obvious way of doing it, and to some extent what happens now with Endeavour fellowships—and that is recent—is to say, 'Go away and spend a year in Vietnam and come back

speaking Vietnamese, please.’ But that is not a terribly effective way of delivering languages. It ignores all the problems of learning languages which are to do with your own culture and the status of language learning within it. I do not want this to be party specific, but maybe Mr Rudd talking Chinese on TV with Chinese is quite important. Mr Whitlam has appeared on spaghetti adverts talking Italian, hasn’t he? In the public space more people who had language competence could display it. There are people on all sides of politics, presumably, who have language skills.

**Mr CHAMPION**—Mr Downer speaks French.

**Prof. Clark**—Why not?

**CHAIR**—Four years ago only about six per cent of members of parliament had any language capacity—I did a survey on it—and probably only two were extremely fluent in terms of being bilingual. So it was an adequate reflection of our language capability across the country: not very good, and not very interested either, may I say. Rowan, do you have another question?

**Mr RAMSEY**—No. I am sorry, Professor, that I missed most of what you had to say.

**CHAIR**—Professor Clark, the issue of language learning is difficult. It has been difficult for a long period of time, and yet it is easy for those that have an insight into the value of it, and from an educational point of view too.

**Prof. Clark**—Can I interrupt? One of the most interesting programs I ever saw on TV—and it was on the old SBS before it was infected by New Zealand commercialism—was the program *Tales from a Suitcase*. People talked about their history and where they had come from, in many cases in their own language. The fact that they were speaking about their experience made the fact that they were speaking in a foreign language somehow vital to the people who do not speak the language. I do not speak Greek. I have a smattering of Spanish and Italian, but I do not speak them. But to hear people infusing or infusing their experience for other Australians with this language that they brought with them seems to me a good way of doing it, but it requires some kind of change in the public media.

**CHAIR**—Maybe it requires some of us to use our language capacity in parliamentary debate! I have often wondered what that would be like, as it comes naturally to quote Greek philosophers in Greek rather than in English. I would like to see that, even if we had a special day dedicated to that. Speeches in language capacity: that would be very interesting.

**FRAN BAILEY**—There would be silence reigning, I think!

**CHAIR**—You could call on your schoolday French.

**Prof. Clark**—If you go to Bologna, you listen to this incredibly beautiful language, just listen to it without knowing it. That presents a value to other people who do not have the skill.

**CHAIR**—Absolutely, yes.

**Prof. Clark**—That could be communicated via media of various kinds, particularly television media. I do not know what the politics of SBS were when it was set up, but that is the only

channel where you see foreign languages used, and you have to tune to it to listen to it—or a few adverts for Leggo’s sauce—and that is it. There is nothing wrong with Leggo’s sauce, by the way! I use it myself.

**CHAIR**—On that note, thank you very much. I hope we might be of some assistance to this ongoing issue.

**Prof. Clark**—I hope so. Thank you very much.

[10.54 am]

**ANDERSON, Professor Warwick, Chief Executive Officer, National Health and Medical Research Council**

**BRUYN, Ms Miranda, Assistant Director, Research Investment Branch, National Health and Medical Research Council**

**MORRIS, Dr Clive, Chief Knowledge and Development Officer, National Health and Medical Research Council**

**CHAIR**—Welcome and thank you. Although the committee does not require you to give evidence under oath, I should advise you that the hearings are formal proceedings of the parliament. Consequently they warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that giving false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. We thank you for your submission and now welcome you to make a brief opening statement before we proceed with questions. Can I say, before we do that, that if I suddenly get up and leave, it is because I am being asked to go into the Main Committee to deliver and not because I am bored by what you have to say.

**Prof. Anderson**—Thank you, Chair, and thanks for the opportunity to appear before you. It is an important issue. I will make a couple of points. The National Health and Medical Research Council, which I will call NHMRC, for a long time have had schemes to develop the health and medical research workforce that we see as being in addition to what the universities do in this area, although it is through universities. We have schemes both for PhD training and then early- and mid-career training. For our PhD scholarships we do not replicate the university and APA systems. We have targeted schemes to develop the workforce appropriate to our industry—if I could use that word—of delivering health care to Australians.

