75 Commercial Road,
Melbourne VIC 3004

Postal address

Baker Heart
Research Institute
PO Box 6492, St Kilda Road
Central, VIC 8008, Australia

T +61 (0)3 8532 1111
F +61 (0)3 8532 1100
E reception@baker.edu.au
W www.baker.edu.au

Baker
Heart Research Institute

Research Update 2007

The Baker Heart Research Institute leads the nation's research fight against cardiovascular disease, its causes and complications.

All our research efforts are aimed at reducing the incidence of, and providing better treatments and cures for, these conditions:

- **Diabetes and Obesity**
- **Acute coronary syndromes**
- **Heart failure**

The following pages provide an overview of these health problems and our team's various molecular, cellular, physiological and clinical research efforts towards solving them.

Contents

Foreword

By Garry Jennings AM, Director

The deadly trio of obesity, diabetes and cardiovascular disease is our most serious impending health burden. Premature death and disability from these conditions continues to rise and the international community is being crippled, both socially and economically, by this ugly phenomenon. So great is the cost, and so widespread the problem, that obesity and diabetes are now discussed and considered at the highest levels of government by politicians and health policy-makers. Tragically most of the chronic disease brought on by these conditions is preventable. Lifestyle interventions and community-based awareness and risk reduction programs are in place, but new approaches are needed, and their effectiveness needs careful and regular evaluation.

The Baker is the nation's leading cardiovascular research institute and we are evolving to keep pace with these growing challenges to public health. Reflecting the relentless rise of diabetes in the community, diabetes research makes up some 30 per cent of the institute's research efforts and we also have boosted our studies into the causes and effects of obesity. Cardiovascular disease is the main complication of diabetes, and obesity is a major precursor to both. We cannot afford to have our research efforts conducted in silos and so we constantly recognise, reinforce and investigate the interplay between these conditions. Supporting the work of our basic scientists is the recently revamped Preventative Cardiology Unit (PCU). This unit is devoted to reducing rates of heart disease in the community by increasing awareness of, and encouraging the reduction of, cardiovascular disease risk factors.

Murray Esler won the prestigious Shaikh Hamdan Award

Part of the Baker, but based in Alice Springs, is the newly created Centre for Indigenous Vascular and Diabetes Research. Headed by Alex Brown, this satellite unit is part of our boosted commitment to improving the cardiovascular health of indigenous Australians – because that's where the greatest disparity in our community occurs, in terms of cardiovascular disease. Mortality rates are three times the rate of the rest of the population, life expectancy is 20 years less and the median age of death is just a little over 50 years. Only 2-6 per cent of aboriginal people are aged over 65, so the elders can not lead their communities because so many of them have passed away. Cardiovascular disease strikes early in Aboriginal people. Those aged 25-54 are 12 times more likely to suffer cardiovascular disease than the rest of us. Behind that is diabetes which is at least four times more common but much more lethal in this group. We have much to be proud of in Australia, and in heart health we have led the world, but this is an area where we have been lagging, and we have not really come up with the solutions. We are striving now to become part of the solution to the nation's indigenous health crisis.

In 2006 the Baker celebrated its 80th anniversary, a significant milestone and one of which we are all proud. Far from resting on our laurels, however, I am delighted to report that 2006 was also one of our most productive scientific years, 239 peer-reviewed scientific publications and many of our staff achieving important national and international recognition for their research. One example of a major finding for the institute last year came from the work of Assam (Sam) El-Osta in the area of epigenetics. Sam's work has identified a unique master molecular controller which is responsible for turning genes that "misbehave" and cause disease "on and off". This master switch underpins cancer, cardiac disease and a form of intellectual disability known as Fragile X syndrome. The

Paul Nestel was recognised by the International Atherosclerosis Society

research was published in the prestigious journal Nature Genetics and last year earned him the Amgen Medical Research Award.

Other research highlights included a study led by Merlin Thomas which showed that one in three type 2 diabetic patients visiting their GPs carried with them symptomless, early stage kidney disease.

From the PCU came new research showing that one third of people receiving treatment for high cholesterol remain at unnecessary risk of heart disease. This is due to their ignorance of their own cholesterol levels and the lifestyle changes that could save their lives. Both of these studies reflect the Baker's focus on community as well as laboratory research.

In another highlight we'd like to congratulate Paul Nestel, an internationally-renowned long-serving Baker scientist and member of our senior faculty. Paul was recognised last year as a Distinguished Fellow by the International Atherosclerosis Society, for his professional achievements as an outstanding specialist in atherosclerosis and related diseases. Paul was the only Australian to earn this distinction, a sign of the esteem in which he is held in the international scientific community.

Murray Esler, an associate director of the Baker and head of the Cardiovascular Neuroscience division, last year won the prestigious Shaikh Hamdan bin Rashid Al Maktoum Award for Medical Sciences in the field of Pathogenesis of Hypertension. Murray was also

Peter Kistler specialises in atrial fibrillation

recognised locally in January of this year when he was awarded Member of the Order of Australia, for his services to medical science through research in human cardiovascular neuroscience, development of health policy and treatment policies.

I am pleased to report newer Baker recruits and early career scientists also continue to earn accolades for their tremendous research efforts. Among last year's highlights was that Enzo Porrello, then a 2nd year PhD student in the Molecular Endocrinology lab, won the Young Investigator Award at the prestigious Angiotensin Gordon Conference held in France. Locally, the Australian Diabetes Society presented its two main Diabetes Australia Research Trust Awards to Baker scientists. The Millennium Type 1 diabetes award went to Josephine Forbes and Melinda Coughlin and the new Millennium Type 2 diabetes award to Barbora de Courten, while the Young Investigator Award went to Anna Calkin. At the Keystone Conference on Metabolic Disease in Colorado, Graeme Lancaster from the Cellular & Molecular Metabolism Laboratory was awarded a scholarship to present his work on fatty acid-induced macrophage inflammation. Graeme was one of only four people awarded this prize and the only Australian. Tony White, from the Clinical Physiology lab also won the prestigious Clinical Young Investigator Award at the World Congress of Cardiology in Barcelona. His work establishes a plausible mechanistic link between a common genetic variant in a matrix protease (MMP-3) and unstable coronary syndromes.

Last year we introduced a new suite of awards to Baker scientists, designed to foster exciting new ideas and new multidisciplinary collaborations. These include internal competitive research grants as well as grants to support early career scientists and two stipends for PhD students. Congratulations to lab heads Sam El-Osta, Mark Febbraio, Stephen Duffy and Bronwyn Kingwell for receiving the major Baker grant under this new initiative. Their collaborative work will be the study "Does a high-fat diet initiate an epigenetic program for diabetes?" Awardees of the first round of early career scientist grants were James Armitage, Michelle de Silva and Vance Matthews.

While supporting our existing scientists in new ways, we also recognise the importance of continuing to invest in new scientific talent. Boosting our pool of researchers in 2006 were some of the nation's finest cardiovascular disease scientists, and I would like to welcome them here: Peter Kistler, a Neil Hamilton Fairley Fellow recently returned from post doctoral studies at Barts in London, brings to the Baker welcome research skills in clinical electrophysiology and the emerging field of ablation therapy for cure of atrial fibrillation. Simon Stewart has started as the new head of the PCU. Simon joins us from a conjoint appointment at the University of South Australia, where he was chair of cardiovascular nursing and the University of Queensland, where he was professor of health research. Mark Febbraio joined us as head of the cellular and molecular metabolism laboratory. Mark's team will continue to pursue his internationally recognised research into the metabolic changes that lead to diabetes.

Markus Schlaich is a hypertension specialist

Another new recruit is Markus Schlaich, a nephrologist and hypertension specialist, investigating the link between the sympathetic nervous system, the kidneys and high blood pressure.

A major scientific conference was held in October to mark our 80th anniversary. Baker 80 – Facing the Future of Cardiovascular Disease was a two-day symposium which attracted an outstanding faculty of local and international speakers to take stock of the latest advances in cardiovascular disease. Ralph Kelly and Albert Schomig were just two of our international guest speakers who joined our own researchers for the stunningly successful two-day event.

In November I took over the presidency of the Australian Association of Medical Research Institutes, an organisation representing 36 independent medical research institutes across Australia, following on from the ever-capable Suzanne Cory from the Walter and Eliza Hall Institute of Medical Research. Suzanne did an outstanding job when she held the post for the two preceding years, and is a hard act to follow.

On the commercialisation front this has also been an outstanding year. Nucleus Network has established itself at the forefront of clinical trials activity for Australia and the region. Other newly established subsidiaries are developing exciting new treatments for cardiovascular disease.

It is an exciting and busy time for the Baker, and its team of scientific and support staff has never been stronger. It is a great pleasure to work with such a team, supported by an outstanding Board of Management and our tireless patron Sir Laurence Muir. Add to this the efforts of so many community stakeholders including sponsors, volunteers, collaborators, government and industry, without whom none of our important work can be achieved.

Organisational Chart

The Baker and IDI are striving to improve the health of the nation

A New Force in Heart and Diabetes Research

Obesity rates in Australia are expected to double by 2025 which will represent 29 per cent of the population, or 7.2 million obese people. In turn, diabetes rates will double and the most detrimental effect of these projections will be on cardiovascular disease, already the major cause of death and disability worldwide.

Obesity, diabetes and cardiovascular disease are enormous public health problems. In order to tackle them effectively now and improve the nation's dire public health projections, research forces must be combined and the best minds brought together. It no longer makes sense to work in isolation from our best and brightest colleagues.

This is the rationale behind the announcement we are combining forces with another world-renowned research organisation, the International Diabetes Institute, to create a new **national and international heart and diabetes institute**. Under this merger we will combine our strengths, our staff and our research capabilities – and indeed significantly add to them – to better fight obesity and its cardiovascular and diabetic complications. This landmark, $29 million venture will serve as a model for medical research collaboration here and overseas. Our vision has been supported with a $14 million commitment from the federal Government and $5 million grant to IDI from the Victorian Government. We are in the process of raising another $15 million to see our plans through to fruition by 2009. Stage one of the merger, including a physical relocation of some IDI staff to the Baker site, will be complete by the end of 2007, as will the consolidation of some administrative resources.

"While medical technology, procedures and pharmaceuticals continue to improve, a growing number of Australians are developing diseases and suffering premature death because of avoidable lifestyle risk factors."

Federal Health Minister Tony Abbott, 2007

Health, environmental and social issues all have an effect on obesity, starting in utero and continuing right through until old age. The complexity of this problem requires a comprehensive range of research expertise, from basic biology to population health. Together the Baker and IDI will build on existing expertise to create an organisation that will improve the health of Australians now and help protect the health of future generations. Although this project is the merger of two outstanding organisations, we have been careful to plan in such a way that the very separate histories, characters and cultures of the Baker and IDI will be preserved and indeed enhanced. Far from becoming a blended and indistinguishable new group, the two institutes will retain some distinct pursuits and projects. But with strategic collaboration, IDI and the Baker are effectively giving us a third force in the fight against obesity – a world first national heart and diabetes institute.

As a combined force against obesity, diabetes and cardiovascular disease, the merged entity will expand to:

- Develop and evaluate lifestyle intervention strategies such as nutrition and exercise, as well as develop the best ways to educate families, schools and communities about the need to make lifestyle improvements
- Identify individuals (including children and indigenous Australians) at greatest risk of becoming obese, as well as identify those obese individuals at greatest risk of the cardiovascular complications of obesity
- Study new experimental models of obesity and Type 2 diabetes to improve our understanding of these complex diseases
- Develop and evaluate effective drug therapies for obesity, Type 2 diabetes and cardiovascular disease for when lifestyle interventions fail
- Extend preventative programs for aboriginal Australians through our Centre for Indigenous Vascular and Diabetes Research in Alice Springs
- Identify the mechanisms and new treatments for the cardiovascular and other complications of diabetes and obesity

Diabetes

Mark Cooper leads the Baker's diabetes research

In 2005, 3.2 million Australians were obese. Obesity is a serious and complex health problem, with type 2 diabetes and cardiovascular disease its major complications. In 2005 there were 379,000 new cases of cardiovascular disease and 102,000 new cases of type 2 diabetes caused by obesity. The health and economic burden for Australia is alarming: the total financial cost of obesity was estimated at $3.7 billion in 2005.

Adding to this existing burden are projections that obesity rates in Australia will double by 2025 – translating to 7.2 million obese Australians. The effect of this will see diabetes rates double, and the greatest pressure of these two rises will be on cardiovascular disease, which is already the major cause of death and disability worldwide. Conservatively, between 2025 and 2050, obesity will alone contribute to:

- 900,000 preventable hospitalisations for cardiovascular disease ($2.2 billion in hospital costs alone)
- 240,000 mainly premature deaths

The complications of diabetes include kidney disease, eye disease and vascular disease. It is a major factor in cardiovascular disease and the most common cause of kidney failure in the western world.

