**INSTITUTE OF MEDICAL AND VETERINARY SCIENCE ACT AMENDMENT BILL 1985**

**LEGISLATIVE COUNCIL, 15 MAY 1985, PAGE 4296**

**Second reading**

**The Hon. FRANK BLEVINS (Minister of Agriculture):**

I move: That this Bill be now read a second time.

The main purpose of this Bill is to permit the Institute of Medical and Veterinary Science to form a company, which would have as its principal objective the management of the commercial aspects of the Institute. In addition, the Bill will allow part-time employees to enter the State Superannuation Fund, thus providing IMVS employees with conditions similar to other State Government employees.

The provision of laboratory services for the diagnosis and management of patients is a fundamental objective of the Institute of Medical and Veterinary Science. The Institute's role in research and teaching is also well understood and clearly identified. However, the Institute has a number of capabilities and functions in other areas which are not so well identified.

The Institute is perhaps the largest medical diagnostic laboratory complex in Australia. It is different from most diagnostic laboratories in that it not only provides laboratory services to public hospitals but is also a major supplier of diagnostic services to the private medical practice. It is integrated into the University of Adelaide Medical School complex with respect to teaching and research in the areas of pathology. Because of the size and range of activities it undertakes, the Institute has had to develop a number of facilities, systems and devices to enable it to provide these services. Some of these have a commercial value and have either been given, copied or sold to other organisations.

Until now there has been relatively little emphasis on the commercial role of the Institute and financial returns have been absorbed into general revenue. However, the recent emphasis on biotechnology by the Federal Department of Science and Technology, the State Ministry of Technology and the Department of State Development have caused the Institute to review this aspect of its role. For the purposes of this Bill the commercial role of the Institute does not include the routine medical diagnostic services provided for patient care.

The Institute already is involved in the manufacture of several biomedical products. However, it is considered that there is a significant market potential for more commercially viable products supported by the present manufacturing capacity of the Institute. Such products could include the various chemical diagnostic test kits, an example being a faecal blood test developed at the Institute and which now appears to have significant national and international applications in the early diagnosis of cancer of the gastrointestinal tract. Special function software for micro-computers in laboratories has been developed at the Institute and has been used in many States within Australia.

Educational systems based on high quality microscope slides could also be developed. There is, of course, a very real potential to develop completely new products using the highly trained and skilled staff of the Institute. The capability for the development of test systems involving recombinant DNA work already exists at the Institute. Indeed, the Institute is already a party to a biotechnology grant awarded to the Flinders University in this area for the development of specific monoclonal antibody-based tests.

The Institute is also in receipt of a further grant with the University of Adelaide Department of Biochemistry which is based on recombinant DNA work involving novel technologies developed in Adelaide. The recent development of a Q fever vaccine by the Institute—a world first—has brought benefit to the State by the elimination of Q fever from SAMCOR, with significant savings from workers compensation and improved productivity. This vaccine is to be marketed by the Commonwealth Serum Laboratories nationally and internationally. The Institute will not benefit further from this development, but may have if there had been a different climate to research and development at the commencement of the project.

Over recent years there has been a dramatic change in the climate with respect to biotechnology developments. Recently in Australia, both Federal and State Governments have been actively promoting technology and officers of the Institute have held discussions with the Federal Departments of Trade, Science and Technology and the State Ministry of Technology. These discussions have offered encouragement to the Institute to pursue the commercialisation of its scientific developments and, in particular, to achieve this through a company.

Arising out of a symposium organised by the Ministry of Technology at which the Federal Minister of Science and Technology was the guest speaker, it was made clear that the principal issue with respect to financial support of research and development in institutions was that it should be linked to marketing to enable the full potential of such developments to be pursued through to commercial viability of the product. There would be advantages for the Institute in having a company to support research. Such advantages would be:

* the proper identification and budgeting of research and development for new tests and procedures;
* better accountability for these developments;
* the development of incentives for staff to be involved in developments;
* the reduction of the deficit of the Institute on the State by more appropriate funding of research and development;
* the direct and indirect possible employment benefits within the State;
* linking research and development of biotechnology to commercial markets.

The present commercial operation of the Institute would provide a small, but self-supporting base for a company to develop from. In addition to the ability to attract biotechnology grants, the company would also be able to actively improve present product manufacture and its marketing. It is not envisaged that such a company would, by itself, develop into a large and separately staffed organisation. Like other companies operating out of Government departments and statutory authorities, it would contract with the Institute for some aspects of its operation and could also contract outside of the Institute for some aspects of its management and marketing.