I will read out a short list of our PhD scholarships. They are for medical and dental graduates who, because of their training usually do not get the exposure to honours and that fourth year of research so they are less competitive for the APAs. We have them for primary health care, for people who are going to be GPs. We have special schemes around Indigenous health research, both Indigenous Australians and people wanting to work on Indigenous health, and we run a number of PhD scholarships with the charitable research funding sector—for example, the Heart Foundation, Multiple Sclerosis Australia, Motor Neurone Disease Association, Cerebral Palsy Foundation and Retina Australia. These are charitable research groups who want to increase the level of interest in skills and research in their particular area.

Finally, on early- and mid-career research training—these are postdoc positions really—again we have targeted schemes. We have schemes for public health researchers and health services researchers, so if they are going to work in public policy they have a research background, and for clinicians so if they are delivering health care they also have a research background. I hesitate to use the word ‘industry’ for healthcare delivery, but where new knowledge and new ways of working are embedded into the system we think that it is very important to have people with research backgrounds involved in that. For many of these early-career fellowships, we offer

two years overseas and then two years back in Australia—the overseas first and then some money back in Australia—so we hope that our people get that international experience but will then be attracted back because they have two years of salary when they come back.

As I said, the aim really is to build up the set of skills that health needs in research. We hope that, by this variety of schemes we have people trained in great discovery. Australian health medical research is excellent, we think, and the independent evidence shows that, and finding out new things to make us healthy and keep us healthy is obviously important. But having the skills to work in the system and know how you take the findings of research and make sure that the systems—the policies and practices in the system—work better is really one of the main aims of what we do in this area. Thank you.

**CHAIR**—If I can go directly to an issue that has come up at various points throughout the public hearings, it has been suggested that no NHMRC funded research has gone on to win a Nobel prize. I thought I would start with the one that might get the conversation going.

**Dr JENSEN**—You've just taken my question!

**CHAIR**—I'm sorry, Dennis, it is the chair's prerogative! One of the reasons that has been suggested is because the grants are highly competitive and therefore many people are inclined to put forward proposals that might be conservative. They do not want to pitch too high in terms of risk and so-called 'blue-sky' research.

**Prof. Anderson**—Yes.

**CHAIR**—Can you comment on that?

**Prof. Anderson**—Sure. That is a fair question. I want to reassure you that we do put innovation in one of our selection criteria for a project grant. For our big program grant scheme, what you have achieved is the main selection criteria. It is true that in the last six or seven years. There was NHMRC support for Sir Macfarlane Burnet. So, first of all, the main supposition is not quite true. When Peter Doherty won the Nobel prize, the ANU was not allowed to apply to the NHMRC, so I do not think we should be held responsible. We could not give him any money if he did not apply.

It does, though, raise the issue of Barry Marshall and Robin Warren and the work that they did on helicobacter infection. I think that was back in the days of regionally based funding with the NHMRC, when it was kind of a state-by-state quota, because we interviewed on a state-by-state basis, and it is true that our peer review panels—just as many journals and professional societies did—failed to see the opportunities and the benefits of that research. Certainly we are very keen to make sure we do not miss that in the future.

**CHAIR**—I will hand over to the deputy chair to take over, because I will have to come and go.

**ACTING CHAIR (Fran Bailey)**—Thanks, Chair. I will continue with this line of questioning, if I can, for a moment and then ask my colleagues to contribute. Given that we have received quite a bit of evidence about the issue that the chair raised, I wonder if you see an

advantage in having a separate pool of funding that would be dedicated to the riskier level of research. Could I have your comments on that?

**Prof. Anderson**—I am sure this arises because the NIH has recently introduced what they call a transformative grant, because all government funding bodies around the world are accused of this—are you too safe?—and so NIH has been thinking about it. We had the director of NIH out earlier in the year so we know what they are thinking about it. Unlike the NIH, we put innovativeness as a selection criterion in our grants. We did that seven or eight years ago and the NIH did not, so to some extent I think we have responded to this criticism.

**ACTING CHAIR**—Does that have a weighting?

**Prof. Anderson**—Yes, it is a third of the grant. The Nobel prize is very important, and we certainly want to win more and are batting towards that. But there are other ways of judging innovativeness, for example, how often Australian research is cited in the highest levels of citation, the top one per cent of citations. Our research is at least two per cent of the top one per cent. You would be aware that many Australians of the year in the last 10 years have been medical researchers—Fiona Stanley, Gus Nossal, Fiona Wood and so on.

