



## Welcome to our May newsletter.

Welcome to our fourth newsletter providing you with information regarding prosthetics and the latest happenings at APC Prosthetics! In this issue we will be focusing on liner technologies, Ian Robertson from our Newcastle facility will address issues of hygiene, and two students who have completed clinical placements with us will speak about their experiences with the APC crew. I hope you enjoy our latest edition and find it informative as well. As we are always looking to improve, if you have any comments or suggestions about what you would like to hear about please let us know by dropping us a line at [apc@apcprosthetics.com.au](mailto:apc@apcprosthetics.com.au)

*Richard Curby APC Prosthetics*

---

### Inside This Issue

Team Profile: Ian Robertson

Focus Technology: Liners

Topic: Hygiene

News:

- \* Tim's Announcement
  - \* Latrobe Student
  - \* International Visitors
- 

## Team Profile – Ian Robertson

APC Prosthetics Hunter

### What is new in your life?

At the moment teaching my eldest son to drive this is truly a new experience. The next step is letting him loose by himself.

### What do you get up to outside of work?

I have recently discovered a latent "artistic" streak and have completed a number of sculpture pieces, so some of my time is spent rummaging for treasures in garbage bins. I also attend my sons' soccer and basketball games and enjoy walking most nights with my wife (and the dog comes too).



"The Shearer"  
One of Ian's Sculptures

### How long have you been involved in Prosthetics and Orthotics?

18 years and **loved** every day. In that time I have worked at 3 prosthetic facilities.

### What do you enjoy about prosthetics?

I love the variety of work and attending the various clinics both metropolitan and rural throughout the area we service, although the early starts are still a killer even after 30 years of work.

### What do you see the future bringing?

Being interested in Myo-electrics I can see that muscle implants will be used to control prosthetic componentry in the near future. With advancements in prosthetics and as new components become available, today's high-end componentry and socket design will become standard and accessible to everyone. I can see this starting to happen now and it's great to see clients getting the most out of their prosthesis as a result of this.

## Technology Focus: "Liners"

While there are many different types of prosthetic fittings available, one of the common fittings that you may have heard more about in recent years are those that use a prosthetic liner.

Prosthetic liners refer to the lining or "interface" that fits between the socket and your stump. It is part of the "socket system" that connects the prosthesis to you. Ideally this point of interface should provide a degree of comfort whilst weight bearing, hold the prosthesis on whilst swinging the leg through space, and provide protection to the tissues which are being used for the connection between "man and machine".

As you can understand this is not an easy task as we are subjecting the body to pressures in areas which were not designed to take them. This is where technology, through research and design, has provided a reasonable compromise between what "was" and what "is".

There are a vast number of different liners available. The main difference is in the types of materials used, most commonly silicone or polyurethane. Each material has specific properties which can provide different benefits to the user. The essential differences in liners are thickness, cushioning properties, stiffness, protection properties and ability to suspend the prosthesis. Different liners will provide these elements to differing degrees. For example a thick soft liner will provide more comfort, but can be big, bulky and heavy. Conversely a hard thin liner will provide a very positive connection which is ideal for high level sporting activities, but might not provide the

comfort level that you desire. Like most things in life, it is all a matter of compromise!!

With the introduction of silicone and polyurethane liners, there has been a trend to provide what we call a "mechanical suspension". This involves a pin being attached to the liner, and once the liner has been rolled onto the stump the pin would lock into a shuttle lock that is fitted inside the prosthetic socket. This is still a very popular and practical solution to suspending a prosthesis.

Another increasingly popular method of suspension is that of using negative air pressure. This involves providing a seal between the stump and the prosthesis using a one way valve. The seal can either be a sealing knee sleeve which is fitted over the prosthetic socket and onto the thigh or the seal is built onto the "interface". The one way valve allows air trapped in the socket system to be expelled upon weight bearing, thus creating a vacuum seal. As with any socket system there are advantages and disadvantages, but the vacuum system works really well for many amputees.

In making any decision about socket systems, it is important to discuss the advantages & disadvantages with your Prosthetist & clinic team. Together you will be able to discuss the specific benefits which you are looking for and then be able to work out which liner & socket system best meets your needs. There are always challenges in trying new things, but change is about seeking out what can be better and what can improve one's lifestyle.

## Hygiene Matters.

### A few simple steps for lasting comfort

Hygiene is of paramount importance with any type and style of prosthesis. Simple measures can prevent skin breakdown or rashes and odours associated with the wearing of prostheses. For example: washing your residual limb, liners and sockets with a non-perfumed soap or an anti-bacterial soap such as Spider (one of my favorites). This is particularly important with a silicone suspension system or total contact prosthesis as the warm moist environment can be an area where bacteria will thrive, the result being skin breakdown and/or odour.

One method of easily cleaning the socket and residual limb is to have a container of wipes, such as Isowipes, on hand. These have an alcohol base that kills bacteria and evaporates in a short period of time. They are particularly good for amputees who are travelling and can be easily purchased at a supermarket.

One thing that should be mentioned is that a small amount of moisturiser applied on the residual limb at night is beneficial to skin care. However, care should be taken not to put too much moisturiser on as the chemicals left on the skin can cause problems in the closed environment of the prosthesis. Also, stump socks should be washed regularly and changed throughout the day depending on activity and perspiration levels. It might be worth changing stump socks rather than adding an extra one as volume change occurs.