The only way to reduce the current disease burden of obesity and ensure that these projections are not realised is to understand it as a complex disease while investigating its molecular, cellular and physiological precursors and implications. The development too of sound preventative strategies informed and evaluated by research are imperative. If we can help reduce the development of new cases of obesity and diabetes we will dramatically improve the rate of death and disability, especially from cardiovascular disease now and in the future.

Reflecting this need, investigations into diabetes and metabolic conditions makes up about 30 per cent of our research effort.

Across the institute, scientists at the Baker are striving to understand why people develop complications from diabetes and, importantly, understand the mechanisms responsible for those complications. Research is directed at the development of new treatments to target the pathways within the body responsible for the development of diabetes and obesity-related disease. The current focus of research is on the development of new techniques for early diagnosis of complications, including gene and proteomic approaches; lifestyle interventions, and the development of drug therapies for use in cases where exercise and diet are not a simple answer.

A research-led effort will improve diabetes projections

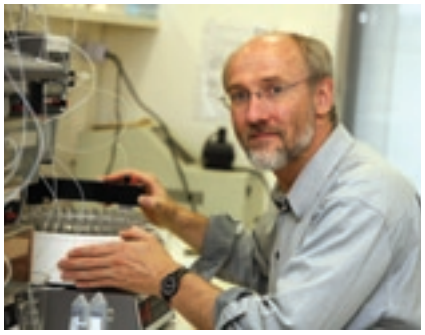
Our aim is to dramatically reduce the incidence of obesity and diabetes, two largely preventable causes of death and disability and an increasing strain on health budgets around the world. A research-led effort, with the development of sound community awareness, education and intervention programs will improve the health of those suffering, and those at risk of, these conditions. In this way, our work will have direct effect on future projections of diabetes and obesity and in turn reduce the burden of cardiovascular disease, their major complication.

Some research projects underway include:

- The development of drugs to increase the activity of antioxidant enzymes to reduce the effects of diabetes
- The identification of a master molecular controller, responsible for turning genes "on" and "off", and how this master switch underpins diabetic and metabolic disease
- How health and disease in one generation modifies genes and affects the next, predisposing infants to diabetes and obesity
- Community-based research understanding the incidence of symptomless kidney disease in type 2 diabetes patients
- The comparison of advanced glycation end products (known as AGEs, these are formed when sugars in the blood attach to proteins in the body) measurements and markers of inflammation and oxidative stress in diabetic patients to predict the development of cardiovascular disease

- The development of a new drug with the ability to reverse the detrimental effects of AGEs in the body, responsible for many of the diseases caused by diabetes
- The way key regulatory molecules that control cell differentiation are activated: research is showing that this damaging process can occur as a result of high glucose levels
- The identification of a new protein molecule, CDA1, has uncovered its anti-proliferation properties. Increasing the level of this protein in a cell stops cell division. The role of this protein in diabetic complications is being further investigated
- The effectiveness of drug treatments in diabetic atherosclerosis, or a hardening of the arteries caused by the damaging effects of diabetes, as well as the effectiveness of dietary interventions in the prevention of this condition
- The complexity of the metabolic changes that precede diabetes and the development of medication to mimic the effects of exercise in the body
- Understanding that the "stickiness" of blood vessels that are diseased can be caused by molecules caused proteoglycans, and this may be the initiating step in atherosclerosis
- Identifying genetic or other factors in the blood that might protect against diabetic complications. Understanding the markers of resistance to disease will allow early, preventative treatment
- Investigation of genes and their products that are altered as a consequence of diabetes, and how the body is altered, on a molecular level, by diabetic disaese

Acute Coronary Syndrome



Karlheinz Peter is working on new therapies for blood clotting

Acute coronary syndrome, commonly known as heart attack, is an umbrella term referring to a set of signs and symptoms that suggest a reduced blood supply to the heart. The most common cause of this is the development of atherosclerosis, the accumulation of fatty deposits, known as plaques, in the blood vessels. It is the rupture or erosion of these plaques that can lead to heart attack and stroke and sudden death. Atherosclerosis is the underlying cause of most cardiovascular disease and understanding the development and nature of these plaques, and who is at greatest risk of their rupture, is a major research concern across the institute. Advances in this area will have a profound effect on reducing the death and disability caused by cardiovascular disease. At present we have no way of detecting which plaques will cause heart attack (and, or death) and which will not.

The direct cost of coronary heart disease in Australia is the largest of any single cardiovascular condition, costing more than $1.7 billion and representing nearly 30 per cent of all costs associated with heart disease. Stroke is the second largest, at more than $1 billion. Coronary heart disease is also the single most common cause of death in Australia and is generally manifest as angina (chest pain caused by a reduced flow of blood to the heart) heart attack or sudden death.

Our work in this area of great community need focuses on the investigation of those cells that play an important role in plaque development, the study of nutritional approaches that might prevent atherosclerosis and even the prevention and reversal of cholesterol accumulation in blood vessels. This area of research pursuit at the Baker is addressing these problems in a range of ways, including the design of a new class of "intelligent" drugs. These will prevent clotting, or dissolve clots that have caused a heart attack or stroke but do so without the excessive bleeding complications that are a feature of currently available drugs. We are also working towards the identification of biomarkers (such as levels of certain proteins in the blood) which, when added to existing knowledge of family history and lifestyle risk, will help predict coronary plaque rupture.

Another major research focus within the institute investigates the effects of stress and psychological illness on heart disease. An active research program is underway on the link between depressive illness and coronary heart disease. Depression is known to be a major cause of heart disease and sudden death, and as an isolated risk factor it is equal to the risk posed by high blood pressure or high cholesterol. Our team has measured the brain transmitters in people newly diagnosed with depressive illness, and found that in about 40 per cent of this group the sympathetic nervous system is permanently switched on, placing the heart under unrelieved pressure. These findings have direct implications for future treatment of sufferers of depression, a major cause of disability. This anomaly in their risk of heart attack may hold clues about different types of depression.

For a growing number of older Australians, atherosclerosis and its complications, including coronary heart disease and stroke, will be the major health care problem in terms of mortality, reduction in quality of life, and cost to the public health system. Depression is also a major health problem, across all demographics and we know this increases the risk of heart disease.

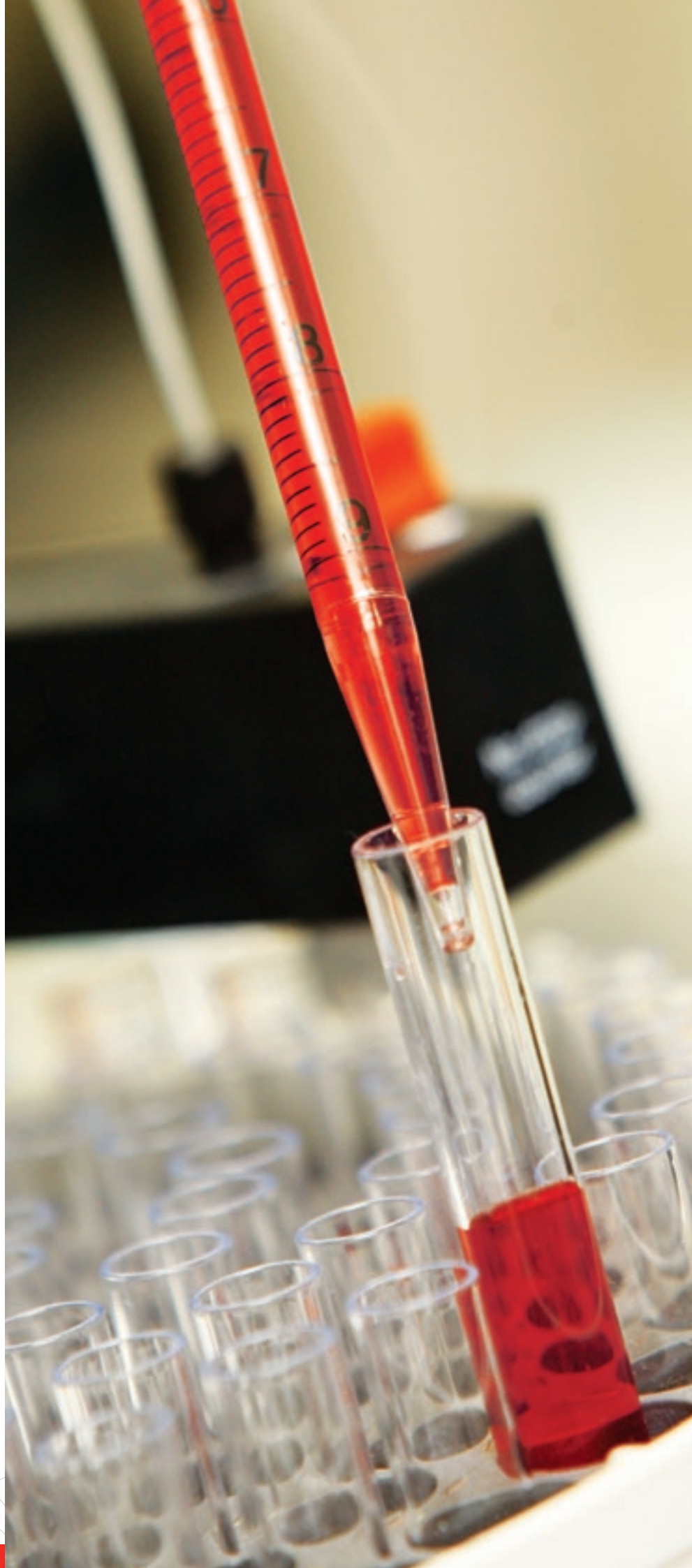
For many, the first indication of a cardiac problem is sudden heart attack or death. Through understanding the mechanisms involved in the development of these conditions, we are developing new tests and new treatments to prevent these events and address some major barriers to their prevention, detection and treatment. Our research in this area is highly focused on providing direct benefits to the many people living with heart disease and their families. Importantly, we are also striving to prevent sudden death and chronic disease in those millions of people who are currently symptomless, but for whom coronary heart disease, stroke and heart attack are on the horizon

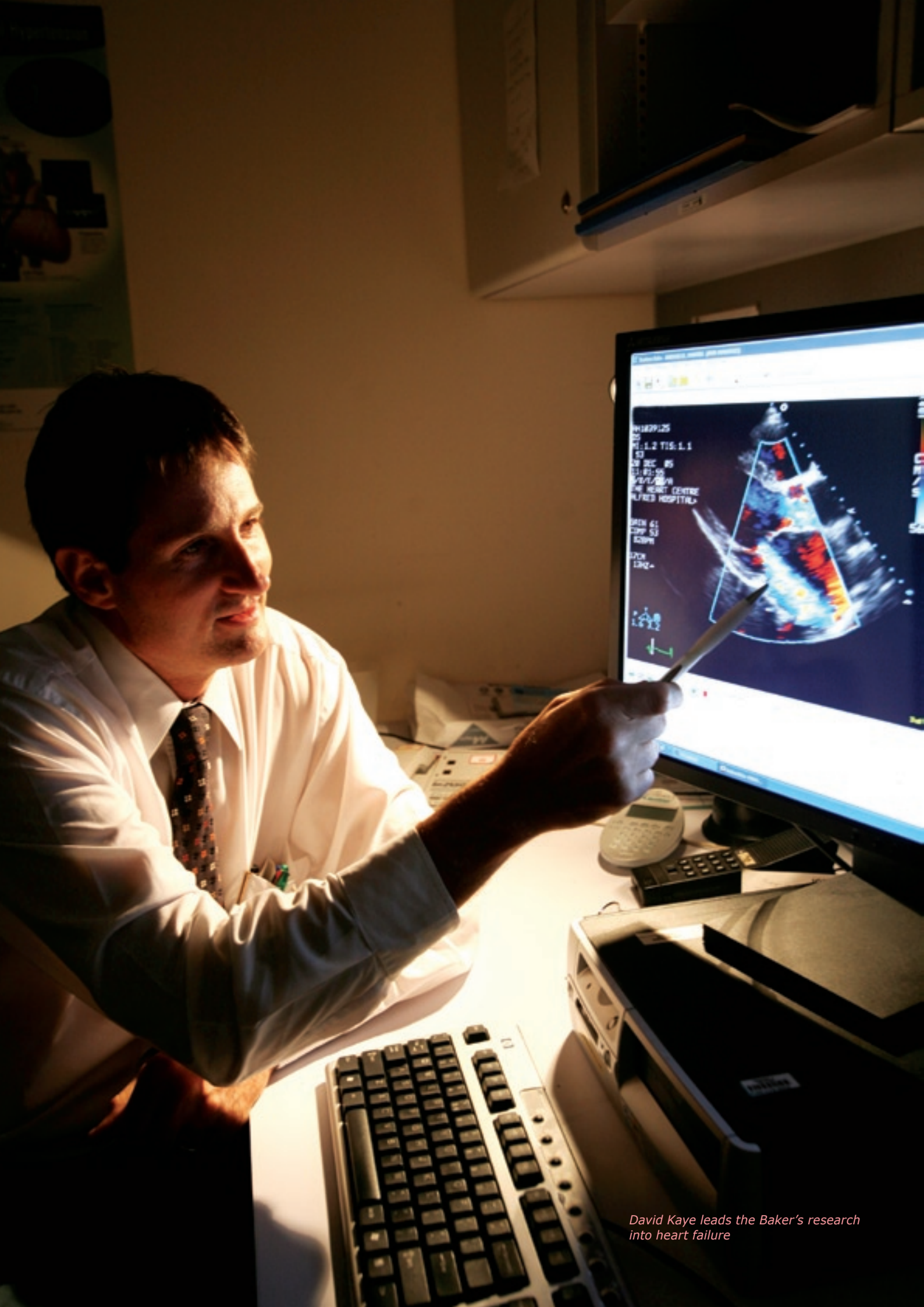
Murray Esler investigates the effects of stress on heart disease