Some of the other innovativeness of what we have supported can be seen from our innovative technology companies—ResMed, Cochlear and Ian Frazer's discovery of the vaccine against cervical cancer, which I am glad we did fund quite a lot over many years—all of which have resulted in innovative development of measures to improve health. The Nobel prize is one issue, but there are other ways you can see whether we fund innovative research.

**Ms RISHWORTH**—You have spoken about how you support PhD students. We have been looking at ways to increase the amount of research output and different cooperative ways that PhD students might interact with external organisations. I was hoping you would briefly outline how the PhD students work with your organisation, with the universities, and whether or not you had any other ideas about how those arrangements could change to make it work better.

**Prof. Anderson**—That is a very interesting question. Our role really is limited to providing the universities or the medical research institutes with a scholarship and then they are the employees. But I suppose I implied a little bit by what I said in my opening comments that we really are very keen to make sure that as many students as possible are helping our healthcare delivery system and are training in ways and hopefully are embedded in ways that help the system run. Because of the targeted nature of our PhD scholarships, many of them will be in clinical settings, in clinical departments or in medical research institutes or in hospital departments. In a sense, they are already embedded in the industry in a way that perhaps the campus based other disciplines are not.

**Ms RISHWORTH**—Do you see a role for yourself in perhaps linking up some of these students with each other? We hear about the importance of people sitting together and discussing these things and the benefits that flow from that, but is there a role for yourself or someone else to bring some of these students together?

**Prof. Anderson**—I would like to think about that question.

**Ms RISHWORTH**—Yes.

**Prof. Anderson**—It is a very good one. I should also point out that there are other people on NHMRC grants doing PhDs because we have some funding schemes that allow that—for example, centres of clinical research excellence, which are meant to be networks of people in, say, heart disease or mental health; one-line grant; basically about capacity building. So they are allowed to use some of that money to fund a PhD.

We have capacity building grants in population health research. Again, one-line grant people can use them. The idea there is along the lines that you are getting at, in the sense that you put some students in this group of people who are trying to achieve particular outcomes and let them learn from the mix of people that are in these centres of excellence. But you have challenged us, in a way, to think of whether we ought to be sending some other messages to the sector about the value of what you are suggesting.

**Mr RAMSEY**—We have had a lot of discussion in this committee and people have come back and discussed stipend levels, APAs, all that kind of thing. It is one of the core issues, obviously. It is one of the impediments. NHMRC is a little different from the other organisations. Could you take me through how a typical young researcher's package is structured by your organisation to support them?

**Prof. Anderson**—On the PhD scholarship level we have been very keen not to do anything other than support people at the same level as the APAs and the broader body of PhD students, although we are often urged to with comments like: why don't you pay more and you'll get more students into health and medical research? We do not necessarily think that it is useful for the country to attract students to our area for financial reasons rather than because of passion for improving human health.

For post PhD we have two ways we support people. One is on our fellowships, of which there is a range; I briefly mentioned early career and mid career. So they were set at levels when they were first introduced in around 2000—after the 1999 budget, was it?—that gave the NHMRC some increased funding. They have just been wage cost index, government indexed out since then.

We also support people on our research grants rather than our fellowships, on project grants and program grants. On those we have a concept called personnel support packages. We, of course, do not employ these people. They are employed by the universities or the institutes or the hospitals and we put a package on the grants that we provide as part of the research support. Then the institutes or universities use those to employ whomever the investigators on the grants choose to employ on the grant. So we do not specify that person A or person B needs to be employed, we just provide a support package.

In health and medical research we face a very wide range of competitive salaries from people who work in our sector. Cardiologists who hold our grants might earn several times what a normal university lecturer will earn. We have physiotherapist researchers; we have university researchers; we have people at institutes. We have well over 100 institutions that get our research funding.

So there is a wide range of employment conditions, a wide range of capacities to support our grant. We are certainly very aware that it is an issue. Our way to handle it has been, from about 2000, the idea of a support package—a pile of money that goes with the grant.

**Mr RAMSEY**—If you had a pile with more money, would you then put together more packages or increase the worth of the packages that you already have?

