

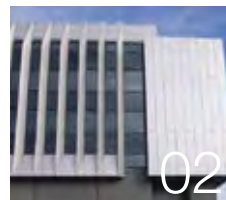


Alchemy

College magazine issue 13, spring 2007

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Local knowledge:
global impact

New building, new technology



Many staff have now relocated to the college's new building at 399 Royal Parade, which houses state-of-the-art facilities that support the cutting-edge research taking place on campus.

The new building represents a significant step for the faculty and a major investment by Monash University in the future of the Parkville campus. Designed primarily to support and extend research activities, the building is the first new structure on the campus since the Manning Building was opened in 1971. The new building stands six stories high and provides the college with an additional 3500 square metres of office and laboratory space.

In the new lobby area, Pharmaceutical Defence Limited has generously provided a superb showcased display of historical pharmacy pieces that creates a wonderful welcome – the faculty is indebted to Pharmaceutical Defence Limited for their generosity in providing and curating this magnificent display.

The building has a contemporary design and it provides excellent facilities for the continuing

development of the faculty. As part of the forward planning, the new space in the building will free up and create new space for teaching initiatives in other parts of the college to support our education programs in pharmacy and the pharmaceutical sciences.

Refurbishment of the Manning Building is now underway, including a new animal house, library and upgraded laboratories. These are scheduled for completion in mid-2008.

Prestigious international recognition for research



Professor Bill Charman, dean of the college, was one of nine international scientists who received a Research Achievement Award at the Pharmaceutical Sciences World Congress in Amsterdam last month.

The award citation recognises Professor Charman's 'significant contribution to the advancement of pharmaceutical sciences during the course of a most distinguished career'.

Every four years, the International Pharmaceutical Federation hosts the Pharmaceutical Sciences World Congress. This year's theme was 'Optimising drug therapy: an imperative for world health'.

The award was presented at the Congress opening ceremony, where Professor Charman paid tribute to the hard work of his colleagues.

"This award recognises the outcomes of the research of all those I have been fortunate to work with during my career," he said. "I particularly thank Sue Charman and Chris Porter for their wonderful and insightful contributions to our research team."

Professor Charman's research career is distinguished. He has published more than 330 scientific papers and communications, is an elected Fellow of the American Association of Pharmaceutical Scientists and a member of various scientific advisory boards, and is chairman of the Seeding Drug Discovery Funding Committee of the Wellcome Trust.

From the dean

The college is moving into a new phase of development as we position ourselves for the future.

We have great staff, great skills and an absolute desire to excel. To build on that, we are working on integrating, collaborating and building our expertise.

Drug research, discovery and development is one of the most challenging of human activities. To maximise our capacity and capability in this area, I am pleased to announce a significant new

initiative. The pharmaceutical science research activities of our four departments and two research centres will be aggregated, strategically positioned, focused and collaboratively structured in one institute – the Monash Institute of Pharmaceutical Sciences. This new entity will represent the largest and most experienced group of pharmaceutical scientists in this country.

To achieve what we need to, the Monash Institute of Pharmaceutical Sciences will

undertake a major fund-raising campaign. We are pleased to welcome John Allen to the new role of executive director of the Victorian College of Pharmacy Foundation and a key component of John's role will be to manage this initiative.

New and exciting developments in pharmacy practice are planned and are occurring – these include a virtual practice environment and a virtual patient program. I will further describe these exciting initiatives in later editions of *Alchemy*.

We have a critical mission ahead – we will work together in new ways to reach for, and achieve, new outcomes for the college, profession and our alumni community. It is an exciting time for us all.



Professor William N. Charman
(BPharm 1981), PhD



Profile:

Professor William N. Charman, PhD

Professor Bill Charman is the new dean of the Victorian College of Pharmacy. He took up the role in January of this year.

Professor Charman received his BPharm from the Victorian College of Pharmacy in 1981 and his PhD in pharmaceutical chemistry (with honours) from the University of Kansas in 1985. From 1986 to 1989, he was a senior scientist/group leader at the former Sterling-Winthrop Research Institute in Rennelear, New York.

He returned to Australia in 1989, where his research interests include absorption and bioavailability of poorly water soluble drugs, lymphatic drug transport, lead candidate optimisation, and the discovery and development of drugs for neglected diseases.

He received the GlaxoWellcome International Achievement award in Pharmaceutical Sciences from the Royal Pharmaceutical Society of Great Britain in 1999, the Drug Discovery Project of the Year by the Medicines for Malaria

Venture (Geneva, Switzerland) in 2002 and 2007, the Australasian Pharmaceutical Sciences Association Medal in 2005, the Controlled Release Society International Career Achievement in Oral Drug Delivery Award in 2006, and a FIP Pharmaceutical Sciences World Congress Research Achievement Award in 2007.

