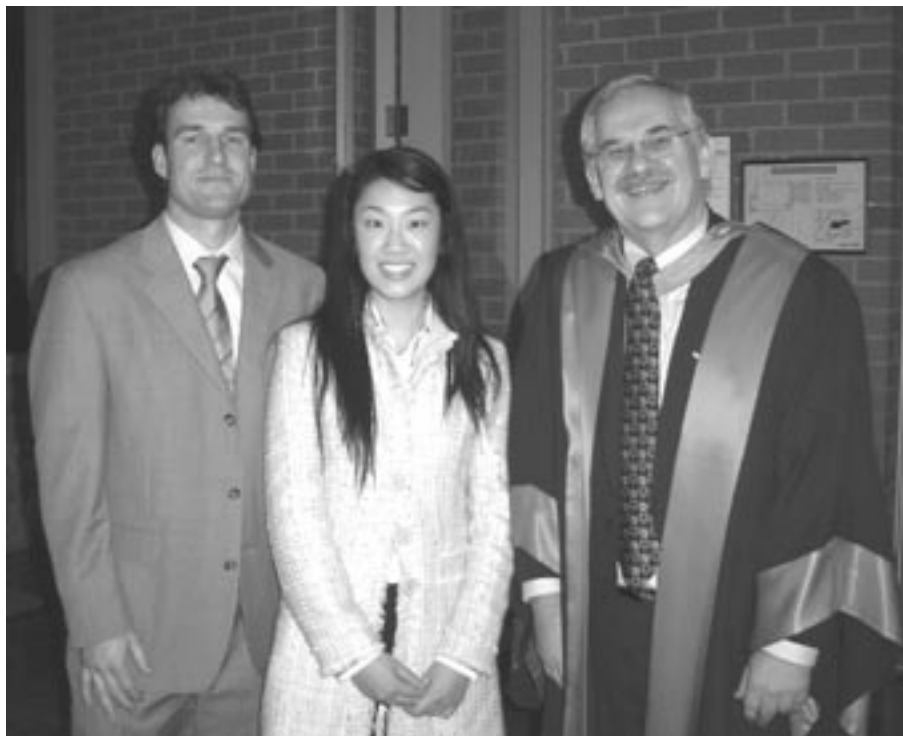


## NCPO Student wins Faculty Medal

Ms Aileen Ibuki, a P&O honours graduate in 2004 was awarded the David Myers University Medal at the University Prizes Ceremony on August 5th. The D M Myers University Medal is awarded annually to the outstanding undergraduate student graduating in each Faculty (usually an honours graduate). The medallion was donated by the first Vice-Chancellor of La Trobe University, Dr David Myers, CMG.

Aileen completed the honours year of her Bachelor of Prosthetics and Orthotics degree with a thesis on orthotic treatment of muscle spasticity aimed at helping patients with such conditions as cerebral palsy, stroke or head injury. She used electrical stimulation of nerves to determine whether changes in orthosis shape or materials in particular areas of the ankle and foot could affect the excitability of their reflexes. Her work challenged a number of current theories of spasticity management. On the basis of her



*Left to right: Rod Cooper, Head of the NCPO, Aileen Ibuki and Stephen Duckett, Dean of Health Sciences*

honours research, she received an Australian Postgraduate Award and is currently continuing with research towards her doctorate.

## NCPO Contributes to AOPA Gait workshop

In July the Australian Orthotic and Prosthetic Association (AOPA) ran a professional development workshop entitled "Introduction to the gait laboratory and management of the partial foot amputee." The one day workshop was designed to introduce or refamiliarise clinicians with gait terminology, provide detail about the equipment involved in movement analysis (how it works and what it can measure) and teach skills in interpreting gait data. The workshop incorporated theoretical, practical and tutorial components using examples of partial foot amputee gait. During the workshop the gait patterns of a partial foot amputee were analysed in conditions of barefoot walking as well as the Ossur Dynamic and Camp Toe-off orthoses. The workshop was hosted by the Biomechanics Laboratory, Faculty of Health Sciences, University of Sydney and involved presentations by A/Prof. Richard Smith, Dr. Damien O'Meara and Dr. Michael Dillon from the National Centre for Prosthetics