**Prof. Anderson**—We put to the national innovation review that Minister Carr established the submission that what would really help would be full funding of research so that we would have a system a little more like some other countries, where we in the ARC would be enabled with funds to fund the full cost of research. As an ex-medical researcher from Monash until recently, I know that it is difficult to juggle what you get from the NHMRC and the ARC, what the university can support and, where there are gaps, what you can get from the Heart Foundation and so on. We are having an internal discussion now with our research advisory committees about level of funding versus the numbers of grants so that we can put away that trade-off.

But I think our formal position is that what would be helpful for Australian research productivity would be full funding of research. Then we would get away from either—and I know you heard this story yesterday—cross-subsidising of research with teaching income and so on or, in our sector, the various ways that people fund the gap between what we fund and what is really required.

We have the university sector and the RIBG and other schemes that they have for that sector. For our medical research institute sector we have some indirect costs that government has given us—a 20 per cent top-up of grants. They are also supported through a range of state based indirect costs systems. They also have a different FBT set-up to the universities. So we have two sectors that are really quite different.

Then, for us, research in hospitals is very important. The hospital based research has none of these schemes for indirect costs of research, so they really struggle. Yet from our point of view, having research in the health sector itself is absolutely crucial. It is really important that there are people doing research in hospitals and in primary healthcare settings for the good of our patients as they turn up there. So your question for us is complicated.

**Mr RAMSEY**—It all sounds wonderfully simple—not!

**Prof. Anderson**—Yes.

**Mr RAMSEY**—Pardon my ignorance. We have been informed that people who are doing their PhDs in a cooperative research centre are probably doing a little better than the rest—that there are more resources. I do not even know if there are any CRCs operating in the health research area.

**Prof. Anderson**—Yes, there are.

**Mr RAMSEY**—Is that the case? Do you have a competitive disadvantage for those researchers?

**Prof. Anderson**—I do not think I can answer the question directly. What I can say is that the level of interest of students in medical research is very high with recruitment into undergraduate biomedical science courses, recruitment into medicine and physiotherapy and so on, and students staying on into honours and then into PhDs. We are not facing to nearly the same extent some of the more enabling sciences. So whether there is a competitive disadvantage or not, there are certainly still many bright students wanting to do a PhD. The competition in our area is really, in a way, between the medical research institutes and the universities and it is very healthy, probably, in trying to get the best students. Our only comment would be that universities and their training and research role are very important factors and you would not want to see undergraduate and PhD training completely disaggregated into separate institutions.

**Mr RAMSEY**—Thank you.

**Mr BIDGOOD**—Thank you very much, Professor, for what you said. In the light of what you said concerning the national innovation review being held by Kim Carr, what is your view on the 2008 budget announcement of Future Fellowships for research to the value of \$140,000 per annum over four years? How is your organisation going to benefit from that? What is your comment on that?

**Prof. Anderson**—It is very welcome. We have certainly been consulted by the Australian Research Council as part of it.

**Dr Morris**—This funding is additional to what the NHMRC funds in fellowships so it is always good news. We are working with the ARC to help them set up the peer review panels to do the selection and they have been consulting us very readily on all of those processes.

**Mr BIDGOOD**—It is good to know about that involvement and that association. Obviously 1,000 mid-career fellowships for researchers is a start. Do you feel that that will be adequate to meet the need now, or how much more would you like to see?

**Dr Morris**—That is a leading question.

**Mr BIDGOOD**—It certainly is.

**Prof. Anderson**—Perhaps it is an opportunity, though, to talk a little about the numbers that we have in that sort of area. We currently have, I think, just over 500 active PhD students on our scholarships. On our immediately post-PhD early-career fellowships, in 2008 we have 203 people overseas and 357 internally, and then, with what we call the Career Development Award, which is probably the most similar to the Future Fellowships, we have 249 people supported on those schemes at the moment. Whatever amount comes from the Future Fellowships to the health and medical research area will be on top of those. As Clive said, more is always very welcome.

**Mr BIDGOOD**—Do you feel that we are going in the right direction with Future Fellowships funding at \$140,000 per mid-career research fellowship? Is that money enough per individual? I am trying to find out whether it is really meeting the need?

**Prof. Anderson**—I am not avoiding your question, but I would like to let you know that we have commissioned a demographic study of the health and medical research workforce which we hope will report before the end of the year. The study is about this, of course, but more generally about the disciplines in the area. We want more nurses who are research active and who are really asking questions on the wards about the best way to deliver health. Because we have people at universities, in institutes, in hospitals and, indeed, in primary care, we are unaware really of the extent of the research workforce in health and medical research, because it extends well beyond university. We know that, of the applicants who come to us early and mid career, around 60 per cent are women, but we do not have a good feel across the whole system for the balance between men and women, age distribution and so on.