Professor Charman has published over 330 scientific papers and communications, is a member of four international editorial boards, and is an associate editor of the *Journal of Pharmaceutical Sciences*. He is an elected Fellow of the American Association of Pharmaceutical Scientists, a previous member of two corporate boards, a member of various scientific advisory boards and chairman of the Seeding Drug Discovery Funding Committee of the Wellcome Trust.

Single dose cure for malaria – new hope

College researchers are part of an international research team that is now one step closer to finding a single, oral dose cure for malaria.



Photo: Anna Wang/Medicines for Malaria Venture.

The project, which involves scientists at the college's Centre for Drug Candidate Optimisation (CDCO), has shown that new, second-generation synthetic peroxide drugs being developed by the project team can cure malaria in animals with a single dose. These drugs would be affordable and more effective than currently available treatments, which require a three-day treatment course.

Malaria is a tropical disease caused by a mosquito-borne parasite. Each year, malaria kills up to three million people and more than 500 million people suffer its debilitating effects. The disease is a critical problem in Africa, Asia and South America, with a large proportion of deaths occurring in children under five in sub-Saharan Africa.

Malaria also has a crippling effect on the African economy, costing US\$12 billion in lost Gross Domestic Product every year and consuming 40% of all health spending. Estimates have one child in sub-Saharan Africa dying every 30 seconds from the disease. As a result, compliance is a critical issue – mothers often take one dose, feel better, and then keep the other two doses in case their children contract the same illness.

Associate Professor Susan Charman, director of the CDCO, explains that, while the malaria parasite has become resistant to many antimalarial drugs, the new fully synthetic, peroxide antimalarials can kill the drug-resistant parasites.

"It is still early days and the chosen candidate drug still has to be shown to be safe and effective in humans," she said. "Our hope is that, one day, this simple, effective and affordable treatment can aid in the fight against this dreadful disease."

The international project team, comprising researchers from the college, the University of Nebraska Medical Center, the Swiss Tropical Institute and Hoffmann-La Roche in Switzerland, has been working on the project since the late 1990s. The program is financed by the Medicines for Malaria Venture (MMV), a not-for-profit public-private partnership funded by the World Health Organization and philanthropic trusts such as the Bill and Melinda Gates Foundation. One of the project's aims is to ensure that the drug resulting from the research is affordable for even the poorest nations.

Results from the first generation project were published in 2004 in the highly regarded international scientific journal *Nature*, attracting significant coverage in print and electronic media worldwide. The lead candidate from the first generation program has completed Phase 1 clinical trials and is currently being evaluated in Phase 2 trials in malaria patients. The second generation project has identified a series of new compounds that show improved efficacy in animal models and is on target to select a development candidate by the end of 2007, with studies in humans planned for 2009.



Professor Bill Charman receiving the Project of the Year Award from Ugandan President Museveni.

“Our hope is that, one day, this simple, effective and affordable treatment can aid in the fight against this dreadful disease.”



Photo: Anna Wang/Medicines for Malaria Venture.



Photo: Anna Wang/Medicines for Malaria Venture.

College CDCO scientists, along with chemists and biologists from the USA and Europe, were recognised at the recent MMV Stakeholders' Meeting in Kampala, Uganda, with an award for the MMV International Drug Discovery Project of the Year 2006, which was presented by Ugandan president Yoweri Museveni.

“This award is a tremendous honour that not only recognises the significant dedication and achievements of numerous scientists at Monash and others around the world, but also highlights the potential for international collaborations to actively

and effectively progress drug discovery research in malaria and other neglected diseases,” said Associate Professor Charman.

Professor Bill Charman is former co-director of the CDCO and current dean of the college.

“The success of this project is due in large part to the productive, dedicated and mutually respectful relationship of the project team and the tremendous support provided by MMV,” said Professor Charman.



About the Centre for Drug Candidate Optimisation

The CDCO, established at the college in 2003, works collaboratively with commercial and not-for-profit research organisations by providing ready access to state-of-the-art instrumentation and highly qualified and experienced drug development scientists to fill the crucial gap between drug discovery and drug development.

Drug candidate optimisation integrates medicinal chemistry and pharmacology with the pharmaceutical sciences and provides a rational means of identifying drug candidates with the necessary chemical, biopharmaceutical and pharmacokinetic properties to enable rapid and successful development.

Research conducted within the CDCO is considered as being within the top 10–15% internationally and its importance is highlighted by the significant number of collaborative programs undertaken (45 programs since 2003), substantial research revenue (more than \$12 million up to December 2006) and the number of reports associated with this work (574 reports as of December 2006). CDCO research has contributed preclinical data to support the submission of four Investigational New Drug applications to regulatory agencies by collaborative partners for their drug candidates to progress into human clinical trials, three significant international commercial licence agreements and numerous Commercial Ready grants.

The CDCO has been awarded a number of internationally competitive grants from the MMV and the Drugs for Neglected Diseases initiative. MMV grants (of which the CDCO has been awarded three) are selected from a field of approximately 100 applications from the some of the most highly respected groups in the world in the area of malaria research.

