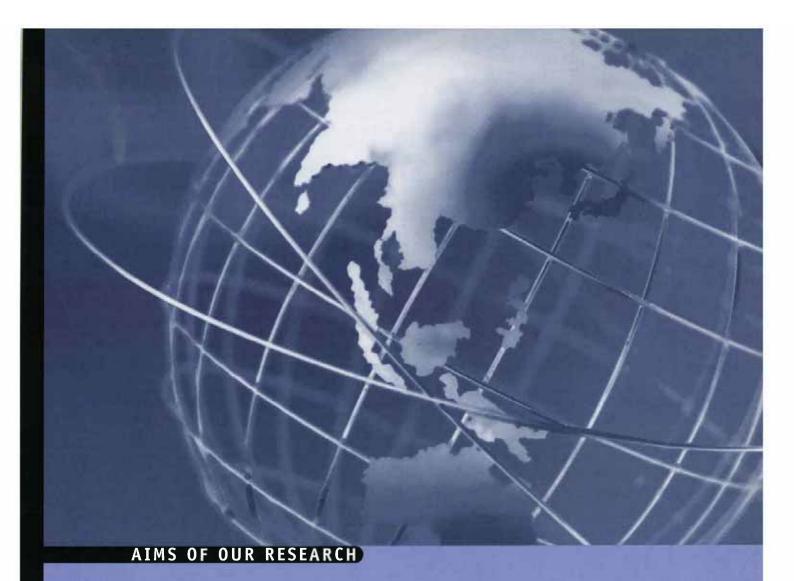


he Baker Institute is a block funded institute of the National Health and Medical
Research Council of Australia, and is also supported by the Victorian Government and the
Baker Benefaction. The Institute is affiliated with Monash University and the Alfred Hospital,
and Baker staff hold appointments in both of these institutions. In addition, the Baker
is a World Health Organisation collaborating centre for research and training in cardiovascular
diseases, the only one in Australia.

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n Australia, 43% of all deaths and serious illness are due to diseases of the heart and circulation.

Most of them are due to Hypertension (High Blood Pressure) and Atherosclerosis (clogging up of arteries with fatty cholesterol - laden plaques) which cause stroke, heart attack, heart failure and kidney failure.

The aims of our research are to increase understanding of the basic causes of hypertension and atherosclerosis, to use this kind of knowledge to help prevent heart and vascular disease in the community, and to improve medical and surgical treatment

Board of Management



Sir Laurence Muir Kt cr VRD, LLB, FSIA, FIAM Company Director Patron of the Institute and former President of the Board of Management



Mr Norman O'Bryan BA, LLB, BCL President, Baker Board of Management Barrister-at-Law



Professor John Funder AO MD, PhD, FRACP Director, Baker Medical Research Institute



Mr Ross Barker
BSc (Hons), MBA, ASIA
Hon Treasurer, Baker Board of Management
Director, J B Were & Son
Managing Director, J B Were Capital Markets Ltd.
Director, Djerriwarrh Investments Ltd.
Alternate Director, Australian Foundation
Investment Company Ltd.
Director Australia Media & Communications
Investments Ltd.
Member Australian Stock Exchange
Member Stock Exchange Derivatives Board



Mr Peter C Barnett FCPA
Former Chief Executive, Pasminco Ltd.
Director, Ericsson Australia Pty Ltd.
Director Mayne Nickless Ltd.
Director, Santos Ltd.
Chairman, Norwich Union Australia Group



Mr Ken Baxter
Director, Management Consulting KPMG
(Until December)



Mr Kevin Courtney Consultant, Ernst & Young



Professor Peter LePoer Darvell

BCE (Hons) Melb, MS Ohio State

MSE MA PhD Prin. DipEd, FIE Aust. FTSE

Deputy Vice Chancellor
(Research & Development), Monash University

(From October)



Mr William P Gurry AO, LLB Chairman, Baker Capital Campaign Executive Chairman, SBC Warburg Dillon Read Australia Ltd



Dr Peter G Habersberger AM RFD, MB, BS, FRACP Visiting Cardiologist, Alfred Hospital



Professor Stephen R. Holdsworth MD, PhD, FRACP Professor of Medicine Clinical Dean of Monash Medical Centre Medical School, Director, Clinical Immunology, Southern Healthcare Network



Dr Gerard P Johnston BSc, PhD Vice President, Baker Board of Management Chairman and Managing Director, Kodak (Australasia) Pty Ltd



Mr Richard Morris NHMRC Representative Secretary, MRC (Until December)



Mr Phillip Munz LLB (Hons) Group Executive Chairman, GSA Industries Pty Ltd



Mr William G Philip AM
B. Comm, FCA
Company Director
(Until October)



Mrs Margaret Ross Convenor, Baker Activities Committee Member, Board of Australian War Memorial Foundation

PAST PRESIDENTS

J.F. Mackeddie E. Rouse
BA, MD, BS CBE, FRACR (Hon)

J.C. Habersberger AO

Sir Laurence Muir Kt cr VRD, LLB, FSIA FAIM J.D. Moir AM

D.F Hogarth OAM

President's Report

n behalf of all the members of the Baker Board,
I congratulate the Director, Professor John Funder
AO, and the scientific and support staff of the Institute
on a sterling performance in 1997. As I write this report,
preparations are now well under way for the long
overdue commencement of the Baker's new building project.
I am sure that everyone associated with the Institute realises
that the new building project is the culmination of many years
of hard but productive work in the life of the Baker.

The new building will, I believe, herald a new era for the Baker and set it firmly on course to become Australia's leading medical research institute in the 21st century.

Sike all of the years in which I have participated since first becoming involved with the Baker, 1997 was extremely busy and I have marvelled at the productivity of the Director and staff of the Institute in very difficult conditions. The Institute has long ago outgrown (and worn out) its premises. Despite this, its scientists continue to produce world ranking scientific achievements which are evidenced by an extraordinarily high rate of publications and the receipt of numerous prestigious awards and invitations to speak and participate at international scientific conferences and seminars.

Monogst the many Baker scientists who have been particularly honoured in the last year, I mention David Kaye, who was awarded a Wellcome Senior Research Fellowship; Murray Esler, who received the Ramaciotti medal for his outstanding contribution to Australian medical research and Garry Jennings, whose team at the ABMU was awarded an NHMRC research grant as a centre of clinical excellence in hospital-based research, one of only two such awards made in Victoria.



here to congratulate Professor Funder on his election as an Officer in the Order of Australia for his outstanding contribution to medical research. This is a great achievement for our Director. The wider Baker family shares with pleasure and admiration all of its members' achievements.

by the NHMRC. I observed with amazement and admiration the work undertaken by all of the scientific and support staff of the Institute in explaining the Institute's leading role in cardiovascular medical research in Australia and why its record justified a substantial increase in NHMRC funding in the next quinquennium. The Board also participated actively in the review.

The independent review committee agreed substantially with the Baker's submission and recommended that the Institute receive a nominal 16% (real 6%) increase in NHMRC funding. At the time of going to press, that recommendation

has not been adopted by NHMRC which has decided instead to freeze its level of funding at 1997 levels while it reviews its own procedures and policies for the funding of all NHMRC block funded institutes. This most unsatisfactory outcome from an agreed process, which the Baker entered into enthusiastically and bona fide (and after it was reviewed most favourably and positively by an independent committee of experts), is very disheartening to the Institute and damaging to the system of medical research funding in Australia as a whole, of which the NHMRC is trustee for the Australian people. We hope the NHMRC will quickly complete its internal review and restore the Baker's position.

shows that a solution must be found urgently to the severe shortage of Government funding for medical research in Australia. To this end, a committee has been formed of the chairmen of all block funded medical research institutes in Australia which has met several times and which proposes to lobby the State and Federal Governments for increases in the medical research funding base in the near future.

By comparison, in his "State of the Union" address in January 1998, U.S. President Bill Clinton announced the establishment of the "21st Century Research Fund" and the largest funding increases in history for the U.S. National Institutes of Health, National Science Foundation and National Cancer Institute. In the USA, unlike Australia, a plain fact of contemporary economics is clearly recognised: the cost of medical research is not simply a government budget outlay but an investment in a nation's future.

Again I congratulate the Director and all of the staff of the Institute on their excellent efforts during 1997. I also thank each of the members of the Board and the many volunteers, donors and supporters of the Baker, all of whom give generously of their valuable skills, time and money to assist the Institute in many and varied ways. These people receive only the satisfaction of knowing that they contribute to what we all regard as one of the great achievements of mankind: discovering the causes and the cures of very significant diseases which continue to threaten our health and the health of those around us. O

NORMAN O'BRYAN

Norman O Buyan

President

1997 was quite a year for the good ship Baker, and those who sail in her. There are years which are steady as she goes, full steam ahead, projects started and others completed, the key word satisfaction rather than challenge. Last year was not one of these - we had political drama, our quinquennial review, and the slow but eventually successful progression towards securing the funding for the new Baker building.

The solution of the Institute's Quinquennial Review (hereafter QQR), when the National Health and Medical Research Council (NHMRC) sends a team of interstate and overseas assessors to take a long, hard look at the place. The solution pages of documentation takes considerable chunks of the previous year in the preparation; the NHMRC sent it to fifteen external assessors, in time for nine to reply; the Committee - three overseas, three interstate - convened on Sunday April 20th, with proceedings taking place the following week.

The QQR committee recommended a 16% increase in funding for 1998-2002, equivalent to that approved for the Walter and Eliza Hall Institute the previous year. In both instances such an increase is more apparent than real, with almost two thirds needed to cover increasing fixed costs for the same number of staff; the 16% 'increase' thus translated into 53 rather than 50 NHMRC-funded positions. In the event, NHMRC decided to freeze funding at 1997 levels for the Baker (and the Garvan, our sister Institute in Sydney), pending a review of Institute funding in the broad. It would be an understatement to call this an unsatisfactory outcome, of a process that was undertaken with good faith by those on both sides of the interview table - and it is my very sincere hope that it will be rectified early rather than late in 1998.



announce that the Commonwealth Government has pledged an additional \$3.6m for the new Baker building. We have approached the Victorian Government for matching funds, and are hopeful that this application will be approved early in the New Year: it then becomes our remit to go out and raise the rest, from our corporate and philanthropic support.

Medical Research and Education Precinct, to be located at the front of the Alfred Hospital on Commercial Road. In addition to the Baker, the precinct will include the Macfarlane Burnet Centre, currently at Fairfield, plus additional Monash laboratories and a consolidated library and teaching centre for the Alfred campus as a whole. It's an exciting development, and one which should be well under way as 1998 unfolds. It will reunite the Baker with the Alfred Baker Medical Unit/Department of Cardiology, and provide up to date facilities in place of what are currently a very mixed bunch.

 \mathcal{F} also gives me great joy to salute various Baker staff members whose achievements were acknowledged in 1997.

- ♣ David Kaye was awarded a Wellcome Senior Research Fellowship for 1998-2002. David trained in cardiology at the ABMU, and did his PhD with Murray Esler, followed by two years in molecular cardiology at Harvard: he thus returns to the Baker as a 'bridge man', doing basic molecular biology in the laboratory, and working as a clinical cardiologist.
- ♣ Murray Esler received the second Ramaciotti Medal and Award, for his outstanding contributions to Australian medical research. The prize is awarded every two years, with John Coghlan of the Howard Florey Institute receiving the inaugural award in 1995.
- ❖ Garry Jennings, Deputy Director of the Baker and Director of the Heart Centre at the Alfred, was awarded one of eight Centre of Clinical Excellence in Hospital Based Research grants by NHMRC Australia-wide, one of two in Victoria. This award will further underpin the clinical end of the basic-clinical research continuum at the Baker, and allow a period of research training for clinical cardiologists in the making.

Congratulations are also due to:

- Bronwyn Kingwell, who was appointed Research Fellow, to head the Clinical Physiology Laboratory;
- ❖ Jaye Chin-Dusting, appointed R.D. Wright Fellow, to head the Vascular Pharmacology Laboratory;
- Zygmunt Krozowski, of the Molecular Hypertension Laboratory, promoted from Senior to Principal Research Fellow; and
- ❖ Paul Komesaroff, appointed Honorary Senior Research Fellow and Associate Professor of Medicine, and awarded \$500,000 over five years by Perpetual Trustees for the work

he and Krishnan Sudhir propose for 1998-2002.