So, in a way to answer your question, we feel that we need a stronger evidence based view of the whole workforce. But there is no doubt—and I am sure you have heard it a lot—that people are concerned about getting a start in research. Eventually we cannot support everybody who wants to be a researcher and our schemes are pyramidal. We have more people at the bottom and people do go by the wayside. It is very tough, but it is why we think Australian health and medical research is at least twice as good as the best in the world because of this citation information that we are happy to provide to you. It is a formal independent study that we would be happy to provide.

It is competitive and, at the end of the day, Australia cannot afford everybody with aspirations to be in research, and that is a tough system really. So we have about 70 or so people at the peak of our system, our senior principal research fellow, but we have a lot more who start out and hope to make a career in research.

**Mr BIDGOOD**—In the light of what you have just said, are we losing some of our best and brightest because of the highly competitive regime that you are talking about?

**Prof. Anderson**—It depends what you mean by ‘lose’. Yes, to health and medical research, but we lose them to the biotech industry; we lose them to teaching; and it would be nice that some of them went to high school, and that does happen—undergraduates. So I am not sure that we lose. I strongly have the view that research training is a terrific thing for people no matter where they end up, because it teaches you to project-manage; it teaches you to think incisively.

**Mr BIDGOOD**—To define the word ‘lose’ in this context, I mean losing the best and brightest brains overseas: the loss of the Australian intellectual wealth of the nation.

**Dr Morris**—That will always happen. There is always going to be competition between Australia and overseas. We always like to think that they come back to Australia. There has been a long tradition of Australian researchers going overseas, doing postdocs, and then coming back and being successful in Australia. There is always going to be a percentage that have better careers overseas than in Australia.

**Prof. Anderson**—There are people—great Australian names sprinkled around the world—running things. It is often very much to our advantage if they are in the pharmaceutical industry or something like that. Another thing is that health and medical research—and there are others, no doubt—are truly global activities, so we have to expect that. If you go to our health and medical research laboratories, you will find hundreds, maybe thousands, of people from around

the world—from Europe, from North America, from Asia—working in the labs too. So we gain as well as drain, and sometimes we like to boast about it. Our stem cell researcher Alan Trounson now runs Californian stem cell research. We have a very distinguished scientist from the Queensland Institute of Medical Research with a leadership position in the pharmaceutical industry internationally. So there are two sides to that issue.

**Dr JENSEN**—I would like to get back to the issue of this risk in blue-sky research. I will put this to you in slightly confrontational wording but without wanting to be deliberately confrontational: I want to challenge you. I put it to you that the NHMRC, in terms of their grant award process, behaves a little bit like an old boys club: you have a group of researchers with established track records evaluating the grant applications, and the grant applications that tend to get granted tend to be based on people that are known and people that have got a track record. As such, although you have got innovation as one of the yardsticks that you use for determining who should be successful in their grant applications, young researchers who often have very innovative ideas will tend not to get a grant application awarded even if it gets high marks for innovation simply because they do not have that track record and delivery. There is the issue as well that, in terms of even the innovative section, the grant applications will be somewhat conservative because people do not want to spoil their record of delivery in terms of what they have said they will deliver with their grant application.

**Prof. Anderson**—That is something that is often said about the NHMRC. Frankly, I think it is about an eight-year out-of-date view and I will say why I believe that in a moment. But it comes from the days of Project Grant interviews, which have long since gone, and the days when there were not clear selection criteria for grants, so it was just an opinion. I think you are talking about our Project Grant scheme. I just want to mention our Program Grant scheme, which is entirely based on your achievement, but there are big grants, and the idea of those is to bring new people in under them.

I also mention that we have about 1,000 fellows, mostly young, who are given a grant directly so that they can get established. But the change that we have made, and I have made particularly since I have taken over this job two years ago, is to directly confront that allegation. So our system is that nobody should serve on a panel for more than two years, so at least a third of the panel are new each year, and there are these clear selection criteria, and we have staff members in the room to keep them to that. They must address the selection criteria rather than, ‘He deserves a grant or he’ll have a gap.’ We take that seriously.