Profile: Dr Sally Thompson



In 1996, Dr Sally Thompson became the first person to receive a PhD from the newly established Department of Pharmacy Practice. Her thesis was entitled 'Opinions and prescription medication use practices among the non-institutionalised elderly'.

The work followed the publication of several studies worldwide that linked the inappropriate use of pharmaceuticals among older patients to high rates of hospitalisations due to adverse drug events.

As a postgraduate student, Dr Thompson developed an interest in health economics and outcomes research. Around a similar time, in 1993, the Pharmaceutical Benefits Advisory Committee in Australia became the first national agency of its kind worldwide to formally incorporate cost-effectiveness evidence into decision making for the reimbursement of pharmaceuticals. Similar agencies in other Western countries soon followed.

In 1996, towards the end of her PhD studies, Dr Thompson was awarded a Rotary Foundation Ambassadorial Scholarship. This scholarship provided her with the financial support to pursue additional studies abroad for a year in the field of health economics. Her choice of location was the Department of Economics and Related Studies, University of York, UK, where the world's first Master of Science degree in health economics was established.

Since graduating, Dr Thompson has worked predominately for the pharmaceutical industry. Initially she was employed in the UK as a GlaxoWellcome Research Fellow in Pharmacoeconomics. In 2000 she took up the challenge of a global position within the pharmaceutical industry and moved to Schering AG in Berlin, Germany. In April this year she moved to Pfizer, where she is currently working within one of the newly established European Business Teams based in Karlsruhe, Germany.

In August, Dr Thompson returned to the college to give an introductory seminar on how the pharmaceutical industry is working to integrate the concept of 'value' into product development and life-cycle management. She indicated that the field of health economics and outcomes research is of growing importance to the pharmaceutical industry. As more and more new technologies become available to treat disease, pressure on healthcare costs continues to rise. The ability of companies to clearly demonstrate the added value of new products is today essential to market success.

Inaugural Professor Barry L. Reed Distinguished Lecture



The college extends an open invitation to the college community to attend the inaugural Professor Barry L. Reed Distinguished Lecture.

This will be the first in a series of annual Professor Barry L. Reed Distinguished Lectures to be given at the college by exceptional speakers to recognise Emeritus Professor Reed's distinguished academic career and exceptional service to the college and pharmacy profession.

The 2008 lecturer will be Professor Ho-Leung Fung from the State University of New York at Buffalo. Professor Fung was a graduate from the college in 1967 (PhC) who then completed his PhD at the University of Kansas and has worked in the USA ever since. He has an internationally distinguished career in pharmaceutical sciences, working in the field of PK/PD, clinical pharmacology and drug delivery. Professor Fung will address research, educational and practice issues in the pharmaceutical sciences and pharmacy.

Location: Lecture theatre 1
Date: Tuesday 11 March, 2008
Time: 6.00pm

RSVP to Belinda Charleson by Wednesday 20 February, 2008
email belinda.charleson@vcp.monash.edu.au
or tel: 613 9903 9504.

Major US funding for antimalarial and antibiotic treatment research

Two groups of researchers from the college have succeeded in attracting \$10 million in collaborative funding from the US National Institutes of Health (NIH) to independently study antimalarial and antibiotic drug treatments.

The National Institute of Allergy and Infectious Diseases (NIAID), part of the NIH, has granted \$6 million to a multidisciplinary group that includes Associate Professor Susan Charman and Professor Bill Charman from the CDCO.

The research focuses on inhibiting the enzyme, dihydroorotate dehydrogenase (DHODH), which is essential for the malaria parasite to survive. The goal of this collaborative project is to design a new drug candidate that inhibits this enzyme and develop it into a new antimalarial drug that can be entered into clinical trials.

Working with the MMV in Geneva, the proposed work plan for the DHODH project encompasses an

integrated and multidisciplinary approach, bringing together the expertise of three laboratories: biochemistry and structural biology at the University of Texas Southwestern Medical Center (Dr Meg Phillips); medicinal chemistry and malaria biology at the University of Washington, Seattle (Dr Pradip Rathod); and lead optimisation and preclinical development at the CDCO, Victorian College of Pharmacy, Monash University.

"This is the third international malaria drug discovery project the CDCO is part of and we look forward to building on our expertise to collaboratively design and bring a further new drug candidate to the



Professor
Bill Charman



Associate Professor
Susan Charman



Dr Jian Li



Professor
Roger Nation

clinic," said Associate Professor Susan Charman.

The second NIH funded project involves Professor Roger Nation and Dr Jian Li of the college's Facility for Anti-infective Drug Development and Innovation (FADDI). They will collaborate with other Australian and US investigators (Professors David Paterson and Alan Forrest) to determine appropriate dosing of the antibiotic, colistin, a 'last-line' antibiotic for critically-ill patients.

