

Four young scientists bring medical research to life for students in  
**BALLARAT, STAWELL AND HORSHAM – JUNE 26 AND 27**  
Talks cover heart disease, stem cells, genetics and malaria

### PhD Student uses medical research skills to travel the world

The typical picture of a PhD student is someone who is stuck in a lab for years on end while the world passes them by. Not Hsiu-Wen Chan! So far she has visited America, England, France, New Zealand and different states of Australia as part of her PhD at the Baker Heart Research Institute.

Speaking of her travels, Chan states *"I have had the opportunity to meet and present my work to world experts in cardiac research"*.

In her research, Chan investigates which signals are switched on to tell the heart muscle cells to grow. This will provide information about potential drug targets so that a successful treatment can be developed to prevent heart failure or at least reduce its effects.

**The research has a personal angle, as Chan's father had a pace maker fitted several years ago, "I hope that if anything happens to him medically, my work will help him in some way."**

### Are stem cells really a 'cure all' remedy?

Stem cells are touted as the cure of tomorrow, with scientists promising to use stem cells to cure everything from Alzheimer's disease to multiple sclerosis. But can they actually deliver on these promises? Dr Hayley Dickinson, a Research Fellow at the Monash Immunology and Stem Cell Laboratories at Monash University in Melbourne, is trying to do just that.

*"Many people, both young and old, are struck down with debilitating disease for which there are no cures. Stem cells offer the possibility of a treatment for these diseases, as they have the potential to replace damaged cells, organs or tissues."* Dickinson spoke of her role in the research: *"I am studying the fate of different types of stem cells, i.e. where do they go and what do they do? If I could see into the future, I would hope that the consequence of my research is that stem cells do fulfil their potential to cure disease."*

### Help for families to communicate genetic information

Imagine your cousin tells you he's been diagnosed with a genetic condition. He can't remember all the information the doctor gave him but he does know the doctor said you need to have a genetic test.

This scenario is becoming increasingly common as more tests become available for genetic conditions, and this is why Laura Forrest, a PhD student at the Murdoch Childrens Research Institute in Melbourne, is investigating how families communicate information about genetic conditions.

*"I'm trying to find out how families communicate about a genetic condition to inform each other."*

Forrest is using interviews with families and surveys of health professionals to try and provide guidelines for professionals and families. *"I had always thought medical research involved a lab bench and test tubes, so I jumped at the opportunity to do research that involved a lot of people contact. I'd like to see people with genetic conditions getting more support so they can communicate more effectively with their family."*

### Malaria kills two million mothers and their children every year!

Understanding how malaria infects pregnant women and their unborn babies, and how to prevent it, is research being conducted by Ms Alex Umbers at The University of Melbourne.

*"We hope to develop new ways to treat malaria infection during pregnancy, preventing disease in newborns and their mothers. Babies born to mothers with malaria are more likely to develop malaria themselves. By preventing the disease in mothers we will reduce the risk of disease in the next generation. We are attacking malaria on a scientific and social scale."*

Media contacts Amy Nisselle 0404 942 577 or Shahan Campbell 0433 113 454

High resolution photographs are available upon request.