

# Health technology news

## A message from the Minister



It is with great pleasure that I present to you the first edition of Health Technology News. Investment in new health technologies is about ensuring patients in Victoria have access to the best treatment available and state-of-the-art technology. Victoria is proud of its leadership in this area, being the first state to develop a specific program for introducing new health technology and to have allocated funding to support the implementation of these initiatives. Since 1997-98, we have allocated an annual budget (currently \$9 million) to support the local

introduction and funding of new health technology. This program has encouraged the uptake and dissemination of new technology in the face of a range of clinical and cost pressures. I have been fortunate in assisting many of the health services launch their technological innovations through the last year. I am confident that this investment in state-of-the-art health technology gives Victorian public patients the opportunity to access the best treatment currently available. I look forward to an exciting and innovative 2009.

**Hon Daniel Andrews MP**  
**Minister for Health**

## Update on the Victorian Policy Advisory Committee on Clinical Practice and Technology (VPACT)

VPACT is a Department of Human Services committee that was established to enable a systematic approach to the introduction and use of new and existing technologies and clinical practices in Victorian public health services. This includes identifying, prioritising, introducing, evaluating and ongoing monitoring of health technologies and clinical practices.

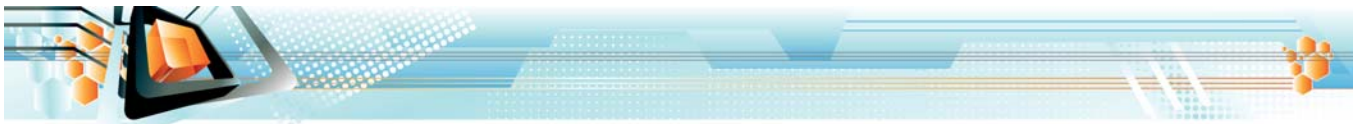
VPACT has had a busy year with a full funding round and several cost benefit studies underway.

VPACT has an important advisory role and, as such is important that evaluation following its introduction is undertaken. The aim of the evaluation is to strengthen the role and capabilities of VPACT to ensure that Victoria stays at the cutting edge in this area. This will include a revision of the terms of reference and governance of VPACT in consultation with health services.

## January 2009

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## VPACT Committee members

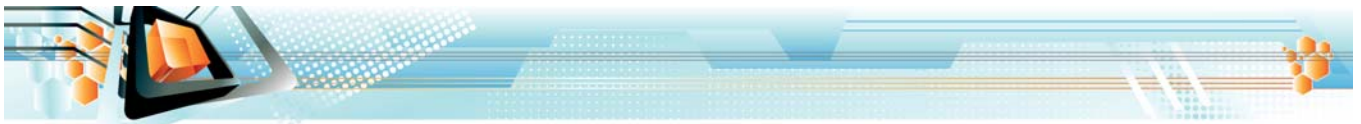
| <i>VPACT members</i>                      | <i>Affiliation</i>   |
|---|--|
| <b>Ms Sophy Athan</b>                     | Consumer representative  |
| <b>Dr Stephen Blamey</b>                  | Chair, Medical Services Advisory Committee & Head of Gastrointestinal Surgery, Monash Medical Centre (MMC)     |
| <b>Ms Liliana Bulfone</b>                 | Senior Research Fellow, School of Health and Service Development, Deakin University                            |
| <b>Professor Rob Carter</b>               | Chair in Health and Human Services Economics, Deakin University  |
| <b>Associate Professor Noel Cranswick</b> | Director of Australian Paediatric Research Unit Royal Children's Hospital                                      |
| <b>Associate Professor Paul Desmond</b>   | Director, Department of Gastroenterology & Clinical Director, Specialist & Critical Care St Vincent's Hospital |
| <b>Associate Professor Stacy Goergen</b>  | Director of Research, Department of Diagnostic Imaging, MMC  |
| <b>Dr Jennifer Johns</b>                  | Medical Director, Specialty Services CSU, Austin Hospital  |
| <b>Ms Kylie Mayo</b>                      | Manager, Clinical Network & Service Development Section, Programs Branch, Department of Human Services         |
| <b>Professor John Zalcborg</b>            | Chief Medical Officer & Director, Division of Haematology & Medical Oncology, Peter McCallum Cancer Centre     |