Their research, which attracted \$4 million in funding from NIAID, involves a clinical trial in hundreds of critically-ill patients across several countries to investigate the way healthy and sick people handle colistin, and colistin's

effect on infection. The major outcome of the project is to develop colistin dosing guidelines.

"Dr Li and I are very happy about the grant, especially when the NIH success rate is running at only about 8%. We look forward to positively impacting colistin use at a time when doctors desperately need guidance on optimising dosing of this old, but still poorly understood, antibiotic for the various categories of critically-ill patients they treat," said Professor Nation.

Both studies will take place over a five-year period.

Research month

Monash University held its inaugural Research Month from 20 August to 21 September this year.

The event involved staff, students and the wider community in campus activities, public lectures, research seminars and other events that aimed to promote the university's outstanding research culture and achievements. The specific theme for Research Month was 'Celebrating great minds, innovative thinking and leading-edge research at Monash'.

Each campus ran specific research events and the highlight for the college was the public lecture 'Better medicines by design', where dean

Professor Bill Charman gave a one-hour presentation that succinctly captured the quality and breadth of research currently undertaken at the college. The immediate future of college research was the highlight. Delegates from the college and industry guests enjoyed the opportunity to network and socialise at the conclusion of the seminar.

The college also hosted the Higher Degree by Research poster presentation of research student posters. Thirteen pharmacy posters



were displayed and the pharmacy prize was awarded to third year PhD candidate Vincent Carbone for his poster entitled 'High resolution structure determination of dimeric dihydrodiol dehydrogenase using synchrotron radiation'.

Other activities included the honours and PhD/Masters information sessions, promotion of the annual Research and Early Career Researcher awards and '7 minute research' presentations, which involved all senior researchers.

"This event provided an avenue to demonstrate that the research culture at the college is thriving and that there is a collective interest in research and research outcomes," said Associate Professor Chris Porter, who is also associate dean (research).

Staff and research students greatly enjoyed their participation in Research Month and look forward to it being an annual event on the research calendar.

Another first for Acrux

Acrux recently announced that the first product based on transdermal delivery technology developed at the college has been approved for marketing by the US Food and Drugs Administration (FDA).

This achievement puts Acrux in the company of GlaxoSmithKline and Faulding (now Hospira) as one of the few Australian companies to have developed products gaining FDA approval.

The product, EvaMist, will be used to treat vasomotor symptoms associated with menopause. It delivers the natural hormone estradiol through the skin via a patient-friendly spray, releasing it into the bloodstream on a sustained basis over 24 hours and providing a practical and convenient once-a-day dosing regimen.

Acrux is an Australian drug delivery company that develops and commercialises a range of patented

pharmaceutical products for global markets. Acrux was founded in 1998 by Ross Dobinson, Professor Barry Reed (PhC 1963), Dr Tim Morgan (BPharm 1992, PhD 1999), Professor Bill Charman (BPharm 1981) and Dr Barrie Finnin (PhC 1967) after researchers at the college invented a method for delivering drugs through the skin. The inventors of the technology, which was patented by the college, were Professor Reed, Dr Finnin and Dr Morgan. Shares in Acrux were listed on the Australian Stock Exchange in 2005.

Development, both within the college and at Acrux, involved many college graduates and staff, including Andrew Humberstone (PhD 1998),

Beverley Thomas, Katie Klose (BPharm 1993, PhD 2000), Nina Wilkins, Olga Dudinksi (BPharm 1970, MPharm 1977, PhD 1987), Brigitte Traversa (BPharm Hons 2000, PhD 2005), Margarita Bakalova, Amelia Davis (BFormSc Hons 2006), Phil Abramson (BFormSc Hons 2004) and Stephanie Liaw (BFormSc Hons 2005).

The Acrux team is currently investigating formulations that are applicable to the treatment of contraception, smoking-cessation, Parkinson's disease, musculoskeletal disorders and hypertension, with some of these formulations already progressing through proof-of-concept pharmacokinetic clinical trials.



Spray applicator designed to deliver a precise dose of medication over a controlled area.

What do LCD TVs, cells and drug delivery have in common?

LCD TVs change the alignment of molecules to generate different colours on screen. College researchers are now applying a similar concept in controlling the alignment of lipid molecules for drug delivery.

Lipids are a class of molecules essential for life. They provide the barrier structure (membrane) for all cells that make up the human body and participate in a vast number of biochemical processes within the body. These membrane structures are highly aligned yet fluid structures that are also technically known as liquid crystal structures.

Department of Pharmaceutics research is using nanotechnology and creative design to identify ways to make medicines work in a more effective, safe or smarter way.

