

POSS Makes Donation to Vietnamese Rehab Hospital



Left to right: Professor Cao Minh Chau, Professor Nguyen Xuan Nghien, and Lee Brentnall from POSS

Prosthetic and Orthotic Unit, and Professor Nguyen Xuan Nghien, head of the Rehabilitation Department. The Professors were extremely grateful for the contribution, which will go toward improving the Prosthetic and Orthotic services provided by the hospital.

2003 was a busy year for POSS (Prosthetics and Orthotics Student Society). One of the highlights of POSS activities for the year would have to be our fundraising efforts led by Lee Brental. The money was raised for the Bach Mai Paediatrics Hospital and the work of the Vietnam Veterans of America foundation at the hospital. A bands night held at the Queensbury Hotel in Carlton was the main fundraising event, showcasing many talented students. The money that the bands night raised was given a helping hand from the POSS piggy bank.

The presentation was made during the ispo2003 ASM in November 2003. Prosthetic and orthotic students were pleased to present the money to Professor Cao Minh Chau, the director of the

P & O Students Set Their Sights on Hong Kong



Innovations for Quality Living

More information about the ISPO World Congress can be found at:

<http://www.polyu.edu.hk/ispo2004/>

Following the success of the Melbourne ISPO Annual Scientific Meeting in November last year, a group of approximately 15 B. P & O students aim to travel to Hong Kong for the ISPO World Congress in August 2004. The students range from first to fourth year, and are all incredibly enthusiastic to be a part of this event. Many activities are planned to take place within the university to raise funds to assist the students with their travel and accommodation expenses. The students would like to appeal to any readers who may wish to assist them in raising funds for the trip. If you are able to assist in any way possible please contact the NCPO. We will be keeping you updated of their progress as the date of the Congress draws closer.

Call for More Volunteer Patients

The NCPO Education program is very dependant on providing our students with a real experience for provision of prosthetic and orthotic devices. To do this we need volunteers who are willing to give up their time to help. We currently have a wonderful team of people who act as volunteers for our students.

We are in urgent need of Foot Othoses and Transfemoral volunteers. If you can help in any way, please contact the NCPO on (03) 9479 5831

NCPO enrolls 30 new students

Strong demand was experienced for first year places in the Bachelor of Prosthetics and Orthotics with a final *enter* score of 86. Twenty eight first year students were selected consisting of VCE applicants, special entry applicants, students applying to transfer from other courses and an international student from Japan. The NCPO was pleased to enroll our first student into our Japanese conversion program. This student has completed three years of P&O study in Japan and will complete another year of combined second and third year subjects at the NCPO to obtain our Bachelor of Prosthetics and Orthotics degree. Three more students are expected to join this program in second semester. We were also pleased to facilitate the transfer of one student from the University of New South Wales P & O program. Under an agreement reached between the two parties, the NCPO will teach out the remaining subjects in this student's degree.

Continuing Education Course and Lecture Marlo Anatomical Socket Design

Presented By

Ing. Marlo Ortiz Vazquez del Mercado

Lecture: 12th July 2004

Course: 12-15th July 2004

The numbers for the course are strictly limited.

The lecture will be held in the evening and includes refreshments.

For all enquiries, please contact Michael Gurry on (03) 9479 5037 or Email:

m.gurry@latrobe.edu.au

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What's Happening in P&O Clinical Education

The NCPO has reintroduced a uniform for the students for clinical placements and volunteer patient sessions on campus. The uniform consists of a shirt which has the NCPO logo embroidered on it and the student's own trousers or skirt. We hope that the uniform will address many of the issues we have encountered with inappropriate dress on placements.

4th year students are currently undertaking their first 8 week placements at facilities around Australia and overseas. Students have travelled to Adelaide, Queensland, Perth, throughout Victoria and Chicago.

A Pre-placement Symposium Day was held one week prior to the fourth year students commencing their placements. David Wilson-Brown attended to provide students with the "Expectations of Students from a Clinical Supervisor's Perspective". The information presented included contributions from other Clinical Supervisors of fourth year students. Also discussed were the requirements for assessment and format of the clinical exam. The NCPO hopes that this has helped the students to prepare for their placements.