As in any year, the Institute farewells some of our people, and welcomes others.

- Robyn Woods and her team left at the end of the year for the Howard Florey Institute, where she will continue her cardiovascular studies on sheep, rather than on her familiar dogs.
- ❖ Sue Luff moved to Monash Physiology at the end of 1997, where she will continue her electron microscopic studies on how sympathetic nerves connect with muscle in blood vessels.
- ❖ Alana Mitchell, after a six week stint with the ABC in Sydney in late 1997, looks likely to forsake molecular biology for science communication, essentially a tabula rasa in Australia.
- ♣ In addition to David Kaye, we welcomed to the Baker Stella Clark, as Scientific Executive Officer. Stella did her PhD at the Melbourne University Department of Medicine, and after time in London as a C.J. Martin Fellow returned to Melbourne. She was President of the Australian Society of Medical Research in 1995, and in 1996 she spent a year in science administration at Deakin University, joining the Baker in January 1997. Over the course of the year Stella has contributed on a wide variety of fronts within the Institute, filling essential linkage and representational roles, and in addition graduated as a Williamson Fellow.
- ♣ In late November we were joined by the Hon. Michael MacKellar, sometime Federal Minister of Health, as Chief Operating Officer, with particular responsibilities for the new Baker building and for fundraising. Michael has fitted smoothly and productively with the executive, and will be the key player in getting the new Baker built.

Director's Report

❖ Early in 1998 we will welcome Krishnan Sudhir back from San Francisco as a Senior Research Fellow, to join Paul Komesaroff in the Hormones and Vasculature Laboratory, and Ross Hannan, currently an Assistant Professor at the University of Pennsylvania, to a High Blood Pressure Research Foundation position in the Molecular Physiology Laboratory.

There are two things which characterise a first-rate medical research institute - consistently good science done by consistently good people, and the infrastructure and administration to allow this to happen. In scientific terms the Baker has chosen a difficult path - that of marrying basic and clinical research; the extent to which our investigators have been successful in this effort can be gauged by the review committee's recommendation for future funding at the top of the range. The success can also be gauged by the laboratory reports later in this Annual Report, and in the consolidated list of publications.

The scientists are supported by an administrative staff which works productively and uncomplainingly to keep the Institute going. Nobody at the Baker works harder than Adrian O'Brien, our Finance Director, which describes only half his responsibilities: he not only keeps the fragile barque afloat financially (vagaries of funding being what they are), but also acts very effectively as chief of the administrative and support staff. Particular tribute should also be paid to Debbie Ramsey, whose contribution to the Baker is far more than an excellently run Biological Research Unit (Animal Facility), her prime responsibility. Without Debbie and Adrian, and the support staff who work with them, there simply would be no Baker.

Board. Norman O'Bryan is an inspiring President, whose contributions of time, wisdom and energy are extraordinary, and of which I as Director am extraordinarily appreciative. The other members of the Board Executive - Gerry Johnston, Ross Barker, Bill Gurry, Philip Munz and Peter Barnett - provide expert guidance in finance and fundraising, in particular, and Mrs. Margaret Ross is a dedicated and very

successful chair of the Activities Committee. Two Board members - Mr. Bill Phillip and Mr. Ken Baxter - resigned as of the end of the year, and Professor Richard Smallwood was appointed over the course of the year to replace Mr. Richard Morris as one of the NHMRC representatives. To all those who serve on the Board, and on its subcommittees, the staff and supporters of the Institute owe a debt of heartfelt gratitude.

1998, finances notwithstanding, looks to be a great year for the Baker. After the new building assuming almost cargo-cult dimensions over the past seven years, the morale of the staff is very high, current space problems notwithstanding. To hear existing walls tumbling down, to see a hole in the ground, to smell the brick dust are things we are all looking forward to. We have recruited very well, and look forward to the 1998-2002 quinquennium with heads held high. \bigcirc

John Funder

The June

Director

HIGH STHIS

In November 1997 Professor Murray Esler was awarded the second Ramaciotti Foundation Medal, for an outstanding discovery in the
fields of biomedical or clinical research which has had or is likely to have an important impact on medical science.
O

Dr Michael Ward a PhD student at the Baker has been awarded a National Heart Foundation Overseas Research Fellowship to continue his studies at Stanford University, California. Michael's research is focussed on understanding why blood vessels become narrower ('re-stenose') after angioplasty in about 30% of patients with coronary heart disease.

Ö

Tr Peter Little, head of the Cell Biology - Diabetes laboratory, was elected Chair of Diabetes Australia (Victorian Branch), the peak body representing consumers and carers for those who suffer from diabetes.

 \circ

Associate Professor Paul Komesaroff and Dr Krishnan Sudhir, who jointly head the Hormones and Vasculature Laboratory, have received major support from the H & L Hecht Trust (Perpetual Trustees), of \$500,000 over five years (1998-2002).

Ö

Karen Sheppard, of the Molecular Physiology laboratory, demonstrated the existence in small and large intestine of receptors (keyholes) for adrenal steroid hormones distinct from, and in addition to, those we currently know about. What these receptors do in response to steroid hormones remains to be established.

Ö

Professor Garry Jennings, Deputy Director of the Baker and Director of the Heart Centre at the Alfred, was awarded an NHMRC grant for a Centre of Clinical Excellence in Hospital Based Research, one of two in Victoria from a total of eight Australia-wide.

O

37. 1997 a bilaterally funded program of scientific interchange commenced between the National Heart Lung and Blood Institute of the NIH (USA) and the Baker. Associate Professor Michael Berndt spent six months in the laboratory of Dr Jose Lopez, Baylor Medical College, Houston, studying the mechanism of blood clot function and Dr Dimitri Sviridov spent three months at the University of California, San Francisco, studying plasma lipids. In 1998 the first NHLBI visitors will come to the Baker for similar periods.

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Tr. David Kaye, after two years at the Harvard Medical School, has rejoined the Baker as a Wellcome Senior Research Fellow, 1998-2002. His area of work covers both laboratory and clinic, focussing on the way nerves to the heart affect its function in health and disease.

0

March 1997 Professor John Funder was appointed to succeed Sir Gustav Nossal as Chairman of the Victorian Health Promotion Foundation (VicHealth), and in August to succeed Sir Edward Woodward as Chair of SANE Australia.

MICHAEL WARD, DEB RAMSEY AND THE MINI-PIGS

ichael Ward is a fully trained

PhD in the laboratory and in the operating theatre at the Baker. Deb Ramsey is the Head of the Biological Research Unit (BRU), whose responsibilities are to run the animal house and the operating theatres. Michael won the Ralph Reader prize for the best presentation by a trainee at the Cardiac Society in 1997, and in 1998 is off to Stanford for two years on a National Heart Foundation of Australia Overseas Research Fellowship. Deb has not one but nine staff to supervise, keeps track of 10,000 animals per year, sits on three key committees at the Baker, acts as an adviser to Melbourne University and the Austin Hospital, and is a crucial component of the research success of Michael Ward (and, indeed, of most of the Baker laboratories).

With the superb infrastructure Deb has provided, Michael has been able to do a series of ground-breaking studies exploring coronary arteries, what keeps them open

and what makes them close down after injury. Successful gardeners are said to have green fingers; Michael, under his surgical gloves, has whatever the experimental equivalent is. What his green fingers have been busy doing is blowing up tiny balloons, threaded on catheters into the coronary arteries and iliac arteries (in the pelvis), and looking at what happens in the blood vessel wall in response to this sort of injury. Sometimes he just blows the balloons up, to distend the vessel and break down the layer of cells that form its lining;

sometimes he does this and puts in a 'stent', a sort of hollow wire scaffolding - rather like an elaborate miniature version of the wire thingy holding a champagne cork on.

Now whereas some of us work in test tubes, or on mice and rats, Deb and Michael do these procedures on pigs. Pigs - as opposed to some other large experimental animals - have a coronary circulation very similar to that in the human; if we're going to translate this sort of research into clinical practice, you can't do it in the test-tube, and you can get only so far with much smaller animals: the pigs we use are not those you see at petting zoos, which are truly pygmies (pigmies ?), but the so called mini-pigs. A healthy adolescent mini-pig goes 50-60 kilograms, which is probably about the same as their counterparts on 'Baywatch'.

It very well, you might be thinking - but how does the sorts of experimental injury Michael's catheter causes in the pig blood vessel match up with the sorts of things that happen in people to give them heart attacks? The answer is surprisingly well, on a number of levels. First, though otherwise healthy people don't have balloons blown up in





their arteries, people with angina, or with very narrowed vessels on angiography (an x-ray of the vessels after dye is

injected in) certainly do, in the process called angioplasty.

Ingioplasty for a number of fairly obvious reasons is better than open chest coronary artery bypass graft surgery - but in about 30% of cases the blood vessels close down again, over the weeks following angioplasty - and we don't know why. When we do, and work out how to stop it, the answer will represent a major advance for patients and for the community which underwrites health care costs.

So Michael has found which growth factors

are turned on by one sort of cell in the damaged blood vessel wall, and which receptors (keyholes) for the growth factors in the same cells, and in neighbouring cells. He has looked at the ways in which novel candidate drugs may interfere with this process, and how the vessel wall reacts to a wire stent being put in to keep its walls apart. He has shown in carotid arteries that

high flow minimises the damage process, with low flow having the opposite effect.



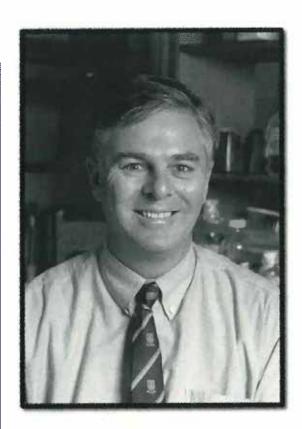
"Successful gardeners are said to have green fingers; Michael, under his surgical gloves, has whatever the experimental equivalent is." The things he has done as a PhD student, under Alex Bobik's supervision and with Deb's mini-pigs, are important in two ways. First, they have already provided some answers for clinical practice. Secondly, they point the way for further experiments - here, at Stanford, elsewhere - to bring angioplasty to a success rate of close to 100% in the early years of the next decade.

SIGNALS, CHANNELS AND BLOOD VESSELS IN DIABETES

eter Little did a Pharmacy degree, then a PhD, and then a postdoctoral stint at the National Institutes of Health. He arrived at the Clinical Research Unit (the forerunner of the Alfred and Baker Medical Unit) in 1980, and has been a stalwart bridge-person, between the laboratory and the bedside, ever since. His remit is two-fold - to supervise the range of very special laboratory tests that are done at the Institute, some of which are done nowhere else in Australia, and to run a research program.

In Alex Bobik's laboratory, and made widely acclaimed discoveries in the area of what is technically called the sodium-hydrogen antiporter. He studied vascular smooth muscle cells, and wondered how they controlled their pH, the level of acid build-up within the cells. The answer is the antiporter, which exchanges one sodium ion (Na*) from the blood or tissue fluid (where there is heaps) for a hydrogen ion (H*) from within the cell - thus preventing acid build-up and allowing the cell to function properly. How this happens, and what messages control the antiporter's activity,

"Diabetes is a major cardiovascular risk factor, in almost every way you'd like to imagine."



are the sorts of things he worked out.

When Peter's daughter had just started school she developed juvenile diabetes. Diabetes is a major cardiovascular risk factor, in almost every way you'd like to imagine: one example is probably enough. When non-diabetic people have angioplasties (little balloons on the end of cardiac catheters blown up to open their almost blocked coronary arteries) about a third of the vessels re-stenose (close down again), and thus they need open chest coronary artery graft surgery. In diabetics the results of angioplasty are very much worse, with over two third of patients re-stenosing - so that in many centres they go straight to grafting, a much more difficult and expensive intervention.

As a father, and someone interested in how the smooth muscle in blood vessels works, Peter's interests perhaps

inevitably shifted from how H⁺ is extruded from these cells to how excess glucose caused them to misbehave. As it happens, there are linkages between glucose and the Na⁺/H⁺ antiporter in some but not all blood vessels. We now know some of the ways in which high glucose levels trigger intracellular alarm bells, in both heart cells and vascular smooth muscle cells. For the heart this is particularly interesting, as (with the brain) it is particularly dependent on glucose as an energy source, so that too little or too much is not good news: we need to get it just about right.