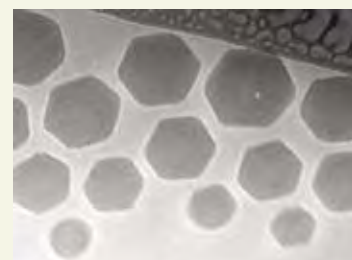
Controlling the release of medicine from the formulation after it has been taken, to reduce toxic effects and frequency of intake, is one way to make medicines more effective and convenient for consumers. In some circumstances, with frequently injected medicines such as insulin, an even more desirable outcome is one in which release of the drug can be stimulated repeatedly at appropriate times after administration.

Common approaches to tackling this problem use polymers. But polymers are synthetic compounds, often toxic to the body, that have limited versatility in tailoring drug release once administered. So college researchers are taking an alternative approach based on lipids. Because lipids are generally low toxicity, have highly versatile structure and are able to form liquid crystals

that can slow drug release, several projects are now underway that aim to better understand their behaviour and application to solve drug delivery problems.

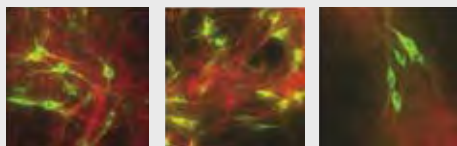
While most lipids in the body form liquid crystals with membrane or sheet structures (lamellar) when exposed to water, some lipids can form more complex structures that contain water channels with nano-dimensions, through which incorporated drug molecules must travel to escape the matrix, providing slow release. To know the internal structure of the liquid crystal, research has been conducted at the Elettra Synchrotron in Italy. Structural characterisation studies will continue at the Australian Synchrotron when it becomes available for research in 2008.

This new technology will be particularly useful in improving the therapy and quality of life of patients suffering from diseases such as diabetes, cancer, hormonal imbalance and macular degeneration.



A microscopy image of nanostructured drug delivery particles – Cubosomes (top image) and Hexosomes (bottom image).

Stem cells, drug discovery and the link with cancer



Over the past four to five years, Professor Colin Pouton and Dr John Haynes have been building a research group to investigate the potential pharmacological uses of neurons, cardiomyocytes and other cell types derived from embryonic stem cells.

Their commitment to this challenge led to an invitation to contribute a perspectives article entitled 'Embryonic stem cells as source of model for drug discovery', which was published last month in the highly regarded international scientific journal *Nature Reviews Drug Discovery*.

"Stem cell technology has the potential to revolutionise drug discovery, making models available for primary screens, secondary pharmacology, safety pharmacology, metabolic profiling and toxicity evaluation," said Professor Pouton.

The stem cell research group is now broadening its scope by entering the fast-developing field of cancer stem cell research with the help of Dr Theo Mantamadiotis, a developmental neurobiologist who was appointed

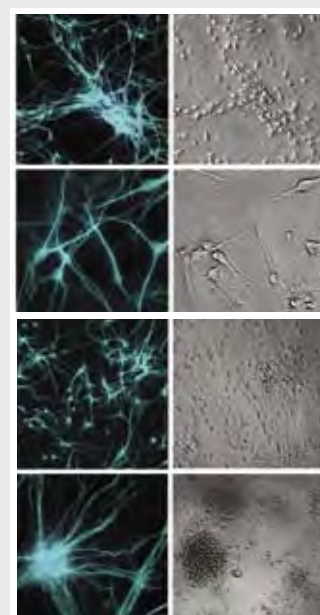
to the college staff last year, and Dr Fred Hollande. Dr Hollande is an Honorary Senior Research Fellow who arrived in Melbourne recently from France. He has a strong background in cancer biology and specific research interests in mechanisms of carcinogenesis in the colon.

"Our move into the 'cancer stem cell' field is an important strategic decision that links our existing research with the strong platform for drug discovery provided by the college's involvement in the Cooperative Research Centre for Cancer Therapeutics," said Professor Pouton. "Understanding the biology of cancer stem cells will be of critical importance to identifying new generation anti-cancer drugs."

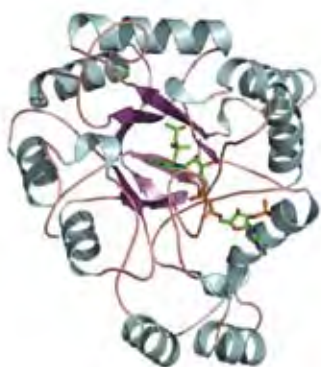
According to Professor Pouton, it has become clear over recent years that many tumours arise by mutation of tissue stem cells, typically by loss of a tumour suppressor gene, which can give rise to cancer stem cells.

"These cells can respond to local environmental cues by up-regulating proto-oncogenes, resulting in rapidly dividing cells that grow to form the main bulk of the tumour," he added.

"Conventional anti-cancer treatment may kill the dividing cells but does not necessarily eradicate the cancer stem cell population, allowing the cancer to re-establish itself when chemotherapy ceases. Targeting cancer stem cell biology may lead to safer and more effective anti-cancer drugs."



Heads or tails?