We have a special process for new investigators as part of the Project Grant scheme, so I think there are 64 new people who have never had a grant before this year. I probably should not say that. I do not think they have been announced yet, so I am sorry about that. That is kept aside just for these people to start.

I have also introduced ways whereby we have—what is the American expression?—vision power, so we have changed the system whereby people get on panels and we get external assessors, so separate people advise us on who is on the panel and the people who look at the grants are separate from those. So we try to make sure there is no centre of power that can do the ‘old boys network’ and destroy that, because we do want to select the best grants. We introduced this clear, seven-point marking scale a number of years ago to force our panels to judge against a

clear written description rather than the sorts of things that you mentioned, back under the more interview type system.

We think that is working well and are pleased to see that the National Institute of Health, the NIH, after visiting us earlier in the year have changed their system to our system because they think that it can help them make this change to transformative grants as well. Having said all that, we have on our agenda right now with our research advisory committee this issue of transformative grants. The last thing I will say about those is that if you are on one of these panels, you are supporting about 20 per cent of the applications that come.

They are nearly all really good and for important health matters. It is a tough and exhausting job being on these panels. There are always difficult decisions to be made between many applications, all of which are terrific; so what to decide? If that leads to more conservative decision making, that is a dynamic of the people in the room rather than any policy we make, but to try to overcome that, as I say, we have been clear on our seven-point scale of what a 6 is and what a 7 is, and innovation is high in all these areas.

**Ms RISHWORTH**—Coming back to a point you made, I am wanting to know whether or not you had any funding for particularly that translation, or encouraging practitioners to do research. I am a psychologist previously and was doing some research with some other psychologists at our clinical practice. We wrote a paper and submitted but had no assistance to do that, so pitched way too high—it was not a randomised control trial, and we picked a journal that would only accept randomised control trials—although it was quite good data. After a while, it lost its momentum. We thought we had good outcomes for a particular therapy but we lost momentum and the paper was never published. You are talking about the focus of translating that, getting that scientist practitioner in the medical area. Are there grants? Is there something that you are looking at to help those practitioners to get advice? It is not necessarily money or a proposal. They do not have time for a proposal, but they need assistance to refine their research, collect their data and then publish.

**Prof. Anderson**—We do not have schemes that do not involve you coming to us with an application. There is no question about that. But we have just introduced a big scheme we are proud of, called the Partnerships for Better Health scheme. This is, in the translational area, absolutely clear both for practice of health—health practice, not just medical—and policy development. The idea is that it is a partnership between the NHMRC and another body. We expect these mostly to be state, territory and Commonwealth health departments, but they could be transport departments or housing departments because all these things affect health as well, and for our partners to contact groups of researchers and say, ‘We’ve got a research need as to how to roll out physiotherapy or psychotherapy services around rural and remote areas,’ say, or Indigenous communities. ‘We need the research. We and the researchers will put an application to you, the NHMRC, to fund this research.’

We also have a scheme called Practitioner Fellowships. This is a mid- to senior-career fellowship for people who work clinically. It has mainly been doctors, but it is for all health professionals, to spend half their time on our money—that small amount of money we talked about earlier—and half their time working for an employer, a hospital or a health care provider, on probably a lot more money than that. We have some absolute stars in that system, but that is our attempt to help in that area.

**Dr Morris**—It would certainly give you the space to write up the papers if you have half a salary to do the research.

**ACTING CHAIR**—Professor Anderson, I would like to get on the record what is stopping the NHMRC from providing the personnel support packages that cover the full cost of research, instead of the four days a week as salary.

**Prof. Anderson**—Just to be clear, our personnel support package is for full-time research but we have, for 30 years or so, said, ‘When you’re supported by us, we’ll give you one day a week to do something else if you want,’ so even our fellows that are full-time NHMRC research fellows, very senior people, can spend one day a week working for a biotech company or consulting or lecturing at a university or whatever they want. That has always been our policy. To answer your question about why there is a gap between what our PSPs are and what employers pay their employees, as I said, we set these at the beginning of the decade. We have just indexed them at government levels and have not made up differences between enterprise bargained increases in salary by our hospitals, institutes and universities and what we do. It is our understanding that that has been government policy across government. Different institutions have addressed this in different ways, mostly by people on our salaries doing some teaching or lecturing at the universities. It is one of the selection criteria for our fellowships, anyhow, that people do participate in these sorts of ways. So that is the process that we have undertaken.