Thile Peter has been at the Baker for 18 years, Stella Clark joined us in January 1997, with similar interests but a very different background. After doing her PhD at Department of Medicine, Royal Melbourne Hospital she went off to the Imperial Cancer Research Fund in London as a C.J. Martin Fellow. The title of the host institution notwithstanding, her area of scientific interest - then and now is that of diabetes, in particular the processes involved in intracellular signalling for insulin and the insulin-like growth factors. Back in Australia, she became co-principal investigator in an NHMRC program grant at Royal Melbourne, and in 1995 President of the Australian Society for Medical Research.

The ASMR (a.k.a. 'The Young Turks') was founded 30 years ago, as a forum where medical research across the board could be discussed. Directors and office-bearers had to be under 40 (the President could turn 40 in his/her term of office). Being a Director is to be involved in the public face of medical research publicity, lobbying etc: being President is an involvement, in spades. At the end of her year as President Stella may have been exhausted, but did not relish returning to the relative peace and quiet of the lab. She took a one year job in research administration (with a nominal 50% time for the lab) at Deakin for 1996 and in 1997



arrived at the Baker as Scientific Executive officer, 80% administration/representation/liaison, and 20% diabetes and insulin. In her 'spare' time in 1997 she did the Williamson Community Leadership Program, and sits on NHMRC Council as a scientific expert 'at-large'.

Jow 50% of Peter and 20% of Stella is all very well, but given the growing importance of diabetes in cardiovascular research it might be worth a bit more. Peter has written a series of successful National Heart Foundation project applications, and the most recent one will see Dr. Kathleen Hannan start at the Institute in 1998, as a newly minted PhD from the University of Pennsylvania. Her husband Ross is joining John Funder's laboratory as a Foundation for High Blood Pressure Research Fellow, after five postdoctoral years in Pennsylvania. Which just goes to show the importance of keeping it in the family. Which is what drew Peter Little into diabetes in the first place. O

OUR LIVING NATIONAL TREASURES

n research we are very appropriately judged by outcomes. Sometimes the outcomes are in the first instance theoretical, to be published as papers in learned journals, judged by the depth of conviction with which those who read them think "I wish I had done that". Medical research is lucky, as often even the most theoretical studies eventually have quite practical outcomes, as opposed for

instance to archaeology or literary criticism.

Judgements about outcomes, theoretical and practical, are made by peer review. Two of the Baker senior staff in 1997 were recognised for their contributions, by the judgement of their peers. Murray Esler, Associate Director and NHMRC Senior Principal Research Fellow, received the second biennial Ramaciotti Medal and Award, for his work on how the brain affects the heart and circulation. The Alfred and Baker Medical Unit, under the

direction of Garry Jennings, Deputy Director of the Baker, was nominated as one of eight NHMRC Centres of Clinical Excellence around Australia.

Mourray Esler is the quintessential clinical research worker, whose experimental subjects are fellow human beings, rather than rats or mice or cells in culture. Some of his subjects are well people: it's crucial to know what's the normal baseline if you are to establish and analyse departures from normal.

Some of his subjects have well-recognised cardiovascular disease - hypertension, heart failure.

Others have conditions which we associate with poor cardiovascular outcomes, such as obesity; and still others have what appear at first sight to be quite distinct conditions, such as panic disorder.

What Murray has done over the years is to show that all these situations are accompanied by overactivity of the sympathetic nervous system, which is the 'acceleration'



"There are several bigger research
Institutes in Australia, and several of
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none the equivalent basic clinical
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Medical research is lucky, as often even the most theoretical studies have quite practical outcomes, as opposed, for instance, to archaeology or literary criticism."

side of the autonomic or subconscious nervous system. Normally, we activate our sympathetic nervous system to cope with stress, physical or psychological: feel the heart pounding, the pulse rate increasing, with exercise on a treadmill or being hassled to do mental arithmetic faster and faster.

The conditions listed above share a common feature, of inappropriate sympathetic nervous system overactivity. If things are working harder, going faster than they need to, it's no wonder people have heart attacks: if the fanbelt on your car is slipping, you're much more likely to overheat.

That Murray does is to measure the amount of the chemical messenger ('neurotransmitter') noradrenaline that the sympathetic nerves to various organs release into the blood under various conditions and in various circumstances, as a measure of the nervous input to that organ. He measures inputs to the brain, like the hormone leptin, made in fat cells as a satiety signal, to tell the brain "Enough, no more eating". He measures all the normal cardiovascular indices, and more, on people prone to panic disorder, and in people actually in a panic attack - when their chance of having a heart attack, as a result of the sympathetic rush, is many times higher than normal.

What Garry does is a virtuoso juggling act in terms of scientific leadership. In addition to being Director of the



ABMU and Deputy Director of the Baker, he is Professor/Director of Cardiovascular Services at the Heart Centre at the Alfred, and Coordinator of Cardiothoracic Services (hearts and lungs, medical and surgical) for the Inner and Eastern Health Care Network.

This a big ask, but it's also a nonpareil position to oversee the translation of basic research into clinical practices - and to inculcate the spirit of enquiry and questioning into cardiology trainees, whose ultimate goal is to work in clinical practice - which is exactly the remit of the NHMRC in establishing such centres..

Which is basically what the Baker is about. There are several bigger research institutes in Australia, and several of comparable size. None has the breadth of leadership that the Baker enjoys, and none the equivalent basic - clinical interface afforded by ABMU. When you think that cardiovascular disease will remain for the foreseeable future the number one medical problem (in terms of DALYs, disability adjusted life years), and the sort of contributions that people like Garry Jennings and Murray Esler are making, it seems like we're on a good thing......

THE INSTITUTE'S RESEARCH ASSISTANTS



ll institutions have rules, written and unwritten. Places like the Baker tend to have relatively few written rules, and a lot of assumptions. One of the rules that used to hold sway in academia is that a PhD represents a licence to do independent research, just as an MBBS was a licence to practice medicine, both now followed by an indenture period of 5-10 years. In such a context what is often overlooked in the maelstrom of postdoctoral ambitions is a group of people who go on going on at the Baker, making a crucial contribution to the life and research output of the Institute - the Research Assistants.

Research assistants come in all sizes, but usually in the female shape. What unites them is their expertise in the laboratory, their pride in what they do: what distinguishes them (even more than size) is the diversity of their backgrounds. Four vignettes, from the rogues gallery represented on this page, should do nicely to illustrate this diversity.

% athy **Wallace** has worked with Ian Smith for a decade - animal experiments, protein chemistry, high tech equipment.

Almost twenty years ago, as a Year 12 student, Cathy spent an Open Day afternoon in John Funder's laboratory. Next week he received a phone call: "I've decided I want to be a research assistant". "Wonderful: but I don't actually have a position". "Don't worry: I'll wait". HSC passed, working at Woolworths, finally a position opens up. Apart from some months working on exchange in Padua, a brief foray into dressmaking, and an even briefer period of maternity leave, Cathy's been on the job ever since.

Mobin Smith has a Bachelor of Science from La Trobe, a DipEd from Melbourne, and a DipAppliedScience (Radiotherapy) from RMIT. Cathy may have seen the light while still at school, but Robin tried her hand at various things before starting in the laboratory. For the past eight years she has worked with Zig Krozowski in the Molecular Hypertension laboratory, on the enzyme (11ßHSD2) which keeps us all from being turned into pillars of salt. Over the course of this period she enrolled as a part-time graduate student, eventually adding MSc (Monash) after her name,

among the elite in the Institute with credentials from four different universities.

Then most of us of a certain age think about the Vietnam war, our memories are of the draft and protest marches, Harold Holt and Gough Whitlam. For Thao Pham the Vietnam war meant having to suspend her medical course after three years, and eventually finding her way to Australia. Thao has worked for almost twenty years in various laboratories around Melbourne - at the late lamented

community health and science; she's stayed in research because Geoff encouraged her to progress from a junior technical assistant to independent involvement in all aspects of medical research within his lab. Which is where we hope she stays but by her own account, "I feel the Kimberley Region drawing me like a magnet still today". On reflection, there may be more than one advantage of a Baker-at-Broome outpost.....





















Prince Henry's, at the Royal Melbourne, and for the last five years at the Baker, most recently with Kathleen Curnow (aka KC) in the Molecular Endocrinology laboratory: Vietnam's loss has been Australia's gain.

For over a decade Shirley Godwin has worked with Geoff Head in the Neuropharmacology Laboratory, first part-time during her B.App.Sci. course at RMIT, and for the last eight years full time. Shirley was born in Derby, fair skinned and proud of her aboriginal ancestors, and came to Melbourne in 1985 via Berriwillock in the Mallee and three years boarding school in Ballarat. She initially saw the Baker as a launching pad for a career at the cutting edge of

The list can, and should, go on to cover every one of the people pictured. Where they are coming from may be very different, but what they bring - dedication, hard work, expertise, loyalty, collegiality -goes across the board. The laboratory head is writing a grant application or doing his stuff for a symposium presentation; the postdoc is (or should be) writing a paper or doing her slides for a seminar; the research assistant is in the laboratory, helping the students, doing the experiments, getting it together, making it work. Sounds like a pretty good definition of irreplaceable. O

ESTROGENS, ANDROGENS, FEMALE, MALE: TINKER, TAILOR, SOLDIER, SPY

n October 1994 a 28 year old man, 6'10" tall and with a dislocated finger, walked into the emergency room of the Cincinnati Medical Center. His driver's licence listed his height ten years earlier as 5'10", and an x-ray of his hand showed that none of his epiphyses (the discs of cartilage at each end of a bone, which allow it to grow) had fused - which normally happens between 10 and 16 years of age.

To stop young people growing we give them estrogens, and so this young man was given an estrogen patch, of the sort used for hormone replacement therapy. And then another, and another, until finally he was wearing 14

patches - but no fusion of his epiphyses. Finally, the penny dropped: maybe he was 'deaf' to estrogen. And so a blood sample was taken, which showed on genetic analysis that he had a point mutation in the DNA coding for the estrogen receptor, the keyhole into which estrogen fits to do its stuff. His parents, who were second cousins, each had one copy of the defective gene, and he had drawn the short straw from both of them.

Wery interesting, but what on earth has it to do with

cardiovascular disease? The answer is we don't know yet, but potentially quite a lot. First up, in addition to having knock knees and easily dislocated fingers and the inability to stop growing, this young man had terrible osteoporosis: he's living evidence that macho men need not just testosterone

but also estrogen to get their bones right. More importantly, from a cardiovascular viewpoint, we've known for ages that relative to men, women are protected by their estrogens from heart attacks, up to the time of menopause. The question then is - if men need estrogen for their bones, do they also need it for their blood vessels?

Enter Krishnankutty Sudhir. Sudhir's father was Professor of Cardiology in Madras, and Sudhir came to the Baker as a fellow in training after his medical degree in India.

He did clinical work with Garry Jennings and a PhD with Murray Esler, and then won a C.J. Martin Fellowship to the Cardiovascular Research Institute in San Francisco, where John Funder was a fellow before the dawn of time, and Paul Nestel slightly earlier. After three years in San Francisco,



Sudhir returned home for the last two years of his C.J. Martin Fellowship, and the then uncertainty of the future of the Alfred Hospital (and thus of the Alfred and Baker Medical Unit). San Francisco offered him twice his Australian salary to return, and a laboratory of eight people, and in 1995 back he went across the Pacific.

over the past three years - Sudhir makes a whirling Dervish in full cry look like a two-toed sloth - was to persuade the 28 year old from Cincinnati to accept a return ticket to San Francisco for a day of tests, to look at the effects on various aspects of cardiovascular function of not having any keyholes for estrogen. The young man is understandably reluctant to spend days in the metabolic ward bristling with catheters - but in the course of a day Sudhir was able to establish that having no estrogen receptors means that some - but not all - of the young man's responses are quite abnormal.

This is good news, for two reasons. First, it means that estrogens are protective in both men and women under normal circumstances: we've known for a long time that men have had receptors for estrogens in various tissues - and so it's not just to turn them into Priscilla, Queen of the Desert, when they take buckets of the stuff. Synthetic estrogens are being increasingly tailored, so that they 'talk' to only particular tissues - for example, bone but not breast or uterus in postmenopausal women - so that the notion of a cardiovascular-specific estrogen is not too faraway.

