

Three young scientists bring medical research to life and inspire students in

**SALE, BAIRNSDALE, ORBOST - JUNE 26 AND 27**

Talks cover: CSI Fan turned researcher, Gippsland Girl makes good and ... Sex determination!

### CSI fan turned medical researcher

Growing up with an avid interest in “whodunits” and CSI thrillers, Mr Kane Treble turned to medical science as his chosen profession. Kane will visit high schools in Gippsland to inspire fellow CSI fans to consider medical research as a career.

*“I think it was growing up watching murder mysteries and the forensic science behind it that got me really interested. In high school I realised medical research was the direction I would take - it was much better to try and keep people alive than working out their final moments...”*

Treble is researching HIV/AIDS at the Burnet Institute in Melbourne. He is investigating the link between HIV and human molecules to understand how HIV infects cells and make more copies of itself. At last count, there are 40 million HIV-positive people worldwide. *“My work has great potential in understanding how HIV works as well as providing potential new targets for designing therapies to help inhibit the spread of HIV.”*

### Medical research into sex determination

When a healthy baby is born the first thing we ask is - is it a boy or a girl? Now, imagine **not** being able to answer that question. In rare cases, babies are born with X and Y chromosomes that do not match their physical sex. Ms Louisa Ludbrook from Prince Henry’s Institute of Medical Research investigates just what triggers the human embryo to develop into a boy or a girl.

During her PhD training, Ludbrook travelled to London and worked at the National Institute for Medical Research in the highly regarded laboratory of Professor Lovell-Badge.

*“I had a fantastic opportunity to study a sex reversal condition caused by the presence of an ‘anti-testis’ gene on the X chromosome which can lead to male-to-female sex reversal in rare cases. It was a tremendous time of learning for me, despite the freezing cold winter!”*

Ludbrook reflects, *“Human genetics simply fascinates me. The correct formation of testicles, ovaries and genitals is a critical first step for successful fertility.”*

### Gippsland scientist to inspire next generation of researchers

A love of biology and a curious mind led South Gippsland girl, Dr Sharyn Fitzgerald, to pursue a career in medical science. *“I am a curious person and I like to find out how and why things work. I enjoy learning and with my job I am always learning new things specifically about my research and in general across the whole field of medicine.”* Fitzgerald from the Baker Heart Research Institute, Melbourne is a lead investigator in a study of the long-term effects of stroke on physical and mental well-being.

*“During my travels to scientific meetings, I have had the chance to meet two Nobel prize winners and three Australians of the Year – including Prof. Peter Doherty who discovered how immune system T cells work, Sir Gustav Nossal a chief advisor on the WHO vaccine program and Prof. Ian Frazer who discovered the cervical cancer vaccine.”*

Fitzgerald speaks of the importance of her work, *“Cardiovascular disease is the leading cause of death in Australia. I hope my research increases our understanding of the risk factors and determines ways we can prevent or reduce the development of cardiovascular disease.”*

**INTERVIEW AND PHOTO OPPORTUNITIES** - Contact Shahan Campbell 0433 113 454 or Amy Nisselle 0404 942 577. High-resolution photographs are available upon request.