The requirement for the company accounts to be audited annually by the Auditor-General (clause 5) and for an annual report to be presented to Parliament as part of the IMVS Annual Report (clause 7) will permit the ordered and controlled development of the commercial aspects of biotechnology at the IMVS. These developments are not seen to be in conflict with private pathology laboratories in South Australia which are not involved in this form of research and development. Indeed, they may wish to use some of these developments for their own services. It is believed that these proposals will assist industrial development and, therefore, employment within South Australia. This expectation is in line with experience in other centres where this form of technological activity is recognised as having a high economic multiplier effect. I commend the Bill to the Council. I seek leave to have the detailed explanation of the clauses inserted in Hansard without my reading it.

Leave granted.

**Explanation of Clauses**

Clauses 1 and 2 are formal. Clause 3 inserts the necessary functions for the Institute to take commercial advantage of its existing activities. Paragraph (b) inserts provisions that will enable the Institute to operate through the instrumentality of a company and paragraph (c) makes a consequential amendment to the delegation provision. Clause 4 makes an amendment that will enable part-time employees of the Institute to join the State superannuation scheme.

Clause 5 replaces section 21 with a provision that requires the auditing of the accounts of a company established by the Institute. Clause 6 amends section 23 of the principal Act so that money generated by the commercial operations of the Institute may be used directly to finance the Institute's functions without first having to be appropriated by Parliament. Clause 7 amends section 31 of the principal Act to include the operations of a company formed by the Institute in the Institute's annual report.

**The Hon. R.I. LUCAS:** I am pleased to support the second reading of this Bill and to expedite its passage through the Parliament. As the Minister has indicated, the primary purpose of the Bill is to enable the IMVS to form a company, which would have as its principal objective the management of the commercial aspects of the Institute. It is certainly clear that in the 1970s and the 1980s many Government departments and statutory authorities throughout Australia have been forming similar companies to help market any new technologies or inventions that might result from their particular brand of research. It is also true that the universities have been at the forefront in recent times of forming such companies to help market the results of the pure and applied research that is undertaken within those tertiary institutions.

As I listened to the second reading explanation, I recalled that certainly the University of Adelaide has at least three companies of which I am aware that help market the commercial aspects of research in various departments. Certainly, the IVF team in Melbourne has formed itself into a company and is seeking to market its technologies, particularly in the United States. Perhaps the Hon. Dr Ritson who, I understand, will speak later, will be able to flesh out the detail. Nevertheless, this is a further example of the trend in the 1980s for results of research by Government or semi-government institutions to be marketed commercially by companies formed for that purpose. I certainly support that as a general principle.

The Minister indicated about half a dozen good advantages from the formation of the company. I will not go over each of them again but will refer to one or two. Certainly, the Minister referred to the incentives for staff to be involved in developments. I believe that that is an important advantage of the formation of a company, that is, to maximise the advantages of research. I believe it gives staff incentive if they can see the end of their research, the commercial aspects and possibly some advantage accruing to them by way of a form of financial inducement. More importantly, I hope that they would see advantage coming back to the institution by way of increased funding through the sale of the technology in which they have been involved.

That leads to the next advantage—the reduction of the deficit of the State because of more appropriate funding for research and development. Those two advantages obviously go hand in hand. Obviously, if the company is successful in the market place and can sell the technologies that are being developed by the professional staff at the Institute not only the staff but also the Institute will prosper. The days of stringent cut-backs in finances, which we have seen recently from both State and Federal Governments of all political persuasions, mean that it is important for the Institute to find alternative means of funding or at least of part funding. I certainly support this initiative and the formation of the company.

I want to refer to one other aspect of the Bill. I was pleased to note that an amendment to section 21 of the principal Act provides that the Parliament will be kept informed of the progress of the company in relation to marketing the results of technologies. Certainly, amendments to section 31 of the principal Act will ensure that the Parliament is informed of the activities of the company in this area. I believe that the company will encourage further research and development of a high quality, particularly in the biotechnology area, referred to by the Minister, at the IMVS. For the reasons that I indicated previously, I am happy to support the second reading.

