

Exploring the Intersection of Paediatric Cardiology and Imaging. Insights from a Fellowship Experience

- Chuk Man Peter HUI

LMCHK, MBBS (Lond.), FHKAM (Paediatrics), PGClinDipDerm (QMUL)

Hong Kong Heart Foundation Fellowship Scholarship Recipient



Royal Children's Hospital (RCH) in *Melbourne* Australia

- “The Children’s”
- The Southern Hemisphere’s leading heart transplant center
- Murdoch Children’s Research Institute
- The University of Melbourne



The Royal
Children's
Hospital
Melbourne

RCH

- Covering huge part of Australia
- Victoria, Tasmania, South Australia, Western Australia, and The Northern Territories



Truly a Children's Hospital





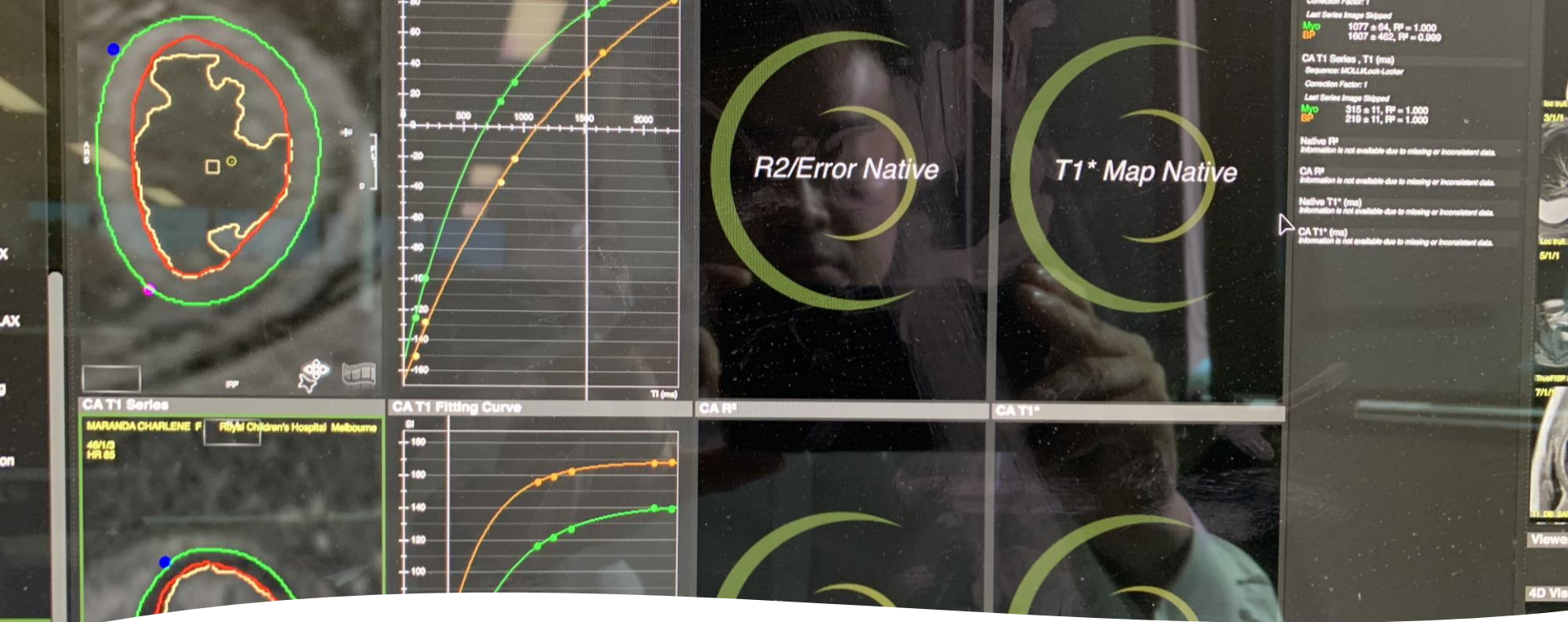
*RCH
cardiology
imaging
fellows*

- Echo
 - TTE
 - TOE / epicardial
- MRI

No CT scanning

RCH echocardiography





Cardiac MRI - cMRI

- Main focus of imaging fellow duty
- 3 imaging consultants
- 1 imaging fellow
- Non-sedated / GA sessions
- 1.5 and 3T scanners

Mock MRI

- Very useful
- Kids
- Adults!
- Claustrophobia!



