



New Heart Research Set to Save Lives

How well do you know your own pulse?



Atrial fibrillation (AF) is a condition affecting the heart, making it beat out of rhythm. While it may not yet have a high profile across the world, it was estimated in 2010 that this condition affected 33.5million patients worldwide and is on the rise. In fact, a third of strokes occur because of underlying AF. Thanks to your support, research at the Royal Adelaide Hospital (RAH) is set to change this.

Meet Professor Prashanthan (Prash) Sanders. An international authority in heart rhythm disorders, Prof Sanders is a clinician-scientist at the RAH and the University of Adelaide. His work has been responsible for ensuring risk factors of AF are managed as part of routine patient care. These common risk factors include high blood pressure, obesity, high cholesterol, sleep apnoea, physical inactivity and diabetes.

“Our work has changed the three standard pillars of AF care to four: stroke prevention, heart rate control, rhythm control and now risk-factor treatment,” Prof Sanders explained.

“By treating risk factors, you can actually get rid of this condition.”

Prof Sanders and his team recently secured funding to develop and implement a specialised and multi-disciplinary clinic at the RAH that has an integrated care (i-CARE) approach for the management of AF. The i-CARE clinic will combine the important care components for AF and ensure collaboration between specialists, nurses and allied professionals all while maintaining a patient-centred approach to treatment.

“We believe our clinic, enabled by this new grant, will reduce hospitalisation and mortality in patients with AF,” Prof Sanders said.

Contributing to this new project has been another successful clinic-based study with the help of PhD student Melissa Middeldorp who is passionate about research that has a direct impact on patients’ symptoms and lives.

This project has been evaluating how a weight and risk factor management program can be integrated into the standard of care in the management of AF. It has also examined the effect of weight loss on AF following ablation (a current surgical procedure used to treat AF). With additional funding, this project can expand to help more people and publish further results that are forming part of new treatment guidelines.

“So many of the risk factors stem from obesity and lead to AF. Our research has involved setting up a dedicated clinic and working one-on-one with patients to develop a healthy lifestyle, addressing all contributing factors individually and personally with each patient,” Melissa said.

“We found that weight reduction and risk factor management meant that patients had much better outcomes following ablation. In fact, for some patients they were able to eliminate their symptoms and didn’t require a procedure at all.

“More funding for projects such as these will enable us to take these trials to a larger scale, meaning we can implement our findings into patient care sooner and save more lives.”

To find out more about research in Atrial Fibrillation and how you can support Prof Sanders and his team, please contact Australian Heart Research on **(08) 8244 0591** or email contactus@ausheartresearch.com.au.

Image above: Professor Prash Sanders together with PhD student Melissa Middeldorp will save the lives of Atrial Fibrillation patients in the future.



Decreasing the Risk of Heart Disease after Pregnancy Complications

Did you know that women who experience a complication during pregnancy have an increased risk of developing premature heart disease before the age of 55?

A unique clinic informed by research at the Lyell McEwin Hospital (LMH) is paving the way in changing this and improving women's health outcomes.

The research program integrated into this clinic (the COFFEE* Clinic) is led by Clinical Research Assistant Emily Aldridge who is passionate about executing research that will educate women, improve their health and reduce their risk of developing heart disease in the future. **It will save lives.**

"Heart disease is the number one killer of women in Australia and worldwide. Pregnancy gives us a unique opportunity to identify those women who are at higher risk of developing premature heart disease," Emily explained.

"It seems that pregnancy acts as a stress test for the heart, meaning it gives us a unique insight into a woman's future heart health."

Established by Emily's supervisor, Associate Professor Margaret Arstall, the COFFEE Clinic at the LMH is a new clinical service that invites women who have experienced serious complications, like high blood pressure and diabetes, during pregnancy to be assessed and given advice from an expert nurse practitioner about lifestyle changes and receive referrals to relevant specialists.

"Many women don't receive follow-up care after giving birth following a pregnancy complication. Our aim with the COFFEE Clinic is to ultimately reduce the burden of heart disease in South Australian women," Emily said.

"We hope our care model will then be adopted in other centres across Australia."

Thanks to your generous support of Australian Heart Research, along with The Hospital Research Foundation, we are proud to have recently expanded our support to the LMH, supporting vital research in Adelaide's north.

Did You Know?

A pregnant woman with a complication such as preeclampsia is:

-  **3 times more likely to develop high blood pressure**
-  **Over 2 times more likely to develop coronary heart disease**
-  **4 times more likely to have heart failure**

"We also want to keep raising awareness about the link between pregnancy complications and heart disease so that women become more engaged in taking steps to reduce their cardiovascular risk earlier in life," Emily said.

If you would like more information on this project, email us at contactus@ausheartresearch.com.au or call **(08) 8244 0591**.

*COFFEE is an abbreviation of 'Cardiovascular assessment after Obstetric complications: Follow-up For Education and Evaluation'

Pictured above: Emily's work will detect the risk of heart disease for mum's like Stacey who is pictured with her son George.