Secondly, it's good news because the 'some-but-not-all' dimension of the results means we have an idea of the sorts of things estrogen is involved in, and the sorts of things it isn't.

The final bit of good news is that early in 1998 Sudhir is coming home to the Baker. Sudhir is the cardiologist and Paul Komesaroff the endocrinologist who together will run the 'Hormones and the Vasculature' Laboratory at the Institute.

Before Sudhir went back to San Francisco, and all the time he was away, the two of them collaborated on a series of studies, based on opposite sides of the Pacific. Together they have won a \$500,000 grant from the H.L. Hecht Trust, to support their work over the next five years, and over that period look set to become established as one of the most contributory and productive groups in the world in this long-neglected area. Tony Bennett may have left his heart in San Francisco: but home is where the heart is - and Sudhir is coming home.

"The question then is - if men need estrogen for their bones, do they also need it for their blood vessels?"

SEEING IS BELIEVING

hen we think of images, these days, it's usually to do with public relations, with front-of-house; image-makers do their stuff on premiers, prime ministers, presidents. At the Baker, we're also involved in image-making in another sense, that of taking pictures of tissues and cells. The shots can be still or moving, black and white, colour or computer enhanced. They are one of the ways we can begin to work out what's happening in cells and tissues - and they are beautiful.

Eraig Neylon works on the smooth muscle cells in blood vessels, studying the machinery within the cell that allows

"The shots can be still or moving, black and white, colour or computer enhanced.

They are one of the ways we can begin to work out what's happening in cells and tissues and they are beautiful."

We may think of calcium as bones and teeth, structural things, bricks and mortar: and so calcium is, when it is complexed as insoluble salts. As well as bones and

teeth, calcium (as ionised Ca, with two positive changes, Ca⁺⁺) is a crucial part of the cell signalling machinery. Blood levels of Ca⁺⁺ are held very tightly cotrolled, by a series of processes involving the gut (where Ca⁺⁺ is absorbed), the kidney (where excess is secreted), the bone (where it is stored), and an interlocking series of hormones (parathyroid hormone, vitamin D, calcitonin).

One of the reasons why we keep blood levels of Ca** so

tightly controlled is that a number of the things that act on blood vessels (and on the heart) do so by opening so-called calcium channels in the cell membrane. This allows calcium from outside the cell to flow (down a concentration gradient) into the cell: it's a bit like the shutter on your camera, which opens for a fraction of a second, allowing light from the



them to respond to chemical messages ("constrict", "relax", "grow") from nerves, from blood, from neighbouring cells.

The mechanisms are complicated, and naturally enough people become experts in one or two aspects. Craig's forte is how calcium gets into cells in response to these messages, and what it does when it gets inside.

outside to access the camera's interior, and to cause lightactivated changes in the molecules on the film - thus the image.

- that the calcium that comes in in response to a particular stimulus does its job, and is then pumped back out of the cell, so that things are now ready for a second message, if such is forthcoming. The time frames are not unlike those of photography; we're talking, by and large, milliseconds (thousandths of a second).
- The beauty of calcium as an intracellular signal is that the resting (that is, unstimulated) concentrations inside the cell are about a thousandth those outside, so that a very short blip of inward flow can raise the inside concentration quite a lot, however good the extrusion mechanisms that then come into play.

Craig Neylon uses dyes that are sensitive to Carconcentration, dyes which are taken up into living cells and which change colour with the change in Carclevels. It's all very fast - but with cinephotography you can 'see' the Carc

"The images are arresting, and interpreted in the context of what we know from molecular biology to clinical studies, tell us lots about how cells behave, and in certain circumstances, misbehave."

flooding into the living cell, cleverly triggering further Car release from intracellular stores, with the intracellular signal spreading throughout the cells, so that all its constituent parts can get the message.

The images are arresting, and interpreted in the context of what we know from molecular biology to clinical studies, tell us lots about how cells behave, and in certain circumstances misbehave. And they're not just pretty pictures, art-for-arts-sake, ivory-tower stuff: a substantial subgroup of patients with high blood pressure are treated with Norvasc or Felodipine, or similar medications. These are the so-called calcium channel blockers - which work, you guessed it, by dampening down the cell's response to inappropriate signals from outside.

Yo tell the children to drink milk for their teeth, and the older folks for their bones - the fact is that calcium also plays a very dynamic role, time frames milliseconds, captured by cinephotography. Maybe it's time calcium got a new image.

BUILDING THE BASIC - CLINICAL BRIDGES

here were a number of good things for the Institute in 1997. In the longer term, what might prove to be the most significant is the appointment of Jaye Chin-Dusting and Bronwyn Kingwell as NHMRC Fellows. Their appointment will mean that for 1998 we will have three women as Research Fellows at the Baker, rather than one: way to go.

 ${\mathscr J}$ aye Chin-Dusting grew up in Malaysia, acquired

the Jaye on moving to Australia, and the Dusting on marrying Dr. Greg Dusting of the Howard Florey Institute. Her PhD was in Pharmacology at Monash, and for the past eight years she has worked as a research officer/senior research officer at the Alfred and Baker Medical Unit. In 1997 she was appointed an R.D. Wright Fellow, and became head of the Vascular Pharmacology laboratory.

Taye's work centres around the endothelium, the layer of cells

lining blood vessels, and the way in which it communicates with the overlying (or underlying, depending on your point of view) vascular smooth muscle. Much of this communication is by a molecule (nitric oxide, NO) which is actually a gas, in the technical as well as the colloquial sense. The enzyme that generates this gas from the amino (nitrogen-containing) acid arginine, and what controls the enzyme activity, and so on are the things that occupy Jaye's waking hours.

Zike all good researchers, Jaye has an eye for the

unexpected, the lovely lateral leap. Where she has been able to take advantage of this is in the area of gastroenterology rather than cardiovascular medicine. People with liver problems often develop what are termed portocaval shunts, where blood can go straight from the gut into the circulation, rather than be processed and filtered and generally fixed up in the liver. There are all sorts of problems associated with this, not the least of them cardiovascular - and these involve NO as a mediator.

The particular problem seems to be that the gut flora (the bacteria we've all got, and with which we normally live



"the appointment of Jaye Chin Dusting and Bronwyn Kingwell will mean that for 1998, we will have three women as Research Fellows at the Bäker, rather than one way to go."

in happy symbiosis) make all sorts of molecules which are usually mopped up in the liver - but when they bypass the



liver, via a portocaval shunt, they release NO and cause trouble. It's not easy to reverse the ravages of liver damage - but we can lessen the load, by using antibiotics to reduce the levels of gut flora, and thus what they release into the bloodstream.

 \mathscr{B} ronwyn did her PhD mainly at the Baker, with an elective year in a laboratory in Ann Arbor, Michigan, on a collaborative project. Her interests, then and now, are in a range of areas, but none far from that of the cardiovascular effects of exercise. She herself is a triathlete and a dedicated squash player, so that the overlap between work and play is somewhat blurred. Although some of her work has involved animal models, for example rats running in wheels, most of her current studies are in people - thus the name of her brand new title, as Research Fellow and head of the Clinical Physiology laboratory.

 \mathscr{E} xercise is good for you in almost any way you like to think - provided you don't go over the top, and wreck your

tendon. Exercise reduces your blood pressure and increases arterial compliance, the elasticity of the blood vessels that allows them to accommodate the blood pushed out with each heart beat, smoothing down what would otherwise be a very jerky business. Exercise will

lower your blood lipids a bit, and your blood sugar a lot: most mature age diabetics can reduce or even stop their tablets with a good exercise regime. Bron uses people - ordinary people and athletes, short and long term programs, moderate and heavy exercise regimes - to dissect out how it happens, where the bits fit into the jigsaw.

> "Like all good researchers, Jave has an eye for the unexpected, the lovely lateral leap "

For many years half the brains and half the energy in Australia were confined to teaching and nursing, honourable professions both, if a girl actually finished secondary schooling. Today, very belatedly, we realise that we need these brains and energy better deployed, that for the future of this country we need all the advantage we can get. Bron and Jaye are part of this change - and would that this change becomes a revolution. O



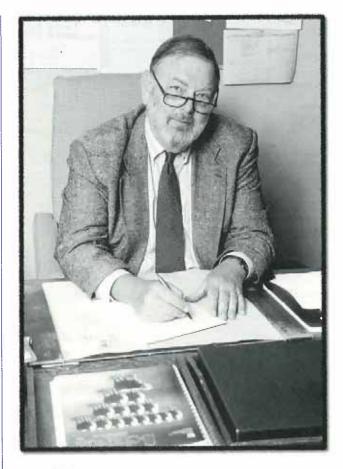
THE OLDEST INHABITANTS

oel Fidge and John Funder have each spent over thirty years in the laboratory. Both originated from South Australia; both work, at the cellular levels, on receptors. Receptors are the keyholes, inside a cell or on its surface, into which circulating molecules (hormones, growth factors etc) fit like keys.

The receptor that occupies Noel's working hours is that for high density lipoprotein (HDL), the 'good' cholesterol. The apple in John Funder's eye is the mineralocorticoid receptor (MR), which binds the salt-retaining steroid hormone aldosterone.

The HDL receptor, in common parlance, is a bear. It's now clear that it is made up not of a single molecule, but of two different proteins. Noel is a biochemist's biochemist, and over the past decade has mastered one of the two HDL receptor sub-units. He started by extracting the proteins from many, many rat liver cell membranes, and then separating them one from another. He raised antibodies against a number of these proteins, and one - luckily - proved to be HB2, the second of the two HDL receptor subunits.

"As the years pass and time becomes precious, centre stage are HDL and HB2, aldosterone and mineralocorticoid receptors."



DNA using the techniques of modern molecular biology, and can now make buckets (well, small buckets) of HB2 in the laboratory in insect cells.

It sounds so simple, compressed into a paragraph, but in fact it's been a long, hard road; nobody else, worldwide, has stayed the distance. There are a lot of things a laboratory can do, knowing half the story, and Noel and his team are still hunting the other subunit, the elusive HB1.

We still don't know how high HDL levels protect people against heart attacks: and a blueprint of the keyhole HDL fits into, and how it is thus moved from the circulation into the cell, will be a giant step in that direction.

Thereas Noel is a biochemist, John Funder (known generally as Funder) is a physiologist. The mineralocorticoid receptor was cloned in San Diego, but how it functions has probably been most fully worked out in Melbourne. As befits



a receptor which binds aldosterone, the salt-retaining hormone, it is found in kidney, intestine and sweat glands, tissues actively involved in salt and water transport.

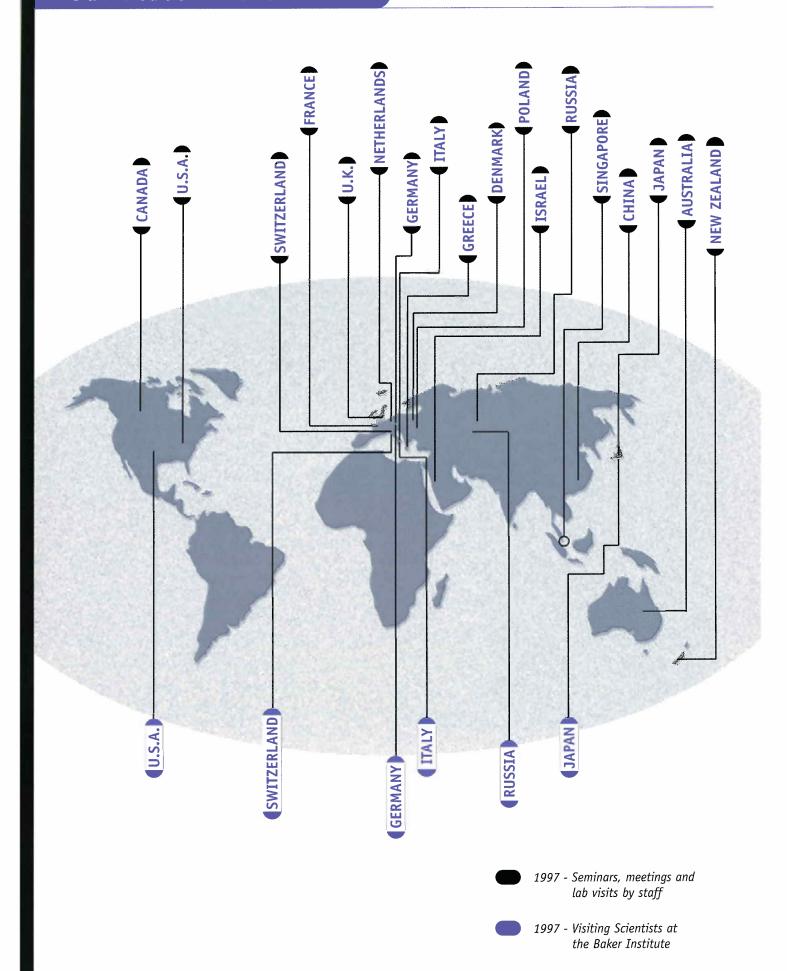
hat's unexpected, and very exciting, is that mineralocorticoid receptors are also found in tissues which do not transport sodium, such as the brain and the heart. Over the past decade, we and others have shown that to raise blood pressure aldosterone acts on the brain, and to cause

"We still don't know how high HDL levels protect people against heart attacks: and a blueprint of the keyhole HDL fits into, and how it is thus moved from the circulation into the cell, will be a giant step in that direction."

cardiac enlargement and stiffening it acts directly on the heart. This is all in experiments on rats, or on cultured cells in vitro: the challenge for the future is to see how these findings fit into the jigsaw puzzle of human 'essential' (i.e. no known cause) hypertension and heart failure.