IMRIS – hybrid system



Difference in cMRI workflow

- Hong Kong: Radiologist
- Australia: Paediatric cardiologist

RCH cMRI caseload / casemix



~ 300 CMRI DONE ANNUALLY



CONGENITAL HEART DISEASE



OTHERS: CARDIOMYOPATHY,
MYOCARDITIS, KAWASAKI
DISEASE, AND PERICARDITIS

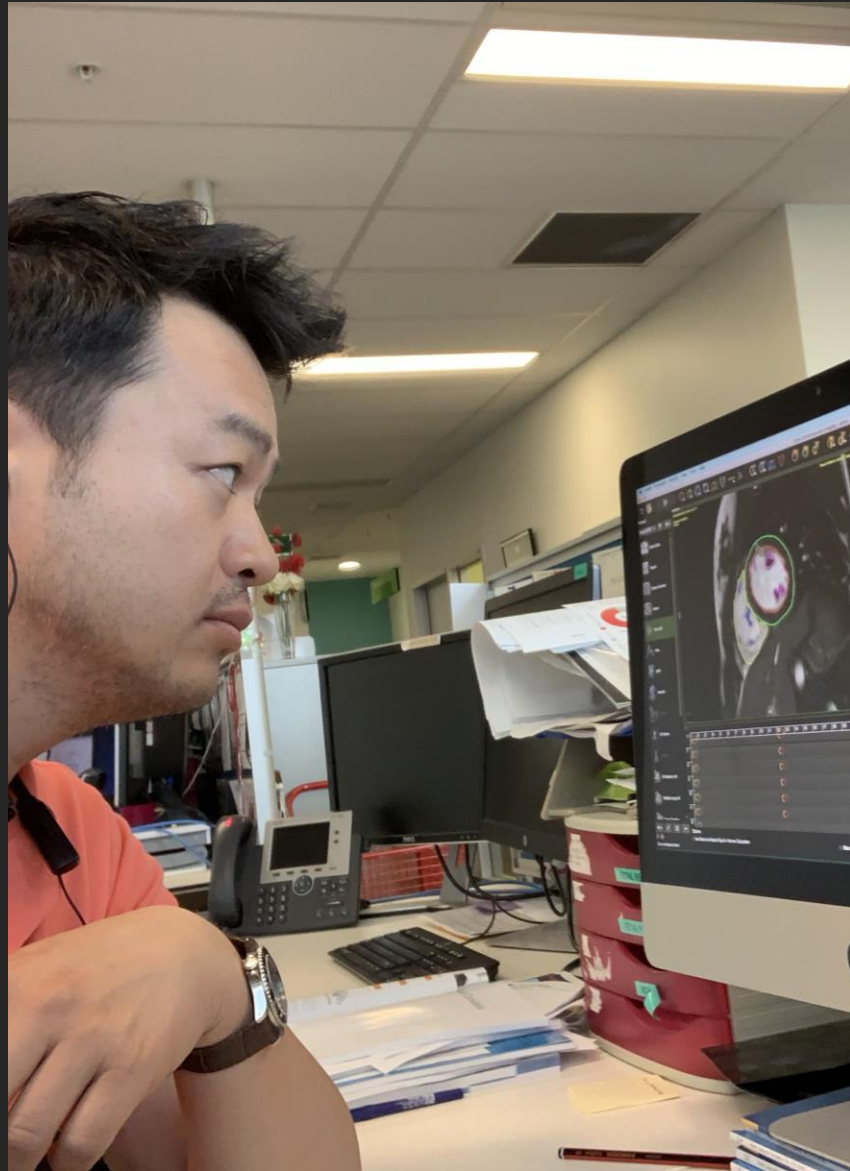
Interesting
cMRI cases





Interesting cMRI cases







The Royal Women's Hospital

- “The Women’s”
- A center of excellence for women’s health in Victoria and beyond
- Site of Australia’s first fetal cardiology unit

