## Medical Physics (Sir Charles Gairdner Hospital) 1997/1998

This period commences on the Sunshine Coast in 1996 where I was living, teaching and actively participating in Surf Lifesaving while awaiting the examination of my PhD thesis. I was awarded the Senior Club Champion title at the Kawana Waters Surf Lifesaving club, however this was more for across-the-board participation/contribution (including annual door-to-door fundraising) rather than being the best athlete at the then relatively small club. Nonetheless, I was always appreciative of the friendships and recognition at the time since even just completing activities such as the Club's local ironman (to say the least in a totally different class

to well-known professional events such as the Cooloongatta Gold) still required a certain level of training given that Kawana (Buddina Beach) is one of the more challenging exposed beaches on the Sunshine Coast due to its frequent rips and dumping waves. Surf boat rowing participation at the time also laid the platform for a neat (simple but highly effective) theoretical model of rowing that I would come to



develop and present at a biomechanics conference, and which was eventually published as a full paper in the *Physicist*.

I had completed a one term teaching contract at the end of 1996 and was in the middle of a subsequent 12 months part-time teaching contract at a different school in 1997. My PhD was conferred in April of 1997 and an opportunity arose for a Medical Physics position at the Sir Charles Gairdner Hospital (SCGH), Perth, Western Australia. Leaving my teaching position midyear was a difficult decision since the students were just marvellous. However, it seemed an excellent opportunity and a very experienced physics teacher remained at the school. And so after weighing up several factors the decision was made and the adventure began, commencing with trekking across the Nullabor with my parents travelling across for the journey in their caravan (after a short stay in Perth they continued on their way).

Working within the Department of Medical Technology and Physics (MT&P) was, for several reasons, brief but very memorable.





The first memorable aspect was my first ever supervision of a postgraduate student, Frederick Chee (shown below), who was from Indonesia and who I found to be a very intelligent, humble,

respectful, spiritual and happy person. Some reading this background may be aware of my most recent voluntary work for the Christian University of Australia initiative on the Sunshine Coast. However, this recent affiliation does not exclude being respectful of all Faiths, and I can confidently say that I am even more respectful for having met people like Frederick. I still treasure the small parting gift of a traditional Indonesian hand puppet that Frederick presented.



The second memorable aspect of the MT&P period is having met some great new and respected Medical Physics colleagues

and friends (Jannette and Thomas), especially with Thomas and I commencing around the same time and living on the same floor of the Hospital's residential building (our makeshift spray painting of Thomas' newly acquired "beat-up" second hand car comes to mind as a funny episode which included the ire of hospital security). Living within the Hospital's residential building (for all manner of hospital staff including doctors, nurses, allied health professionals, etc.) was generally a positive new experience also.

The third memorable aspect of the MT&P period is being introduced to new treatments and procedures such as I-125 seed implants to treat prostate cancer, and after training I attended associated surgeries solo in a radiation safety capacity.

The fourth and final memorable aspect of the period requires more in depth portrayal. I was not aware at the time, but when I commenced at MT&P I was walking into, and would come to inherit, a serious, delicate, and inflamed health and safety situation at SCGH. I was asked to address a room full of worried nurses to allay their fears (about a Ward used to house Nuclear medicine patients). The meeting took a positive step forward and I was also given the serious task of designing radiation shielding for the Ward.

The tonnage of lead required was going to be considerable, and whether the building's structure could support the weight was a real ongoing issue of concern (at least initially and throughout the design process) for structural engineers. The fine balancing act of weight minimisation due to this structural consideration certainly challenged and factored into my eventual design. As it turned out, after the design was approved it was indirectly revealed from structural engineers that the design weight could actually be more comfortably supported than first realised.

I did not stay at SCGH long enough to see construction of the design. As per my official report, I was advised that the solution was meant to be temporary despite its high cost, such was the seriousness of the situation. However, I found out years later when chatting to a MT&P colleague at a conference that surprisingly the Ward was still in service, and so had stood the test of time. No doubt the Ward is periodically heavily scrutinised for suitability with its unexpected longevity possibly due to conservatism factored into some aspects of calculations (despite weight minimisation strategies and reasonability concessions in other areas).