**The Hon. R.J. RITSON**: I join with my colleague in supporting this Bill. I will deal with it with my usual brevity. Unfortunately, the Minister through great pressure of work has been called momentarily from the Chamber, but I am sure he will hear me in spirit or perhaps on one of the loud speakers. The whole question of the scientific output of public institutions, whether universities or other public scientific institutions, indicates that they have been rather poor cousins to the great commercial scientific, pharmaceutical and industrial complexes of the Western world economy. I think it is fair to say that the entire original research output of the university system is a drop in the ocean compared with the output of the commercial scientific systems. There are many examples of this deficiency.

The Minister in the second reading explanation gave some examples of a discovery that is now marketed by the Commonwealth Serum Laboratories with no financial benefit to the Institute. I recall that in the 1950s when I was a resident in a university college a guest speaker addressed the students one evening: he brought with him gadgetry to demonstrate his new invention, called dry drawing or zerography. He was employed by the Defence Standards Laboratory and he had developed a technique of copying. In fact, he had discovered photocopying. In the event, I think he was rewarded by his employer, the Government, with a little incentive grant of several hundred pounds, but obviously the Government then scratched its head and wondered what to do with this invention. It was sold to the Rank organisation, which is now Rank Xerox. So, the name given to the process by the original inventor is now a world-famous name in the field of photocopying. The name of the inventor is lost to me at the moment and the potential gain to the people of Australia is also lost because the rights to that process I am sure were sold for what would be a pittance compared with its true value.

This Bill, together with the proposal for universities to move into the marketing of their discoveries, is therefore a great step forward. It has of course nothing to do with the service role of the Institute, that is, the providing of diagnostic and investigative services. The Institute has always rendered those services at the appropriate arbitrated medical benefits fee for the general public and, depending on the state of play of medical politics in Australia from decade to decade, it has rendered those services for no fee to the patients of the public hospitals. Indeed, it never started life as a competitor with private pathologists. It was the major source of these diagnostic services and small private pathologists many years ago dealt with that part of pathology which did not require high technology and expensive plant and equipment, and sent all the rest of their stuff to the Institute. So, as time has gone by, what has happened is that the private pathologists have upgraded their techniques, plant and equipment and increasingly competed with the previously established Institute of Medical and Veterinary Science. Separate from that service which the Institute performs competitively in the market place it should have an opportunity of marketing scientific discoveries and of securing rights over them in the same way as any private nongovernment scientific or industrial company could.

I have one hope and a little anxiety which was aroused by some comment that the Hon. Mr Lucas made that perhaps income which flows eventually from any successful commercialisation of a scientific discovery will help fund deficits. I hope that there would not be any question of income from scientific discoveries being milked to fund deficits in other areas of the Institute's function. If any university or Government scientific institution is ever going to get a level of activity in excellence in output approaching the very large multinational companies, any income from the marketing of its scientific work should really be ploughed back—it should become input into further research in the same way as for example a pharmaceutical company would put a substantial proportion of its revenue back.

In the case of a pharmaceutical company, for instance, the company might have experiments running on dozens of different chemicals, different variants of drugs attempting to modify side effects of one or the other. Then when it makes a discovery, it would patent it, promote it vigorously and, in the initial phases of promotion, it is usually quite expensive because its aim in the first instance is to recover its development costs and in the second instance to put further money into ongoing research into further products and any money left over from that pricing and marketing structure is then profit. That is sound business practice and if there is to be marketing of discoveries, patenting of discoveries by the Institute, then I would be disturbed if it were not done on a business-like basis. In other words, if it were set up to conduct this business, it should do it as other businesses do and allocate the appropriate amount of its cash flow to further market orientated research projects and not allow the Government of the day, be it Labor or Liberal, to milk that enterprise in order to subsidise deficits, whether they be deficits caused by either inefficient administration or unavoidable public service. Having said that and expressed that anxiety. I have much pleasure in supporting the second reading.

**The Hon. Frank Blevins:** Is that the definition of a Labor deficit or a Liberal deficit?

**The Hon. R.J. RITSON:** I made no partisan comment at all. You must have misheard me.

**The Hon. Frank Blevins:** I thought you were describing a Labor deficit or a Liberal deficit.

**The Hon. R.J. RITSON:** No, I said, whether a Labor Government or a Liberal Government. In any case, I have much pleasure in supporting the second reading of the Bill and we will expedite its passage.

**The Hon. FRANK BLEVINS:** I thank the Hon. Mr Lucas and the Hon. Dr Ritson for the support they have given to the second reading and also the Opposition in general for the assistance it has given the Government in the speedy passage of this Bill. The remarks that both members made I am sure will be taken into consideration by the Minister who is in charge of this area.

Bill read a second time and taken through its remaining stages.