

SPRING 2018

Thanks  
to you...



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**Burnet Institute**  
Medical Research. Practical Action.



“We have so much further to go to eliminate malaria, but the longest journey is made in single steps, and I can't tell you how thankful I am to all the donors who made a contribution to our work.”

DR JACK RICHARDS

#### YOUR GIFTS IN ACTION

## We are *one step closer* to the elimination of malaria, thanks to you

Dr Jack Richards and his team received a much needed boost in funds for their work in developing a novel diagnostic test that will enable safe and effective treatment to eliminate malaria.

As we shared earlier in the year, 400 million people in the world are living with an inborn disorder called glucose-6-phosphate dehydrogenase (G6PD) deficiency.

**Tragically, for many people in malaria affected countries, the drug that can keep them safe is also the drug that could kill them, or make them very sick.**

The only drug available to cure the vivax strain of malaria, primaquine, can cause severe anaemia and potential death in people with G6PD deficiency. Testing for this disorder before drug treatment is the only option to prevent this problem.

Because of you, Jack and his team have been able to move forward with their research to develop a point-of-care test that will effectively diagnose G6PD deficiency, allowing for safe malaria treatment to be provided.

“In the last few months we have forged a critical partnership with an Australian diagnostics company called Axxin,” Jack said. “Together, we've been able to do more work on the design of the test itself, and of the integrated reader that is required for this test. Making the test and the reader commercially viable is a critical next step. It's got to be cheap, accurate and easy to use. That's the only way it will get used in the countries where it is most needed.”

**Two of the most generous donors to Jack's work this year were Geoff and Jan Phillips from Melbourne. Geoff and Jan are very passionate about supporting research into eliminating malaria.**

“We chose to support Burnet because of its reputation for high quality research,” Geoff said. “And we support malaria research because the disease has a devastating effect on so many people. A cure or even new treatments which mitigate its effect would be a marvellous achievement.”

# Mothers and babies in PNG are closer to *a healthier future*, because of you



Gathering data on the health issues faced by mothers and babies in PNG is so important.

Information gives us the power to save lives, understanding what can be done now, and importantly, how to have an even greater impact into the future.

DR MICHELLE SCOULLAR



Papua New Guinea (PNG) has one of the highest maternal mortality rates in the world – more than 500 maternal deaths per 100,000 live births. This is about 80 times that in Australia and equates to around 1,500 mothers dying each year.

**If that figure isn't shocking enough, 5,000 newborns die in their first month of life which is just not acceptable.**

In May we shared with you an update on our Healthy Mothers, Healthy Babies (HMHB) program, and asked for your help to undergo the next phase of our research. Your response has been fantastic and will help continue this life-saving program.

**Without you, we simply would not be able to do it.**

Dr Michelle Scoullar, a Principal Investigator for HMHB, was very grateful for the support we received from donors.

“It means a lot to me that our supporters understand the importance of what we are doing long term,” she said. “Yes, we are out in the field now, today, testing mothers and babies and providing them with results and advice to seek treatment that can save lives immediately, but just as important, the data we gather will inform the provision of future health services, saving lives long term.”

## Tessie continues to thrive

In May we shared with you the story of Tessie and her extended family in PNG.

Sadly, soon after Tessie was born her mother died, but she has since been adopted by her aunt and uncle. Tessie herself had health issues early on, but we can report she is home again with her extended family and thriving. And the great news is that now, with your help, we are so much closer to making sure other babies in PNG do not lose their mothers as tragically as Tessie did.



## Thank you from Kerryanne

Ms Kerryanne Tokmun is a Research Officer with HMHB. She is out in the field testing mothers and babies, collecting data for our ongoing research.



“

I want to thank everyone who has donated towards the Healthy Mothers, Healthy Babies program in PNG. Every day we see the impact we are making as a result of your help.

MS KERRYANNE TOKMUN  
(WITH HER FAMILY)

”

**Dr Scoullar and the team have seen a number of significant findings emerge through the early stages of the project. These indicate that mothers and babies in PNG face multiple serious health issues.**

- Low birth weight is the single biggest risk factor for newborn death.
- Malnutrition, stunting (impaired growth) and wasting (becoming progressively weaker) are major health issues for newborns.
- There is a high prevalence of anaemia - around 80% of pregnant women are anaemic and around 70% of infants are anaemic by six months of age.
- There is an alarmingly high rate of reproductive tract infections and sexually transmitted infections.
- There is a high prevalence of type-2 diabetes, and testing is rare.
- There is a high rate of malaria - it is estimated that over 90% of the population is at risk of malaria.

With your very generous support we are now able to undertake the crucial next steps in the HMHB project. We will be able to do further tests on mothers and babies, complete analysis of samples already taken, and work towards a full understanding of the scope of the problems facing mothers and babies in PNG.