Some research projects underway include:

- A specific cell type of the immune system, a regulatory T cell, has been shown by Baker scientists as important in controlling the development of atherosclerosis. This has important implications for the treatment of atherosclerosis and has the potential to be used in conjunction with other therapies to prevent the development of life-threatening lesions
- Marfan syndrome is a rare and devastating connective tissue disorder. Baker scientists are investigating the effects of ACE inhibitors in the treatment of this syndrome. Standard treatment to date has been beta blocker therapy, which has many side effects

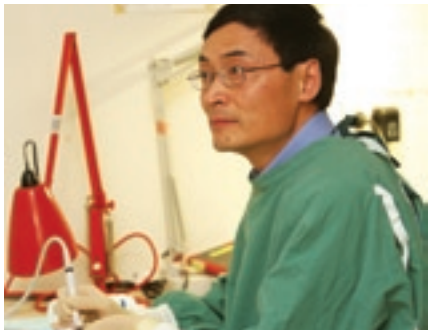
- Baker research has revealed that the protein selectin is a significant contributor to heart disease in its own right, and not merely an active biomarker. As such, drug treatments for disease indicated by its presence can focus on switching off the effects of this protein
- The development of better-targeted treatments for blood pressure regulation through ongoing studies of the renin-angiotensin system
- The development of a drug therapy that will halt the formation of atherosclerotic plaques by preventing changes in proteoglycans, protein molecules that exist in the blood vessel wall
- New surgical treatments for the problem of atrial fibrillation, an increasingly common condition where the chambers of the heart beat out of "sync"
- Understanding the pathway within the body responsible for removing cholesterol from the blood vessel wall, known as reverse cholesterol transport. Research focuses on the balance between the delivery of cholesterol to the blood and its removal
- The neural control of the cardiovascular system during the onset of obesity and other metabolic disorders, and the mechanisms that cause cardiovascular diseases through environmental factors influencing the central nervous system
- Investigation of the link between different forms of stress and heart disease, including the link between panic disorder and cardiovascular disease, and the effects on heart risk of two different types of treatment: cognitive behavioural therapy and selective serotonin reuptake inhibitor (SSRI) medication





David Kaye leads the Baker's research into heart failure

Heart Failure



Research aims to improve the ability of a failing heart to pump blood

Despite the alarming increase in its prevalence, heart failure is commonly misunderstood as "heart attack". In fact, heart failure is a debilitating, progressive condition that often begins as a response to injury of the heart muscle, for example after heart attack. Heart failure has devastating consequences for patients, representing a host of secondary conditions that result from the failing heart's inability to adequately pump blood around the body. As more people survive heart attack, the incidence of heart failure is rising. The quality of life for a person with heart failure is dramatically reduced – normal daily activities like walking to the letterbox or making a bed can be an unpleasant, difficult and exhausting experience. In many cases heart failure leads to slow death. Understanding why the heart fails, and who is at risk of the progression of this disease is crucial given the rates of cardiovascular disease here and around the world.

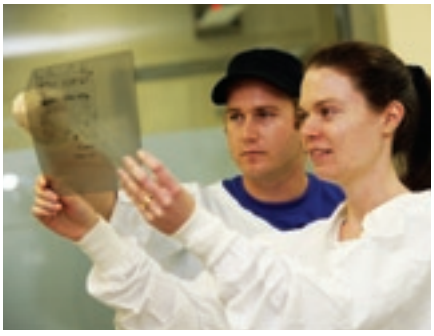
- It is currently estimated that heart failure affects 300,000 Australians
- Up to 30,000 new cases develop each year
- It is the third largest cause of death among the various forms of cardiovascular disease in Australia
- Heart failure is a major cause of disability in the elderly
- The condition represents one of the biggest causes of hospital bed stays and as such is a significant drain on health budgets, costing millions of dollars in home and hospital care

The broad work of the Baker's research into heart failure is centred on understanding the processes of heart failure in order to identify those who might be at risk of the condition and to halt its progression in those already suffering. In extreme cases, heart failure patients require transplant if they are to have any chance of survival. Investigations by Baker scientists range from efforts to improve the health of those who must undergo heart surgery to work on the cellular, molecular and genetic underpinnings of the progression from initial heart muscle damage to the condition of heart failure. Our scientists are hoping to not just treat heart failure better, but to cure it.

Our team has already made internationally renowned improvements to the understanding of heart failure and the treatment of those living with it. We are devoted to working on existing knowledge and building a better platform for scientists and clinicians to help those stricken with this condition, and the families who care for them. Under the Baker's community arm, the Preventative Cardiology Unit, we are tracking and mapping areas in Australia where heart failure is most concentrated and conducting an analysis of the availability of health care services. This is highlighting the absence of adequate services in some parts of Australia with the greatest need, and will ensure patients have their health concerns understood.

Some research projects underway include:

- Studies of the enlarged heart (cardiac hypertrophy) – why it is beneficial to athletes but a harmful development in heart failure
- Investigations of the effects of diabetes on the muscle of the heart, and how diabetes contributes to heart disease
- Studies of the effects of the hormone relaxin on fibrotic heart tissue, and how it might improve the ability of a failing heart to pump blood
- Better cardiac surgical techniques, including a novel, non-surgical method for mitral valve repair
- The design of therapies that may regenerate hearts that have failed and how the muscle might be rebuilt to make it function better
- The study of mechanisms whereby the heart responds to stimulation and how these processes contribute to heart disease
- Ways to eliminate the risk of rupture of the ventricular wall, a serious complication of heart attack that almost always leads to sudden death. Research focuses on why it occurs and which drug treatments might prevent it



Scientists hope to cure heart failure, not just treat it

Nucleus Network applies rigorous standards to clinical research

Phase I drug trials, where a new drug therapy is tested in a healthy volunteer, are an integral part of the pharmaceutical industry, and the only way that new therapies and treatments can be introduced into the health system.

Nucleus Network, located in the Burnet Tower in the Alfred Medical Research and Education Precinct (AMREP) is a centre for excellence in clinical research and one of Australia's leading Phase I clinical research facilities. This not-for-profit business, a wholly-owned subsidiary of the Baker, operates a 24-bed early phase clinical research unit, with significant expansion planned in 2007. It is here that new drugs and compounds are administered to healthy volunteers in a strictly controlled environment, attended to 24 hours a day by Nucleus Network's specially trained medical support staff. Volunteers are watched closely for any reactions and have blood samples, blood pressure and other vital signs taken and carefully recorded at regular intervals. The information gathered monitors and protects the volunteer's health and also provides crucial information about the therapy being trialled. These volunteer profiles inform the pharmaceutical company's understanding of the drug and are a vital part of its development.

In a very successful year for the company, 2006 saw Nucleus Network achieve increased financial stability through strong growth. Importantly, Nucleus has also enhanced its operations in a number of key ways:

- A greater depth of staff (a 50 per cent increase on 2005) has enabled the core business to support specialised areas such as a technical laboratory; volunteer recruitment, screening and medical support;
- The development of a new Quality Management System has boosted quality standards through the introduction of internal audits and vendor assessment programs;
- The implementation of a risk management system and risk register has given Nucleus the edge over its competitors by identifying all areas of possible risk and applying best practice quality standard procedures at the earliest stage in the cycle of trials, and
- A greater spread of customers across all operations means that no one client represents more than 17 per cent of revenue.

These rigorous standards and unparalleled quality of service to clients has resulted in repeat work from six of the top 10 global pharmaceutical companies. To accommodate this expansion, the company's employee headcount doubled in 2006 to 41 permanent staff in 2006, up from 20 in 2005. Eighty per cent of this growth was funded from business and contracts from lucrative off-shore customers. This growth in the overseas client base is significant as the local biotechnology sector in Australia is not sufficiently large enough to exclusively support a Phase I unit such as Nucleus. Importantly, however, this local industry continues to benefit from the experience and infrastructure Nucleus Network is developing through work with big, international pharmaceutical companies.

This company growth makes Nucleus, one of only four specialist Phase I research units in Australia, and the only one in Melbourne, a productive and profitable AMREP partner. To date, core business has brought over $1 million in contracts to the site and the company's growth and profit in 2006 was exponential. With the attention shown to the most important areas of the company – Nucleus Network's safety record and procedures are exceptional, as witnessed by strong repeat business – this healthy growth is expected to continue.

NN divisional highlights

Centre for Clinical Studies:

- CCS conducted 28 studies in 2006
- 42 ethics submissions were sent to the Alfred Research Ethics Committee in 2006, with 31 approved, one not approved, four studies did not proceed and nine approvals are pending
- International clients generated export revenues of more than $6 million. These clients include GSK, Roche, Merck, J&J, Sanofi-Aventis and and Pfizer
- Successful conduct of six first-in-man studies

Clinical Trials Consulting:

- Consulted to over 14 Australian and NZ biotechnology companies
- Seven of these consulting projects have led to trials planned or conducted in the CCS unit
- Staff doubled

Nucleus Network Education:

- Delivered 257 training days
- ACRP membership has grown to 339
- 26 Nucleus staff trained in Good Clinical Practice (GCP)
- 79 trained in Queensland through franchisee

Nucleus Network is an industry leader, following strict adherence to the highest standards of clinical research, conducted in accordance with international regulatory requirements and expectations. The company is also committed to best practice clinical research and regularly provides training for researchers and medical staff around the country who are involved in trials. In 2006, Nucleus Network subsidised GCP training for 150 students.

Phase I drug trials are the only way new treatments can be developed

Commercialisation

An important adjunct to the work of our scientists at the Baker is our commercialisation team. The commercialisation of research activities is one of the most effective ways we have of ensuring the knowledge and ideas developed by our scientific team improve the lives of people living with, and at risk of, cardiovascular disease. To do this successfully we need to ensure that laboratory findings are translated into good results for patients.

MEDICAL RESEARCH COMMERCIALISATION FUND

Begun in 2006 and finalised in 2007, the Baker's commercialisation arm established Australia's first Medical Research Commercialisation Fund (MRCF). This unique venture, which represents many of the nation's leading medical research institutes, is supported by state-run superannuation firms and the Victorian and NSW governments and will provide critical funding to early stage medical research in Australia.

The $30 million dollar venture capital fund aims to fill the shortfall in development dollars for early-stage medical innovations and comes as a boost to our medical research community.

MRCF founder, Baker commercialisation director Chris Nave, says the biggest obstacle to commercialisation of good ideas is the lack of a mature Australian venture capital industry. The new fund will go a long way to overcoming that obstacle.

The MRCF will allow good ideas with commercial potential time to come to fruition by providing crucial early support. The fund will put a $2 million cap on individual investments, and seek to create separate companies from the more promising research ideas that would then have the funding to conduct their own phase-II clinical trials.

V-KARDIA

V-Kardia Pty Ltd, and its US operation, Osprey Medical, Inc, are medical device companies dedicated to the development of V-Focus™, a new, minimally invasive, percutaneous (delivered through the skin) system that offers a radically new and improved treatment for heart failure patients. This innovation overcomes a major problem with heart disease therapies: it allows drugs to be delivered directly to the heart, with little leakage around the rest of the body. The first disease targeted for this new therapy is heart failure. This progressive disease, where the ailing heart cannot pump blood to meet the requirements of the body, can be a consequence of all forms of serious heart disease. This new therapy, developed by a team of Baker scientists led by David Kaye and John Power has been designed to overcome the problem of systemic leakage associated with traditional delivery of drugs intended for the heart. It has potential applications beyond heart failure, and clinical trials are expected to be underway this year.