Even the oldest inhabitants can't just do physiology and biochemistry. Noel runs cattle in the King Valley, and leads a jazz ensemble from the piano: in the sixties his day job was as a postdoc at Columbia in New York, and by night he haunted the Julliard. Funder reads and writes and cooks, as a postdoc in San Francisco exploring the Napa Valley, and in Paris majoring in steak-frites and cru bourgeois.

That was then, with all the energy and enthusiasms of blooming youth: as the years pass and time becomes precious, centre stage are HDL and HB2, aldosterone and mineralocorticoid receptors. So much to do, so little time: but maybe, when the shouting is all done, there's the prospect of a joint venture into a theatre restaurant.



1997 Seminars, meetings and lab visits by staff

1	Adelaide	Australia	1	Nuremberg	Germany	1	Leicester	U.K.
	Brisbane	Australia		Tubingen	Germany		Leeds	U.K.
	Cairns	Australia	7	Athens	Greece		London	U.K.
	Canberra	Australia		Rhodes	Greece		Macclesfield	U.K.
	Hobart	Australia	8	Haifa	Israel		Nile	U.K.
	Lindeman Is.	Australia	9	Ancona	Italy		Oxford	U.K.
	Leura	Australia		Bologna	Italy	18	Atlanta	U.S.A.
	Lorne	Australia	100	Florence	Italy		Baltimore	U.S.A
	Melbourne	Australia	Alle.	Milano	Italy		Bethesda	U.S.A.
	Newcastle	Australia	400	Padova	Italy		Boston	U.S.A.
	Perth	Australia	37	Rome	Italy		Chicago	Ų S.A.
	Sydney	Australia	10	Kyoto	Japan		Columbia	U.S.A.
			1	0saka	Japan		Davis	U.S.A.
	EUS), Y			Sendai	Japan		Durham	U.S.A.
2	Montreal	Canada	- 10	Tokyo	Japan		Houston	U.S.A.
	Vancouver	Canada	ACC	Yokohama	Japan		Iowa	U.S.A.
3	Beijing	China	11	Amsterdam	Netherlands		Jackson	U.S.A.
	Shanghai	China	300	Rotterdam	Netherlands		Minneapolis	U.S.A.
4	Copenhagen	Denmark	12	Auckland	New Zealand		Monterey	U.S.A.
5	Bordeaux	France		Christchurch	New Zealand		Nashville	U.S.A.
	Lille	France	13	Krakow	Poland		New Orleans	U.S.A.
	Nice	France	14	Moscow	Russia	60	New York	U.S.A.
	Paris	France	360	St. Petersburg	Russia		Orlando	U.S.A.
	Saint Malo	France	15	Singapore	Singapore		Philadelphia	U.S.A.
	Versailles	France	16	Basel	Switzerland		Portland	U.S.A.
6	Cologne	Germany	17	Bath	U.K.		San Diego	U.S.A.
D	Heidelberg	Germany		Birmingham	U.K.		San Francisco	U.S.A.
	Kiel	Germany		Bristol	U.K.	-	Seattle	U.S.A.

Washington

U.S.A.

1997 Visiting scientists at the Baker

		The second second second	
1	Dr. Barbara ROLAND	Wisconsin	U.S.A.
	Dr. Stephen J. SOLLOTT	Baltimore	U.S.A.
	Dr. Jose LOPEZ	Houston	U.S.A
2	Dr Christopher GATZKA	Nuremberg	Germany
3	Dr. Hanspeter BRUNNER	Zurich	Switzerland
3	Dr. Guido GRASSI	Milan	Italy
4	Dr. Nigora MOUKHAMEDOVA	Moscow	Russia
	Dr. Elena ANDREEVA	Moscow	Russia
	Dr. Natalia KALININA	Moscow	Russia
	Dr. Olga PLEKHANOVA	Moscow	Russia
5	Dr. Hitohi UENO	Toyama	Japan
	Dr. Yoshiaki FUKUHIRO	Kurashiki	Japan
	Dr. Takayuki SASAHARA	Kumamoto	Japan
	Dr. Takeshi YAMASHITA	Saitama	Japan
	Dr. Hideki SHIGE	Tokyo	Japan
	Dr. Atsuhisa SATO	Tokyo	Japan
	Dr. Osamu EBISUI	Kyoto	Japan
	Dr. Kaori KOYAMA	Sendai	Japan

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Scientific Executive Officer

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Associate Director (Hypertension)

Prof Murray D. ESLER BMedSc (Melb), MBBS (Melb), PhD (ANU), FRACP

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Ms Louise NOONAN SRN, BApplSc
(Deakin)

Ms Marijke TRESS
Ms Di WILSON SRN

Laboratory Manager

Ms Elizabeth DEWAR BSc (Mon)

Technical Staff

Ms Belinda AHLERS BBMedSc (Hons Biochem) (JCU)

Ms Kristina BENNETT BApplSc (RMIT)
Ms X Qin CHANG Until July B CompSc.
(Hons) (LaTrobe), BE (Elec) (LaTrobe)
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Mr Julian SMITH MBBS, MS, FRACS
Honorary

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Dr Elena ANDREEVA

Dr Natalia KALININA

Dr Olga PLEKHANOVA

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Ms Carmen LLERENA Assoc Dip Lab Tech (Pens TAFE)

Visiting Scientist

Dr Jose LOPEZ Until Feb MD, PhD

HORMONES & VASCULATURE

(Including Menopause Clinic)

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CHIEF OPERATIONS OFFICER

The Hon Michael MACKELLAR M.A., BSc.Agr., M.A.I.A.S. From Nov

ASSISTANT TO CHIEF OPERATIONS OFFICER

Ms Jan STRAUSS

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Board Members Report

FOR THE YEAR ENDED 31 DECEMBER 1997

The Board of Management present their report together with the financial statements of the Institute for the year ended 31 December, 1997 and the auditors' report thereon.

Board Members

The Board Members in office at the date of this report are:

Mr N O'Bryan, President
Dr G P Johnston, Vice-President
Mr R E Barker, Hon. Treasurer
Professor J W Funder AO, Director
Mr P C Barnett
Mr K Courtney
Professor P Darvall (appointed October 1997)
Mr W P Gurry AO
Dr P G Habersberger AM
Professor S R Holdsworth
Mr P Munz
Mrs M Ross
Professor R Smallwood AO (appointed December 1997)
Mr S Blair (Alternate for Mr K Courtney) (appointed January 1998)

Principal Activities

The principal activities of the Institute are medical research into the basic causes of cardiovascular disease, to use this knowledge to help prevent heart and vascular disease in the community, and to improve medical and surgical treatment. No significant change in the nature of these activities occurred during the year.

Operating Result

The consolidated surplus of the Institute for the year amounted to \$1,224,207 (1996:surplus \$369,109) Income tax is not applicable.

Review of Operations

A review of the operations of the Institute during the year has been included in the President's and Director's report. The Institute's activities continued to be dedicated to medical research into the basic causes of cardiovascular disease. The Institute is a body corporate under an Act of Parliament and has no share capital.

State of Affairs

The Capital Appeal Campaign and the plans for the rebuilding of the Institute have progressed satisfactorily over the course of 1997. The Commonwealth Government has increased its contribution to a total of \$7.6m, and we have applied to the Victorian Government to extend their matching funds to a similar figure. In 1998 planning, detailed architectural studies, letting of tenders, site preparation and the beginnings of construction are anticipated, with a projected completion date of the third quarter of the year 2000.

Events Subsequent to Balance Date

There has not arisen in the interval between the end of the financial year and the date of this report any item, transaction or event of a material and unusual nature likely, in the opinion of the Board of Management of the Institute, to affect significantly the operations of the Institute, the results of those operations or the state of affairs of the Institute in subsequent financial years.

Board Members Report

Board Members Benefits

Since the end of the previous financial year, other than one Board Member who is an employee, Director and shareholder of a firm of Stockbrokers which has received, or become entitled to receive, fees for services rendered to the Institute on normal commercial terms, no Board member has received or has become entitled to receive any benefit, by reason of a contract made by the Institute or a related corporation with any Board Member or with a firm of which a Board Member is a member or with an entity in which any Board Member has a substantial financial interest other than the Director of the Institute, Professor J W Funder, who receives a salary.

Dated at Melbourne this 29th day of April 1998

Signed in accordance with a resolution of the Board of Management

Norman O'Bryan

President

John W Funder AO

Director

BAKER MEDICAL RESEARCH INSTITUTE CONSOLIDATED INCOME AND EXPENDITURE STATEMENT

YEAR ENDED 31 DECEMBER 1997

		1997	1996
INCOME	Note	\$	\$
Government and Statutory Bodies	3	5,609,440	5,292,069
Baker Benefaction		1,050,000	1,050,000
Alfred Hospital		20,000	122,715
Fundraising, Corporate & Private Support		3,080,263	2,954,326
Investment Income		599,965	599,055
Clinical Services		62,949	268,370
General Income		1,183,723	546,571
Total Income		11,606,340	10,833,106
EXPENDITURE			
Salaries and Wages		6,834,060	6,425,975
Consumable Supplies		1,258,194	1,434,802
Minor Scientific Equipment		53,609	53,593
Depreciation / Amortisation		512,240	573,341
Laboratory Support Costs		668,384	665,816
General Overheads		753,278	889,513
Administration		249,678	330,789
Public Relations / Fundraising		52,690	90,168
Total Expenditure		10,382,133	10,463,997
CONSOLIDATED SURPLUS FOR YEAR	7	1,224,207	369,109
Represented by:			
Deficit from Operations		(91,289)	(412,760)
Surplus from Capital Fund		1,548,673	523,095
(Deficit) / Surplus from Specific Purpose Fund		(233,177)	258,774
Consolidated Surplus for Year		1 <u>,</u> 224 <u>,207</u>	369,109

BAKER MEDICAL RESEARCH INSTITUTE CONSOLIDATED BALANCE SHEET AS AT 31 DECEMBER 1997

		1997	1996
ASSETS	Note	\$	\$
Current Assets			
Cash at bank and in hand		694,546	1,196,111
Debtors		506,160	214,773
Stock on hand		150,306	159,531
Prepayments		130,518	119,042
Accrued Interest		59,967	81,619
Investments (at cost)	8(a)	3,688,125	4,166,256
Total Current Assets		5,229,622	5,937,332
Non - Current Assets			
Plant & Equipment	9	1,628,816	1,855,397
Investments (at cost)	8(b)	6,222,931	4,232,388
Total Non - Current Assets		7,851,747	6,087,785
TOTAL ASSETS		13,081,369	12,025,117
LIABILITIES			
Current Liabilities			
Creditors		485,463	486,660
Lease Liability	2(f)	26,459	38,252
Prepaid Grants	10	3,948,279	3,901,934
Provisions	11(a)	619,976	596,989
Total Current Liabilities		5,080,176	5,023,835
Non - Current Liabilities			
Lease Liability	2(f)	102,872	165,852
Provisions	11(b)	303,470	464,786
T. 111	(-)		
Total Non - Current Liabilities		406,342	630,638
TOTAL LIABILITIES		5,486,518	5,654,473
NET ASSETS		7 504 951	6 270 6//
NET ASSETS		7,594,851	6,370,644
FUNDS			
Accumulated Funds			
Operating Fund	4	(3,536,766)	(3,445,477)
Capital Fund	5	8,628,983	7,080,310
Specific Purpose Fund	6	501,146	734,323
Asset Revaluation Reserve - 1/1/93	-	2,001,488	2,001,488
	_		**************************************
TOTAL FUNDS	7	7,594,851	6,370,644