## Funded health technologies

Each year the department allocates funding on the recommendation of VPACT to enable health services to introduce new health technologies. Health technologies funded in 2007-08 and 2008-09 include:

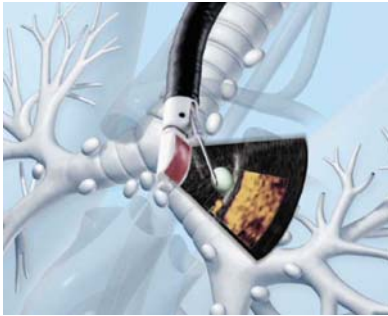
- Percutaneous sclerotherapy for head, neck and peripheral vascular malformations – Monash Medical Centre (MMC) Clayton
- Double balloon enteroscopy for small bowel imaging – Royal Melbourne Hospital (RMH) and St Vincent's Hospital (SVH)
- Cardiac MRI – The Alfred
- Foetal MRI – MMC Clayton
- Endobronchial ultrasound-guided biopsy for lung cancer diagnosis and staging – Austin Hospital
- ABO blood group incompatible kidney transplantation for end-stage kidney disease – RMH
- Rapid determination of carrier status for breast cancer predisposition genes – Peter McCallum Cancer Centre (PMCC) & RMH
- Complex movement disorders service for paediatric dystonia – Royal Children's Hospital (RCH)
- Bone anchored hearing aid program for ear canal atresia and chronic middle/outer ear disease – Royal Victorian Eye & Ear Hospital and The Alfred.





## Highlights 2007-08

### Endobronchial ultrasound–guided biopsy for lung cancer – Austin Hospital



Lung cancer is a common malignancy in the western world. In selected patients, radical surgery offers a real prospect for curative therapy.

In order to define those patients who will benefit from such surgery, it is important to stage the development of the cancer as accurately as possible. In the past, this has required invasive biopsies. These are usually performed under general anaesthesia and often require a stay in hospital of several days to recover. The development of endobronchial ultrasound (EBUS) – guided fine needle aspiration biopsy has allowed Austin Health to obtain this staging information using a minimally invasive technique that can be performed as a day procedure without the need for any incisions and with minimal, if any, post operative discomfort.

The procedure is performed under a brief anaesthetic, where the EBUS bronchoscope is introduced into the airway via the mouth and structures in the chest are biopsied with a needle puncture technique under direct vision, using ultrasound imaging. The procedure allows for rapid and accurate assessment of previously difficult to access parts of the body and, therefore, allows for swift and precise planning of the best treatment pathways for patients with lung cancer. The procedure also allows Austin Health to best manage its precious resources and provide an efficient and economical service to the community.

For further information, please contact Ms Leanne Turner, Director Specialty Services CSU, on ph: 9496 3262.

### ABO blood group incompatible kidney transplantation – Royal Melbourne Hospital

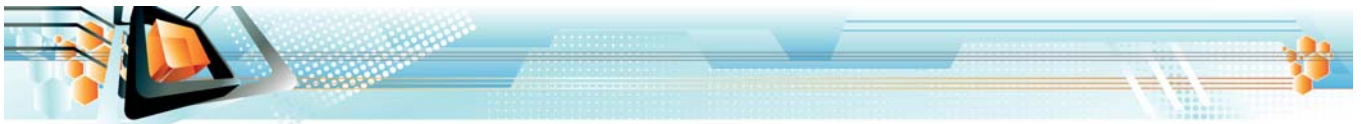
Renal transplantation improves the length and quality of life of patients with end-stage renal failure (ESRF) compared with remaining on dialysis. Without a live donor, patients with ESRF face a prolonged wait (on average five to seven years) for a renal transplant from a deceased donor. To increase the likelihood of finding a suitable live donor for patients with ESRF, we are now performing transplants across blood group barriers. Previously patients could only receive a transplant from a donor of the same blood group, or from an O blood group donor, due to a fear of severe, immediate rejection. To minimise the risk of rejection we pre-treat patients with a recently developed immunoabsorption column. These columns bind specifically to the antibodies directed against the donor's blood group, thereby greatly reducing their concentration in the recipient's blood. The columns and transplant protocol we use were developed in Sweden. Outcomes using this regimen are reported to be comparable to blood group compatible transplantation. Performing ABO incompatible transplantation will make kidney transplantation a possibility for more patients sooner, with the prospect of improved quality and length of life.