Australia's first fetal cardiology unit

- Headed by:
Dr Darren Hutchinson / Dr Bryn Jones

Referrals from large part of Australia

Integrated into the larger
Multidisciplinary Fetal Medicine Unit

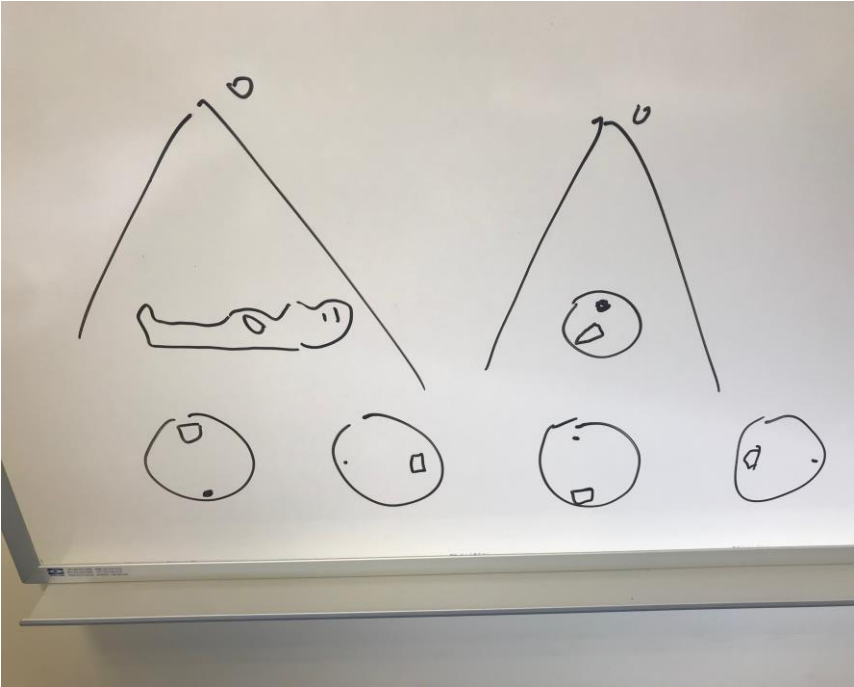
Fetal echocardiography



Screening vs fetal echo

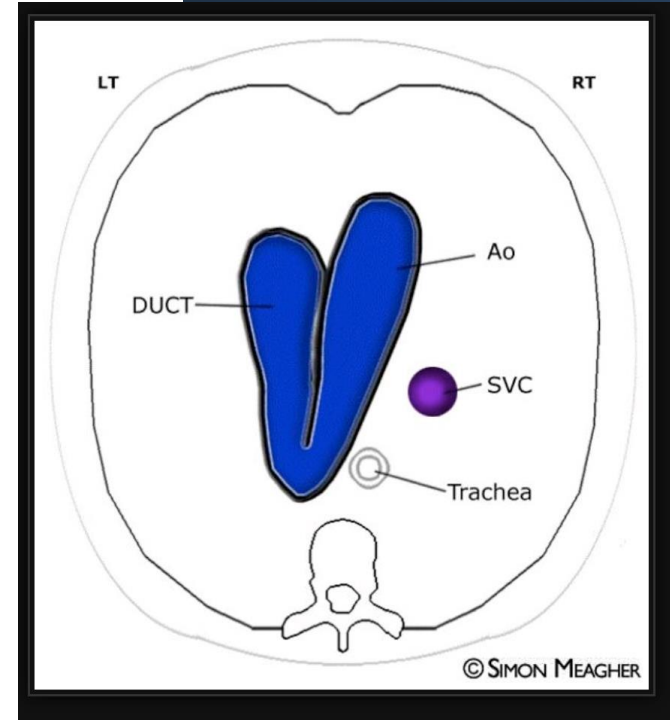


Referrals



Fetal echocardiography

- Additional views
- The use of colour doppler and M-mode
- Make a diagnosis
- Counseling



Fetal echocardiography

- My secondary imaging role
- Quite different from trans-thoracic echo (TTE)
- Maternal & fetal factors
- Different approach



Returning to Hong Kong



Using what I'd learnt to better care for the children of Hong Kong



Summary

- I had a great learning experience which has enriched me on many levels
- Thanks to Hong Kong Heart Foundation Fellowship Scholarship