David Kaye has developed a new treatment for heart failure

V-Kardia has recently attracted $5 million of equity financing with Brisbane-based CM Capital Investments to further develop this exciting technology.

Other commercialisation highlights:

- The Baker commercialisation team now represents Bayside Health (The Alfred Hospital) in their commercial endeavours. Assistance ranges from advice on IP protection strategies to commercial negotiations
- More than 20 material transfer agreements have enabled Baker scientists to gain access to a range of compounds for in vitro and in vivo studies, and has fostered collaborations with other research organisations globally
- New collaborative commercial agreements have been entered into with companies Starpharma, Cytopia and MiniFab. Collaborations with George Washington University, the University of South Carolina, Roche Pharmaceutical, Johnson & Johnson, Pfizer and Speedel are continuing
- Nucleus Network has considerable expanded its operations under the strategic guidance of the Baker's commercialisation team
- Income was received from 15 newly executed research contracts in 2006
- Total consolidated revenue now $17.8 million

V-Focus™ allows drugs to be delivered directly to the heart

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Paul Nestel	
Kerin O'Dea	

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Elizabeth Dewar	ABMU Manager
Jenny Starr	Client Services Manager
Sally Kay	Nurse
James Shaw	Research Fellow
Chiew Wong	Senior Research Officer
Nina Bose	Research Assistant

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Dorina Heng	Administration Assistant
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Jessele Vinluan	Administration Assistant
Stefanie Nagendirarajah	Research Assistant
Robyn Berry	Research Nurse
Susan Montgomery	Research Nurse
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Virginia Cable	Casual Research Nurse
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Steffen Eisenhardt	Research Officer
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Nicole Bassler	Research Assistant
Yung Chih Chen	Technical Assistant

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Nicole Pelaez	Research Assistant

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Janelle Mollica	Research Assistant
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Josefa Pete	Research Assistant
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Maryann Arnstein	Technical Officer
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Sally Penfold	Research Assistant
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Karen Oliva	Research Assistant
Gillian Barker	Research Assistant

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Renee Dutton	Business Development Manager
Zoe Kristall	Business Development Associate
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Students

Name	Supervisor
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Oliver Vasilevski	Liz Woodcock
David Barton	Murray Esler
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Anna Ahimastos	Bronwyn Kingwell
Jessica Chellappah	Chris Reid
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Jason Chung	Mark Febbraio
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Ratana Lim	Gregory Rice
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Kelly Yen-Yon To	Alex Bobik
Yugang (William) Tu	Mark Cooper
Yie Chee Yuen	Mark Febbraio

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Sheng Chen	Karlheinz Peter
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Sacha Khong	Melissa Byrne

Publication Listing 2006

Journal Articles

1. Adams DJ, Head GA, Markus MA, Lovicu FJ, van der Weyden L, Kontgen F, Arends MJ, Thiru S, Mayorov DN, Morris BJ. Renin enhancer is critical for control of renin gene expression and cardiovascular function. J Biol Chem 2006;281(42):31753-61.

2. Ahimastos AA, Lawler A, Reid CM, Blombery PA, Kingwell BA. Ramipril markedly improves walking ability in patients with peripheral arterial disease. Ann Intern Med 2006;144(9):660-4.

3. Ahrens IG, Moran N, Aylward K, Meade G, Moser M, Assefa D, Fitzgerald DJ, Bode C, Peter K. Evidence for a differential functional regulation of the two β3-integrins αVβ3 and αIIbβ3. Exp Cell Res 2006;312(6):925-37.

4. Ajani AE, Szto G, Duffy SJ, Eccleston D, Clark DJ, Lefkovits J, Chew DP, Warren R, Black A, New G, Walton A, Lew R, Shaw J, Horrigan M, Sebastian M, Yan BP, Brennan A, Meehan A, Reid C, Krum H; Melbourne Interventional Group investigators. The foundation and launch of the Melbourne Interventional Group: a collaborative interventional cardiology project. Heart Lung Circ 2006;15(1):44-7.

5. Allen AM, Dosanjh J, Dassanayake S, Tan G, Thomas WG. Baroreceptor reflex stimulation does not induce cytomegalovirus promoter-driven transgene expression in the ventrolateral medulla in vivo. Auton Neurosci-Basic Clin 2006;126-127(1-2):150-5.

6. Allen AM, Dosanjh JK, Erac M, Dassanayake S, Hannan RD, Thomas WG. Expression of constitutively active angiotensin receptors in the rostral ventrolateral medulla increases blood pressure. Hypertension 2006;47(6):1054-61.

7. Allen T, Zhang F, Moodie SA, Clemens LE, Smith A, Gregoire F, Bell A, Muscat GEO, Gustafson TA. Halofenate is a selective peroxisome proliferator–activated receptor γ modulator with antidiabetic activity. Diabetes 2006;55(9):2523-33.

8. Alvarenga ME, Richards JC, Lambert G, Esler MD. Psychophysiological mechanisms in panic disorder: a correlative analysis of noradrenaline spillover, neuronal noradrenaline reuptake, power spectral analysis of heart rate variability, and psychological variables. Psychosom Med 2006;68(1):8-16.

9. Amira C, Ntyintyane L, Wilkinson D, Stewart S, Becker A, Libhaber E, Silwa K. Emerging epidemic of cardiovascular disease among urban Africans: acute coronary syndrome at Baragwanath Hospital, Soweto. SA Heart 2006;3(4):7-12.

10. Battaglia S, Angus P, Chin-Dusting JPF. Role of the endothelium on vasoactive agents in patients with liver cirrhosis. J Gastroenterol Hepatol 2006;21(7):1189-93.

11. Bhatt DL, Steg PG, Ohman EM, Hirsch AT, Ikeda Y, Mas JL, Goto S, Liau CS, Richard AJ, Rother J, Wilson PW; REACH Registry Investigators. International prevalence, recognition, and treatment of cardiovascular risk factors in outpatients with atherothrombosis. JAMA 2006;295(2):180-9.

12. Bisping E, Ikeda S, Kong SW, Tarnavski O, Bodyak N, McMullen JR, Rajagopal S, Son JK, Ma Q, Springer Z, Kang PM, Izumo S, Pu WT. Gata4 is required for maintenance of postnatal cardiac function and protection from pressure overload-induced heart failure. Proc Natl Acad Sci USA 2006;103(39):14471-6.

13. Bobik A. Transforming growth factor-βs and vascular disorders. Arterioscler Thromb Vasc Biol 2006;26(8):1712-20.

14. Bukrinsky M, Sviridov D. Human immunodeficiency virus infection and macrophage cholesterol metabolism. J Leukoc Biol 2006;80(5):1044-51.

15. Burns WC, Twigg SM, Forbes JM, Pete J, Tikellis C, Thallas-Bonke V, Thomas MC, Cooper ME, Kantharidis P. Connective tissue growth factor plays an important role in advanced glycation end product-induced tubular epithelial-to-mesenchymal transition: implications for diabetic renal disease. J Am Soc Nephrol 2006;17(9):2484-94.

16. Calkin AC, Allen TJ. Diabetes mellitus-associated atherosclerosis: mechanisms involved and potential for pharmacological invention. Am J Cardiovasc Drugs 2006;6(1):15-40.

17. Calkin AC, Cooper ME, Jandeleit-Dahm KA, Allen TJ. Gemfibrozil decreases atherosclerosis in experimental diabetes in association with a reduction in oxidative stress and inflammation. Diabetologia 2006;49(4):766-74.

18. Calkin AC, Giunti S, Jandeleit-Dahm KA, Allen TJ, Cooper ME, Thomas MC. PPAR-α and γ agonists attenuate diabetic kidney disease in the apolipoprotein E knockout mouse. Nephrol Dial Transplant 2006;21(9):2399-405.

19. Capewell S, Murphy NF, MacIntyre K, Frame S, Stewart S, Chalmers JW, Boyd J, Finlayson A, Redpath A, McMurray JJ. Short-term and long-term outcomes in 133,429 emergency patients admitted with angina or myocardial infarction in Scotland, 1990-2000: population-based cohort study. Heart 2006;92(11):1563-70.

20. Carey AL, Petersen EW, Bruce CR, Southgate RJ, Pilegaard H, Hawley JA, Pedersen BK, Febbraio MA. Discordant gene expression in skeletal muscle and adipose tissue of patients with Type 2 diabetes: effect of interleukin-6 infusion. Diabetologia 2006;49(5):1000-7.

21. Carey AL, Steinberg GR, Macaulay SL, Thomas WG, Holmes AG, Ramm G, Prelovsek O, Hohnen-Behrens C, Watt MJ, James DE, Kemp BE, Petersen BK, Febbraio MA. Interleukin-6 increases insulin-stimulated glucose disposal in humans and glucose uptake and fatty acid oxidation in vitro via AMP-activated protein kinase. Diabetes 2006;55(10):2688-97.

22. Chan HW, Jenkins A, Pipolo L, Hannan RD, Thomas WG, Smith NJ. Effect of dominant-negative epidermal growth factor receptors on cardiomyocyte hypertrophy. J Recept Signal Transduct Res 2006;26(5-6):659-77.

23. Chan HW, Smith NJ, Hannan RD, Thomas WG. Tackling the EGFR in pathological tissue remodelling. Pulm Pharmacol Ther 2006;19(1):74-8.

24. Chin-Dusting J, Shennan J, Jones E, Williams C, Kingwell BA, Dart AM. Effect of dietary supplementation with β-casein A1 or A2 on markers of disease development in persons at high risk of cardiovascular disease. Br J Nutr 2006;95(1):136-44.

25. Clark RA, Yallop J, Wickett D, Krum H, Tonkin A, Stewart S. Nursing sans frontières: a three year case study of multi-state registration to support nursing practice using information technology. Aust J Adv Nurs 2006;24(1):39-45.

26. Cooper ME. Is diabetic nephropathy disappearing from clinical practice? Pediatr Diabetes 2006;7(5):237-8.

27. Cooper ME, Tikellis C, Thomas MC. Preventing diabetes in patients with hypertension: one more reason to block the renin-angiotensin system. J Hypertens Suppl 2006;24(1):S57-63.

28. Dart AM, Gatzka CD, Kingwell B. Letter by Dart et al regarding article, "Differential impact of blood pressure-lowering drugs on central aortic pressure and clinical outcomes: principal results of the Conduit Artery Function Evaluation (CAFE) study". Circulation 2006;114(15):e537.

29. Dart AM, Gatzka CD, Kingwell BA, Jennings GL. Response to brachial and central arterial pressure. Hypertension 2006;48(1):e2.

30. Dart AM, Gatzka CD, Kingwell BA, Willson K, Cameron JD, Liang Yu-Lu, Berry KL, Wing LMH, Reid CM, Ryan P, Beilin LJ, Jennings GLR, Johnston CI, McNeil JJ, MacDonald GJ, Morgan TO, West MJ. Brachial blood pressure but not central arterial waveforms predict future cardiovascular events in elderly female hypertensives. Hypertension 2006;47(4):785-90.

31. Dawson M, Mariani JA, Koulouris G, Taylor AJ, Avery S. The successful treatment of primary cardiac lymphoma with a dose dense schedule of rituximab-plus-CHOP. Ann Oncol 2006;17(1):176-7.

32. de Dios ST, O'Brien RC, Little PJ. Clinical thiazolidinediones as PPARγ ligands with the potential for the prevention of cardiovascular disease in diabetes. Curr Diab Rev 2006;2(2):227-39.

33. de Haan JB, Witting PK, Stefanovic N, Pete J, Daskalakis M, Kola I, Stocker R, Smolich JJ. Lack of the antioxidant glutathione peroxidase-1 does not increase atherosclerosis in C57BL/J6 mice fed a high-fat diet. J Lipid Res 2006;47(6):1157-67.

34. De Matteo R, Head GA, Mayorov DN. Angiotensin II in dorsomedial hypothalamus modulates cardiovascular arousal caused by stress but not feeding in rabbits. Am J Physiol Regul Integr Comp Physiol 2006;290(1):R257-64.

35. De Matteo R, Head GA, Mayorov DN. Tempol in the dorsomedial hypothalamus attenuates the hypertensive response to stress in rabbits. Am J Hypertens 2006;19(4):396-402.

36. de Zeeuw D, Lewis EJ, Remuzzi G, Brenner BM, Cooper ME. Renoprotective effects of renin-angiotensin-system inhibitors. Lancet 2006;367(9514):899-900.