A group of college researchers, led by Associate Professor Ossama El-Kabbani, have obtained valuable information that will be used in the design of inhibitors against cancer and diseases affecting the nervous system.

Associate Professor El-Kabbani and his group have resolved the 3D structure of the enzyme AKR1C21 that metabolises steroids, and will use this information in the design of inhibitors that may lead to the development of new medications against cancer and diseases affecting the nervous system. AKR1C21 belongs to a group of enzymes called hydroxysteroid dehydrogenases and is unique in its ability to act on either end of the steroid molecule, head or tail.

"Together with researchers from Gifu Pharmaceutical University in Japan, we were able to crystallise AKR1C21 complexed with small ligand molecules," he said. "Then, working closely with our collaborators at the Swiss Light Source, we obtained a detailed high-resolution 3D image of the enzyme."

To understand the bi-functionality of AKR1C21, the researchers used molecular modelling techniques to orient steroid molecules inside the binding pocket of the enzyme. From the models of the AKR1C21-steroid complexes, they are now able to explain the bi-functional role of the enzyme.

"In addition to understanding how AKR1C21 can selectively target two positions on the steroid molecule (also known as functional plasticity), the detailed information derived from

the 3D molecular structure will be used in the design of a new class of inhibitors selective for the hydroxysteroid dehydrogenases, which is important due to their pivotal role in the production of hormones and neurotransmitters," Associate Professor El-Kabbani added.

"This discovery was made possible by the support we receive from the Australian Research Council."

Associate Professor El-Kabbani and his group are planning to conduct experiments at the Australian Synchrotron to investigate the detailed interaction between AKR1C21 and various small molecule compounds. They will use this information in the design of inhibitors that may lead to the development of new medications against cancer and diseases affecting the nervous system.

Successful Pharmacy Education Symposium in Prato, Italy

Fifty-six delegates representing seven countries recently attended the Monash University – King's College Pharmacy Education Symposium held at the Palazzo Vaj, the Monash Centre in Prato, Italy.



The Symposium theme 'Teaching for multidisciplinary practice', attracted interest from pharmacists practising in hospital and community settings, as well as in academia.

The Symposium created ideal opportunities to explore current areas of interest. Speakers presented the arguments for and against educating pharmacists alongside other healthcare professionals. They also detailed a number of programs where multidisciplinary and interdisciplinary education had been undertaken, both in rural and urban environments.

Perspectives were shared on the many challenges surrounding interprofessional learning. Some of these ideas were investigated in more depth in workshops, and particular areas of interest were teased out during PeArLS (Personally Arranged Learning Sessions). Delegates left the Symposium with a balanced view on the merits and pitfalls of multidisciplinary education. They were also more aware of the challenges they may face if they choose to establish interdisciplinary education programs in their own universities.

"The Symposium provided a unique, timely and interactive forum to discuss multidisciplinary and interprofessional learning in pharmacy education with input from leading European, American and other international educators led by the college's experts in pharmacy practice," said Professor Bill Charman, dean of the college.

Ideas were also discussed for the 2009 Symposium, which will focus on 'Fitness to practice: competency based teaching and learning in pharmacy'. Along with other health disciplines, pharmacy is experiencing

the global trend to competency based assessment of fitness or readiness for practice. Also, many academic and professional development organisations are developing competency based teaching and learning strategies and associated resources.

Videos of the presentations are available on the Symposium website www.vcp.monash.edu.au/prato2007

Cyril Tonkin Fellowship winner



Dr Jennifer Marriott (BPharm 1971), a senior lecturer in the Department of Pharmacy Practice, has been awarded a Cyril Tonkin Fellowship to undertake a study tour exploring curriculum design and content, teaching methods and assessment at top pharmacy schools.

Dr Marriott will travel to North America in October–November this year, and to the UK in January–February 2008, to review pharmacy courses at these schools. She will also review other innovative courses that deliver education efficiently using sophisticated technology and current educational theory.

Endowed in 1976, the Cyril Tonkin Fellowship promotes innovation and leadership in pharmacy through visits to international pharmacy institutions.

Dr Tonkin, a pharmacist and doctor, was a strong supporter of scholarship and research. Named in his honour, the scholarship was established through a bequest of over \$250,000 by Sarah Amy Lloyd, whose father conducted a pharmacy business in Geelong. It was the largest scholarship fund of its type established in Australia for the pursuit of academic and professional excellence.

Projects must assist the college's goal to gain acceptance as one of the top pharmacy schools in the world and/or to assist the college and the Pharmaceutical Society of Australia (PSA) (Victorian branch) to develop knowledge and expertise of developing areas of pharmacy practice.

"The Cyril Tonkin Fellowship is a fantastic opportunity to immerse myself in teaching issues and to explore the best ways of delivering a modern pharmacy curriculum," said Dr Marriott. "It is particularly relevant now as our Bachelor of Pharmacy course is undergoing review."

