Newsletter of

the **Australian Society** *for*

Medical Research

Election 2001

comments from

Meg Lees
Australian Democrats

Jenny Macklin
Australian Labour Party

Dr Michael Wooldridge
Liberal Party of Australia

President's Report

Dr Peter O'Loughlin, October 2001

Political

The approaching Federal election will be fought at least in part on the basis of the science, education and innovation policies of the major parties. While the government's position on innovation (Backing Australia's Ability) seems reasonably clear, at this stage the detail of the opposition plans have not been released. The gist of the Knowledge Nation policy is very pro innovation and education, but Kim Beazley has made it clear that a Labor government would proceed with caution and their plan for delivery of initiatives in this area will stretch over 10 years.

The Labor Party has indicated in meetings with members of ASMR Executive that it is interested in allocating at least some funding for targeted research objectives. We have urged that the allocation of any such strategic funds be determined by strategic need in this country. The Health and Medical Research Strategic Review recognised a requirement for priority driven strategic research to "*address local issues that are unique, significantly over-represented or more severe, and yet under-researched in Australia.*" It recommended that Australia "*develop a consultative priority-setting program, managed through an enhanced NHMRC, to establish priorities across the full array of health issues*." The distribution of strategic research funds through any other mechanism runs the risk of allocation on the basis of effective lobbying by special interest groups rather than on the basis of Australia's unique needs. The ASMR recommends that all medical research support be distributed through the NHMRC who will determine the appropriate balance between priority driven and investigator driven research. The HMRSR recognised that *"Curiosity driven, investigator initiated, peer-reviewed fundamental research is the foundation of our current success and it must remain so."*

Over the course of this year various members of the Executive have joined me in meetings with a number of key politicians. Some of the more important issues that have been raised in these meetings include:

- **the need for rapid implementation of any new investments to encourage innovation.**
- **the need to encourage philanthropy.**
- **distribution of new project-related infrastructure should target the organisations which incur the research project costs.**
- **the need for an evidence-based approach to regular review of government spending on medical research.** *We suggest that the appropriate indicator shouldbe the average per capita government expenditure on medical research in OECD countries.*

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President's Report, continued

Politicians visited: Michael Wooldridge, David Kemp, Jenny Macklin, Carmen Lawrence, Martyn Evans, Martin Ferguson, Senator Kelvin Thomson, Senator Kim Carr, Senator Meg Lees, Senator Rod Kemp, Senator Peter Cook and Senator Alan Eggleston.

ASMR Election strategy:
In the lead up to the Federal Election, ASMR has distributed a Fact Sheet to assist members in writing to and/or meeting with candidates for election. The facts and figures contained in the document will be useful in putting the case for Australian Health and Medical Research and to ensure HMR is on the political agenda.

I urge you to write letters to the Cabinet and Shadow Cabinet. ASMR believes it is particularly important members also target local candidates with letters and where possible, face-to-face meetings. Experience has shown us that this strategy works (ie, the 1998 ASMR Campaign, laid the ground work which allowed the Minister for Health to successfully call for the Health and Medical Research Strategic Review which resulted in the doubling of NHMRC funding).

It is useful in your communications with politicians to indicate firstly, how medical research funding affects you as an individual (eg, job security, ability to employ other researchers and the importance of funding your particular area of research) and secondly the importance of medical research in general. The fact sheet will assist particularly in the latter.

General
ASMR has worked to strengthen its national focus this year. The March Board meeting was held in Perth for the first time, with the intention of meeting with key members of the West Australian Branch and establishing contact with politicians based in WA. Politicians who attended functions with members of the Board included Mike Board (State Shadow minister for health), Carmen Lawrence (Shadow Minister for Industry, Innovation and Technology) Senator Peter Cook (deputy leader of the opposition in senate), Sen Alan Eggleston and Julie Bishop.

Expansion of the medical research Expos into all capital cities and Canberra also contributed to a more national focus for the Society. This growth was made possible by a grant of $135,000 from Dept of Health and Aged Care.

