

NCPO Volunteer Patients Recognised at Ceremony



La Trobe's Pro Vice-Chancellor (Learning and Teaching) and Dean of the Faculty of Health Sciences, Professor Stephen Duckett, presents a certificate to volunteer Bruno Moretti while staff, students and other volunteers look on.

On Thursday 28th of October, a BBQ was held for all the volunteer patients who have participated in the NCPO teaching programs. At that BBQ, certificates were presented by Professor Stephen Duckett to those patients who had provided five or ten years voluntary service, giving their time to act as subjects for the NCPO teaching program. In a short speech, Professor Duckett praised the work of the

many volunteers and acknowledged that without them, the NCPO would not be able to provide the high level of clinically based learning that our students enjoy. All of the attending 24 certificate recipients were delighted with acknowledgement of their valuable contribution to the NCPO teaching program. A few of the volunteers have been participating in the teaching program since before the NCPO moved from the Carlton Campus in 1997. They were pleased to have the opportunity to meet other volunteers who they would normally not see. Many of the volunteers were surprised by the number and range of disabilities that participated in our program. There were 8 volunteers from the lower limb orthotics program and 16 from the lower limb prosthetics teaching program who enjoyed the opportunity to share experiences with people who had different disabilities. NCPO students from all years and all teaching staff enjoyed the pleasant conversation and relaxed atmosphere of the lunch time BBQ. There were a total of 42 volunteer patients who were eligible for either a five year or ten year certificate and those volunteers who were not able to attend, have been sent their certificates in the mail.

The NCPO is always interested in hearing from people who use prosthetic or orthotic devices and are interested in becoming a volunteer. Please call Barbara at the HS Clinic on 9479 5831.



NCPO Volunteer Glenys Waters and Professor Duckett with her certificate

October Graduation Ceremony

The La Trobe University Faculty of Health Sciences Semester Two Graduation Ceremony took place on Thursday 7th October. Eighteen prosthetics and orthotics students were awarded their Bachelor degrees along with Dr. Roslyn Boyd who was awarded a Doctor of Philosophy. Dr. Boyd's thesis titled "The Central and Peripheral Effects of Botulinum Toxin A in Children With Cerebral Palsy" was co supervised by NCPO staff member Associate Professor Dr. Tim Bach.

The NCPO would like to congratulate all of these students on receiving their awards.



The October NCPO graduates

Japanese Students Visit NCPO

A group of 23 prosthetic and orthotic students from Kobe College of Medical Welfare Japan were recently hosted by the NCPO. The students spent one week at the NCPO attending classes with NCPO students, presenting research papers and participating in educational tutorials to gain a greater understanding of P&O education in Australia. The group also attended the Austin Health Prosthetics and Orthotics department to investigate the service delivery model and facilities of an Australian clinic.

This annual visit by the Japanese students also provides our domestic students with an opportunity to learn more about prosthetic and orthotic practices in another country and to compare their educational experiences.



Kobe College of Medical Welfare students provided some post BBQ entertainment during their visit to the NCPO

Employment Opportunities at the NCPO

The NCPO is currently seeking expressions of interest from dynamic Australian P&O practitioners to join the NCPO team.

In collaboration with the Australian Orthotics and Prosthetics Association (AOPA) we are seeking to fill a maternity replacement contract for the position of AOPA Executive Officer. This two day per week position is located at the NCPO and offers an attractive salary and employment conditions.

The NCPO Clinic provides a range of orthotic and prosthetic services and requires a part time clinician. Responsibilities of this three day per week position include O&P clinical service provision and participation in clinic marketing and financial management. This position is ideally suited to clinicians possessing experience in these areas however recent graduates will also

be considered. Salary to be negotiated with the successful applicant commensurate with clinical experience.

Both of these positions become available from January 2005, with the potential to negotiate with applicants to combine these appointment to create a full time role or for job sharing of these roles.

Interested parties should contact NCPO Head Mr. Rod Cooper for further information. (03) 9479 5862 rod.cooper@latrobe.edu.au

The NCPO is also pleased to announce the appointment of Mr. Anthony Francis to the role of NCPO Clinical Services Manager. Anthony possesses a depth of experience in orthotic/prosthetic service delivery and will be a valuable asset to the NCPO clinic. He can be contacted on 9479 5037. We welcome Anthony to the NCPO.



2005 Student Research Symposium

The Annual Student Research Symposium was held on November 1, 2004. In the symposium, students presented the results of their honours research and Independent Study Projects.

The symposium program was smaller than in previous years because of the changes to the third year subject, Independent Study Project. This year, about half of the third year students completed a series of Clinical Challenges delivered in a Web-assisted format. Only students who completed a research or development project presented their work during the symposium.