Dr Marriott has been involved in a range of pharmacy projects this year. She was program director on the committee for the recent Pharmacy Australia Congress, marking the 150th anniversary of the founding of the PSA. She was invited to be an expert participant for the Global Pharmacy Education Consultation during the FIP World Congress of Pharmacy and Pharmaceutical Sciences in Beijing. And she organised the recent Monash University – King's College Pharmacy Education Symposium held in Prato, Italy.

Challenge for young pharmacist in Guyana

Newly-registered pharmacist Dhineli Perera (BPharm Hons 2006) recently travelled to Guyana as part of a Youth Challenge Australia project that delivered a local health promotion campaign.



"As information coordinator, my job was to plan, promote and conduct health information sessions on topics such as first aid, malaria, diarrhoea, typhoid, HIV/AIDS/STIs, reproductive health and puberty. We also tackled social topics such as sexual abuse, child abuse, domestic violence, drug and alcohol abuse and teenage pregnancy (requiring subtlety in these strict Christian communities).

Topics were tailored for each of the communities we visited. One tiny community, Alik, was bursting at the seams with children under 12, so our content needed to be interactive, fun and to the point. In contrast, Caria-Caria had a large teenage population. Most were no longer at school and only a few adults had any education beyond primary school. This lack of education extended to difficulties finding work, idleness, poor self-esteem and a high incidence of teenage pregnancy.

To establish any long term changes in the health of these people, we soon realised that our content needed to focus on behaviour changes rather than disease information. So we altered our

delivery to spend more time on prevention strategies.

A 'day-off' consisted of cooking all three meals for our team of 11, cleaning the house, collecting water from the river and entertaining our frequent visitors. No showers, no toilet, no electricity, no phone, no beds, no washing machine, no car and no email. Replace this with washing self and clothes in the river, using outhouses, lanterns and torches, hammocks, snail mail and old fashioned walking. Not only was it a reality check on what is important in life, it was refreshing and humbling.

As a pharmacist, this experience heightened my desire to take on a public health role for my community and globally. Volunteering has been the most priceless experience of my life so far.

I would like to thank the PSA for its generous donation and my family, friends and work colleagues for their continuous support. I would also like to acknowledge my old friend Mathew Peck, who I know would have loved to be there with me every step of the way."

Mathew Peck Travelling Scholarship – 2007 winner Jaya Soma



The college would like to congratulate fourth year pharmacy student Jaya Soma, recipient of the 2007 Mathew Peck Scholarship.

The Mathew Peck Travelling Scholarship is awarded annually to a third or fourth year pharmacy student to enable them to work on a health program in a developing nation. Previous recipients of the scholarship have travelled to Vietnam, Vanuatu and East Timor, to experience first hand the important role pharmacists play in these areas.

Jaya said that the scholarship will enable her to work towards her long term career goal of contributing to higher standards of health and education in underprivileged areas. This is a goal she began working towards with her involvement in the student club Remedy, which focuses on pharmacy education and practice in underprivileged countries.

Throughout her time at the college, Jaya has played an active role. Currently co-president of Remedy, she has also acted as a student liaison officer for the Victorian Pharmacy Students' Association and as a mentor for new students during the college's Orientation Week.

Jaya's enthusiasm and passion to learn about international health, other countries and cultures, teamed with her active participation in her local community, has made her an ideal recipient of the scholarship.

Applications will open for the 2008 scholarship from October. For more information on the Mathew Peck Scholarship, visit www.vcp.monash.edu.au/students/mpeckscholar/index.html

Postgraduate study on offer

Postgraduate courses at the college can increase career opportunities and contribute significantly to professional development. The programs are delivered flexibly, allowing for studies to fit with a busy lifestyle, and key units can usually be studied on a single-subject basis.

Clinical pharmacy

The Master of Clinical Pharmacy provides pharmacists working in clinical settings with the opportunity to develop their skills in evidence based practice, quality use of medicine, practice based research and the provision of high level clinical pharmacy services.

Who should do this course?

The course is designed primarily for pharmacists practising in a clinical setting in hospital pharmacy. With increased emphasis on providing clinical pharmacy services in aged-care facilities and homes, it may also be useful for pharmacists in community based practice.

On completion

Graduates of the Master in Clinical Pharmacy will be able to:

- provide clinical pharmacy services at a high level, as part of a multidisciplinary team
- use evidence based principles to guide clinical practice
- appreciate new concepts in pharmacotherapy and their application to contemporary practice
- critically evaluate literature to develop research proposals
- undertake practice based clinical research projects in collaboration with other healthcare providers
- take a leading role in the profession, providing direction and mentoring to other pharmacists
- encourage collaboration between their workplace and the college.

About the coordinator

Kirstie Galbraith is a clinical senior lecturer in pharmacy practice at the college and senior pharmacist, research and education at The Royal Melbourne Hospital. Her contribution to teaching and research in clinical pharmacy practice was recognised in 2006 when she received the Society of Hospital Pharmacists Australia (SHPA) Clinical Pharmacy Award.

