

2011 TG Hungerford Award Citation for Steven Holloway

Steve Holloway went to **Chester Hill High School**. This isn't very far from what we now know as Villawood Immigration Detention Centre. So he went to what would now be called a "multi-cultural high school" - that meant he was better at soccer than rugby, and lots of his friends had funny names and interesting food in their lunchboxes.

Steve came from a working class background. His father ran a factory whilst his mum ran the household. Unfortunately, his dad, a smoker, died of a heart attack the week before Steve attempted the Higher School Certificate. As a consequence, Steve's preparations for the 1978 HSC were seriously disrupted and principally consisted of reading Dickens "Great Expectations" during Stuvac. Never the less, Steve breezed into the "Vet School" at the bottom of the hill at University Sydney. First year was a culture shock for Steve, as he wasn't use to mixing with 'posh' kids from the affluent North shore suburbs and the privileged high schools in the city and the bush. Steve once told me he never really got the vibe of his classmates till he started to play touch football with them, and then he developed lifelong friendships with people such as David Jordan and Glenn Browning. Steve also had some catching up to do in first year, because the subjects he chose for the HSC were not ideal preparation for the BVSc program. But Steve is good at playing catch up. It no doubt was a struggle, making a long commute by train every day to south western Sydney, and looking after his mum, but he managed it admirably and continued to excel at University.

Steve was inspired by a number of mentors as an undergraduate, and both Daria Love and David Watson had a huge impact on his approach to critical thinking in relation to both science and clinical work. Steve graduated with honors in 1983, at a time when that achievement was a rarity. He headed off into practice, starting off at Associated Animals Hospitals Lidcome, working for Ross Hansford for a year or so.

It wasn't long before Steve aspired to greater things, and to that end was accepted into the two-year internship Program (1986-1988) at the **University of Melbourne**. No doubt Steve had many mentors there, as Melbourne University clearly left his mark on him, but Professor Bruce Parry played a key role, helping Steve write his first three clinical papers for the **Australian Veterinary Journal**, which concerned snake bite and haemophilias, one interestingly with Andrew Mackin as a co-author. Clearly, he wanted to be an internist, so he headed off to the **University of Florida** to do a Residency training program (1988-1990). Just before he left, he passed the Membership examination of the **Australian College of Veterinary Scientists**, inexplicably choosing **Medicine of Cats** as his subject area. At the same time, he was also awarded a **Master of Veterinary Studies** by thesis and examination from the University of Melbourne.

Both Steve's intelligence and ability were rapidly recognized and acknowledged at the University of Florida. He was their "star resident", as the Americans say, and indeed I believe he won a prize for being the best internal medicine resident of the year for his work on haemolytic uraemic syndrome. He was interested in all facets of internal medicine and critical care during this period, and published unusually widely and well for a resident. Steve wrote interesting papers about treatment of immune-mediated hemolytic anemia using danazol, heatstroke, pancreatitis in the cat, and the seminal paper about haemolytic uraemic syndrome. The last topic was the first report of this complex syndrome in the small animal literature, published in the prestigious **Journal of Veterinary**

Internal Medicine. This paper was the one that brought Steve's high intellect to my attention, for I had to read it three times to really grasp the complex pathophysiology! Furthermore, Steve correctly speculated that "Alabama rot", an affliction of greyhounds in the South was likely a manifestation of the same disease process. Steve had some terrific mentors at Florida State, such as the brilliant double-boarded Mikey Shaer, one of the pioneers of small animal internal medicine, and ex-patriot Australian David Senior. He also had to cope with some formidable adversaries, like Colin Burrows, who for some reason made life a little difficult; but as always Steve overcame such adversities and passed the ACVIM boards at the first attempt in 1991 and was asked to stay on for two extra years at Florida as a clinical instructor. During this time he continued to publish and did some basic research into electrolyte and acid base physiology in racing greyhounds. Steve then decided to briefly work in private referral practice in Pittsburgh. It was this experience that ensured Steve returned to Australia and engage in more academic pursuits.