For further information, please contact Professor Gavin Becker, Director of Nephrology, on ph: 9342 7267.

## Technologies funded in 2008-09

VPACT has had another busy funding round this year. It recommended the funding of a number of new technologies that were accepted by the department. These include:

- 320-slice cardiac CT scanner – MMC Clayton
- Cytocare drug compounding robot – Peter McCallum Cancer Centre
- ABO blood group incompatible renal transplantation – MMC Clayton
- LDL apheresis for homozygous Familial Hypercholesterolaemia – Austin Hospital



- MRI-guided focused ultrasound for uterine fibroids (MRgFUS) – The Royal Women's Hospital
- HALO radiofrequency ablation for Dysplastic Barrett's Mucosa – Royal Melbourne and St Vincent's Hospitals.

## Highlights 2008-09

### 320 Slice Cardiac CT scanner – MMC Clayton



Southern Health has installed a Toshiba Aquilion ONE 320-slice cardiac CT machine at MMC Clayton. The technology will be used for patients presenting with acute chest pain.

The 320-slice cardiac CT scanner is a fast and effective way to quickly establish if low to medium-risk patients have coronary heart disease, and should create more clinical efficiency by eventually replacing other cardiac tests.

Established as a luminary site for this new technology, MMC Clayton is the only southern hemisphere site, and only one of four sites internationally, with a 320-slice cardiac CT scanner.

For further information, please contact Professor Ian Meredith, Director of MonashHeart, on ph: 9594 2726.

### Cytocare drug compounding robot – Peter McCallum Cancer Centre



The Cytocare cytotoxic manufacturing drug compounding robot is designed to automate the preparation of individual chemotherapy doses in a form suitable for administration to patients.

The robot performs the function of two pharmacy technicians operating within a chemotherapy biological hazard (cytoguard) cabinet and provides the following advantages over the current system:

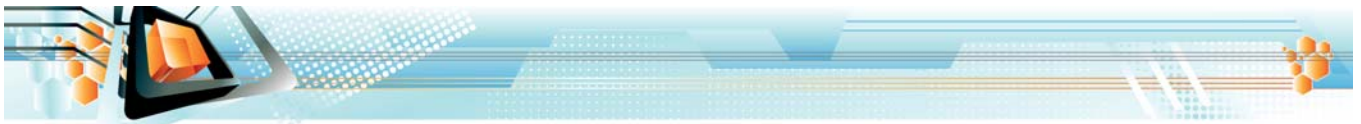
- Substantially reduced occupational exposure to cytotoxic agents
- Substitutes for pharmacy technician workforce (a known and recognised area of workforce shortage)
- Improves product and patient safety (reduced medication errors)
- Improved efficiency.

For further information please contact Ms Sue Kirska, Director of Pharmacy, Peter McCallum Cancer Centre, on ph: 9656 1212

### ABO blood group incompatible renal transplantation – Monash Medical Centre, Clayton

MMC commenced this procedure in July 2008, which has been funded at RMH since July 2007 through the New Technology Program. Details are on the New Technology Program website at [www.health.vic.gov.au/newtech](http://www.health.vic.gov.au/newtech).

For further information, please contact Dr Bill Mulley on ph: 9594 3518.



### **HALO RF ablation for Dysplastic Barrett's Mucosa – Royal Melbourne and St Vincent's Hospitals**

The HALO RF ablation system uses a balloon-based electrode to ablate Barrett's tissue circumferentially within the oesophagus. It consists of an electrode mounted on the end of an endoscope, allowing the physician to treat focal areas of diseased tissue. The HALO system provides uniform and controlled therapy at a consistent depth, which can remove Barrett's oesophagus and allow the regrowth of normal cells. Given the Barrett's oesophagus to dysplasia and adenocarcinoma sequence, the effective ablation of dysplastic tissue in Barrett's oesophagus is likely to impact on the incidence of cancerous tissue at this site.

For further information, please contact Dr Andrew Taylor at St Vincent's Hospital on ph: 9890 3977.

### **LDL apheresis for homozygous Familial Hypercholesterolemia (FH) – Austin Hospital**

LDL apheresis is a method of treating extremely high cholesterol levels, which do not respond to conventional drug therapy. This therapy will be used for patients with FH. This is a genetic disorder affecting one in 500 people (about 10,000 cases in Victoria), in which the liver is unable to clear LDL, the 'bad' cholesterol.