37. Di Nicolantonio R, Kostkal V, Kwitek A, Jacob H, Thomas WG, Harrap SB. Fine mapping of Lvm1: a quantitative trait locus controlling heart size independently of blood pressure. Pulm Pharmacol Ther 2006;19(1):70-3.

38. Ditiatkovski M, Toh BH, Bobik A. GM-CSF deficiency reduces macrophage PPAR-γ expression and aggravates atherosclerosis in ApoE-deficient mice. Arterioscler Thromb Vasc Biol 2006;26(10):2337-44.

39. Douglas G, Armitage JA, Taylor PD, Lawson JR, Mann GE, Poston L. Cardiovascular consequences of life-long exposure to dietary isoflavones in the rat. J Physiol 2006;571(2):477-87.

40. Driscoll A, Worrall-Carter L, McLennan S, Dawson A, O'Reilly J, Stewart S. Heterogeneity of heart failure management programs in Australia. Eur J Cardiovasc Nurs 2006;5(1):75-82.

41. Driscoll A, Worrall-Carter L, Stewart S. Rationale and design of the National Benchmarking and Evidence-based National Clinical Guidelines for Chronic Heart Failure Management Programs Study. J Cardiovasc Nurs 2006;21(4):276-82.

42. Du XJ, Fang L, Kiriazis H. Sex dimorphism in cardiac pathophysiology: experimental findings, hormonal mechanisms, and molecular mechanisms. Pharmacol Ther 2006;111(2):434-75.

43. Du XJ, Gao XM, Kiriazis H, Moore XL, Ming Z, Su Y, Finch AM, Hannan RA, Dart AM, Graham RM. Transgenic α1A-adrenergic activation limits post-infarct ventricular remodeling and dysfunction and improves survival. Cardiovasc Res 2006;71(4):735-43.

44. Duffy SJ, Federman J, Farrington C, Reuter DG, Richardson M, Kaye DM. Feasibility and short-term efficacy of percutaneous mitral annular reduction for the therapy of functional mitral regurgitation in patients with heart failure. Catheter Cardivasc Interv 2006;68(2):205-10.

45. Earley MJ, Showkathali R, Alzetani M, Kistler PM, Gupta D, Abrams DJ, Horrocks JA, Harris SJ, Sporton SC, Schilling RJ. Radiofrequency ablation of arrhythmias guided by non-fluoroscopic catheter location: a prospective randomized trial. Eur Heart J 2006;27(10):1223-9.

46. Eckert KA, Wilkinson D, Taylor AW, Stewart S, Tucker GR. A population view of mental illness in South Australia: broader issues than location. Rural Remote Health 2006;6(2):541.

47. Eikelis N, Esler M, Barton D, Dawood T, Wiesner G, Lambert G. Reduced brain leptin in patients with major depressive disorder and in suicide victims. Mol Psychiatr 2006;11(9):800-1.

48. El-Osta, A. Mechanisms of abnormal gene expression in tumor cells. EXS 2006;96:351-61.

49. Esler M, Alvarenga M, Pier C, Richards J, El-Osta A, Barton D, Haikerwal D, Kaye D, Schlaich M, Guo L, Jennings G, Socratous F, Lambert G. The neuronal noradrenaline transporter, anxiety and cardiovascular disease. J Psychopharmacol 2006;20(4 Suppl):60-6.

50. Esler M, Eikelis N. Is obstructive sleep apnea the cause of sympathetic nervous activation in human obesity? J Appl Physiol 2006;100(1):11-2.

51. Esler M, Kaye D. Sympathetic nervous system neuroplasticity. Hypertension 2006;47(2):143-4.

52. Esler M, Straznicky N, Eikelis N, Masuo K, Lambert G, Lambert E. Mechanisms of sympathetic activation in obesity-related hypertension. Hypertension 2006;48(5):787-96.

53. Esler M, Wiesner G. Development of the metabolic syndrome along the female biological life-path. J Hypertens 2006;24(1):43-5.

54. Farrell MJ, Egan GF, Zamarripa F, Shade R, Blair-West J, Fox P, Denton DA. Unique, common, and interacting cortical correlates of thirst and pain. Proc Natl Acad Sci USA 2006;103(7):2416-21.

55. Fischer CP, Hiscock NJ, Basu S, Vessby B, Kallner A, Sjoberg LB, Febbraio MA, Pedersen BK. Vitamin E isoform-specific inhibition of the exercise-induced heat shock protein 72 expression in humans. J Appl Physiol 2006;100(5):1679-87.

56. Gallicchio MA, McRobert A, Tikoo A, Cooper ME, Bach LA. Advanced glycation end products inhibit tubulogenesis and migration of kidney epithelial cells in an ezrin-dependent manner. J Am Soc Nephrol 2006;17(2):414-21.

57. Gao XM, Wong G, Wang B, Kiriazis H, Moore XM, Su YD, Dart AM, Du XJ. Inhibition of mTOR reduces chronic pressure-overload cardiac hypertrophy and fibrosis. J Hypertens 2006;24(8):1663-70.

58. Garbrecht MR, Krozowski ZS, Snyder JM, Schmidt TJ. Reduction of glucocorticoid receptor ligand binding by the 11-β hydroxysteroid dehydrogenase type 2 inhibitor, Thiram. Steroids 2006;71(10):895-901.

59. Garbrecht MR, Schmidt TJ, Krozowski ZS, Snyder JM. 11β-Hydroxysteroid dehydrogenase type 2 and the regulation of surfactant protein A by dexamethasone metabolites. Am J Physiol Endocrinol Metab 2006;290(4):E653-60.

60. Garreffa AM, Woodman OL, Cao AH, Ritchie RH. Sodium nitroprusside protects adult rat cardiac myocytes from cellular injury induced by simulated ischemia: role for a non-cGMP-dependent mechanism of nitric oxide protection. J Cardiovasc Pharmacol 2006;47(1):1-8.

61. Giunti S, Barit D, Cooper ME. Diabetic nephropathy: from mechanisms to rational therapies. Minerva Med 2006;97(3):241-62.

62. Giunti S, Barit D, Cooper ME. Mechanisms of diabetic nephropathy: role of hypertension. Hypertension 2006;48(4):519-26.

63. Giunti S, Cooper M. Management strategies for patients with hypertension and diabetes: why combination therapy is critical. J Clin Hypertens 2006;8(2):108-13.

64. Gordon MV, Calkin AC. Vildagliptin: a viewpoint by Michelle V. Gordon and Anna C. Calkin. Drugs 2006;66(15):2002-4.

65. Gosbell AD, Stefanovic N, Scurr LL, Pete J, Kola I, Favilla I, de Haan JB. Retinal light damage: structural and functional effects of the antioxidant glutathione peroxidase-1. Invest Ophthalmol Vis Sci 2006;47(6):2613-22.

Publication Listing (continued)

66. Gould PA, D'Agostino J, Schneider HG, Kaye DM. Influence of atrial fibrillation on cardiac brain natriuretic peptide release during haemodynamic stress in heart failure. Eur J Heart Fail 2006;8(3):263-9.

67. Gould PA, Mariani JA, Kaye DM. Biventricular pacing in heart failure: a review. Expert Rev Cardiovasc Ther 2006;4(1):97-109.

68. Gould PA, Yii M, McLean C, Finch S, Marshall T, Lambert GW, Kaye DM. Evidence for increased atrial sympathetic innervation in persistent human atrial fibrillation. Pacing Clin Electrophysiol 2006;29(8):821-9.

69. Gupta D, Al-Lamee RK, Earley MJ, Kistler P, Harris SJ, Nathan AW, Sporton SC, Schilling RJ. Cryoablation compared with radiofrequency ablation for atrioventricular nodal re-entrant tachycardia: analysis of factors contributing to acute and follow-up outcome. Europace 2006;8(12):1022-6.

70. Hadj A, Esmore D, Rowland M, Pepe S, Schneider L, Lewin J, Rosenfeldt F. Pre-operative preparation for cardiac surgery utilising a combination of metabolic, physical and mental therapy. Heart Lung Circ 2006;15(3):172-81.

71. Harikrishnan KN, Pal S, Yarski M, Baker EK, Chow MZ, de Silva MG, Okabe J, Wang L, Jones PL, Sif S, El-Osta A. Reply to "Testing for association between MeCP2 and the brahma-associated SWI/SNF chromatin-remodeling complex". Nat Genet 2006;38(9):964-7.

72. Harris D, Thomas M, Johnson D, Nicholls K, Gillin A; CARI. The CARI guidelines. Prevention of progression of kidney disease. Nephrology 2006;11 Suppl 1:S2-197.

73. Head GA, Mayorov DN. Imidazoline receptors, novel agents and therapeutic potential. Cardiovasc Hematol Agents Med Chem 2006;4(1):17-32.

74. Head GA, Reid CM, Shiel LM, Jennings GL, Lukoshkova EV. Rate of morning increase in blood pressure is elevated in hypertensives. Am J Hypertens 2006;19(10):1010-7.

75. Hengel CL, Russell PA, Gould PA, Kaye DM. Subacute anthracycline cardiotoxicity. Heart Lung Circ 2006;15(1):59-61.

76. Henschke P, Vorum H, Honore B, Rice GE. Protein profiling the effects of in vitro hyperoxic exposure on fetal rabbit lung. Proteomics 2006;6(6):1957-62.

77. Hilton DJ, Reid CM, Paratz J. An under-used yet easily understood statistic: the number needed to treat (NNT). Physiotherapy 2006;92(4): 240-6.

78. Howes AL, Miyamoto S, Adams JW, Woodcock EA, Brown JH. Gαq expression activates EGFR and induces Akt mediated cardiomyocyte survival: dissociation from Gαq mediated hypertrophy. J Mol Cell Cardiol 2006;40(5):597-604.

79. Huynh NN, Chin-Dusting J. Amino acids, arginase and nitric oxide in vascular health. Clin Exp Pharmacol Physiol 2006;33(1-2):1-8.

80. Inglis S, Stewart S. Metabolic therapeutics in angina pectoris: history revisited with perhexiline. Eur J Cardiovasc Nurs 2006;5(2):175-84.

81. Inglis SC, Pearson S, Treen S, Gallasch T, Horowitz JD, Stewart S. Extending the horizon in chronic heart failure: effects of multidisciplinary, home-based intervention relative to usual care. Circulation 2006;114(23):2466-2473.

82. Jaarsma T, Stromberg A, De Geest S, Fridlund B, Heikkila J, Martensson J, Moons P, Scholte op Reimer W, Smith K, Stewart S, Thompson DR. Heart failure management programmes in Europe. Eur J Cardiovasc Nurs 2006;5(3):197-205.

83. Jandeleit-Dahm K. Does the risk of developing diabetes in hypertensive kidney disease vary with different antihypertensive agents? Nat Clin Pract Nephrol 2006;2(11):612-3.

84. Jandeleit-Dahm K, Cooper ME. Hypertension and diabetes: role of the renin-angiotensin system. Endocrinol Metab Clin North Am 2006;35(3):469-90.

85. Jandeleit-Dahm KA. Dual ACE/NEP inhibitors - more than playing the ACE card. J Hum Hypertens 2006;20(7):478-81.

86. Jennings G. Autonomic neuropathy and the heart. Diabetes Management 2006;14:16-7.

87. Joubert J, Reid C, Joubert L, Barton D, Ruth D, Jackson D, Sullivan JO, Davis SM. Risk factor management and depression post-stroke: the value of an integrated model of care. J Clin Neurosci 2006;13(1):84-90.

88. Kahri J, Soro-Paavonen A, Ehnholm C, Taskinen MR. ApoE polymorphism is associated with C-reactive protein in low-HDL family members and in normolipidemic subjects. Mediators Inflamm 2006;2006(3):12587.

89. Kalinina NI, Bobik A, Tkachuk VA. Participation of the DNA-binding cytokine amphoterine in triggering the processes of tissue reparation. Ross Fiziol Zh Im I M Sechenova 2006;92(1):39-48.

90. Kanellakis P, Slater NJ, Du XJ, Bobik A, Curtis DJ. Granulocyte colony-stimulating factor and stem cell factor improve endogenous repair after myocardial infarction. Cardiovasc Res 2006;70(1):117-25.

91. Karagiannis T, El-Osta A. Clinical potential of histone deacetylase inhibitors as stand alone therapeutics and in combination with other chemotherapeutics or radiotherapy for cancer. Epigenetics 2006;1(3):121-6.

92. Karagiannis TC, El-Osta A. Modulation of cellular radiation responses by histone deacetylase inhibitors. Oncogene 2006;25(28):3885-93.

93. Karagiannis TC, El-Osta A. The paradox of histone deacetylase inhibitor-mediated modulation of cellular responses to radiation. Cell Cycle 2006;5(3):288-95.