## YOUR GIFTS IN ACTION

### Your gifts keep our labs going

We are especially grateful to our donors who contribute gifts towards the purchase of equipment, keeping our labs operating at maximum capacity. It is thanks to these donors that we have most recently been able to purchase the Octet K2 and a 3D printer.



## The Octet K2

The Octet K2 enables detailed studies of proteins. This may not mean a lot to those of us without any scientific knowledge, but it is a process used in just about all of our lab-based research.

It will be used in drug discovery, as well as the development of vaccines to prevent infectious diseases, therapeutic antibodies for the treatment of cancer and immune system disorders, and rapid diagnostic tests for early interventions.

*With thanks specifically to the Ian Potter Foundation, Kel and Rosie Day Foundation, the Janina and Bill Amiet Foundation and a small group of other supporters.*

*Read about the 3D printer on the next page.*

YOUR GIFTS IN ACTION

Your gifts keep our labs going



Our new 3D printer

3D printing refers to processes used to create three-dimensional objects.

Objects that would otherwise be prohibitively expensive or difficult to acquire (objects may be required from overseas, potentially delaying projects for months) can be created in-house with researcher input rather than from a costly external source.

At Burnet the 3D printer will be used to design and create prototype equipment or consumables. It can create replacement parts for equipment that are no longer available due to age. It has also become common for researchers to use structural data to produce and present tangible 3D models of their organism or protein of interest to help describe their work at conferences.

With thanks specifically to the Nelson Alexander Charitable Foundation.

COMMUNITY ENGAGEMENT



Your continued support can help us do more life-saving research

Your support helps us make crucial headway in our research, not just in the labs but also in the field. Your donations are the fuel that allows us to move forward.

Sharing what we have been able to achieve because of you, and what still needs to be done for the future, is fundamental to the success of our programs.

For this reason, it has been an absolute pleasure to share some of our work with our donors face-to-face at functions in Melbourne, Adelaide and Brisbane (interstate functions have been entirely funded by Macquarie Group for which we are extremely grateful).

We also hosted a fundraising lunch as a part of International Women's Day and updated donors on the Healthy Mothers, Healthy Babies program over a light lunch at the Institute.



Professor Suzanne Crowe AM, Program Director, Healthy Ageing



Dr Suman Majumdar, Deputy Program Director, Health Security



Dr Michelle Scoullar, a Principal Investigator for Healthy Mothers, Healthy Babies



Ms Tope Adepoyibi, International Health and Development Specialist – TB

# Sisters supporting *gender equity* at Burnet



“

While she never wasted an opportunity to learn or do something new, Vida always regretted that she was unable to pursue the career that she wanted. She would be proud to know that her legacy, through us, will allow two women to continue their education and research, and further their careers in a way she she could not.

ALISON MARTIN

”

**Earlier this year, sisters Jean Edwards and Alison Martin, along with Jean’s husband David, made a gift to Burnet Institute in honour of their mother, Dorothy Vida Martin.**

Vida had been a long-time supporter of Burnet Institute herself and believed strongly in the importance of education for women. When Jean and Alison found out about the opportunity to fund travel fellowships for female research staff at Burnet, they thought it was the perfect way to contribute in a way that was meaningful to the memory of their mother.

Travel fellowships enable outstanding researchers at Burnet to exchange knowledge with their peers, present their work, receive mentoring through participation in scientific conferences and gain exposure to the wider scientific community in which they specialise. The provision of Travel Fellowships specifically for young women scientists is absolutely critical to develop the new generation of female leaders.

“Vida was born in 1911,” Alison explained. “She loved school and had ambitions of a university education and a career in teaching but was prevented

from doing this by parental pressure. Undaunted, she found employment in a stockbroking firm and studied accountancy at night, gaining excellent results and becoming a Certified Accountant.”

“She rose to a position of responsibility,” Jean added, “but on her marriage, according to the attitudes of the times, she had to resign and devoted her time to home and family. However, she kept up her skills by keeping incredibly detailed household accounts – a book that now provides us with the ultimate reference point for questions such as when our parents bought their first refrigerator, television, or car. It also gives a fascinating perspective on social and economic history from the 1930s to the early 2000s.”

**And so, in May 2018, two Dorothy Vida Martin scholarships were awarded. Malaria scientist Dr Jo-Anne Chan received the Postdoctoral Fellowship and fellow malaria researcher Leanna Surrao received the Postgraduate fellowship. Both will attend conferences later this year.**

Each edition we will feature one of our donors here, sharing their story with our donor community. If you have a story to tell and would like to share, please email: [ashley.sievwright@burnet.edu.au](mailto:ashley.sievwright@burnet.edu.au)

# Raising funds and *raising awareness*

Earlier this year, we participated in two key festivals on the Melbourne festival calendar, Midsumma Festival and the Melbourne International Comedy Festival, raising funds and awareness.

*Infectious (2018)*, a comedy night held as a part of the Melbourne International Comedy Festival



Midsumma is Victoria's premier LGBTQIA+ cultural festival celebrating diverse gender and sexuality



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