These patients develop premature atherosclerosis and coronary artery disease, usually in their 20s to 40s. Many of these people can be treated with drugs to lower cholesterol, although in some, the drugs are not effective or not tolerated. The severe form, homozygous FH, affects one in one million people, and if untreated patients will usually die of coronary disease before the age of 15. Homozygous FH responds poorly to drug therapy and LDL apheresis or liver transplantation are the only available treatments.

LDL apheresis is a process similar to renal dialysis, passing blood through a special column that removes the LDL.

For further information, please contact Ms Tamla Tait on ph: 9594 3390.

### **MRI-guided focused ultrasound (MRgFUS) for uterine fibroids – Royal Women's Hospital**

MRI-guided focused ultrasound (MRgFUS) is a non-invasive procedure used for the treatment of uterine fibroids. During this procedure, the patient lies inside the MRI scanner. Three-dimensional MRI images show the location and size of the uterine fibroid(s) that needs to be destroyed. The procedure involves directing highly-focused ultrasound waves onto the unwanted tissue. The ultrasound waves penetrate the skin and healthy tissue, focusing on the fibroid. This focused ultrasound energy causes the fibroid to heat, which leads to its destruction.

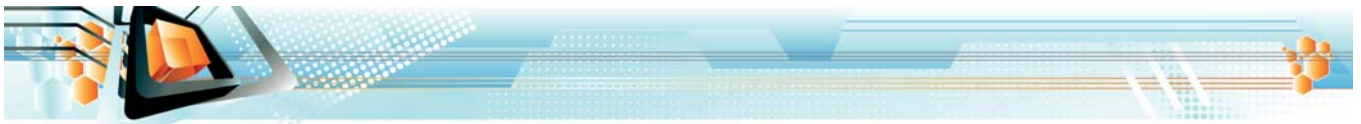
The procedure is monitored at all times using thermal images from the MRI scanner. These images provide real-time feedback on the location of the ultrasound beam and the temperature of the fibroid and surrounding tissue. This ensures that healthy tissue is not heated unnecessarily and ensures that the unwanted tissue is appropriately necrotised at the required temperature.

For further information, please contact Ms Nicole Twedde on ph: 8345 2013.

### **2009-10 funding round**

The deadline for health services to make a submission for the 2009-10 New Technology Program is **Friday 13 February 2009**. The 2009-10 submission proforma has been revised following health service, departmental and VPACT feedback. In particular, health services should note the following:

- Health services will need to detail how implementing the new health technology will impact on existing clinical practice.
- Health services seeking funding for equipment > \$100,000 will need to complete a business case examining the full life cycle costs of the proposed equipment. This aligns with existing departmental policy and processes
- While attaching the business case component to the proforma has increased its length, it is only mandatory to complete this section if equipment funding > \$100,000 is being sought.



- Health service chief finance officers will also be required to endorse submissions.

Health services are encouraged to contact the department to ensure submissions are appropriate.

Please note the health service *New Technology Committees* will still be required to endorse submissions prior to forwarding to the department.

Details about the 2009-10 New Technology Program funding round are at [www.health.vic.gov.au/newtech/funding](http://www.health.vic.gov.au/newtech/funding).

### **ECRI and Sg2**

The department has subscribed to membership of the US-based ECRI Institute and US/UK-based Sg2.

ECRI, based in Philadelphia, is a medical evidence service. The department utilises, and often commissions, ECRI health technology assessment and horizon scanning outputs to inform policy development, decision-making and funding allocations.

Sg2 is a health care intelligence company that reports on emerging trends and opportunities in health care, predicting when they will arrive and analysing their potential impact.

The department uses information from ECRI and Sg2 to inform its due diligence activities and consideration around the annual New Technology Program submissions.

Details about ECRI and Sg2 are available at [www.erci.org](http://www.erci.org) and [www.sg2.com](http://www.sg2.com).

### **Horizon scanning**

Horizon scanning (HS) provides short, rapidly completed 'state of play' documents that provide current information on new and emerging health technologies to alert planners, policy makers and providers to their advent and potential impact in terms of safety and cost before introduction into the health care system.