94. Karagiannis TC, Harikrishnan KN, El-Osta A. The epigenetic modifier, valproic acid, enhances radiation sensitivity. Epigenetics 2006;1(3):131-7.

95. Kawaguchi M, Masuo K, Katsuya T, Rakugi H, Ogihara T, Tuck ML. β2- and β3-adrenoceptor polymorphisms relate to subsequent weight gain and blood pressure elevation in obese normotensive individuals. Hypertens Res 2006;29(12):951-9.

96. Kaye DM, Esler MD. Letter by Kaye and Esler regarding article "Extracardiac progenitor cells repopulate most major cell types in the transplanted human heart". Circulation 2006;113(22):e844.

97. Kemp W, Chin-Dusting J. Selective intestinal decontamination in portal hypertension. Gastroenterol Hepatol 2006;2(1):64-7.

98. Kingwell BA, Anderson GP, Duckett SJ, Hoole EA, Jackson Pulver LR, Khachigian LM, Morris ME, Roder D, Rothell-Short J, Wilson AJ. Evaluation of NHMRC funded research completed in 1992, 1997 and 2003: gains in knowledge, health and wealth. Med J Aust 2006;184(6):282-6.

99. Kistler PM, Earley MJ, Harris S, Abrams D, Ellis S, Sporton SC, Schilling RJ. Validation of three-dimensional cardiac image integration: use of integrated CT image into electroanatomic mapping system to perform catheter ablation of atrial fibrillation. J Cardiovasc Electrophysiol 2006;17(4):341-8.

100. Kistler PM, Liew G, Mond HG. Long-term performance of active-fixation pacing leads: a prospective study. Pacing Clin Electrophysiol 2006;29(3):226-30.

101. Kistler PM, Rajappan K, Jahngir M, Earley MJ, Harris S, Abrams D, Gupta D, Liew R, Ellis S, Sporton SC, Schilling RJ. The impact of CT image integration into an electroanatomic mapping system on clinical outcomes of catheter ablation of atrial fibrillation. J Cardiovasc Electrophysiol 2006;17(10):1093-101.

102. Kistler PM, Roberts-Thomson KC, Haqqani HM, Fynn SP, Singarayar S, Vohra JK, Morton JB, Sparks PB, Kalman JM. P-wave morphology in focal atrial tachycardia: development of an algorithm to predict the anatomic site of origin. J Am Coll Cardiol 2006;48(5):1010-7.

103. Kistler PM, Sanders P, Dodic M, Spence SJ, Samuel CS, Zhao C, Charles JA, Edwards GA, Kalman JM. Atrial electrical and structural abnormalities in an ovine model of chronic blood pressure elevation after prenatal corticosteroid exposure: implications for development of atrial fibrillation. Eur Heart J 2006;27(24):3045-56.

104. Konstantakopoulos N, Montgomery KG, Chamberlain N, Quinn MA, Baker MS, Rice GE, Georgiou HM, Campbell IG. Changes in gene expressions elicited by physiological concentrations of genistein on human endometrial cancer cells. Mol Carcinog 2006;45(10):752-63.

105. Krum H, Jelinek M, Stewart S, Sindone A, Atherton J, Hawkes A on behalf of the National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand Chronic Heart Failure Clinical Practice Guidelines Expert Writing Panel. Guidelines for the prevention, detection and management of people with chronic heart failure in Australia 2006. Med J Aust 2006;185(10):549-57.

106. Krum H, Lambert E, Windebank E, Campbell DJ, Esler M. Effect of angiotensin II receptor blockade on autonomic nervous system function in patients with essential hypertension. Am J Physiol Heart Circul Physiol 2006;290(4):H1706-12.

107. Krum H, Stewart S. Chronic heart failure: time to recognize this major public health problem. Med J Aust 2006;184(4):147-8.

108. Kurokawa K, Chan JC, Cooper ME, Keane WF, Shahinfar S, Zhang Z. Renin angiotensin aldosterone system blockade and renal disease in patients with Type 2 diabetes: a subanalysis of Japanese patients from the RENAAL study. Clin Exp Nephrol 2006;10(3):193-200.

109. Lambert E, Hotchkin E, Alvarenga M, Pier C, Richards J, Barton D, Dawood T, Esler M, Lambert G. Single-unit analysis of sympathetic nervous discharges in patients with panic disorder. J Physiol 2006;570(3):637-43.

110. Lambert G, Elam M, Friberg P, Lundborg C, Gao S, Berquist J, Nitescu P. Acute response to intracisternal bupivacaine in patients with refractory pain of the head and neck. J Physiol 2006;570(2):421-8.

111. Lanzafame AA, Turnbull L, Amiramahdi F, Arthur JF, Huynh H, Woodcock EA. Inositol phospholipids localized to caveolae in rat heart are regulated by α1-adrenergic receptors and by ischemia/reperfusion. Am J Physiol Heart Circul Physiol 2006;290(5):H2059-65.

112. Lappas M, Permezel M, Rice GE. 15-deoxy-Δ12,14-prostaglandin J2 and troglitazone regulation of the release of phospholipid metabolites, inflammatory cytokines and proteases from human gestational tissues. Placenta 2006;27(11-12):1060-72.

113. Lappas M, Yee K, Permezel M, Rice GE. Lipopolysaccharide and TNF-α activate the nuclear factor kappa B pathway in the human placental JEG-3 cells. Placenta 2006;27(6-7):568-75.

114. Laskowski A, Woodman OL, Cao AH, Drummond GR, Marshall T, Kaye DM, Ritchie RH. Antioxidant actions contribute to the antihypertrophic effects of atrial natriuretic peptide in neonatal rat cardiomyocytes. Cardiovasc Res 2006;72(1):112-23.

115. Lee JS, Pinnamaneni SK, Eo SJ, Cho IH, Pyo JH, Kim CK, Sinclair AJ, Febbraio MA, Watt MJ. Saturated, but not n-6 polyunsaturated, fatty acids induce insulin resistance: role of intramuscular accumulation of lipid metabolites. J Appl Physiol 2006;100(5):1467-74.

116. Lekgabe ED, Royce SG, Hewitson TD, Tang ML, Zhao C, Moore XL, Tregear GW, Bathgate RA, Du XJ, Samuel CS. The effects of relaxin and estrogen deficiency on collagen deposition and hypertrophy of non-reproductive organs. Endocrinology 2006;147(12):5575-83.

117. Lenzen M, Scholte op Reimer W, Norekval TM, De Geest S, Fridlund B, Heikkila J, Jaarsma T, Martensson J, Moons P, Smith K, Stewart S, Stromberg A, Thompson DR, Wijns W. Pharmacological treatment and perceived health status during 1-year follow up in patients diagnosed with coronary artery disease, but ineligible for revascularization. Results from the Euro Heart Survey on Coronary Revascularization. Eur J Cardiovasc Nurs 2006;5(2):115-21.

118. Lessard SJ, Chen ZP, Watt MJ, Hashem M, Reid JJ, Febbraio MA, Kemp BE, Hawley JA. Chronic rosiglitazone treatment restores AMPKα2 activity in insulin-resistant rat skeletal muscle. Am J Physiol Endocrinol Metab 2006;290(2):E251-7.

119. Li D, Weisinger HS, Weisinger RS, Mathai M, Armitage JA, Vingrys AJ, Sinclair AJ. Omega 6 to omega 3 fatty acid imbalance early in life leads to persistent reductions in DHA levels in glycerophospholipids in rat hypothalamus even after long-term omega 3 fatty acid repletion. Prostaglandins Leukot Essent Fatty Acids 2006;74(6):391-9.

120. Lu J, Moochhala S, Moore XL, Ng KC, Tan MH, Lee LK, He B, Wong MC, Ling EA. Adult bone marrow cells differentiate into neural phenotypes and improve functional recovery in rats following traumatic brain injury. Neurosci Lett 2006;398(1-2):12-7.

121. MacIsaac RJ, Panagiotopoulos S, McNeil KJ, Smith TJ, Tsalamandris C, Hao H, Matthews PG, Thomas MC, Power DA, Jerums G. Is nonalbuminuric renal insufficiency in Type 2 diabetes related to an increase in intrarenal vascular disease? Diabetes Care 2006;29(7):1560-6.

122. MacIsaac RJ, Tsalamandris C, Thomas MC, Premaratne E, Panagiotopoulos S, Smith TJ, Poon A, Jenkins MA, Ratnaike SI, Power DA, Jerums G. Estimating glomerular filtration rate in diabetes: a comparison of cystatin-C- and creatinine-based methods. Diabetologia 2006;49(7):1686-9.

123. Mariani JA, Gould PA, Broughton A, Kaye DM. Cardiac resynchronisation therapy for heart failure. Intern Med J 2006;36(2):114-23.

124. Masedunskas A, King JA, Tan F, Cochran R, Stevens T, Sviridov D, Ofori-Acquah SF. Activated leukocyte cell adhesion molecule is a component of the endothelial junction involved in transendothelial monocyte migration. FEBS Lett 2006;580(11):2637-45.

125. Masuo K, Katsuya T, Kawaguchi H, Fu Y, Rakugi H, Ogihara T, Tuck ML. β2-Adrenoceptor polymorphisms relate to obesity through blunted leptin-mediated sympathetic activation. Am J Hypertens 2006;19(10):1084-91.

126. Mayorov DN. Does coffee reinforce the vascular inflammatory response to mental stress? J Hypertens 2006;24(11):2149-51.

127. McAllen RM, Farrell M, Johnson JM, Trevaks D, Cole L, McKinley MJ, Jackson G, Denton DA, Egan GF. Human medullary responses to cooling and rewarming the skin: a functional MRI study. Proc Natl Acad Sci USA 2006;103(3):809-13.

128. McConell GK, Kingwell BA. Does nitric oxide regulate skeletal muscle glucose uptake during exercise? Exerc Sport Sci Rev 2006;34(1):36-41.

129. McKinley MJ, Denton DA, Thomas CJ, Woods RL, Mathai ML. Differential effects of aging on fluid intake in response to hypovolemia, hypertonicity, and hormonal stimuli in Munich Wistar rats. Proc Natl Acad Sci USA 2006;103(9):3450-5.

130. McLennan SN, Pearson SA, Cameron J, Stewart S. Prognostic importance of cognitive impairment in chronic heart failure patients: does specialist management make a difference? Eur J Heart Fail 2006;8(5):494-501.

131. McMullen JR, Izumo S. Role of the insulin-like growth factor 1 (IGF1)/phosphoinositide-3-kinase (PI3K) pathway mediating physiological cardiac hypertrophy. Novartis Found Symp 2006;274:90-111.

132. McMurray JJ, Andersson FL, Stewart S, Svensson K, Solal AC, Dietz R, Vanhaecke J, van Veldhuisen DJ, Ostergren J, Granger CB, Yusuf S, Pfeffer MA, Swedberg K. Resource utilization and costs in the Candesartan in Heart failure: Assessment of Reduction in Mortality and morbidity (CHARM) programme. Eur Heart J 2006;27(12):1447-58.

133. Menshikov M, Torosyan N, Elizarova E, Plakida K, Vorotnikov A, Parfyonova Y, Stepanova V, Bobik A, Berk B, Tkachuk V. Urokinase induces matrix metalloproteinase-9/gelatinase B expression in THP-1 monocytes via ERK1/2 and cytosolic phospholipase A2 activation and eicosanoid production. J Vasc Res 2006;43(5):482-90.

134. Meyer RP, Hagemeyer CE, Knoth R, Kaufmann MR, Volk B. Anti-epileptic drug phenytoin enhances androgen metabolism and androgen receptor expression in murine hippocampus. J Neurochem 2006;96(2):460-72.

135. Moons P, Scholte op Reimer W, De Geest S, Fridlund B, Heikkila J, Jaarsma T, Martensson J, Smith K, Stewart S, Stromberg A, Thompson DR; Undertaking Nursing Interventions Throughout Europe Research Group. Nurse specialists in adult congenital heart disease: the current status in Europe. Eur J Cardiovasc Nurs 2006;5(1):60-7.

136. Morris JB, Huynh H, Vasilevski O, Woodcock EA. α1-Adrenergic receptor signaling is localized to caveolae in neonatal rat cardiomyocytes. J Mol Cell Cardiol 2006;41(1):17-25.

137. Mujawar Z, Rose H, Morrow MP, Pushkarsky T, Dubrovsky L, Mukhamedova N, Fu Y, Dart A, Orenstein JM, Bobryshev YV, Bukrinsky M, Sviridov D. Human Immunodeficiency Virus impairs reverse cholesterol transport from macrophages. PLoS Biol 2006;4(11):1970-83.