Second year placement results have been processed. Thank you for returning the paperwork so promptly.

First year students will be deciding on their preferences for the placements in the next two weeks and placements will be allocated prior to Easter.

The next Clinical Supervisor's meeting will be held on Wednesday April 28, at 4.30pm in the Health Sciences Clinic. An Agenda is included in this edition of the newsletter.

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

Donations to the NCPO

In the last few months the NCPO has gratefully accepted donations of prosthetic and orthotic componentry and materials from several companies and institutions.

Ossur, through local distributor, Advanced Prosthetic Centre, has donated prosthetic components, including knee mechanisms and feet, as well as continuing their support of our transtibial prosthetics programs.

Chas Blatchford, through their local distributor, Orthopaedic Techniques, has donated prosthetic knees and feet as well as other components for use in our transfemoral prosthetic classes.

Smith and Nephew has donated materials for use in the Orthotic Management of Fractures subject.

The Crippled Childrens Society of South Australia sent a large package of used orthotic components.

Royal Talbot Rehabilitation Centre has donated used spinal orthotic devices and prosthetic components and feet.

The Prosthetic and Orthotic Service at The Canberra Hospital donated some used prosthetic feet.

Hales Orthotic Services at Coffs Harbour also donated some used prosthetic components.

The NCPO expresses its gratitude to these organisations for their assistance. We are always on the lookout for used components, so if your facility can help, please contact us on (03) 9479 5747.

Details of the generous support from corporate sponsors can be found at: www.latrobe.edu.au/ncpo/sponsors

NCPO Staffing Update

The NCPO is pleased to welcome Mr. Anthony Francis from Network Orthotic Services to the teaching team again this semester. We look forward to utilizing Anthony's extensive clinical experience in assisting in the delivery of the lower limb orthotics program.

We also welcome Mr. Wes Pryor who has been appointed to a part time international development role. The NCPO gratefully acknowledges the vision and financial assistance of La Trobe University Vice Chancellor Professor Michael Osborne in supporting this role. We hope to have an article about Wes's new role in the next issue of the NCPO News.



Anthony Francis teaching Lower Limb Orthotics at the NCPO

Curriculum developments in Transfemoral Prosthetics

Substantial redevelopment of the transfemoral prosthetics program has occurred this year. This was done to improve the assessment and clinical decision making skills of graduates. In previous years, the transfemoral program has focused on the treatment pathway from initial assessment through to fitting and dynamic alignment. While this is an important aspect of prosthetic treatment, so is the ongoing care of existing prostheses, necessitating strong skills in reviewing fit, function and clinical problem solving.

Several projects have been developed to enhance these skills. These require students to review the fit and function of prostheses made by fellow students and record these assessments in a medical record, in much the same way as would be required in clinical practice.

Students will also benefit from a project requiring them to independently learn to fit and adjust advanced prosthetic knee mechanisms utilising instructions which come with these knee units. This project was made possible thanks to donations from Ossur, Endolite and Otto Bock.

If you would like to know more about curriculum developments in transfemoral prosthetics, please contact Michael Dillon on 9479 5889 or Michael.Dillon@latrobe.edu.au

2003 ISPO Workshop

The November 2003 Annual Conference of Australian ISPO Pre-conference Workshop was attended by more than 40 delegates who took the opportunity to meet the legendary character and father of prosthetic biomechanics, Professor Charles Radcliffe.

The workshop was divided into two sections. The first session (in the morning) was devoted to a detailed analysis and comparison of Four Bar Linkage (4BL) systems where a computer program developed by Professor Radcliffe was used to compare linkage length and alignment of 6 common knee units. These were related to the swing of the limb (the centrode) and the Hosmer Spectrum 4BL knee (designed by Professor Radcliffe) was presented. From his computer program he was able to analyse in detail the 4BL knees. The morning session finished up with a demonstration of two volunteer patients who showed the use of the Hosmer Spectrum Knee.