**ACTING CHAIR**—You would have, I am quite sure, like the rest of us, been interested in Dr Terry Cutler’s review. I am sure you were pleased to note—I cannot speak for all of the committee but certainly, from a personal perspective, I was—his recommendation about the full cost. He also mentioned the question of ‘fragmentation’, as he referred to it. A theme that I have been pursuing throughout this inquiry is the number of campuses—or indeed, in your case, some different hospitals—that are engaged in research, and it is a lot of facilities almost trying to be all things to all people.

What is your view about actually establishing centres of excellence in particular areas of research—for example, the ‘James Cook University of Marine Biology’? If we were to build up these centres of excellence with international reputations it would be easier to attract international students and it would be easier to provide exchange programs with overseas universities. It would also be easier to attract perhaps some industry internships and, in your case, this could be hospitals or pharmaceutical firms or whatever. What is your view on that aspect, which, as I said, Dr Cutler refers to as ‘fragmentation’?

**Prof. Anderson**—Yes, I think we are concerned about fragmentation. There is a recommendation in the Cutler report for the NHMRC to be resourced to see what we can do in our sector. I mentioned earlier that there are, I think, 150 or so institutions on our books as administering grants and, in an era where collaboration and multidisciplinary approaches to complex research questions is the direction in which research is going, I think fragmentation into small units does not help.

We support the full costs of research for this very reason: because in our sector the indirect costs of research are provided by at least three different processes. For universities there is one process; for medical research institutes it is mainly from the states, and from us with a separate line of money; and for the hospitals it is, theoretically, through the state and Commonwealth

health agreements, but it is very hard for hospitals to keep some money for those indirect costs of research if the emergency department is in trouble and so on. So it is our view that the fragmentation in health and medical research comes from the lack of a uniform approach to funding the indirect costs of research and, if that were overcome, then there would be nothing driving institutions apart.

At the moment they are driven apart because if you can define yourself as an institute you can get money from a state government for these indirect costs, or from us with the separate line of funding that we have from government for these indirect costs, but that does not apply to universities, so it has tended to split off smaller institutes that can then access that line of support, and everybody understands that collaboration and working together without these sorts of barriers in place is what we need to be working towards.

**ACTING CHAIR**—When you are assessing applications with, I think, your six- or seven-point template, are you able to drive some of this change by perhaps changing one of your six or seven points?

**Prof. Anderson**—No, but how we can drive some change—and we are about to write to institutions saying that we are thinking about this—is by being clear on who can administer our grants. Our policy of almost any organisation being able to administer one of our grants has led to 150 administering institutions, and we are very imminently about to write to those 150 saying that we are rethinking that policy in order to drive better collaboration, but for other reasons too. For example, we require a number of ethical issues to be addressed around animal welfare in research and human participants in research, through a national statement and in our Code for the Responsible Conduct of Research, which has provisions in it around research misconduct and provisions for how institutions should handle allegations of research misconduct.

To do that, you have to be a certain size so that you have the resources and the independence within the organisation to be able to set up independent inquiries. That is very difficult if you are a very small institution with a dozen researchers and so on. So there are a number of motivators for us to do that, but we certainly are very keen to ensure as much working together between universities and institutes and hospitals as we can possibly manage.

**ACTING CHAIR**—And you would see funding as a key means?

**Prof. Anderson**—Yes.

**ACTING CHAIR**—There is a lot of competition amongst facilities.

**Prof. Anderson**—Which is healthy in a way.

**ACTING CHAIR**—Yes.

**Prof. Anderson**—I suppose the issue is that, if there are funding drivers that drive the opposite, that is not—

**ACTING CHAIR**—But that is what has been happening.

**Prof. Anderson**—That is what has been happening.

**ACTING CHAIR**—Are there any other points that you wish to make that we have not covered in our questions?

**Prof. Anderson**—I really do not think so. It has been a very comprehensive lot of questions.

Resolved (on motion by **Ms Rishworth**, seconded by **Mr Ramsey**):

That this committee authorises publication of the transcript of the evidence given before it at public hearing this day.

**ACTING CHAIR**—Thank you very much. I now close the hearing.

**Committee adjourned at 11.43 am**