138. Murphy AJ, Sviridov D, Chin-Dusting JPF. Lipids and the endothelium: an update . Future Lipidol 2006;1(5):517-26.

139. Murphy NF, MacIntyre K, Stewart S, Hart CL, Hole D, McMurray JJ. Long-term cardiovascular consequences of obesity: 20-year follow-up of more than 15 000 middle-aged men and women (the Renfrew-Paisley study). Eur Heart J 2006;27(1):96-106.

140. Murphy NF, Stewart S, Hart CL, Macintyre KP, Hole D, McMurray JJ. A population study of the long-term consequences of Rose angina: 20 year follow-up of the Renfrew-Paisley study. Heart 2006;92(12):1739-46.

141. Naredi S, Lambert G, Friberg P, Zall S, Eden E, Rydenhag B, Tylman M, Bengtsson A. Sympathetic activation and inflammatory response in patients with subarachnoid haemorrhage. Intensive Care Med 2006;32(12):1955-61.

142. Nelson MR, Reid CM, Ryan P, Willson K, Yelland L. Self-reported adherence with medication and cardiovascular disease outcomes in the Second Australian National Blood Pressure Study (ANBP2). Med J Aust 2006;185(9):487-9.

143. Nestel P. Relationship between arterial stiffness and glucose metabolism in women with metabolic syndrome. Clin Exp Pharmacol Physiol 2006;33(9):883-6.

144. Nestel PJ, Fujii A, Allen T. The cis-9,trans-11 isomer of conjugated linoleic acid (CLA) lowers plasma triglyceride and raises HDL cholesterol concentrations but does not suppress aortic atherosclerosis in diabetic apoE-deficient mice. Atherosclerosis 2006;189(2):282-7.

145. Nigro J, Osman N, Dart AM, Little PJ. Insulin resistance and atherosclerosis. Endocr Rev 2006;27(3):242-59.

146. Ohman EM, Bhatt DL, Steg PG, Goto S, Hirsch AT, Liau CS, Mas JL, Richard AJ, Rother J, Wilson PW; REACH Registry Investigators. The REduction of Atherothrombosis for Continued Health (REACH) Registry: an international, prospective, observational investigation in subjects at risk for atherothrombotic events-study design. Am Heart J 2006;151(4):786.e1-10.

147. Oto T, Calderone A, Pepe S, Snell G, Rosenfeldt F. High-flow endobronchial cooled humidified air protects non-heart-beating donor rat lungs against warm ischemia. J Thorac Cardiovasc Surg 2006;132(2):413-9.

148. Owen AJ, Reid CM. Prevention and treatment of atherothrombosis: the role of primary care. Int Rev Throm 2006;1(3):45-52.

149. Palliser HK, Hirst JJ, Rice GE, Ooi GT, Dellios NL, Escalona RM, Young IR. Labor-associated regulation of prostaglandin E and F synthesis and action in the ovine amnion and cervix. J Soc Gynecol Investig 2006;13(1):19-24.

150. Pearson S, Inglis SC, McLennan SN, Brennan L, Russell M, Wilkinson D, Thompson DR, Stewart S. Prolonged effects of a home-based intervention in patients with chronic illness. Arch Intern Med 2006;166(6):645-50.

151. Pettersson-Fernholm K, Fröjdö S, Fagerudd J, Thomas MC, Forsblom C, Wessman M, Groop PH; FinnDiane Study Group. The AT2 gene may have a gender-specific effect on kidney function and pulse pressure in Type I diabetic patients. Kidney Int 2006;69(10):1880-4.

152. Pfleger KD, Dromey JR, Dalrymple MB, Lim EM, Thomas WG, Eidne KA. Extended bioluminescence resonance energy transfer (eBRET) for monitoring prolonged protein-protein interactions in live cells. Cell Signal 2006;18(10):1664-70.

153. Pinnamaneni SK, Southgate RJ, Febbraio MA, Watt MJ. Stearoyl CoA desaturase 1 is elevated in obesity but protects against fatty acid-induced skeletal muscle insulin resistance in vivo. Diabetologia 2006;49(12):3027-37.

154. Pittaway JK, Ahuja KD, Cehun M, Chronopoulos A, Robertson IK, Nestel PJ, Ball MJ. Dietary supplementation with chickpeas for at least 5 weeks results in small but significant reductions in serum total and low-density lipoprotein cholesterols in adult women and men. Ann Nutr Metab 2006;50(6):512-8.

155. Plekhanova OS, Stepanova VV, Ratner EI, Bobik A, Tkachuk VA, Parfyonova YV. Urokinase plasminogen activator in injured adventitia increases the number of myofibroblasts and augments early proliferation. J Vasc Res 2006;43(5):437-46.

156. Policha A, Daneshtalab N, Chen L, Dale LB, Altier C, Khosravani H, Thomas WG, Zamponi GW, Ferguson SS. Role of angiotensin II type 1A receptor phosphorylation, phospholipase D, and extracellular calcium in isoform-specific protein kinase C membrane translocation responses. J Biol Chem 2006;281(36):26340-9.

157. Prelovsek O, Mars T, Jevsek M, Podbregar M, Grubic Z. High dexamethasone concentration prevents stimulatory effects of TNF-α and LPS on IL-6 secretion from the precursors of human muscle regeneration. Am J Physiol Regul Integr Comp Physiol 2006;291(6): R1651-6.

158. Preovolos AC, Mennen MT, Bilney A, Mariani J, Kaye DM, Power JM. Development of a novel perfusion technique to allow targeted delivery of gene therapy--the V-Focus system. J Extra Corpor Technol 2006;38(1):51-2.

159. Raj T, Kanellakis P, Pomilio G, Jennings G, Bobik A, Agrotis A. Inhibition of fibroblast growth factor receptor attenuates atherosclerosis in apolipoprotein E-deficient mice. Arterioscler Thromb Vasc Biol 2006;26(8):1845-51.

160. Reid CM, Nelson MR. Optimising the management of hypertension. Med Prog 2006;33(6):278-81.

161. Rice GE, Georgiou HM, Ahmed N, Shi G, Kruppa G. Translational proteomics: developing a predictive capacity – A Review. Placenta 2006;27(Suppl A):S76-86.

162. Ritchie RH, Delbridge LM. Cardiac hypertrophy, substrate utilization and metabolic remodelling: cause or effect? Clin Exp Pharmacol Physiol 2006;33(1-2):159-66.

163. Ritchie RH, Zeitz CJ, Wuttke RD, Hii JTY, Horowitz JD. Attenuation of the negative inotropic effects of metoprolol at short cycle lengths in humans - comparison with sotalol and verapamil. J Am Coll Cardiol 2006;48(6):1234-41.

164. Roberts MA, Thomas MC, Fernando D, Macmillan N, Power DA, Ierino FL. Low molecular weight advanced glycation end products predict mortality in asymptomatic patients receiving chronic haemodialysis. Nephrol Dial Transplant 2006;21(6):1611-7.

165. Roberts-Thomson KC, Kistler PM, Kalman JM. Focal atrial tachycardia I: clinical features, diagnosis, mechanisms, and anatomic location. Pacing Clin Electrophysiol 2006;29(6):643-52.

166. Roberts-Thomson KC, Kistler PM, Kalman JM. Focal atrial tachycardia II: management. Pacing Clin Electrophysiol 2006;29(7):769-78.

167. Rose H, Woolley I, Hoy J, Dart A, Bryant B, Mijch A, Sviridov D. HIV infection and high-density lipoprotein: the effect of the disease vs the effect of treatment. Metabolism 2006;55(1):90-5.

168. Rosenfeldt F. Sir Brian Barratt-Boyes: a giant in cardiothoracic surgery in Australasia-will we see his like in the future? Heart Lung Circ 2006;15(5):289-90.

169. Rossing P, Cooper ME, Parving HH. Comparison of the effects of vitamins and/or mineral supplementation on glomerular and tubular dysfunction in Type 2 diabetes. Diabetes Care 2006;29(3):748.

170. Samuel CS, Du XJ, Bathgate RA, Summers RJ. 'Relaxin' the stiffened heart and arteries: the therapeutic potential for relaxin in the treatment of cardiovascular disease. Pharmacol Ther 2006;112(2):529-52.

171. Schäufele TG, Schlaich MP, Delles C, Klingbeil AU, Fleischmann EH, Schmieder RE. Impaired basal NO activity in patients with glomerular disease and the influence of oxidative stress. Kidney Int 2006;70(6):1177-81.

172. Schmidt BM, Sammer U, Fleischmann I, Schlaich M, Delles C, Schmieder RE. Rapid nongenomic effects of aldosterone on the renal vasculature in humans. Hypertension 2006;47(4):650-5.

173. Scholte op Reimer WJ, Moons P, De Geest S, Fridlund B, Heikkila J, Jaarsma T, Lenzen M, Martensson J, Norekval TM, Smith K, Stewart S, Stromberg A, Thompson DR. Cardiovascular risk estimation by professionally active cardiovascular nurses: results from the Basel 2005 Nurses Cohort. Eur J Cardiovasc Nurs 2006;5(4):258-63.

174. Schwarz M, Meade G, Stoll P, Ylanne J, Bassler N, Chen YC, Hagemeyer CE, Ahrens I, Moran N, Kenny D, Fitzgerald D, Bode C, Peter K. Conformation-specific blockade of the integrin GPIIb/IIIa. A novel antiplatelet strategy that selectively targets activated platelets. Circ Res 2006;99(1):25-33.

175. Shaw JA, White AJ, Reddy R, Duffy SJ, Walton AS, Kingwell BA, Dart AM. Evaluation of differences in coronary plaque mechanical behaviour in individuals with and without Type 2 diabetes mellitus. Arterioscler Thromb Vasc Biol 2006;26(12):2826-7.

176. Sheeran F, Pepe S. Energy deficiency in the failing heart: linking increased reactive oxygen species and disruption of oxidative phosphorylation rate. Biochim Biophys Acta Bioenergetics 2006;1757(5-6):543-52.

177. Smith NJ, Luttrell LM. Signal switching, crosstalk, and arrestin scaffolds: novel G protein-coupled receptor signaling in cardiovascular disease. Hypertension 2006;48(2):173-9.

178. Soldatos G, Cooper ME. Advanced glycation end products and vascular structure and function. Curr Hypertens Rep 2006;8(6):472-8.

179. Soro-Paavonen A, Forbes JM. Novel therapeutics for diabetic micro- and macrovascular complications. Curr Med Chem 2006;13(15):1777-88.

180. Soro-Paavonen A, Westerbacka J, Ehnholm C, Taskinen MR. Metabolic syndrome aggravates the increased endothelial activation and low-grade inflammation in subjects with familial low HDL. Ann Med 2006;38(3):229-38.

181. Srivastava PM, Thomas MC, Calafiore P, MacIsaac RJ, Jerums G, Burrell LM. Diastolic dysfunction is associated with anaemia in patients with Type II diabetes. Clin Sci 2006;110(1):109-16.

182. Steinberg GR, Macaulay SL, Febbraio MA, Kemp BE. AMPK-the fat controller of the energy railroad. Can J Physiol Pharmacol 2006;84(7):655-65.

183. Steinberg GR, Michell BJ, van Denderen BJ, Watt MJ, Carey AL, Fam BC, Andrikopoulos S, Proietto J, Gorgun CZ, Carling D, Hotamisligil GS, Febbraio MA, Kay TW, Kemp BE. Tumor necrosis factor α-induced skeletal muscle insulin resistance involves suppression of AMP-kinase signaling. Cell Metab 2006;4(6):465-74.

184. Steinberg GR, Watt MJ, Fam BC, Proietto J, Andrikopoulos S, Allen AM, Febbraio MA, Kemp BE. Ciliary neurotrophic factor suppresses hypothalamic AMP-kinase signaling in leptin-resistant obese mice. Endocrinology 2006;147(8):3906-14.

185. Steinberg GR, Watt MJ, McGee SL, Chan S, Hargreaves M, Febbraio MA, Stapleton D, Kemp BE. Reduced glycogen availability is associated with increased AMPKα2 activity, nuclear AMPKα2 protein abundance, and GLUT4 mRNA expression in contracting human skeletal muscle. Appl Physiol Nutr Metab 2006;31(3):302-12.

186. Stewart S. Review: multidisciplinary interventions reduce hospital admission and all cause mortality in heart failure. Evid Based Nurs 2006;9(1):23.

187. Stewart S. Review: routine changes of IV administration sets (not containing lipids or blood products) at intervals 96 hours do not affect infusate or catheter related bloodstream infection. Evid Based Nurs 2006;9(3):81.

188. Stewart S, McMurray JJ. Chilling findings: the need for winter vigilance in heart failure. J Card Fail 2006;12(2):120-1.