Research Making Inroads for Personalised Patient Care



Being admitted into hospital after suffering a cardiac complication can be extremely stressful and the unknown can be frightening. Thanks to Clinical Data Manager and researcher at the Basil Hetzel Institute for Translational Health Research Dr Rosanna Tavella, this is about to change.

When undergoing an operation such as a coronary angioplasty, (a procedure used to open clogged heart arteries and treat coronary heart disease), it is vital patients are aware of the benefits and risks associated with the procedure.

Currently, patients undergoing this procedure receive an information sheet published with outdated data. Dr Tavella is determined to update this sheet to enhance patient care, using relevant data from the Coronary Angiogram Database of South Australia (CADOSA).

“It’s about educating patients as much as possible so they feel comfortable having informed conversations with their doctor about the best treatment methods for them and also discussing the risks involved,” Dr Tavella said.

“The information sheet they receive will be based on five years’ worth of data from CADOSA which is key to this project as the data was collected from South Australian hospitals.”

CADOSA is already generating data from South Australia’s four public hospitals and Dr Tavella is now working on collecting data from private hospitals.

“Using data from our hospitals is the most relevant information we can present to patients. An exciting development is that we are expanding CADOSA to the private hospital space now, already working with the Calvary Wakefield Hospital,” Dr Tavella said.

“Around 20 to 30 per cent of patients in South Australia attend private hospitals for cardiac procedures and that is a substantial amount of records being missed. Having data from private hospitals will improve the accuracy of our information sheet.”

Dr Tavella will also continue focusing on improving patient care, hoping to develop a personalised risk program that will provide individualised patient profiles for risk assessments in hospitals.

“By providing clinicians and patients with information regarding the possible outcomes of the surgery based on each patients’ medical history, we are hopeful it can reduce complication rates and improve patient outcomes following the procedure,” Dr Tavella explained.

“The individualised patient profiles will also determine the best course of action for each patient. This is something the United States have implemented and are already showing substantial results.

“Implementing strategies to avoid risks for patients will help clinicians to prevent possible complications in surgery.”

These vital projects are leading the way in improving heart care across Australia. With your ongoing support this research can continue to save lives.

“This exciting research is about providing our cardiac patients with the best care possible, making them the centre of care throughout our hospitals and ultimately saving more lives.”

Pictured above: Dr Tavella's research will continue to revolutionise care for heart disease.



Taking Heart Research Across the Globe



With your support, Australian Heart Research (AHR) is committed to ensuring our researchers can collaborate with world-class cardiologists around the globe leading to better treatments and improved care for heart disease sooner.

It's your invaluable support that enabled Dr Sivabaskari (Tharshy) Pasupathy and Clementine Labroschiano from the Basil Hetzel Institute for Translational Health Research to attend the 2017 American Heart Association (AHA) Conference in California. Now back in the lab, both dedicated researchers are armed with new findings and collaborating with new colleagues from around the globe in the hopes of saving the lives of everyday Australians living with heart disease.

It was a fantastic networking experience for Dr Pasupathy who was able to share her research on chest pain following an unexplained heart attack with leading cardiology researchers.

"My poster drew significant attention from the attendees and I had the privilege of discussing my research with some of the brightest minds of cardiovascular research," Dr Pasupathy said.

Each day was exciting for Clementine who attended many cardiology discussions, meeting researchers and presenting her Australian-first research investigating variation in early death and readmissions following heart attack hospitalisations in Australia and New Zealand.

"This was my first international conference and it was a great opportunity to discover more about the research being undertaken in the cardiology community. Being able to present my research opened great discussions with researchers around the world," Clementine said.

By supporting Dr Pasupathy and Clementine to attend this conference you're helping to advance research and save the lives of people living with heart disease.

"Through the generous donations from AHR, our attendance at this international conference allowed

us to form collaborations with leaders in cardiology research and we have brought home this world-class knowledge to implement in our latest research to help improve the lives of patients living with heart disease here in South Australia," Clementine said.

"At the AHA conference, I had the opportunity to keep up to date on the latest news in cardiology and discuss the results of my own research to colleagues from other countries. Networking amongst the researchers stimulated new collaborations and ideas for my further research in Adelaide," Dr Pasupathy said

"It was a great experience to learn and share new advances and I look forward to using this knowledge towards my research, hopefully saving the lives of those living with heart disease."

You can support a researcher's travel to an international conference and help in the world-wide battle against heart disease! Contact us at **(08) 8244 0591** to find out how.

Image above: AHR researchers recently attended a conference in America where they collaborated with leading cardiologists from around the world to help save lives!

Go behind the Scenes of Heart Research!

Do you want a behind the scenes look at where heart research takes place? We're currently taking registrations for an exclusive tour of the Royal Adelaide Hospital where you'll have the opportunity to hear from the hospital's world-class cardiology team. To register your interest please contact us at **(08) 8244 0591** or email contactus@ausheartresearch.com.au.

Have you been touched by heart disease?

We would love to share your story! Email us at contactus@ausheartresearch.com.au or call **(08) 8244 0591**.



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