STATEMENT OF CASH FLOWS FOR YEAR ENDED 31 DEC	EMBER 1997		
	Maka	1997	1996
	Note	\$	\$
Cash Flows from Consolidated Activities			
Receipts from Granting Bodies		5,408,093	5,155,218
Donations and Bequests		4,051,915	4,143,256
Payments to Suppliers & Employees		(10,025,934)	(10,015,620)
Dividends Received		312,278	222,989
Interest Received		304,997	373,854
General Income		398,607	762,574
Net Cash from Consolidated Activities	14(b)	449,956	642,271
Carly Flance Sugar Turnasting Astinitias			
Cash Flows from Investing Activities		(4,439,058)	(1,514,690)
Payment for Investment Securities Proceeds from sale of Investment Securities		3,340,273	1,783,131
		· ·	
Payment for Plant & Equipment		(309,345)	(523,281)
Net Cash used in Investing Activities		(1,408,130)	(254,840)
Cash Flows from financing activities			
Principal Repayments under finance leases		(34,697)	(40,430)
Net Cash used in financing activities		(34,697)	(40,430)
		(000 071)	2/7 224
Net Cash (Decrease) / Increase in cash held		(992,871)	347,001
Cash at beginning of the financial year		5,362,367	5,029,360
Effects of exchange rate changes		13,175	(13,994)
on cash held in foreign currencies			
Cash at the end of the financial year	14(a)	4,382,671	5,362,367

BAKER MEDICAL RESEARCH INSTITUTE NOTES TO AND FORMING PART OF THE ACCOUNTS

1. Incorporation

The Thomas Baker, Alice Baker and Eleanor Shaw Medical Research Institute was incorporated as the 'Baker Medical Research Institute' ("the Institute") under the Baker Medical Research Act 1980.

2. Summary of Significant Accounting Policies

Set out hereunder are the significant accounting policies adopted by the Institute in the preparation of its accounts for the year ended 31 December 1997. These policies have been consistently applied unless otherwise indicated.

(a) Accrual basis

The accrual basis of accounting has been used with revenues and expenses being recognised as they are incurred, and brought to account in the period to which they relate.

(b) Historical cost

The financial statements have been prepared on a historical cost basis and except where stated do not take into account current valuations of non-current assets.

(c) Fund accounting

The Institute operates on a fund accounting basis and maintains three funds; Operating, Specific Purpose and Capital Funds. The work of the Institute is financed from grants, investment income and donations of both general and specific natures. Income of a specific nature is used in accordance with the terms of any relevant convenants. The amount of grants received for specific purposes during the year but unspent at year end, will be generally expended in the next financial year. The Institute's capital fund comprises the capital donations, bequests and receipts from fundraising activities carried forward.

(d) Principles of consolidation

The Institute's accounts have been prepared on a consolidated basis. All inter-fund transactions have been eliminated on consolidation.

(e) Plant and equipment

Items of plant and equipment are recorded at cost or Board's valuation and are depreciated over their useful lives using the straight line method. Profits and losses on disposal of property, plant and equipment are taken into account in determining the result for the year.

(f) Leased Assets

Assets acquired under finance leases are included as property, plant and equipment in the balance sheet. Finance leases effectively transfer from the lessor to the lessee substantially all the risks and benefits incidental to ownership of the leased property. Where assets are aquired by means of finance leases, the present value of the minimum lease payments is recognised as an asset at the beginning of the lease term and amortised on a straight line basis over the expected useful life of the asset. A corresponding liability is also established and each lease payment is allocated between the liability and finance charge.

(g) Land and building

The land and building occupied by the Institute is not included as an asset as the Institute does not have title to the property. The estimated replacement cost of this building is \$13m.

(h) Stocks

Stocks of consumable scientific and administrative items are stated in the Balance Sheet at the lower of cost and net realisable value. Cost is determined by the average cost method from computerised stock records.

(i) Tax status

The income of the Institute is exempt from income tax pursuant to the provisions of section 23(e) of the Income Tax Assessment Act. The Institute is also exempt from other government levies such as payroll tax and sales tax but not fringe benefits tax.

(j) Employee Entitlements

Annual Leave

The Institute has fully provided for accrued annual leave entitlements for all employees as at balance date.

Long Service Leave

The liability to employee entitlements to long service leave represents the present value of the estimated future cash outflows to be made by the Institute resulting from employees' services up to the balance date. Liabilities for employee entitlements which are not expected to be settled within twelve months are discounted using rates based on government guaranteed securities, which most closely match the terms of maturity of the related liabilities. In determining the liability for employee entitlements, consideration has been given to future increases in salary rates, and the Institute's experience with staff departures. Related on-costs have also been included in the liability. It is Institute policy that employees with ten or more years of service qualify for long service leave entitlements.

(k) Foreign exchange transactions

The Institute maintains bank accounts in the USA and UK for the purpose of receiving donations and for the purchase of equipment and supplies. Foreign currency at balance date is translated at exchange rates at balance date. Exchange gains and losses are brought to account in determining the surplus or deficit for the year.

(l) Comparative figures

Where necessary comparative figures have been adjusted to conform with changes in presentation in the current year.

3. Government and Statutory Bodies	1997	1996
	\$	\$
National Health & Medical Research Council	4,065,797	3,848,610
Victorian State Government	720,075	715,435
National Heart Foundation	573,042	469,094
Australian Research Council	130,526	138,930
Victorian Health Promotion Foundation	120,000	120,000
	5,609,440	5,292,069
4. OPERATING FUND		
Balance at beginning of year	(3,445,477)	(3,032,717)
Deficit for year	(91,289)	(412,760)
Balance at end of year	(3,536,766)	(3,445,477)

5. Capital Fund

The Institute's Capital fund comprises the capital donations, bequests and receipts from fundraising activities. Each year the Board allocates a proportion of these funds to supplement the research operations of the Institute. From time to time the Institute is the beneficiary under various wills and trust agreements. Such bequests and legacies are an unpredictable source of income each year.

The current balance is:

	1997	1996
	\$	\$
Balance at beginning of year	7,080,310	6,557,215
Surplus for year	1,548,673	523,095
Balance at end of year	8,628,983	7,080,310

6. Specific Purpose Fund

Specific purpose funds comprise funds provided to the Institute for special purposes other than through normal fund raising activities. The funds are used in accordance with the wishes of donors. Institute accounting records are kept so as to identify expenditure charged against income from these funds. All such income and expenditure is incorporated in the consolidated Income and Expenditure Statement. The current fund balance is:

Balance at beginning of year (Deficit) / Surplus for year Balance at end of year	734,323 (233,177) 501,146	475,549 258,774 734,323
7. Fund Balances		
Balance at 1 January 1997 Surplus / (Deficit) for year -	6,370,644	6,001,535
Operating Fund	(91,289)	(412,760)
Capital Fund	1,548,673	523,095
Specific Purpose Fund	(233,177)	258,774
	1,224,207	369,109
Balance at 31 December 1997	7,594,851	6,370,644
8. Investments (at cost)		
(a) Current		
Short term deposits	3,688,125	4,166,256
Total Current Investments	3,688,125	4,166,256
(b) Non - Current		
Shares and Debentures	6,157,898	4,167,355
Trust Units	65,033	65,033
Total Non - Current Investments	6,222,931	4,232,388
Total Investments	9,911,056	8,398,644

The Institute's investments are shown at cost. As at the 31 December 1997 the market value of the Institute's non-current investments was \$7,894,465 (1996: \$6,067,897)

9. Plant and Equipment	1997	1996
• •	\$	\$
Plant and Equipment (at cost or Board's valuation)	4,026,886	3,717,541
Less: Accumulated Depreciation	2,498,647	2,036,667
,	1,528,239	1,680,874
Motor Vehicles under finance leases	194,814	273,182
Less: Accumulated Amortisation	94,237	98,659
	100,577	174,523
Written down value	1,628,816	1,855,397

10. Prepaid Grants

Prepaid grants include capital works grants of \$3.6m received from the Federal Government for the redevelopment of the Institute. In accordance with our accounting practices, income and expenditure associated with the redevelopment project will be brought to account in the period to which they relate.

Prepaid Grants	3,948,279	3,901,934
11. Provisions		
(a) Current		
Annual Leave	397,295	354,381
Long Service Leave	222,681	242,608
Total Current Provisions	619,976	596,989
(b) Non - Current		
Long Service Leave	226,321	325,742
Deferred Maintenance	77,149	139,044
Total Non - Current Provisions	303,470	464,786
Total Provisions	923,446	1,061,775

12. Remuneration of Board Members

(a) The names of each person who held office as a Board Member of the Baker Medical Research Institute during the financial year ended 31 December 1997 are:

Mr N O'Bryan	Mr K Courtney	Mr. P. Munz
Dr G P Johnston	Professor P Darvall (appointed Oct '97)	Mr W G Phillip AM (resigned Oct '97)
Mr R E Barker	Mr W P Gurry AO	Mrs M Ross
Professor J W Funder	Dr P G Habersberger AM	Professor R Smallwood AO (appointed Dec'97)
Mr P C Barnett	Professor S Holdsworth	
Mr K P Baxter (resigned Dec '97)	Mr R Morris (resigned Dec '97)	

(b) Other than one Board Member who is an employee, Director and shareholder of a firm of Stockbrokers which has received, or become entitled to receive, fees for services rendered to the Institute on normal commercial terms, no Board Member has received or has become entitled to receive any benefit, by reason of a contract made by the Institute or a related corporation with any Board Member or with a firm of which a Board Member is a member or with an entity in which any Board Member has a substantial financial interest other than the Director of the Institute, Professor J.W. Funder, who receives a salary.

13. Superannuation

The Institute operates an accumulation type superannuation plan under which all employees are entitled to benefits on retirement, disability or death. Employees contribute to the plan at various percentages of their salaries. The Institute also contributes to the plan at rates related to employee contributions and pursuant to an award set down under a national wage case. Funds are available to satisfy all benefits that have been vested under the plan in the event of termination of the plan or voluntary or compulsory termination of employment of each employee.

14. Notes to the Statement of Cash Flows

(a) Reconciliation of Cash

For the purpose of the statement of cash flows, cash includes cash on hand and in the bank and investments in the money market instruments, net of outstanding bank overdrafts. Cash at the end of the financial year as shown in the statement of cash flows is reconciled to the related items in the balance sheet as follows:

	1997	1996
	\$	\$
Cash	694,546	1,196,111
Deposits at call	3,688,125	4,166,256
Total as above	4,382,671	5,362,367
(b) Reconciliation of Net Cash provided by Consolidated Activities to Surpl	us	
Operating Surplus from Consolidated Activities	1,224,207	369,109
Effects of exchange rate changes on cash held in	(13,175)	13,994
foreign currencies		
Depreciation and Amortisation	512,240	573,341
Net assets disposed of	0	0
(Profit) on sale of non-current assets	(908,149)	(130,689)
Changes in net assets and liabilities	·	, ,
(Increase) / Decrease in debtors	(291,387)	(25,804)
(Increase) / Decrease in inventories	9,225	(22,800)
Decrease / (Increase) in prepayments	(11,476)	40,551
(Increase) in accrued interest	21,652	(4,456)
Increase in creditors	(1,197)	67,848
(Decrease) / Increase in prepaid grant	46,345	(39,703)
(Decrease) / Increase in provisions	(138,329)	(199,120)
Net cash from consolidated activities	449,956	642,271

(c) Non-cash Financing Activities

Motor Vehicles

During the year the Institute provided motor vehicles for staff under salary sacrifice arrangements with a value of \$194,814 by means of finance leases. These acquisitions are not reflected in the statement of cash flows.