# Latest News

## An 8 week Clinical Placement with APC Prosthetics

La Trobe University Student – Simon Yap

Hello, my name is Simon Yap and I am a final year Prosthetics and Orthotics student from La Trobe University (Victoria), completing an eight week clinical placement at APC Prosthetics. I have just completed my sixth week of clinical placement with the APC team. In that time, I have been exposed to a great deal of Prosthetic-related activities and am grateful to have experienced so much over a short period of time.

“It has been very inspiring to meet clients from diverse backgrounds and to have gained more insight into what amputees experience day after day”

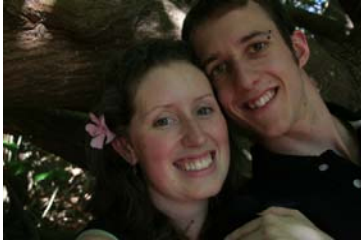
The past 6 weeks at APC has given me the chance to work alongside different staff members to learn from their knowledge, skills and experiences; whether it is from a Prosthetist, Technician, or member of the Administration Team. I have been involved in different aspects of the Prosthetic treatment process- from meeting patients after amputation, through to the plaster casting, manufacturing, fitting and review of patients and their prostheses. I have also attended a number of amputee clinics that APC services. In this clinical setting, I had the chance to observe the treatment administered by multidisciplinary team members, including the Prosthetist from the APC team, as well as a number of Physiotherapists, Nurses, Occupational Therapists, Rehabilitation Specialists, Psychologists, Social Workers, and Podiatrists. As a result, I have gained a deeper understanding of the different end-to-end rehabilitation processes for amputees.

It has been personally motivating to see and learn the different work approaches that the APC staff adopts to contribute to the success of each



treatment outcome. I am glad to have endeavored into the field of Prosthetics and Orthotics and have been given the opportunity to learn from Richard Curby and the team at APC. I hope to some day exhibit the high level of expert knowledge, skills and professionalism that they have modeled during my clinical placement.

I can't forget to mention the amputee clients I have had the chance to meet and work with at APC; especially those who have given up their personal time to enable me to expand my portfolio of experiences. It has been very inspiring to meet clients from diverse backgrounds and to have gained more insight into what amputees experience day after day, with and without their prosthesis/es. My practical involvement with amputees has reinforced the importance of gaining a holistic understanding of patients' circumstances, to enable optimal treatment outcomes. I look forward to further developing my knowledge, skills and experiences in Prosthetics and Orthotics.



## *Wedding Bells!!*

*Congratulations to Tim from APC Northmead & his lovely girlfriend Dani who have announced their Engagement.*



## **Crossing Borders**

### **Canadian Student Kimberly Morrison's Aussie Experience**



I remember the first day I walked through the doors at APC Prosthetics just like it was yesterday. It was a Monday morning, at about 10am, and I was running two hours late. My sense of direction had led me astray, and I was kicking myself for not leaving my hotel sooner. Not only was I anxious about my inexcusable tardiness, but I was about to begin my first day of a 4-week work term for uni, alone in a strange country, half way around the world from my home. The twenty-three hour journey from Canada had left me incredibly jet-lagged and slightly disoriented, and I remember the voice in the back of my head saying, "Okay Kim, Don't Screw this Up!"

I knew absolutely nothing about Australia (other than what I had read off of postcards) and I knew even less about the field of prosthetics in this country. Turns out, the methods for fabricating and fitting prosthetic limbs is quite similar to that of Canada (phew!), but the quality of the work that is completed by the prosthetic technicians at APC (Sky, Thomo, Bradley, and Tim) is some of the best that I've ever seen. While I learned a great deal about fabrication theory, casting techniques and gait analysis, I would have to say that the most important thing that I have learned here, I could never have learned from a textbook. What I have come to realize from working with the Prosthetist at APC (David, Richard, Cameron, Stefan & Amy), as well as the rest of the staff, is that no clinical relationship can function without cooperation and trust. The prosthetic team here has shown me that being a good clinician is about more than just making arms and legs. It's about working openly with patients to meet their functional needs, and striving to achieve the goals which are set out together.

I feel blessed to have had the opportunity to work in Australia. This country has so much to offer, and the people I have met have been incredibly welcoming. So don't be surprised if you see me around these halls again (hopefully sooner than later) and, when I return, I promise, I'll bring enough Canadian maple syrup and hockey tape for everyone!

### **We want your feedback!**

If you have a comment or suggestion regarding our newsletter, we would like to hear from you. Please contact us at [apc@apcprosthetics.com.au](mailto:apc@apcprosthetics.com.au)

### **Victorian Bushfire Appeal**

APC Prosthetics together with staff donated over \$5,400.00 towards the Victorian Bushfire Appeal

APC Prosthetics Pty Ltd

2 Redbank Rd, Northmead NSW 2152 Ph: 02 9890-8123 \* 7 Ailsa Rd, Broadmeadow NSW 2292 Ph: 02 4969-8700

Email: [apc@apcprosthetics.com.au](mailto:apc@apcprosthetics.com.au) Web: [www.apcprosthetics.com.au](http://www.apcprosthetics.com.au)