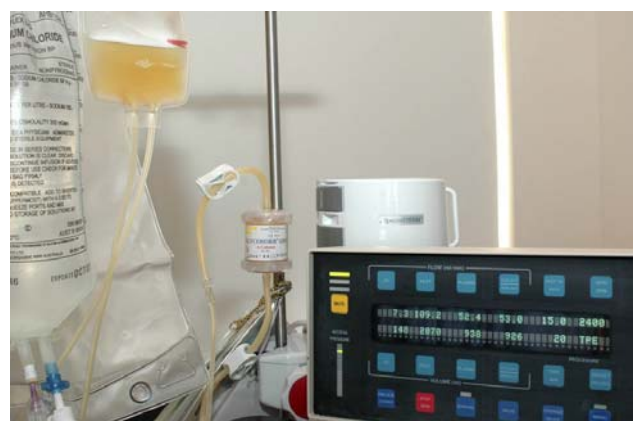
HS can assist planners, policy makers and providers to identify, prioritise, plan and allocate resources for, and monitor the introduction of, new and emerging health technologies to ensure maximum utilisation of resources at least cost. In addition to new and emerging technologies, HS also provides timely information about changes in the delivery and use of existing health technologies.

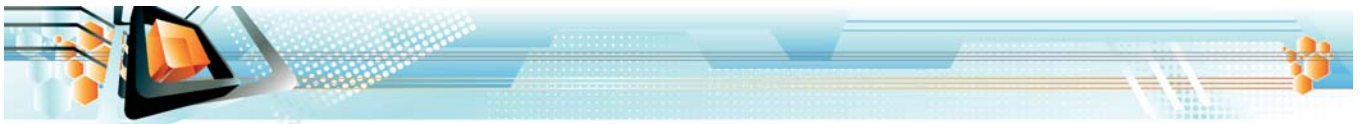
### **HealthPACT update**

A formal network to undertake Horizon Scanning has been established in Australia. The Health Policy Advisory Committee on Technology (HealthPACT) is a sub-committee of the Commonwealth Medical Services Advisory Committee (MSAC) and the Australian Health Ministers' Advisory Council (AHMAC). HealthPACT comprises representatives from health departments in all States and Territories, the Australia and New Zealand governments, MSAC and the New Zealand District Health Boards.

HealthPACT produces quarterly bulletins, which are forwarded to health service New Technology Committee Chairs. It is anticipated that Victorian health services and clinicians will contribute to horizon scanning activities in 2009.

Details about horizon scanning and HealthPACT can be found at [www.horizonscanning.gov.au](http://www.horizonscanning.gov.au).





## Health service New Technology Committees

Most health services have now convened New Technology Committees. The next step in building system capacity to make best use of new and emerging technologies is to bring the committees together so they can share their experience, knowledge and skills and look for areas of possible collaborations across organizations. For further information on membership of your local committee visit our website at [www.health.vic.gov.au/newtech](http://www.health.vic.gov.au/newtech).

## New Technology Committee updates

### Austin Technology and Clinical Practice Committee

The Austin Technology and Clinical Practice Committee has had a busy 2008. A number of activities have commenced and the highlights include:

- Commencement of endobronchial ultrasound services (EBUS)
- Commencement of the LDL apheresis service
- Commencement of ABO incompatible renal transplants
- Approval and commencement of Green Light laser treatment for benign prostatic hyperplasia
- Approval for the commencement of percutaneous aortic valve replacement
- Ongoing preparation for the establishment of an intestinal transplant service.

These activities will continue in 2009 and the Austin Technology and Clinical Practice Committee aims to improve the framework for monitoring outcomes, undertake a review of the application process and promote the role of the committee to clinicians.

For further information, please contact Mr Mark Petty, Executive Director, Acute Operations, on ph: 9496 5354.

## SHARE Program

### Sustainability in Healthcare by Allocating Resources Effectively – Southern Health

Cessation of potentially harmful, clinically ineffective or cost-inefficient practices, also known as 'disinvestment', has the dual advantage of improving patient care and allowing for a more efficient use of available resources. A program to maximise the efficient use of health resources has the potential to increase total health benefits without increasing spending.