A number of prosthetists and orthotists from local facilities attended at least part of the Symposium. We appreciate the contribution these professionals made to the discussion during question time and during breaks in proceedings. We also appreciate the support of P&O facilities in making time available for their staff to attend the Symposium.

A closing reception at the conclusion of the Symposium was sponsored by Reis Orthopaedic and Surgical Services. We gratefully acknowledge Helmuth and Sue Reis for their support of the social aspect of our Symposium over the past five years.

A list of the topics, investigators and supervisors is available on the NCPO web page: www.latrobe.edu.au/ncpo. Anyone who is interested in additional information about any of the topics should contact the NCPO.

The Symposium has established itself as a day of excellent P&O research. The next Student Research Symposium will be held on Monday, October 31, 2005. Prosthetists, orthotists and professionals in related areas are welcome to attend.

NCPO research into student retention

The third year NCPO subject Independent Study Project provides the opportunity for students to design and complete a small research project. One of the projects completed this year investigated factors affecting student retention in the Bachelor of Prosthetics and Orthotics course. Student retention was identified as being an important consideration for the NCPO due to it being the sole provider of Australian graduates and future negative financial penalties for the course for under enrolment (Nelson 2004).

The project was conducted by Mr. Jack Yeung and Ms. Emily Graham and supervised by Mr. Rod Cooper. It compared the retention rate of the B.P&O course to other La Trobe Health Sciences courses and then examined key factors thought to contribute to students withdrawing from the course.

The study found that retention in the B.P&O course (76%) was lower than other Health Sciences courses such as Physiotherapy (90%) and Podiatry (81%) but higher than the Orthoptics course (67%). Research by Tucker (1998) suggests that students who have a greater knowledge of the course they are entering are more likely to complete the course. The current study suggested that the Physiotherapy and Podiatry professions have a higher public profile and that students entering these courses are likely to be more knowledgeable of what the courses will contain when compared to prior knowledge of applicants entering the P&O course.

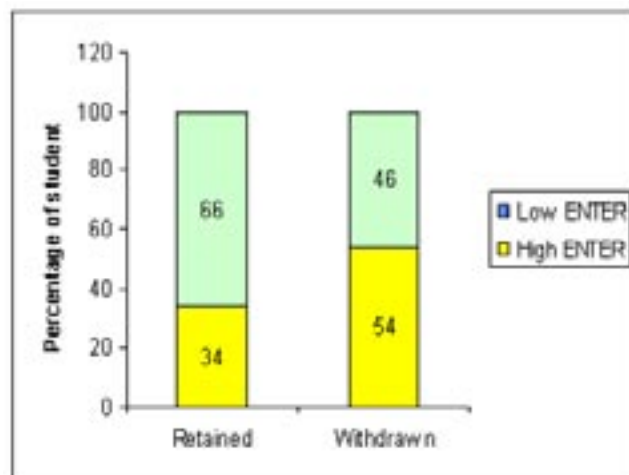
An unexpected finding of the study was that students accepted into the course with Year 12 enter scores above 90 were significantly more likely to withdraw from the course than students who obtained lower scores ($p=0.03$). The study also revealed no statistical difference in retention between year 12 and "mature age" student course entrants.

The authors recommended that to improve the course retention rate the NCPO should review its current selection criteria by reducing the emphasis upon previous academic achievement and place a greater focus upon "prior exposure" of the applicants to the Prosthetic and Orthotic profession. Several suggestions for further study to provide a greater understanding of factors affecting student retention were also made.

References.

Nelson, B. (2004) Higher Education Report for the 2004-2006 triennium. Australian Government, Department of Education, Science and Training.

Tucker, C. (1998) Recruitment, selection, wastage and retention of student midwives. *Midwifery Digest*, 8(1), 26-28.



Students with higher ENTER scores are more likely to withdraw.



Curriculum Corner: Transtibial Prosthetics

In the Transtibial Prosthetics program, 2nd year students have been taught how to cast and fit an ICEX prosthesis. Continuation of this project in the 2004 NCPO program has only been possible by the ongoing and generous donations of 30 Ossur catalogues, 30 ICEX kits, many silicone liners and pin locks by Ossur Prosthetics. The project this year was further supported by participation in the 2 week teaching program by Fiona Barnett of Advanced Prosthetic Services which enabled her high level of experience to be communicated in a relaxed teaching situation. Fiona provided Lectures, Demonstrations and laboratory assistance for this ICEX project.

This ICEX project allows the NCPO students to gain practical hands-on knowledge and develop many skills that would not be possible without it.

This project introduces the students to the principles and practicalities of:-

- 1/ the ICEX socket fabrication process,
- 2/ the use of the Icecast pressure casting method,
- 3/ the Icecast plaster casting method,
- 4/ hydrostatic socket principles and casting techniques,
- 5/ silicone and other elastic liner selection criteria,
- 6/ elastic liner suspension methods including distal locking systems and lanyard suspensions,
- 7/ understanding the trimline requirements of hydrostatic sockets,

8/ processes for cutting and sanding carbon composite sockets.