ASMR is routinely invited by the Department of Health and Aged Care to attend the Federal Budget lockup and this year that duty was undertaken by Rohan Baker. There were no surprises in this year's budget, with the expected appropriations for the Backing Australia's Ability being announced. The forward projections for the innovation plan indicated that only a disappointing 2/3rds of the promised $2.9b is accounted for in the first 4 years of the 5 year plan.

ASMR has made submissions by invitation to the following Reviews: Review of the NSW Cancer Council Act, Inquiry into matters arising from the Post Mortem and Anatomical Examination Practices of the Institute of Forensic Medicine, NSW, Child Health Research Institute, SA, Women's & Children's Hospital, SA.

Peter O'Loughlin PhD
President, ASMR
2/10/01

Events

2001 Joint ASM HSANZ & ASBT
Oct 21-24 , Brisbane Convention Centre, www.hszanzasbt2001.im.com.au

Genetics & Public Health Short Course
October 26-29, 2001,University of Sydney, www.health.usyd.edu.au/pdf/genetics.pdf

ASMR 40th NSC
November 24 - 27, Marriott Resort Hotel, Gold Coast, Email: mp@asnevents.net.au

Redox Processes in Chemistry, Biology and Medicine,
November 30 - December 4, Email: sfrr.sydney.2001@hri.org.au

Australian Health & Medical Research Congress
Melbourne, November 2002, Email: mp@asnevents.net.au

Intellectual Property

Patent Protection for Medical Inventions

Research scientists are increasingly being forced to seek and secure funding from alternative sources to the research grants upon which reliance has traditionally been placed. Commercialisation of the fruits of research is the most obvious avenue of alternative funding available. In the area of medical research, where commercialisation involves enormous risk to investors and long lead times before products make it to market, it is particularly important for researchers to protect their intellectual property and to thereby be in a position to offer investors a period of market exclusivity. Patents offer the most effective means of securing this desired market exclusivity.

While there are numerous international conventions in place which outline basic requirements of national patent laws, patents are granted and administered by national governments and therefore separate applications must be made in each country or region of commercial interest. The basic principle behind these various patent systems is, however, consistent throughout the world. This basic principle is that in return for full disclosure of an invention by an inventor, the national government will grant to the inventor in the form of a patent a period of market exclusivity. This term is 20 years in most countries. During this period the inventor, or someone to whom the inventor's rights are transferred, will be able to bring an action in the courts to prevent others from commercially exploiting the invention. The intention is that research and development will be encouraged, at the same time as ensuring technical details of inventions are made public and can be used as a basis for further research. In this regard, it is important to emphasise that further non-commercial research in relation to a patented invention should not constitute an infringement of the patent owner's rights.

In the field of medical research there is a wide variety of subject matter which may be the subject of patent protection. Apart from pharmaceutical compounds and compositions it may also be possible to obtain protection in respect of methods of medical treatment, diagnostic methods, methods of preparation of compounds or compositions, medical instruments, medical research tools, such as drug targets, screening methods and related computer software, for example. In addition to falling within the scope of what is generally understood to be patentable subject matter, a number of other requirements must also be satisfied to qualify for patent protection. These include that the invention must be novel, it must be inventive, and a detailed written description of it must be provided. These requirements will be discussed in further detail below.

Novelty

The requirement of novelty is relatively straight forward. It simply means the invention must be different from anything that has previously been published or patented (the prior art). This is established during examination, which involves a detailed search of patent and technical literature.

Although there are some differences in the novelty requirements between countries due to the divergence of national laws, it is generally the case that disclosure or publication of an invention before lodgement of a patent application will destroy novelty. The main exception to this rule which exists in a few countries, such as the United States, is where a grace period is provided during which publications by the inventor are allowed. In the United States the grace period is the twelve months prior to the filing of a patent application in the United States. Reliance upon this grace period is usually not recommended as it is likely to

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Early Career Researchers

Details of the new Career Development Awards which replace the RD Wright scheme and RF level entry points in the Fellowship scheme, were posted to theNHMRC website on June 18th . , The expanded and fully overhauled scheme is closer to the recommendations of the AHMRSR and encompass:

- Basic Research (10 awards annually)
- Clinical Research (5 awards)
- Public Health (5 awards).