189. Stewart S, Murphy NF, McMurray JJ, Jhund P, Hart CL, Hole D. Effect of socioeconomic deprivation on the population risk of incident heart failure hospitalisation: an analysis of the Renfrew/Paisley Study. Eur J Heart Fail 2006;8(8):856-63.

190. Stewart S, Sliwa K. An African approach chronic heart failure management. SA Heart 2006;3(2):42-8.

191. Stewart S, Wilkinson D, Becker A, Askew D, Ntyintyane L, McMurray JJ, Sliwa K. Mapping the emergence of heart disease in a black, urban population in Africa: the Heart of Soweto Study. Int J Cardiol 2006;108(1):101-8.

192. Stocker R, Pollicino C, Gay CA, Nestel P, Colquhoun D, Whiting M, Tonkin A, Sullivan D, Simes J. Neither plasma coenzyme Q10 concentration, nor its decline during pravastatin therapy, is linked to recurrent cardiovascular disease events: a prospective case-control study from the LIPID study. Atherosclerosis 2006;187(1):198-204.

193. Sviridov D, Chin-Dusting J, Nestel P, Kingwell B, Hoang A, Olchawa B, Starr J, Dart A. Elevated HDL cholesterol is functionally inefficient in cardiac transplant recipitents; evidence for impaired reverse cholesterol transport. Transplantation 2006;81(3):361-6.

Publication Listing (continued)

194. Taylor AJ, Al-Saadi N, Abdel-Aty H, Schulz-Menger J, Messroghli DR, Gross M, Dietz R, Friedrich MG. Elective percutaneous coronary intervention acutely impairs resting microvascular perfusion assessed by cardiac magnetic resonance imaging. Am Heart J 2006;151(4):891.e1-7.

195. Thomas MC. The high prevalence of anemia in diabetes is linked to functional erythropoietin deficiency. Semin Nephrol 2006;26(4):275-82.

196. Thomas MC, Atkins RC. Blood pressure lowering for the prevention and treatment of diabetic kidney disease. Drugs 2006;66(17):2213-34.

197. Thomas MC, Cooper ME, Rossing K, Parving HH. Anaemia in diabetes: is there a rationale to TREAT? Diabetologia 2006;49(6):1151-7.

198. Thomas MC, Rosengård-Bärlund M, Mills V, Rönnback M, Thomas S, Forsblom C, Cooper ME, Taskinen MR, Viberti G, Groop PH. Serum lipids and the progression of nephropathy in Type 1 diabetes. Diabetes Care 2006;29(2):317-22.

199. Thomas MC, Tsalamandris C, MacIsaac R, Jerums G. Functional erythropoietin deficiency in patients with Type 2 diabetes and anaemia. Diabet Med 2006;23(5):502-9.

200. Thomas MC, Tsalamandris C, MacIsaac RJ, Jerums G. The epidemiology of hemoglobin levels in patients with Type 2 diabetes. Am J Kidney Dis 2006;48(4):537-45.

201. Thomas MC, Weekes AJ, Broadley OJ, Cooper ME. The assessment of kidney function by general practitioners in Australian patients with Type 2 diabetes (NEFRON-2). Med J Aust 2006;185(5):259-62.

202. Thomas MC, Weekes AJ, Broadley OJ, Cooper ME, Mathew TH. The burden of chronic kidney disease in Australian patients with Type 2 diabetes (the NEFRON study). Med J Aust 2006;185(3):140-4.

203. Thomas MC, Zimmet P, Shaw JE. Identification of obesity in patients with Type 2 diabetes from Australian primary care: the NEFRON-5 study. Diabetes Care 2006;29(12):2723-5.

204. Tikellis C, Cooper ME, Thomas MC. Role of the renin-angiotensin system in the endocrine pancreas: implications for the development of diabetes. Int J Biochem Cell Biol 2006;38(5-6):737-51.

205. Tikellis C, Thomas MC, Bialkowski K, Johnston CI, Burns WC, Lew RA, Smith AI, Cooper ME. Developmental expression of angiotensin converting enzyme 2 in the rodent kidney; a role in hypertension? Kidney Int 2006;70(1):34-41.

206. Turpin SM, Lancaster GI, Darby I, Febbraio MA, Watt MJ. Apoptosis in skeletal muscle myotubes is induced by ceramides and is positively related to insulin resistance. Am J Physiol Endocrinol Metab 2006;291(6): E1341-50.

207. van den Brink OW, Rowland MA, Marasco SF, Esmore DS, Rosenfeldt FL, Pepe S. Complex regional pain syndrome and methionine-enkephalin. Clin Chem 2006;52(3):535.

208. Van Doornum S, Jennings GLR, Wicks IP. Reducing the cardiovascular disease burden in rheumatoid arthritis. Med J Aust 2006;184(6):287-90.

209. Vaz Patto MC, Skiba B, Pang ECK, Ochatt SJ, Lambein F, Rubiales D. Lathyrus improvement for resistance against biotic and abiotic stresses: from classical breeding to marker assisted selection. Euphytica 2006;147(1-2):133-47.

210. von zur Muhlen C, Peter K, Spreer J, Beyersdorf F, Pache G, Bode C, Handke M. Evidence of a steal phenomenon by a thoracic side branch of an internal mammary artery bypass. J Vasc Interv Radiol 2006;17(10):1714-5.

211. Walker A, McMurray J, Stewart S, Berger W, McMahon AD, Dargie H, Fox K, Hillis S, Henderson NJK, Ford I. Economic evaluation of the impact of nicorandil in angina (IONA) trial. Heart 2006;92(5):619-24.

212. Watt MJ, Dzamko N, Thomas WG, Rose-John S, Ernst M, Carling D, Kemp BE, Febbraio MA, Steinberg GR. CNTF reverses obesity-induced insulin resistance by activating skeletal muscle AMPK. Nat Med 2006;12(5):541-8.

213. Watt MJ, Hevener A, Lancaster GI, Febbraio MA. Ciliary neurotrophic factor prevents acute lipid-induced insulin resistance by attenuating ceramide accumulation and phosphorylation of c-Jun N-terminal kinase in peripheral tissues. Endocrinology 2006;147(5):2077-85.

214. Watt MJ, Holmes AG, Pinnamaneni SK, Garnham AP, Steinberg GR, Kemp BE, Febbraio MA. Regulation of HSL serine phosphorylation in skeletal muscle and adipose tissue. Am J Physiol Endocrinol Metab 2006;290(3): E500-8.

215. Watt MJ, Steinberg GR, Chen ZP, Kemp BE, Febbraio MA. Fatty acids stimulate AMP-activated protein kinase and enhance fatty acid oxidation in L6 myotubes. J Physiol 2006;574(Pt 1):139-47.

216. Watts G, Chan D, Ooi E, Nestel P, Beilin Lj, Barrett P. Fish oils, phytosterols and weight loss in the regulation of lipoprotein transport in the metabolic syndrome: lessons from stable isotope tracer studies. Clin Exp Pharmacol Physiol 2006;33(9):877-82.

217. Williamson M, Woollard KJ, Griffiths HR, Coombes AG. Gravity spun polycaprolactone fibers for applications in vascular tissue engineering: proliferation and function of human vascular endothelial cells. Tissue Eng 2006;12(1):45-51.

218. Winkelmayer WC, Zhang Z, Shahinfar S, Cooper ME, Avorn J, Brenner BM. Efficacy and safety of angiotensin II receptor blockade in elderly patients with diabetes. Diabetes Care 2006;29(10):2210-7.

219. Wluka AE. Remember the titanic: what we know of knee osteoarthritis is but the tip of the iceberg. J Rheumatol 2006;33(11):2110-2.

220. Woollard KJ, Kling D, Kulkarni S, Dart AM, Jackson S, Chin-Dusting J. Raised plasma soluble P-selectin in peripheral arterial occlusive disease enhances leukocyte adhesion. Circ Res 2006;98(1):149-56.

221. Woollard KJ, Loryman CJ, Meredith E, Griffiths HR. α-Tocopherol supplementation does not affect monocyte endothelial adhesion or C-reactive protein levels but reduces soluble vascular adhesion molecule-1 in the plasma of healthy subjects. Redox Rep 2006;11(5):214-22.

222. Woollard KJ, Nesbitt W, Stugeon S, Harper I, Jackson S. Visualizing thrombus formation in vivo: current limitations and future prospects. Int Rev Throm 2006;1(1):34-42.

223. Xu Q, Xu N, Zhang T, Zhang H, Li Z, Yin F, Lu Z, Han Q, Zhang Y. Mammalian tolloid alters subcellular localization, internalization, and signaling of α1a-adrenergic receptors. Mol Pharmacol 2006;70(2):532-41.

224. Yallop J, Chan B, Piterman L, Tonkin A, Forbes A, Davidson PM, Clark R, Halcomb E, Nangle A, Stewart S, Croucher J, Krum H, on behalf of the CHAT Study Group. The Chronic Heart-failure Assistance by Telephone (CHAT) study: assessment of telephone support for vulnerable patients with chronic disease. Asia Pacific Family Medicine 2006;5(2):.

225. Yan BP, Ajani AE, Duffy SJ, New G, Horrigan M, Szto G, Walton A, Eccleston D, Lefkovits J, Black A, Sebastian M, Brennan AL, Reid CM, Clark DJ. Use of drug-eluting stents in Victorian public hospitals. Med J Aust 2006;185(7):363-7.

226. Yang Z, Kaye DM. Endothelial dysfunction and impaired L-arginine transport in hypertension and genetically predisposed normotensive subjects. Trends Cardiovasc Med 2006;16(4):118-24.

227. Yap CH, Reid C, Yii M, Rowland MA, Mohajeri M, Skillington PD, Seevanayagam S, Smith JA. Validation of the EuroSCORE model in Australia. Eur J Cardiothorac Surg 2006;29(4):441-6.

228. Yap KS, Gould P, Kalff V, Kaye DM, Esmore D, Kelly MJ. Evaluation of sympathetic re-innervation in heterotopic cardiac transplants by iodine-123-metaiodobenzylguanidine (I-123-MIBG) imaging. J Heart Lung Transplant 2006;25(8):977-80.

229. Zhang WZ, Kaye DM. Does arginase activity in vitro represent that in vivo? Hypertension 2006;48(4):E14.

230. Zhang WZ, Venardos K, Chin-Dusting J, Kaye DM. Adverse effects of cigarette smoke on NO bioavailability. Role of arginine metabolism and oxidative stress. Hypertension 2006;48(2):278-85.

231. Zhang WZ, Venardos K, Chin-Dusting J, Kaye DM. Response to cigarettes and ADMA: the smoke hasn't cleared yet. Hypertension 2006;48(4):E21.

232. Zimanyi MA, Denton KM, Forbes JM, Thallas-Bonke V, Thomas MC, Poon F, Black JM. Developmental nephron deficit is associated with increased susceptibility to secondary renal injury due to Advanced Glycation End-products (AGEs). Diabetologia 2006;49(4):801-10.

Books

233. Stewart S, Inglis S, Hawkes A. Chronic Cardiac Care: a Practical Guide to Specialist Nurse Management. 2006. Blackwell BMJ Books, USA.

Book Chapters

234. El-Osta A. Mechanisms of abnormal gene expression in tumor cells. In: Bignold LP (ed) Cancer: Cell Structures, Carcinogens and Genomic Stability. 2006. Birkhäuser Verlag, Germany. pp351-61.

235. Kingwell BA. Statins and arterial stiffness. In: Safar ME, O'Rourke ME (eds) Handbook of Hypertension: Arterial Stiffness in Hypertension, Vol 23. 2006. Elsevier, UK. pp559-66.

236. Kingwell BA, Cameron JD. Non-pharmacological treatment for increased arterial stiffness. In: Safar ME, O'Rourke ME (eds) Handbook of Hypertension: Arterial Stiffness in Hypertension, Vol 23. 2006. Elsevier, UK. pp567-80.

237. Lancaster GI, Febbraio MA. Exercise-induced increase in heat shock proteins - implications for metabolic diseases. In: Radons J, Multhoff G (eds) Heat Shock Proteins in Biology and Medicine. 2006. Research Signpost, India. pp295-303.

238. Rosenfeldt FL, Marasco S, Leong JY, Pepe S. Oxidative stress and coenzyme Q10 therapy. In: Singh KK (ed) Oxidative Stress, Disease and Cancer. 2006. Imperial College Press, UK.

239. Safar ME, Kass D, Asmar R, Kingwell BA. Basis for a de-stiffening strategy of antihypertensive drugs. In: Safar ME, O'Rourke ME (eds) Handbook of Hypertension: Arterial Stiffness in Hypertension, Vol 23. 2006. Elsevier, UK. pp527-36.