The second session was a practical session for clinicians where the Hosmer Spectrum knee was re-aligned, swing control adjusted and a clinical analysis of the gait was discussed. Trials of the 4BL prostheses were carried out over rough terrain, slopes and stairs to demonstrate the control achieved by the volunteer patients.

All participants felt that the workshop was valuable and interesting.

Les Barnes



The 2003 ISPO Workshop participants

Tech Tips - Using Images in Presentations and Documents

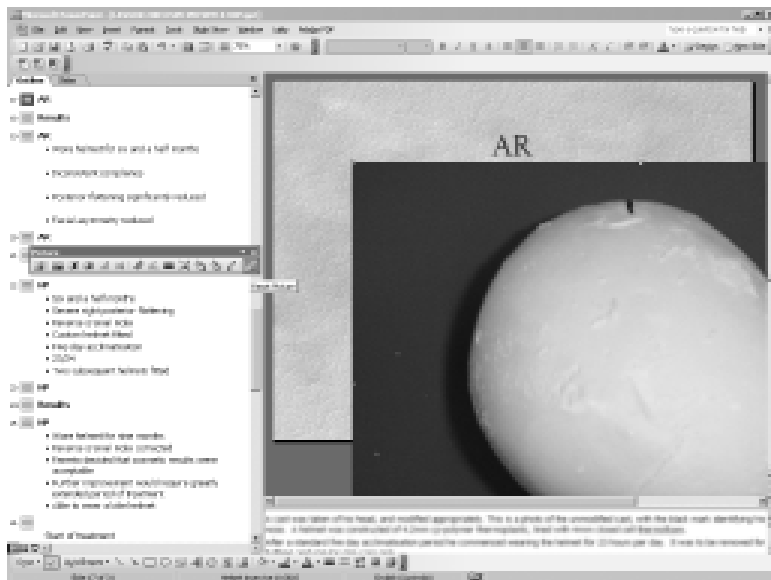


Fig. 1 - A large image reset in PowerPoint

When organising seminars and conferences, the NCPO receives many PowerPoint presentations. Some of these are poorly built due to inappropriate use of images and photos. The size of presentations can grow rapidly as images are inserted, but with careful planning, the final size of a 35 slide presentation with 20 images and 5 diagrams should fit on a floppy disc (Less than 1.4Megabytes). For example, Fig. 1 shows an image 'reset' in PowerPoint to its original size of 1171 by 906 pixels. Although the author had shrunk the image in PowerPoint, it maintained its original file size (about 150Kb as a jpeg). Many such images in this presentation made the whole PowerPoint file over 14Mb in size. Fig. 2, on the other hand, shows that the reset image is the original size, about 400 x 350 pixels. This image is less than

20Kb as a jpeg. This presentation, despite having over 30 slides and 20 images, was only 700Kb in size.

Figure 3 is another example of what not to do. Here the image (scanned from a book) should have saved as 1 bit line art, or as "black and white image" instead of greyscale. It would have been much clearer and about one eighth

of the size. Another problem shown here is that some of the text has shown through from the printing on the reverse side the page. To avoid this, cover the reverse side with a sheet of BLACK paper before scanning.

When Inserting images into PowerPoint:

Use the menu command Insert->Picture->From File... to insert the image rather than pasting or drag/drop.

Size your image appropriately first – inserting a large image, then resizing in PP doesn't reduce the file size.

For simple diagrams and shapes or arrows and lines, try and use PPs vector based drawing tools – these will result in a much smaller file, otherwise use a gif image.

For maximum compatibility, save to a slightly older version of PP, rather than the absolute latest version.

Try to have a CD or disc handy with your presentation and the original image or media files in the same folder.

General Imaging Points to Remember

These suggested settings will give high quality output while conserving resources, such as disk space, memory, program performance, printing and download times.