and Orthotics, La Trobe University. The workshop attracted 25 participants with backgrounds in prosthetics/orthotics, podiatry, physiotherapy and rehabilitation medicine. Participants reported that it "provided a great opportunity to meet other health professionals who work with partial foot amputees, we are looking to collaborate in the future"; "the practical sessions gave great insight into ways in which we can further research this population"; "the software that provided real time comparison was amazing. It really enabled me to put it all together!" Given the success of the workshop similar sessions are looking to be held in the future.

The workshop would not have been possible without the financial support of OAPL and Australian Orthotic Technologies, the organisational legwork of Fiona Barnett and Bernard Badorrek (AOPA NSW-CPD committee members) as well as the assistance of Jason Downs.

## NCPO Head Invited to Teach in Japan

During the mid semester break the Head of the NCPO, Mr. Rod Cooper was invited to Kobe College of Medical Welfare, Japan to teach their second year P&O students. Mr. Cooper delivered a series of lectures and practical classes on Orthotic Fracture Management, and Foot Orthotic management. "It was interesting to see how different orthotic practices are in Japan, especially in the area of foot orthotic assessment and provision" reported Mr. Cooper.

When discussing his teaching of the Japanese students Mr. Cooper commented "It was challenging to try and teach Japanese P&O students about these areas as our NCPO teaching style involves constantly challenging the student's knowledge and asking them to justify their practices based upon this knowledge. This initially seemed to be quite confronting to the students." "It was pleasing to note that towards the end of the classes, students began to ask more questions, verbalise their knowledge and challenge some of their previous thinking in this area." he concluded.

In addition to his teaching at Kobe College, Mr. Cooper also presented seminars to professional groups



*NCPO Head Rod Cooper advises a Japanese P & O student during a fracture management class*

on Australian P&O education and foot orthosis provision. The visit further strengthened the relationship between Kobe College of Medical Welfare and La Trobe University. It is anticipated that more collaboration with other La Trobe University disciplines such as Physiotherapy and Occupational Therapy could be developed in the near future.

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## Case Study: Swimming Prosthesis for a Transradial Amputee

A young transradial amputee in his early thirties presented to the NCPO Clinic for a replacement swimming prosthesis which he had obtained as part of a research project. His current swimming prosthesis consisted of a laminated socket with a silicon liner and Lanyard suspension. A custom made paddle was attached to the wrist unit and hinged elbow joints with cuff attachment were also fixed to the prosthesis to prevent rotation when swimming. Our client had been using the prosthesis regularly for the past few years but had currently found that it was not suspending as efficiently as it used to and his silicon liner had developed distortions and small tears as a result of friction between the silicon liner and the rivet attachment sites.



*The original prsthesis*



*The foamed extension over the original polypropylene mould*

*The second PP shell moulded over the foam and wrist unit*

A cast was taken and a new swimming prosthesis was fabricated for our client. A socket was fabricated from polypropylene following a 2-step moulding procedure. An initial mould was draped over the cast directly, the distal end was then extended using a foam mixture which was shaped and flattened to enable attachment of a wrist unit. A second drape was then completed over



the wrist unit. A new paddle was constructed to fit into the wrist unit and hinged elbow joints were bent, aligned and attached to the socket and polyethylene humeral cuff. Our client was also provided with a new silicon liner.

Suspension was significantly improved with the more intimate fit of the newly fabricated socket. Polypropylene was chosen as it is a water resistant material and is less prone to deterioration from water than other materials. Our client was certainly happy with the completed swimming prosthesis provided.



*The finished prosthesis*

## NCPO Students Acknowledged for Academic Excellence

Seven NCPO students were recently presented with awards in recognition of their outstanding 2004 academic achievements. The awards were presented at the La Trobe University Annual Presentation of Awards and Prizes ceremony.