As well as the project specific experiences listed above, students reinforce their knowledge of the bench, static, and dynamic alignment process, gain more experience in assessing different amputee patients and extend their clinical problem solving skills.

This year we were fortunate to have Harvey Blackney of Advanced Prosthetic Services and Jamie Gillespie, Prosthetist, International Markets from Ossur Prosthetics also participate in the teaching program. In an email from Jamie after the project was completed, he indicated that he thought our students were "very fortunate in that they have such a varied understanding of concepts by graduation". He also suggested that our program would contribute to development of the profession and raise the standards within Australia. The role of a teaching program is to raise the standards and the ICEX project allows us to achieve that in an efficient way.

Many experienced international P&O professionals suggest that the Australian NCPO undergraduate course is one of the best (if not the best) in the world. The participation by our volunteer patients and projects like the ICEX project, help to strengthen our program.

For more information about our transtibial prosthetics program, please contact Les Barnes on 03 9479 5847 or email: l.barnes@latrobe.edu.au

What's Happening in P&O Clinical Education?

2nd year, 2004

24 students have completed or are about to start their 3 week clinical placements. Students have been allocated to facilities across Australia attending facilities in Melbourne, Geelong, Ballarat, Albury, Hobart, Launceston, Canberra, Adelaide, Brisbane, Sydney and Darwin.

4th year, 2005

21 students have been allocated 4th year placements with 2 students heading to New Zealand and one to Japan.

Honours students will undertake Block 1 placements in 2005 as the placements begin a month earlier in 2005.

Students will attend a Pre-placement Symposium Day prior to their Block 1 placements where a Clinical Supervisor will attend to overview Clinical Supervisor expectations. This session appeared to be well received by students last year and Clinical Supervisors noted an improvement in the student's preparedness for their placements.

Clinical Education Guidelines

The new version of the guidelines will be completed soon. Please check the NCPO web page for the updated Clinical Education Guidelines.

Clinical Supervisor's Meeting

A clinical supervisor's meeting was held in early November. Clinical Supervisors should find a copy of the report from that meeting enclosed with this newsletter.

Clinical Education Coordinator 2005

Kaisha will be taking maternity leave from mid-January 2005 for 12 months. In her absence, Anthony Francis will cover 2nd and 4th year clinical education and Michael Dillon will take over 1st year clinical education.

Further information about P&O Clinical Education can be obtained from the Coordinator, Kaisha Gurry, phone: (03) 9479 5864 or email: K.Gurry@latrobe.edu.au



Tech Tips - Cast Cutters

At the NCPO we use a variety of cast cutters and we thought others may benefit from our experience of the different models available. Due to our limited budget cost is always an important factor, and over the years we have found several lower cost alternatives to conventional cutters. We also look at the pros and cons of air operated cutters versus electric ones.



This is a conventional electric medical cast cutter. The brand is Martin, but it is very similar to others by Stryker, DeSoutter and others. It is very high quality, well made, is passed by the TGA for use on patients. It is also fairly quiet. It costs about \$1200, so it is the upper range for these tools. Blades are also expensive.



This electric model is by Fein, and was originally designed as a multi purpose sanding/cutting tool. However, it is passed by the TGA for use on patients. It is quiet if used on low speed, and only costs about \$350 for the basic tool, or \$450 with a kit of different attachments. The black fine toothed blades are about \$60 which is typical.



This is an air operated model by Dotco. It is found in many different workshops, not just P & O, and is very well made. These tools are designed to last a lifetime, and are priced to match at about \$1500. Blades can also be expensive, but we have found a supplier in the USA that charges a few dollars. This is the 'Rolls Royce' of cast cutters, but unfortunately has a price to match,



Above is an air operated sander by KC Tools/Suntech (Model SM5185). With a slight modification (A different bolt and washer) the blades from the Fein cutter can be used on this machine. The advantage: It costs about \$220 - a huge saving compare to traditional cutters. Like the Fein, the blade is parallel to the machine, as opposed to perpendicular like a traditional cutter, but if you don't mind this, it is a great cutter for a low price.

Air or Electric?

This is up to the practitioner, but there are several things to keep in mind: Air tools are not practical to use on patients. Air tools use more electricity - The compressor converts electricity to air, which is then converted to cutting power with a loss of energy along the way. Air tools last a long time if looked after, much longer than power tools. Air tools don't have the risk of electric shock in wet environments. If you want more information, please contact Steve Hockey on 03 9479 5747 or email: s.hockey@latrobe.edu.au



*Everyone at the NCPO
would like wish all our
readers a Merry Christmas and a
safe and happy holiday season*



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