Application of an ELISA for the identification of mosquito blood meals collected from urban habitats

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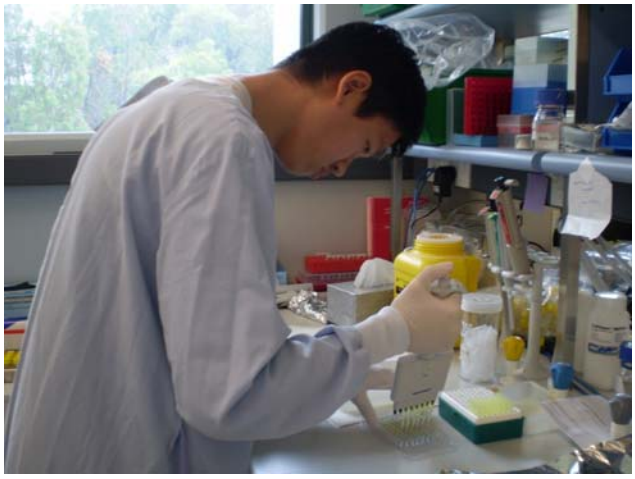
The six week project I undertook involved a placement with Queensland Health Forensic and Scientific Services in southern Brisbane. It involved the assaying of mosquito bloodmeals to determine which hosts they fed upon. The importance of this lies in the fact that many types of hosts are often involved in the transmission of viruses known to be threats to public health. By knowing the types of hosts that mosquitoes feed on in Australia, it was hoped the project results would help in determining the country's risk from exotic viruses.

It seemed like a big task, but when I first began I had no idea what fulltime laboratory work involved, let alone one that could help contribute to Australia's biosecurity awareness. So aside from the brief practical work I had at university the semester before, my experience was mainly in the realm of theory. But what a difference six weeks can make. Starting slowly – and notwithstanding the trials and tribulations that are credited towards the scientific method – I gradually learnt to assay hundreds of crushed mosquitoes and determine which hosts their bloodmeals came from. I saw positive readings light up like Christmas decorations. But more importantly, I knew why. I had put theory into practice.



I learnt a great deal from this experience. I probably cannot emphasise that enough. Not only did I obtain new techniques in laboratory diagnostics, but I also learnt much about research and its role in public health protection. By undertaking the scholarship with the AB-CRC, it has allowed me to gain an insight into what a career in public health involves. It has also given me an understanding of the many interconnected processes and facilities that constitute the large web of public health preservation and infectious disease surveillance in Australia. I would strongly advocate other tertiary students to take up this opportunity, seeming it was the previous years' reports which initially piqued my interest.