BAKER MEDICAL RESEARCH INSTITUTE STATEMENT BY BOARD MEMBERS

In the opinion of the Board Members of the Baker Medical Research Institute:

- (a) The financial statements and notes to the accounts set out on pages 40 to 47 are drawn up so as to present a true and fair view of the state of the Institute's affairs as at 31st December, 1997 and of its results for the year ended on that date;
- (b) As at the date of this statement there are reasonable grounds to believe that the Institute will be able to pay its debts as and when they fall due; and
- (c) The consolidated financial statements have been made out in accordance with applicable Accounting Standards.

Signed at Melbourne this 29th day of April 1998 in accordance with a resolution of the Board.

Noman O'Bryan

President

John W Funder AO

Director

Independent Audit Report

Independent Audit Report to the Board of Management

Scope

We have audited the financial statements of the institute for the year ended 31 December 1997 as set out on pages 40 to 47. The Directors are responsible for the preparation and presentation of the financial statements and the information contained therein. We have conducted an independent audit of the financial statements in order to express an opinion on them to the Board of the Institute.

Our audit has been conducted in accordance with Australian Auditing Standards to provide reasonable assurance as to whether the financial statements are free of material misstatement. Our procedures include examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial statements, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion as to whether, in all material respects, the financial statements are presented fairly in accordance with Accounting Standards, other mandatory professional reporting requirements, being Urgent Issues Group Consensus Views, and the Corporation Law, so as to present a view which is consistent with our understanding of the Institute's state of affairs, the results of its operations and its cash flows.

The audit opinion expressed in this report has been formed on the above basis.

Audit Opinion

In our opinion, the financial statements of the institute are properly drawn up:

- (a) so as to give a true and fair view of the state of affairs of the Institute as at 31 December 1997 and its results and cash flows for the financial year ended that date.
- (b) in accordance with provisions of the Corporations Law, and
- (c) in accordance with applicable accounting standards and other mandatory professional reporting requirements.

Price Waterhouse Chartered Accountants

> EA Alexander Partner

Melbourne 29 April 1998

THE INSTITUTE IS GRATEFUL FOR MAJOR CONTRIBUTIONS TO ITS WORK FROM:

National Health & Medical Research Council of Australia Baker Foundation Victorian Government High Blood Pressure Research Council Inc National Heart Foundation Victorian Health Promotion Foundation National Institutes of Health (USA) Australian Research Council

Bristol Myers Squibb Merck Sharp & Dohme Park Davis Pty Ltd IRI Servier & Compagnie -Developpement G D Searle GiEnne Pharma S.p.A.

CAPITAL APPEAL (SINCE INCEPTION)

Alfred Healthcare Group Amcor Limited Baker Medical Research Staff Barker, Mr R Beaurepaire, Dame Beryl Burke MLA, Ms L T Crennan QC, Ms S Dickson, Mrs L C Funder AO, Professor J W Gurry AO, Mr W P Habersberger AM, Dr P G Hogarth OAM, Mr D F & Mrs M Jennings, Professor G & Mrs J Johnston, Dr & Mrs G P Kodak (Australasia) Pty Ltd National Australia Bank Limited National Foods Limited O'Bryan, Mr N J Pacific Dunlop Limited Philip AM, Mr W G Ian Potter Foundation John T Reid Charitable Trusts Roche Bros Pty Ltd Ross, Mrs M S Saddington, Mrs A SECV International Smorgon Family Charitable Fund TAC Insurance Thompson QC, Mr B K Transfield Holdings Pty Ltd J B Were & Son Charitable Fund

BAKER INSTITUTE RESEARCH FOUNDATION (FOUNDING MEMBERS)

GSA Group Pty Ltd Gurry AO, Mr W P Kodak (Australasia) Pty Ltd O'Bryan, Mr N J Ross, Mrs M S

TRUSTS & FOUNDATIONS

Alfred Healthcare Foundation Research Grants William Angliss (Vic) Charitable Fund William Buckland Foundation Jack Brockhoff Foundation Rebecca L Cooper Foundation Feilman Foundation Marion & E H Flack Trust Grosvenor Settlement Elisabeth Murdoch Trust Garnett Passe & Rodney Williams Memorial Foundation Sunshine Foundation Edward Wilson Charitable Fund

ENDOWMENTS

Bell Charitable Trust

James & Elsie Borrowman Research Trust William Buckland Research Fund Thomas, Annie & Doris Burgess Charity Grace & Herbert Foulkes Charitable Trust George Frederick Little Settlement M A & V L Perry Foundation Estate of Emily E E Stewart Joe White Beguest

BEQUESTS

Estate Lindsay J Baldy Estate Vera Veronica Bower Estate Robert B Casimir Estate Josephine Giuliano Estate Patrick Sellar Lang Estate Erica Charlotte Messer Estate Eleanor Isobel McDougall Estate Margaret E Shaw Estate Estelle Anne Watson

SCHOLARSHIPS

Allan Williams Scholarship

INTERNATIONAL SPONSORS

Australian - Russian Exchange Program Cultor Foods USA Hoffmann-LaRoche USA Knoll A G Pharmaceuticals, Germany Lilly Research Laboratories USA Manpei Suzuki Diabetes Foundation, Japan

National Defence Medical College, Japan Pharmingen USA Solvay Pharma Deutschland Worwag Pharma Germany

INDIVIDUAL SPONSORS

Clark, Mr D & Mrs I Crennan QC, Ms S Funder AO, Professor J W Greenfield, Mr H & Mrs M Gurry AO, Mr W P, & Mrs M Habersberger AM, Dr P G & Mrs P Mueller AM, Major General D M O'Bryan, Mr N J Robertson, Mr B & Mrs R Rolls, Mr R & Mrs H Ross, Mr I & Mrs M S

CORPORATE SPONSORS Archicentre - Architects Advisory Service Australia Israel Chamber of Commerce Beckman Instruments (Australia) Pty Ltd **Becton Corporation** Coopers & Lybrand Country Road De Bortoli Winery & Restaurant Yarra Valley Dulux Decorative Division Eli Lilly Australia Ptv Ltd Foster's Brewing Group Limited Gipsy Point Lodge Glaxo-Welcome Australia Limited Grains Research & Development Corporation GSA Group Pty Ltd Hallmark Cards Hotel Negara Singapore Kodak (Australasia) Pty Ltd Lindenderry at Red Hill Makers Mark Gallery Meadow Lea Foods Meat Research Corporation Merck Sharp & Dohme M H Pelcman & Company, Jewellers Micro Arts Australia Pty Ltd Minter Ellison Opera Australia Novogen Pty Ltd Perri Cutten Australia Peter Gertler - Gold & Silversmith PGA Tour of Australia Proscience Pty Ltd Qantas Airways Limited Re-Creation Health Club of Armadale Sandoz Australia Pty Ltd Scotchmans Hill Vineyard Servier Laboratories (Aust) Pty Ltd

Costelloe, Mrs N C I

CORPORATE SPONSORS CONT...

Sigma Aldrich Pty Ltd Sunnybrook Shoreham Estate Trace Scientific Ltd Tuck's Ridge at Red Hill "Waitangi" Syndicate J B Were Stockbroking Limited Wilson Dilworth Limited

CORPORATE DONORS

Abbott Stillman & Wilson ANZ Banking Group Chase Property Management Co Pty Ltd Coles Myer Limited Davies Collison Cave Eggleston Macdonald Herald & Weekly Times Ltd HIH Winterhur Insurance ICI Australia Limited Media Feature Services Micro Arts Australia Pty Ltd Proscience Pty Ltd Rothchilds Australia Shell Company of Australia Sigma Aldrich **VEADA** J B Were Charitable Fund

INDIVIDUAL DONORS

Anonymous Barker, Mr R E Barnett, Mr P C Buchanan, Mrs A M E Cook, Mr S J Davies, Mrs D C Eisner, Mr & Mrs K Fitzgerald, Mr L J Garner AM, Mr E L & Mrs N Glascodine, Miss H D Goldstein, Mr J Habersberger AO, Mr J & Mrs D Harris, Mrs C H Heartbeat Alfred & Baker Hogarth OAM, Mr D F & Mrs M Johnston, Dr G P & Mrs S Jones, Mr E Kelly, Mr A P Lees, Mr N Miller Foundation Morton, Mrs M Myer AC, Mr S B Ross, Mr & Mrs E Ross, Mrs M S Rowland, Mrs A Snowy Nominees Pty Ltd St Andrews Opportunity Shop Turner, Mr G

Webster, Mrs R

Wellington, Mrs P

DONATIONS IN LIEU OF GIFTS

To celebrate the following occasions: 40th Wedding Anniversary of Mr & Mrs H & S Hirsch 50th Birthday of Mr Ted Kirsh

CLUB OF 1.000

Roberts, Mr F A Robertson, Mr & Mrs B B S Row, Mrs P S Abbott Stillman & Wilson

THOMAS BAKER SOCIETY

Bade, Mr G Berkowitz, Mr L Bult, Mrs A Dickson, Mrs L C Edwards, Mr & Mrs A & B Ennis, Mrs N M Ferrarin, Mr & Mrs J Garfield, Mr A Grimwade, Mrs J E Hacker, Mr A Keir, Mrs W Kennedy, Miss A P Korner AO, Emerit Prof P I Levingston, Mr J B Marks, Mr A Marriott OAM, Mr A T Milne, Ms P A Pitcher, Mr R G Reid, Lady Sullivan, Mrs C Y Swindells OAM, Mr P Vivian, Mr H E Weber, Mr & Mrs A C

THE CENTURY CLUB

Abbey, Mr A K Allen, Mr D C Allison, Mr B C Armstrong, Mr L A Barry, Mrs N M Belcher, Mr & Mrs K H & J E Bell, Mr R W Benini, Mrs T J Birch, Mr & Mrs D L Bland, Mr J M Bridgland, Mr M D Bromley, Miss J Brown, Mr J W Bunning, Miss E F Burgesson, Mr & Mrs J E & B C Butcher, Mrs B L Canobio, Mr P F Charleston, Mr R Christesen, Dr C B Cole, Mr N R Condie, Mr & Mrs D A & R Cormack, Mr G F

Cvetkovic, Dr P Daws, Dame Joyce Dodd, Mr & Mrs E A & M P Downes, Mrs G E Downey, Mr R S Downing, Mr A J Eather, Mrs H Englebert, Mr J W Euhus, Mrs M I Farmer, Mr G J Fih, Mr L Filgate, Mr & Mrs J & B Findlay, Mrs F M Flack, Mr & Mrs K N & B C Fleischer, Miss L M M Gardiner, Dr J M Glover, Mr R J Grey, Mr P Guest OBE, Mr J H G Guest, Dr J S Hamilton, Mrs K Hancock, Mrs L K Harcourt OAM, Dr J K Harden, Mr R J Hawkins, Mr & Mrs F & S Hicks, Mrs I L Hinds, Mr T G Hore, Dr A D Hudson, Mr P M Hudson, Mr R F Hunter, Miss N Johnston Mr & Mrs K Johnstone, Mrs M Jones, Dr & Mrs F C Jones, Miss G Keller, Mr & Mrs R Kerr, Mr R D King, Mr L J Kirby, Mr & Mrs R H & B L Lamburd, Mrs E E Laycock, Mr A Leslie, Mr J W Linton-Smith, Mrs C A Little, Mrs M G Loughhead, Mrs P Love, Miss P E Lowthian, Mr & Mrs M J & S Macdonald, Mr J Maggs, Mrs P L Marriot, Miss M Marsh MD, Dr J B Martin, Mr C L McLaren, Mr N S McPhee, Mrs G Miller, Mr R G Moore, Mr F Morgan CBE, Mr F R D

Nisbett, Mr T G

THE CENTURY CLUB CONT...