The awards on offer are for a 5 year non-renewal term and the package of $80,000 per year is to cover salary, travel allowance and maintenance; part-time awards will be reduced accordingly. Applications are currently under review and announcement of the results will be made at the time of all other NHMRC awards. The closing date for 2002, will be much earlier, probably March or April.

For further details see - http://www.health.gov.au/nhmrc/funding/careerdev.htm

Dr Catherine L. Coulter

Federal Election 2001

Meg Lees, *Australian Democrats*

Thank you for the opportunity to outline the Democrats' policy for supporting Australian health and medical research.

The Australian Democrats believe public spending on medical research provides vital knowledge, employment and health gains to Australia. It must not be seen as a cost but as an investment. The Democrats support the allocation of 3% of the Federal Health Budget to medical research, including research into natural and complementary medicine.

Australia's spending on education, as a percentage of GDP, is way behind most other OECD countries. If we want to improve the health of Australians and keep many of our talented graduates here we must re-invest in a number of areas. Of major importance is a funding boost directly to our universities. Also important to both research and training is adequate funding of our public hospital system. Public health research, as well as biomedical and clinical research must be a priority for government.

The Democrats believe the private health insurance rebate should be abolished or at the very least capped and means tested. Capping and means testing the rebate would allow at least an extra $1 billion to be spent directly on areas of need such as the public hospital system and medical research.

To ensure our scarce health dollar is spent on the most appropriate and effective health procedures and services, up-to-date research is vital.

Jenny Macklin, *Australian Labour Party*

There are two central planks of Kim Beazley's election platform which are good news for Medical researchers - the Knowledge Nation and the Medicare Alliance.

Labor will encourage innovative health and medical research to maintain Australia's reputation as a world leader in high quality medical research. We will deliver in full the promised doubling of funding for medical research over 5 years.

The Howard Government has failed to deliver on the recommendations of the Wills report on Medical research. Spending on ARC grants and research infrastructure has dropped substantially and the removal of tax concessions has severely damaged private investment in research. The much touted County Investments initiative has not produced a single new project in medical research

In addition we have already announced a $148 million plan to upgrade the fight against cancer. This policy includes funding for clinical trials in Australia and the formation of a National Cancer Alliance on the model of the Canadian virtual National Health Institutes. Labor will also fund Comprehensive Cancer Centres to link groups of research institutions and hospitals more directly and encourage the transfer of knowledge.
Labor wants to encourage our best researchers to remain in Australia and build internationally competitive teams - starting with new Cancer Research Fellowships and other Knowledge Nation initiatives. We will maintain a register of Australian researchers working overseas to maintain links and provide incentives for them to return.

One of the great strengths of Australia's public hospitals is their close ties with Universities and medical research centres. Teaching and research are closely linked to patient treatment. This ensures that we have a highly skilled and experienced workforce and that patients are getting the benefits of the latest knowledge about their condition.
Labor will build on these strong links and ensure that medical research and bio-technology are key sectors that benefit from our Knowledge Nation policies.

Labor has put health and education at the top of the agenda and these areas will get the top priority. The detailed policies will be released during the campaign and can be accessed on the ALP website - www.alp.org.au

Dr Michael Wooldridge, Liberal Party of Australia

Today, not many in the medical research and scientific community would remember that in 1996 when the Coalition came to government, the National Health and Medical Research Council (NHMRC) budget was declining.

The previous Labor Government had cut our health and medical research funding by $50 million a year so that in 1996 Labor was providing the NHMRC with a budget of only $100 million.

I am proud to say that the Coalition Government reversed that position and in 1999 we were able to announce a historic and unprecedented doubling of medical research funding in this country.

The Coalition has put Australia at the forefront of health and medical research with a record $614 million boost for medical research over the 6 years from 1999. No other Government has ever given medical research such a high priority in Australia.

This year alone, the Coalition is providing over $250 million for medical research in Australia. The NHMRC will be directing $35 million to cancer research; $23 million for cardiovascular research; $13 million for research into diabetes and $5 million for research into asthma and other lung diseases.