Steve enrolled in a PhD program with Professor Michael Studdert in the **Centre for Equine Virology** at the University of Melbourne. His studies principally concerned one of the glycoproteins of equine herpes virus-type 5. Why did someone with American Boards do a PhD studying a horse virus, you might ask? The answer for Steve was easy. He saw the future of internal medicine being in molecular biology, and he wanted to apply it to one of his favorite discipline areas, infectious diseases. The model system was not germane. He was interested in the intellectual "tool kit" of skills he would develop, and a conceptual framework that would let him tackle complex problems. No one was surprised when Steve finished his PhD in record time, publishing five papers on equine herpesviruses in prestigious, high impact virology journals. Steve briefly took up a position as Veterinary Virologist at the University of Sydney in 1998, but for professional and private reasons he couldn't resist the temptation to return to his defacto alma mater when Professor Virginia Studdert retired, taking up a **Senior Lectureship** in Small Animal Medicine in 1999. From 2002 he took on the role of Head of Small Animal Medicine when Russell Mitten retired, and in 2008 he was promoted to the rank of Associate Professor.

For a decade, Steve was essentially the heart and soul of small animal internal medicine at the University of Melbourne. He trained and mentored nine people in this and allied disciplines, all of which went on to become credentialed veterinary internists. So far, five have passed the FACVSc by examination. More will follow. He also supervised 2 PhDs, 3 MVSc by research, and 5 clinical Masters, not to mention giving over 40 lectures per year and 24 hours of practical classes. He was successful in obtaining 7 research grants, some for contract work, most from competitive granting bodies such as the **Winn Foundation** and the **Canine Research Foundation**. In 2005 he was voted "Teacher of the Year". Steve has published consistently over this period, especially in the areas of vaccinology, immunology (especially in relation to MHC) and infectious diseases. Critically, he had maintained expertise in virology and molecular biology, being one of the very few true "clinician-scientists" working in small animal medicine in Australia. He has over 35 peer reviewed publications, 4 book chapters, plus numerous conference notes and proceedings. The topics range widely – from acromegaly to bull ant envenomation, from FIV to mycobacteria, from dermatophytes to GME. He is the most omni-competent small animal internist I have ever had the pleasure to know.

In terms of veterinary continuing education in Australia, Steve has made 22 presentations for the **Centre for Veterinary Education**, the **Australian Veterinary Association**, the **Australian Small Animal Veterinary Association** or the **Australian College of Veterinary Scientists**. The range of topics is broad, far too board to list in this citation.

Different people do CPD in different ways. Steve has a knack of bringing together complex and challenging material, distilling the key concepts, and presenting them in a clear, incisive manner. This means he will often tackle challenging topics, and make them explicable to a general audience. He is not only an informative speaker, but an inspirational speaker, and there is no doubt many of the next generation of clinicians will have been

strongly influenced by Steve's talks and lectures, either at the University of Melbourne, or through the wider veterinary community. His most recent challenge is to Chair the **Australian Infectious Diseases Advisory Panel**.

Steve left Melbourne University at the end of 2009, and now works in private referral practice at Advanced VetCare. Whilst this has greatly benefitted the Melbourne veterinary profession, it is a tremendous blow for the University of Melbourne which has lost a gifted teacher and a brilliant researcher. Steve was and remains a person of integrity and principle. He never took the easy path when a wrong had to be righted. He did exceptional work overseas and in Australia, and he always took on the hard scientific challenges. It doesn't matter what body system he puts his analytic mind to – he is interested in everything, and has the best overall grasp of physiology, molecular biology and immunology of anyone I know. He is someone who can make difficult concepts very clear, and he's not the type of academic to do things to feather his own nest. He does things because they are important to the discipline and he's not afraid to call a spade a shovel!

I hope he will find enough time to continue to mentor and engage in good science in practice. I also hope he can find time to continue to make contributions to the work of the **CVE**, and for the **Australian and New Zealand College of Veterinary Scientists**.

The final word should go to Professor Mikey Shaer, Steve's mentor from Florida. Mike is not that well known in Australia, but he is a living legend in the veterinary scene in the USA, having been one of the first people to sit ACVIM boards by examination, and being a foundation fellow in the discipline of veterinary critical care. He has won more veterinary awards than I have had warm breakfasts. So his words, as set out below, should have a genuine resonance, even for an Australian audience:

Holloway is "a 'no-bull' kind of guy who stands for honesty, excellence, and integrity.

"He will always stand out in my mind as the smartest resident I have had the pleasure of working with during all of my 34 yrs at the University. There was not a day at medicine rounds when he would not deliver interesting information that he had read in the recent past. I particularly enjoyed Steve because he had a perfect work ethic and he was always where he was supposed to be without ever being a clock watcher. He was engaging and would always have the moxie to speak his piece and be able to defend it with a handful of references. He was indeed the embodiment of evidence-based medicine.

"Standing beside him always made me look smart because I knew he had all the right answers. I count my blessings for having been able to be one of his mentors."