Recipients of awards were:

Aileen Ibuki – Hans Georg Nader Prize; awarded for the highest overall result in the honours year, and the D.M. Myers University Medal; awarded to the outstanding undergraduate student graduating in each faculty.

Tim Burke – Australian Orthotic and Prosthetic Association Inc. (Victorian Section) Prize; awarded to the most outstanding first year student.

Sarah McLean – Australian Orthopaedic Association Prize; awarded to the most outstanding second year student.

Amy Emons – E.H. Armstrong Prize for services to

Lower Limb Amputees; awarded to recognize contributions to amputees through a research project.

Emily Graham – International Society for Prosthetics and Orthotics (ISPO) Prize; awarded to the most outstanding third year student.

Martina Lukin and Emily Wilson – joint recipients – Robert Gardner Memorial Prize; awarded for the best result in the third year subject Independent Study Project.

The NCPO gratefully acknowledges the support of all the prize donors and would like to especially thank Ms. Kirrily Brown (representing AOPA) and Ms. Margaret Hodge (representing ISPO) for their attendance at the ceremony to congratulate the winners of the prizes awarded by their organisations.

Congratulations to these students upon their outstanding achievements.



NCPO Award Winners. Left to Right: Martina Lukin, Tim Burke, Emily Wilson, Emily Graham, Sarah McLean, Aileen Ibuki, Amy Emons



# NCPO Study Tour to Thailand and Cambodia

The NCPO facilitated an international study tour, giving its students an insider's view of the global context of prosthetics and orthotics practice. A group of students recently returned from Thailand and Cambodia where they visited a number of P&O teaching institutions and facilities.

In Bangkok, the group was hosted by Mahidol University at their main campus and then the teaching hospital where the 3rd year of the P&O program is located. NCPO and Mahidol students were able to meet and discuss their courses. They were then shown the teaching labs by Mr. Jim Lavranos, NCPO graduate, who teaches the 3rd year program at Mahidol.



NCPO and Mahidol P&O staff and students at Mahidol's teaching hospital in Bangkok. The group were greeted by Director of the program, Dr. Kamontip (left, front), and Mr. Jim Lavranos, (4th from left, main group.) The NCPO students were Oliver Keen (3rd year, 2nd from left main group), Shanelle Whitson (5th from left), Elizabeth Murrell (2nd year, 10th from left, 2nd row), Ella Nicholson (3rd year, 6th from right, at front), Andrew Jolly (1st year, 3rd from right, front)

The group then flew to Siem Riep in Cambodia, and toured the Angkor Wat complex in searing heat and monsoonal rain. Then, they headed for Battambang with the intention of visiting the ICRC rehabilitation centre. A 5 hour boat ride, though, quickly became 13 grueling hours and the visit was delayed. However, the next day, they were hosted by the centre's director, Mr. Joël Nininger. The ICRC takes an active role in documenting important aetiological and demographic data, and the group was able to learn of the unique characteristics of P&O practice in the Battambang area, which was one of the most heavily mined regions in Cambodia. Mr. Nininger was able to offer some personal insights into P&O work from the viewpoint of an expatriate with many years experience in Cambodia.

After Battambang, they headed for Cambodia's capital, Phnom Penh, an uneventful 5 hour bus ride away. The group was moved by a visit to the killing fields,

which was the site of unspeakable atrocities during the reign of the Khmer Rouge. The group then toured the Cambodian School of Prosthetics and Orthotics with their peers at that school, before meeting the students who will participate in the NCPO's upgrade program beginning in January next year. This gave the cohort of upgrade students an opportunity to meet some of their new colleagues, and learn more about teaching and learning in Australia. Wes Pryor, NCPO International Lecturer, then introduced the upgrade students to the NCPO's emerging distance learning environment.

The study tour has added a new dimension to teaching and learning at the NCPO, and recognises the differences and similarities in P&O practice in different countries in our region. It is hoped that the study tour will be repeated in future years.



NCPO students, present and future, meet for lunch in Phnom Penh restaurant. Upgrade students are from Cambodia, Sri Lanka, Laos and Pakistan.

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