The Coalition has also made it a priority to attract our researchers working overseas back to Australia. I was recently able to announce that both Professor Peter Doherty and Professor Tony McMichael have received the National Health and Medical Research Council Burnet Award. This Award is worth up to $2 million to each recipient and will allow them to return to Australia to continue their distinguished research work at home.

The return of such internationally recognised researchers is an endorsement of the Government's approach to promoting our research and development capacity through the NHMRC and through this year's $3 billion Innovation Statement, Backing Australia's Ability.

The Coalition is committed to Australia's health and medical research community. Our record in Government shows that. If re-elected we will continue this strong and steadfast support.

*A*SMR believes it is particularly important members target local candidates with letters and where possible, face-to-face meetings.

It is useful in your communications with politicians to indicate firstly, how medical research funding affects you as an individual (eg, job security, ability to employ other researchers and the importance of funding your particular area of research) and secondly the importance of medical research in general. The fact sheet included with this Newsletter will assist in this area.

Write to the Leaders of the Australian Democrats, ALP and Liberal Party

The ASMR Platform for Health and Medical Research can be viewed at www.asmr.org.au/news/

jeopardise the prospects of obtaining patent protection in other countries.

Inventiveness

The requirement of inventiveness is more complicated. Again it requires a comparison between the invention and the prior art, and again there are differences between countries in relation to the standard required. In the case of inventiveness though, it is not sufficient for there just to be differences between the "invention" and the prior art. Rather there must have been either some ingenuity involved in conceiving the invention or some unexpected result observed.

A test often adopted for inventiveness is to pose the following question: if a person skilled in the relevant area of technology (a person equipped with all the skills and knowledge routinely used in the field) was to attempt to solve the same problem intended to be solved by the invention, would the skilled person routinely and without ingenuity arrive at the invention? In other words, would the invention be considered obvious to the skilled person? If the answer is in the affirmative, then it is also considered to lack inventiveness.

Clearly, the test for inventiveness is a subjective test which leaves much open for argument.

Written description

A patent application must include a written description of the invention which provides detailed information to the extent that would enable a person skilled in the relevant field to make and use the invention. In the case of medical research related inventions, patent applications usually take a format somewhat similar to a scientific publication, and indeed it is becoming more prevalent for patents to be considered as publications for the purposes of reviewing researchers' performance. The patent application will usually include some background to the problem which the invention intends to solve, a disclosure of how the invention can be made and used which includes description of possible modifications, some examples of how the invention has successfully been implemented as well as a set of claims. The claims are of particular importance as it is these that define the boundaries of the invention and will be closely considered by a court if a third party is accused of patent infringement.

If the invention relates to a peptide and/or nucleic acid sequence it will be necessary to include sequence listing information within the patent application. Other specific requirements apply to microorganism related inventions where it might not be possible to adequately describe the invention in a written manner. In this case it may be necessary to deposit a sample of the microorganism with a recognised depository institution. In this way third parties who wish to conduct research in relation to the invention or work the invention after patent expiry will be able to do so by obtaining a sample of the deposited microorganism.

Overview

It is not the intention of this article to provide detailed information in relation to the many complex issues you may be confronted with in seeking patent protection in respect of commercial development arising from medical research. Rather, the article is intended to provide a brief overview of some of the opportunities associated with patent protection and the major requirements of novelty, inventiveness and filing a written application. The most important message to understand is that prospects of obtaining patent protection may be destroyed if there is disclosure of the invention before filing a patent application. You should therefore consult a patent attorney before publishing in relation to research with commercial potential.

Mark Roberts
Patent Attorney/Associate
Davies Collison Cave
1 Little Collins Street, Melbourne, Victoria 3000

ASMR Research Award 2000

This year the "ASMR Research Award" was used to further research on a novel protein identified by Professor S. Peter Klinken's group at the Laboratory for Cancer Medicine, Western Australian Institute for Medical Research, Perth, WA. The "ASMR Research Award" has been used to aid the generation of M44 knockout mice. This work is currently underway as a collaboration with Professor Ashley Dunn at the Ludwig Institute for Cancer Research, Melbourne, Victoria. These studies aim to identify the fundamental role of the novel kinase M44 in normal cellular functions and to determine whether its activity can be exploited to regulate the oncogenic potential of MLF1. I look forward to presenting my work at the ASMR National Scientific Conference on the Gold Coast

Raelene Lim
PhD Student.

