Darren Richardson  
**Anaesthetic Technician, Cardiac Theatres, Starship Childrens’ Hospital**

Darren Richardson is an Anaesthetic Technician, based in the Cardiac Operating Rooms at Starship Childrens’ Hospital. After training at Auckland and Green Lane Hospitals in the early 1990s, he has been practising anaesthesia since then and has maintained an interest in childrens’ cardiology and cardiac anaesthesia throughout that time. After completing his training under the New Zealand Anaesthetic Technicians Board, he moved to the UK and spent the next 6 years working in various training hospitals around London. He has spent the last decade heavily involved with the Paediatric and Congenital Cardiac Service which he helped migrate from Green Lane Hospital in 2003.

Darren lives on the North Shore of Auckland, and on days off can be found fishing off his jetski in summer, or riding the slopes of Mt Ruapehu in winter.

**Have a Little Heart**

**A Review of Cardiac Anaesthesia at Starship Childrens’ Hospital**

In the late 1990s, an ambitious plan was launched by the Ministry of Health, to amalgamate and centralise the services of Auckland, Green Lane and National Womens’ Hospitals on one site.

After several years of building work and logistical planning, Auckland City Hospital opened in October of 2003. In December of that year, the Green Lane Paediatric and Congenital Cardiac Service (PCCS) completed its migration to Starship Childrens’ Hospital.

The service is New Zealand’s main provider of cardiology and cardiothoracic surgery to infants and children born with heart defects, and to adults who present with congenital cardiac abnormalities.

The 7 paediatric cardiac anaesthetists, based at the Starship, along with the team of anaesthetic technicians, administer approximately 1000 anaesthetics per year in our 2 busy cardiac theatres and cathlab which opened in 2003.

In this presentation, we take a look at aspects of modern paediatric cardiac anaesthesia, a true subspecialty, including current practice inside the operating rooms with the provision of care for bypass and non-bypass surgery.

Topics covered include physiological and anatomical considerations for this unique group of patients, airway maintenance, transesophageal echocardiography (TOE) in children, issues with coagulation profiling using thromboelastography (TEG), Near InfraRed Spectroscopy (NIRS) monitoring and delivery of nitric oxide for the treatment of pulmonary hypertension.

Outside of the operating room, the service also covers the catheter laboratory, which undertakes a range of diagnostic studies and interventions on neonates all the way up to adults with cardiac conditions. A review of anaesthesia techniques for these procedures is also included. With the arrival of state of the art imaging equipment at the Starship, CT Angiograms and Cardiac MRI are also becoming increasingly popular investigations.

The presentation aims to provide an interesting and informative overview of anaesthesia practice, at New Zealand’s only tertiary referral centre for children with congenital heart disease.