Scan at the size and resolution of the end use of the image – Changing resolution and resizing in software leads to a deterioration in image quality

Try to get the image straight on the scanner – this is much easier than trying to correct it in software later on.

When scanning something from a book or page with thin paper, such as a newspaper, the printing on the reverse side can come through and mess up the image you are trying scan. To prevent this place a sheet of opaque black paper or cardboard on the back of the page you are scanning

If your images are to be used in an on screen presentation, set your digital camera to 640 x 480 and/or resize photos before inserting them. This is for an image which will occupy a full slide. Remember that you may have a 4 Mega pixel camera, but 640 x 480 is 0.3 Mega pixels! Set your scanner to 72DPI and use a JPEG for format for colour photographs, or the GIF format for black and white photographs. For diagrams, use the GIF format, with 256 colours for colour, and 2 colours for black and white line drawings. Remember to turn off 'Dithering' for diagrams.

If your image is to be placed in a document that is to be printed 200 DPI is fine for nearly all printed images, even though you may have 600, 1200 or more DPI printer. You will not notice an increase quality if you increase the resolution. An image measuring 10 by 15 cm at 200 DPI would be about 800 by 1200 pixels. The Tiff format is the best to use here, with all compression off. This makes the files larger, but this is generally accepted when the item is for print. If you are not printing in colour, changing your images to greyscale will reduce the file size.

Use a PC type extension on the file name (full stop and three letters) and no PC/Unix illegal characters: / \":!@{}+|

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Subscription is free to people or organizations with an interest in prosthetics and orthotics

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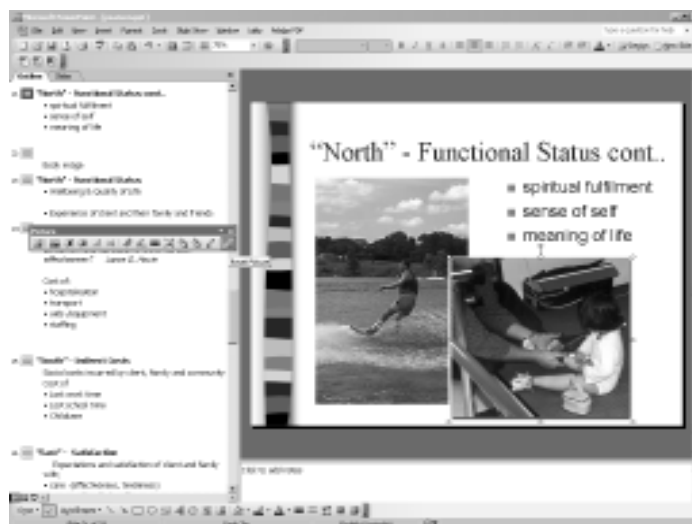


Fig. 2 - Resetting the image does not change the size

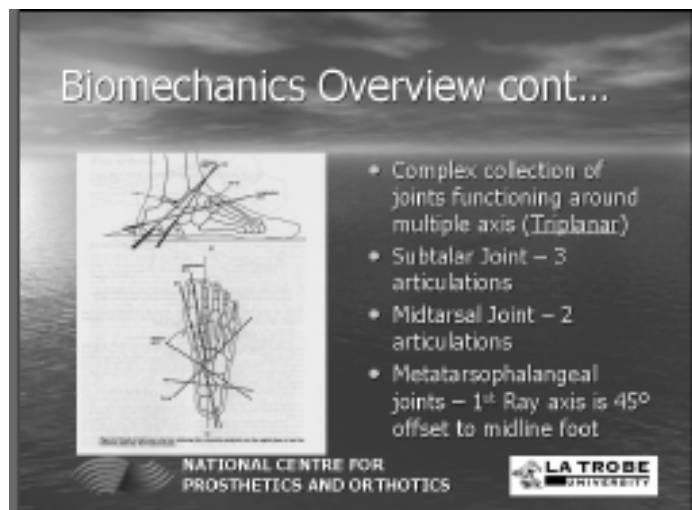


Fig. 3 - This image should be a 2 colour bitmap