40th ASMR National Scientific Conference

Marriott Hotel, Gold Coast
25th - 27th November 2001

"BioInnovation: The Future of Medical Research"

Final Announcement

On behalf of the Local Organising Committee, we would like to invite you to attend the 40th ASMR NSC to be held at Marriott Hotel on the Gold Coast. Symposia for the meeting include:

- 'Therapeutic Applications of Proteases'
- 'Functional and Structural Genomics'
- 'Glycotherapuetics and Drug Design'
- 'Targeting New Vaccines and Diagnostics'
- 'Molecular Genetics of Cancer'
- 'Tissue Construction and Destruction'
- 'The Pot of Gold at the End of the Research Rainbow'

There are many excellent overseas and national speakers including Prof Tom Curran, Prof Garry Taylor and Prof Julie Campbell.

There will also be several Research Highlights Sessions giving attendees the opportunity to present their research. The Firkin Orator in 2001 is Dr Edison Liu, Director of the Singapore Genomics Program and the AWT Edwards Oration will be delivered by Professor Peter Andrews, co-Director, Institute for Molecular Biosciences, UQ.

When making your decision to attend, allow yourself to be swayed by the good time you can expect at a conference on the Gold Coast in late Spring. The Marriott Hotel offers fantastic facilities to all delegates and there is a variety of affordable accommodation packages.
Assoc. Professor Lyn Griffiths
Convenor, ASMR National Scientific Conference 2001

All enquiries and registrations are best made from www.asmr-nsc2001.conf.au

ASMR Election of Directors
Candidates for Election to the Board of ASMR equalled the number of vacancies available.
New Directors (2001-2003):
Dr Alaina Ammit (NSW)
Dr Anthony Armson (WA)
Dr Michael McGuckin (Queensland)
Returning Directors (2001-2003):
Dr Moira Clay (Vic)
Dr Bronwyn Kingwell (Vic)
Dr Ricky Johnstone (Vic)
Directors continuing (to 2002)
Dr Rohan Baker (ACT)
Dr Cathie Coulter (SA)
Prof. Peter Schofield (NSW)
A/Prof. Andrew Sinclair (Vic)
Dr Joe Simonetta (NSW)
Directors Retiring November 2002
Dr Peter O'Loughlin (SA)
Dr Cassie Lawson (WA)
A/Prof Lyn Griffiths (Queensland)

Congratulations!

Emeritus Professor Donald Metcalf, AC FAA FRS

Winner of the 2001 Prime Minister's Prize for Science for his life-saving white blood cell research that is helping to treat millions of patients with cancer and severe infections

Professor Peter Bartlett

Winner of the 2001 Malcom McIntosh Prize for Achievement in Physical Sciences for his work in helping computers learn new and difficult tasks

Associate Professor Bostjan Kobe

Winner of the 2001 Minister's Prize for Achievement in the Life Sciences for his groundbreaking work which is helping piece together the jigsaw of how our cells work

Election 2001

Find your electorate at:

http://search.aec.gov.au/searchb/mainb.htm

Find your Candidates:

- **Australian Democrats**
  www.democrats.org.au/election01/
- **ALP**
  http://www.alp.org.au/people/people.html
- **Liberal Party**
  http://www.liberal.org.au/candidate.HTM

Write to or visit your Candidates

Keep Australian Health and Medical Research on the political agenda

145 Macquarie Street, Sydney 2000. Ph: 02 9256 5450, Fax: 02 9252 0294, Email: asmr@world.net
Website: www.asmr.org.au **Executive Officer:** Catherine West. **Newsletter Ed.** A/Prof Andrew Sinclair
ACN 000 599 235 ABN 18 000 599 235