Notley, Miss V H Oldham, Mr E P Oxenbould, Mrs M W Palm, Mr D L Paruit, Mr G Perry, Mr & Mrs J N Perry, Mr J A Pollard, Mrs G E Pollock, Mr W J Prince, Messrs D & J Ray, Mrs J Renard, Mr & Mrs R M Robertson, Mrs P E Rooney, Mr W M Ryall, Mr P W Ryan, Mr & Mrs J B Rysman, Mrs N Salamy, Dr & Mrs S G & J E Scott, Mr K J Shepherd, Mr A R Shinkfield, Mr A R Smith, Mr W R Smorgon, Mr G Soutar, Mr & Mrs C J & E D Spry-Bailey, Mr P Stanley-Low, Mrs D J M Stevens, Mr & Mrs T N Stock, Mrs & Mrs M C Talbot, Mr B R Thompson, Mr J W Trezise, Mr & Mrs K& S Viet, Mr G R Waller, Miss H P Watkins, Mrs J E Weile, Mr L W Westfold, Prof K C Whatmough, Mrs P B Wicks, Dr W G Woolfe, Mr K W

CERTIFICATES OF APPRECIATION

In addition to the various Charitable Trusts, Foundations and Estates listed in the 1996 Annual Report, a Certificate of Appreciation was also presented to the following at the 1997 Annual General Meeting:

Abbott Stillman & Wilson ANZ Banking Group Bell Charitable Trust Buchanan, Mrs A M E C E Heath Insurance Limited Castan, Mrs A Castan QC, Mr A R Chase Property & Management Co. Cook, Mr S J Csordas, Dr S E Curwen-Walker, Miss E C Davies, Mrs D C Edwards, Mrs T B Eisner, Mr & Mrs K Emmerson QC, Dr J Ennis, Mrs N M McDougal, Estate Angus Campbell Paige, Estate Arthur Augustus Greig, Estate Harry Douglas Sedgfield, Estate K K Wilson, Estate Edward Baldy, Estate Lindsay J Jones, Estate Miss Ella B Stewart, Estate Mrs E E E Kirby, Estate Peggy Francesca Farish, Mr J J Fitzgerald, Mr L J G & E Ramsav Charitable Trust G & H Foulkes Charitable Trust Gillbank , Mr & Mrs H H & N Griffin, Mrs Winnifred Hazel & Pip Appel Fund Heartbeat Alfred & Baker Hoult, Mr & Mrs L R ICI Australia Limited J B Were & Son Charitable Fund James & Elsie Borrowman Trust Joe White Bequest Jones, Mr I J Lions Club of Kew Lions Club of Mitcham Lo, Mr & Mrs S C Lowe, Miss Violet M A & V L Perry Foundation Marion & H E Flack Trust McCorkell Construction Company Miller Foundation Ltd Morton, Mrs M Murdoch AC DBE, Dame Elisabeth Peggie, Mrs M A Phillips, Mrs Nancy

Pitcher, Mr R G Ramaciotti Foundations R F Ross Trust Rebecca L Cooper Medical Research Foundation Ltd Richmond, Mr & Mrs A & F Rogan, Mrs M J Ross, Mr & Mrs E Rotary Club of Toorak Rouse, Dr & Mrs J L Row, Mrs PS Shell Company of Australia Ltd Smith, Mr L T Smorgon, Mr George Smorgon, Mr & Mrs Graham Snowy Nominees Pty Ltd Spicer, Mrs T A Stanley-Low, Mrs Dorothy Stracey, Mr & Mrs R Tersch, Mr R Thalassinos, Mr J G Tuckwell, Mrs D E Turner, Mr G D **VEADA** Vermont Cancer Research Fundraising Group Watson, Mr G L Webster, Mrs Ruth William Angliss Charitable Fund William Buckland Foundation Wilmoth, Mr J A Wiseman, Mr D B

Wright, Mrs E

IN MEMORY OF:	FROM:
	2/14th Field Regiment
, , , , , , , , , , , , , , , , , , ,	-
	Eileen McKellar
	Mrs N W Prentice
Atkins, May	
	Mrs Phyllis L Maggs
	Mrs Phyllis L Maggs
Blair, Lorna	
	& D K Habersberger
	Harold C Trinick
	Miss Jean Hagger
	Cynthia & Alex Holper
	2/14th Field Regiment
	Association
Bullen, Jack Stephen	Jean H Healy
Chambers, David	Winifred Chambers
Chapman, Margaret .	Cynthia Holper
Chapman, Margaret .	V Heath
Clarke, A M	N D Crawford
Cunneen, K	2/14th Field Regiment
	Association
Curtain, Arthur	Mrs Pat Cheeseman
Darvall, Lady	Harold C Trinick
Davies, Reggie	Mrs J Duncan
Dawe, Mr K	2/14th Field Regiment
	Association
	Mr & Mrs R A & E A Simpson
Duncan, Ian	Mrs J Duncan
	2/14th Field Regiment
Elliott, Bernice Alla	
	Mrs F Jean Evans
=	R S & D G Treadwell
_	2/14th Field Regiment
	Marjorie J Gough
	Jim & Sue Lucas
	Mr & Mrs K B Allen
	Mrs J Williams
Hindle, George	
Holloway, Stewart	
	Mrs Phyllis L Maggs 2/14th Field Regiment
	Mrs Cynthia Holper
	Amcor Fibre Packaging
Jackson, Frederick C	
	Bob & Joyce Henderson
Jackson, Frederick C	•
	Dennis & Linda Leworthy
	•
	Graeme Menzies
,	

Jackson, Frederick C	.Heather, Simon, Jarrod, Erin
	.& Sam Stoddart
Jackson, Frederick C	.J Meckiff & G Kibell
Jackson, Frederick C	.Jean Taylor
Jackson, Frederick C	.Joy & Alan Russ & Nadine,
•••••	.Ross & Darren
Jackson, Frederick C	.L & D Stewart
Jackson, Frederick C	Lester Vanderzeil
Jackson, Frederick C	Lindsey Bateman
Jackson, Frederick C	.Lorna J Jepson
Jackson, Frederick C	.Mr & Mrs Michael & June
	Dixon
Jackson, Frederick C	.Mr & Mrs W A Thackray
Jackson, Frederick C	.Mrs Mary J Rainsbury
Jackson, Frederick C	.Collins Family
Janicke, John	.Harold C Trinick
Jarrett, Theo	.Marjorie J Gough
Karanges, George	.George Papageorge
Kemp, Sydney & Phyllis	.Cynthia Holper
Lawry, Enid & Alfred	.Ms Betty Knight
Loved Ones	.Winifred Chambers
Ly, Cuu	.Katharine Ching
Mitchell, Donald	.Constance Armstrong
Nelson, W (Bill)	.2/14th Field Regiment
	.Association
Nissen, Andreas P	.2/14th Field Regiment
	.Association
Owers, Ralph	.Cynthia Holper
Owers, Ralph	.V Heath
Paxino, Andy	
Paxino, Owen A (Andy)	
· · · · · · · · · · · · · · · · · · ·	Jim McWilliam, Elaine Brown,
Bonnie	
Pearce, Philip Hamilton	_
Pearce, Philip Hamilton	
Pearce, Philip Hamilton	•
Pharo, Agnes Dorothy	Marjorie Davies, Ian & Helen
	Hargreaves
Plant, Lorna Emily	
Pomeroy, Ron	
Shaw, Etta Jean Shaw	
Sherry, K	
Silberstein, S	
Smith, Tom	
Standish, A	
Character Manager	
Steere, Margaret	
Stevens, Ronald Frank	
Surridge, Colin	
Walters, Bill	
White, Don	marjorie White

Supporting the Baker

HOW YOU CAN SUPPORT MEDICAL RESEARCH AT THE BAKER INSTITUTE

The Baker Medical Research Institute relies on non-government sources - including donations from members of the public - for a substantial part of its operating income.

The Institute enjoys an international reputation for the high quality of its basic and applied research into the causes of cardiovascular disease (in particular hypertension and atherosclerosis). It is an established centre for training in medical research, providing post-graduate education, and on-the-job training in specialised laboratory techniques.

USE OF DONATED FUNDS

All donations are used to support the Institute's medical research program, and in particular to assist with the purchase of equipment and laboratory supplies. Donations are not directed towards administrative costs, nor are they used to support our fund-raising activities.

TAX DEDUCTIBILITY

All donations over \$2 to this Institute are tax deductible.

SPECIFIC PURPOSE DONATIONS

We will be pleased to honour a request that your donation be applied to a particular area of research, or used for a purpose which is consistent with our objectives as a research and teaching institute (for example, to establish a post-graduate scholarship).

ACKNOWLEDGEMENT

All donations are acknowledged by letter, and those of \$1,000 and over are listed in the pages of this Report. There may be other suitable ways to acknowledge your generosity - we will be pleased to discuss the options with you.

HOW TO SUPPORT THE BAKER INSTITUTE

There are a number of ways in which you can support our research effort. Some of these are listed below. Depending on the size and nature of your donation, it may be in your interests to obtain professional advice concerning taxation, probate and other financial matters. In these circumstances, we suggest that you discuss your situation with your solicitor, accountant or financial advisor.

TYPES OF SUPPORT

Donation

Remember that all amounts over \$2 are tax-deductible.

Bequest

We prefer to invest amounts in excess of \$10,000, and use the income. Your directions are welcome. See below for a suggested wording for a bequest.

Gift of Assets or Property

Some donors elect to transfer property to the Institute, while retaining its use during their lifetime.

Trust or Named Fund

This option may be of interest to Trustees of existing Trusts, as well as to individual donors. A donor may elect to establish a fund by instalments.

We appreciate all donations - small or large, and we value our connection with donors throughout Australia and

Should you have any enquiries, please do not hesitate to contact Bobbie Renard in our Community Relations Department:

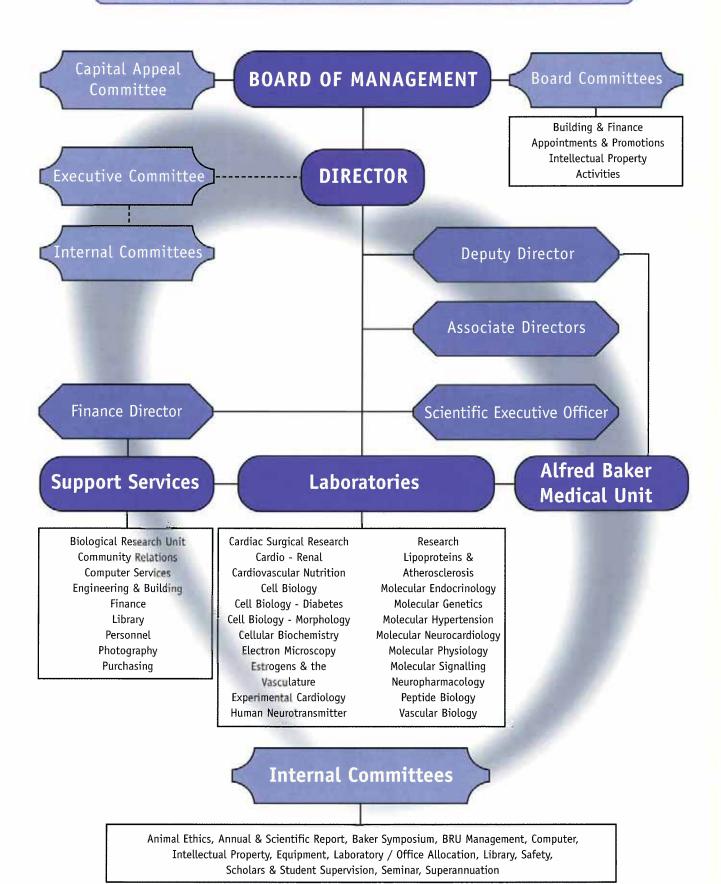
Telephone: (03) 9522 4333. Mailing Address for all Donations: The Baker Medical Research Institute

P.O. Box 6492, Melbourne, Victoria 8008 Australia

All cheques should be made payable to Baker Institute.

Wording of a conventional bequest:

MANAGEMENT STRUCTURE



DIRECTORY

Auditor

Price Waterhouse 215 Spring Street Melbourne

Solicitors

Blake Dawson Waldron 101 Collins Street, Melbourne, Vic. 3001

Annual General Meeting

Monday 4th May Baker Medical Research Institute 5.00pm

Baker Medical Research Institute

P.O. Box 6492 Melbourne 8008 Australia

Telephone: (03) 9522 4333 Facsimile: (03) 9521 1362