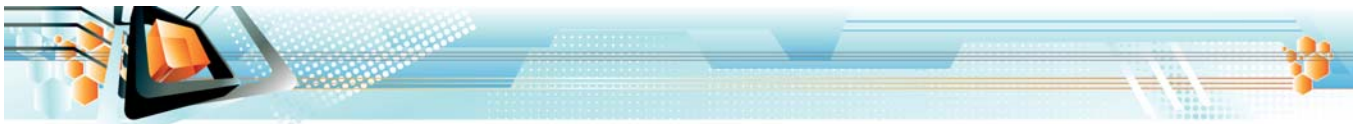
Realising that 'disinvestment' does not stand alone, but is part of a continuum of decision-making related to health technologies, Southern Health is committed to establishment of an organisation-wide evidence-based process of decision making and prioritisation for the introduction and utilisation of safe, effective and cost-effective technologies as well as cessation or limitation of harmful, ineffective or inefficient procedures. This will be achieved through funding provided by the department for the SHARE (Sustainability in Healthcare by Allocating Resources Effectively) project. Methods to improve decision-makers' access to evidence and capacity building in evidence-based change will be addressed, as well as pilot projects in evidence-based disinvestment. In addition to project outcomes, a detailed evaluation of the processes of change will be undertaken to inform implementation and adoption in other Victorian health services.

For further information, please contact Dr Claire Harris, Centre for Clinical Effectiveness, at [claire.harris@southernhealth.org.au](mailto:claire.harris@southernhealth.org.au).

## Nationally Funded Centres update

Nationally Funded Centres (NFCs) have been established to provide Australians with equitable access to certain high-cost, low-demand, new and emerging medical technologies. NFCs are approved by the Australian Health Ministers' Advisory Council (AHMAC) and funded by jurisdictions.

Victoria is host to several NFCs including Paediatric Heart Transplant (RCH), Paediatric Liver Transplant (RCH) and Pancreas Transplant (MMC).



This year, the Norwood Procedure for Hypoplastic Left Heart Syndrome and Paediatric Lung Transplantation will be assessed for NFC recognition.

Further information can be found at [www.health.vic.gov.au/newtech/nfc](http://www.health.vic.gov.au/newtech/nfc).

## Useful links

### Australia

- Australia and New Zealand Horizon Scanning Network  
[www.horizonscanning.gov.au](http://www.horizonscanning.gov.au)
- Australian Safety and Efficiency Register of New Interventional Procedures – Surgical (Royal Australasian College of Surgeons) [www.surgeons.org/asernip-s/](http://www.surgeons.org/asernip-s/)
- Medical Services Advisory Committee  
[www.msac.gov.au](http://www.msac.gov.au)
- Adelaide Health Technology Assessment  
[www.adelaide.edu.au/ahta](http://www.adelaide.edu.au/ahta)

### Europe

- National Institute for Health and Clinical Excellence (UK) [www.nice.org.uk](http://www.nice.org.uk)
- National Institute for Health Research Health Technology Assessment programme (UK) [www.ncchta.org](http://www.ncchta.org)
- EuroScan (European Consortium)  
[www.euroscan.bham.ac.uk](http://www.euroscan.bham.ac.uk)
- Cochrane Library  
[www.thecochranelibrary.org](http://www.thecochranelibrary.org)

### North America

- Canadian Agency for Drugs and Technologies in Health  
[www.cadth.ca/index.php/en/home](http://www.cadth.ca/index.php/en/home)
- Health Technology Assessment International (HTAi) [www.htai.org](http://www.htai.org)
- Evidence-based Practice Centres / Agency for Healthcare Research and Quality  
[www.ahrq.gov/clinic/techix.htm](http://www.ahrq.gov/clinic/techix.htm)

## Accessibility

If you would like to receive this publication in an accessible format, please phone (03) 9096 1327 using the National Relay Service 13 36 77 if required, or email [shaun.brown@dhs.vic.gov.au](mailto:shaun.brown@dhs.vic.gov.au).

This document is also available in PDF format on the internet at [www.health.vic.gov.au/newtech](http://www.health.vic.gov.au/newtech).



## Contact details

For information and advice about the New Technology Program, Health Technology Strategy or other related areas, please contact one of the following in the department's Genetics & Health Technology Unit:

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Mobile: 0429 019 289

### Mr Gregory Dowling

Senior Project Officer  
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### Ms Luisa Chaves

Project Officer  
Phone: 9096 1410