Wound care

Graduate Certificate in Wound Care Graduate Diploma in Wound Care Master of Wound Care

Postgraduate studies in wound care are designed to meet the diverse needs of all health professionals with a responsibility and interest in wound care. The Graduate Certificate provides health professionals with the theoretical foundation for contemporary practices in wound care. The Graduate Diploma explores areas of specialty practice within wound care and develops the clinician's competency in specialist wound care skills, and the Masters program prepares health professionals for advanced practice in wound care.

Who should do these courses?

These courses will be of particular benefit to doctors, nurses, pharmacists, podiatrists, dieticians, occupational therapists and physiotherapists.

On completion

At the completion of the Graduate Certificate in Wound Care, graduates will be able to:

- demonstrate an understanding of the physical, psychosocial and environmental components of a comprehensive wound assessment
- develop an understanding of the process of wound healing
- identify and describe factors that affect the rate of wound healing
- understand the composition, structure and appropriate use of wound dressings
- critically appraise new technologies in wound dressings.

Graduate Diploma in Wound Care

At the completion of the Graduate Diploma in Wound Care, graduates will be able to:

- demonstrate high level problem solving skills for clients with complex wounds
- utilise a systematic approach to perform an advanced assessment of a client with a wound
- develop an appropriate plan of wound care in collaboration with the client and the multidisciplinary team
- utilise an evidential basis for clinical decision making in the management of people with wounds
- demonstrate clinical competency in practical wound care techniques
- evaluate the outcomes of care for clients with complex wounds.

Master of Wound Care

At the completion of the Master of Wound Care, graduates will be able to:

- demonstrate a high level of critical analysis, problem solving and decision making related to the care of clients with complex wounds
- utilise an evidential basis for clinical decision making in the management of people with wounds
- demonstrate an understanding of the consequences of acute and chronic wounds from an individual and population health perspective
- demonstrate leadership and innovation in wound care that is underpinned by a continuous quality improvement framework.

About the coordinator

Adriana Tiziani has been course director for postgraduate studies in wound care since March 2006. Before that, she wrote and reviewed several of the units for the course. Adriana also worked as a nurse educator in a range of roles after she completed a Master in Educational Studies.



Coordinators (L-R) Adriana Tiziani, Laura Dean and Kirstie Galbraith.

Pharmacy practice

The Graduate Certificate in Pharmacy Practice, incorporating the Pre-registration Course, allows participants to develop further knowledge and skills in a range of pharmacy practice related areas, providing a great opportunity for ongoing professional development at the same time as earning an additional qualification.

Who should do these courses?

After completing their Bachelor of Pharmacy, graduates can enrol in either the non-award Pre-registration Course or the Graduate Certificate in Pharmacy Practice, which incorporates the Pre-registration Course.

Registered pharmacists are also eligible to enrol in the Graduate Certificate in Pharmacy Practice.

On completion

Pre-registration Course

Graduates of the Pre-registration Course will be able to:

- demonstrate a sound understanding of the legal, professional and ethical framework for pharmacy practice in Victoria
- demonstrate strong problem solving skills and apply professional judgement in a range of areas including prescription problems, therapeutic problems, and legal and ethical problems
- apply evidence based principles to the practice of pharmacy
- promote and contribute to optimal use of medicines
- provide primary healthcare, including identifying symptoms, knowing when to refer patients for medical evaluation, and recommending appropriate non-prescription products
- effectively communicate medication related information to patients and other health professionals
- solve simple and complex pharmaceutical calculations
- understand the nature and importance of multidisciplinary care
- apply organisational skills and manage work issues and interpersonal relationships in pharmacy practice.

Graduate Certificate in Pharmacy Practice

Depending on the choice of elective, graduates of the Graduate Certificate in Pharmacy Practice will be able to:

- demonstrate specialist knowledge and skills in the area of geriatric health problems, geriatric pharmacy practice and medication management reviews
- demonstrate specialist knowledge in the identification and management of common dermatological problems, especially those encountered in primary care
- understand the design and evaluation of clinical trials
- demonstrate a sound understanding of the planning and design of a pharmacy, pharmacy operating procedures, risk principles, and the key principles in managing people in a work environment
- describe the Australian healthcare system, and how the roles of government, the pharmaceutical industry, community pharmacies, hospitals, professional peak bodies and consumer groups affect the pharmaceutical supply infrastructure
- demonstrate a sound understanding of the economic characteristics of healthcare, financing health services, equity and economic evaluation
- demonstrate a specialist knowledge in wound care.

The choice of elective may allow for credit towards higher degrees such as the Master of Clinical Pharmacy, Graduate Diploma in Pharmacy Management or higher qualifications in wound care.

About the coordinator

Laura Dean has practised as a pharmacist in South Africa, the UK and Australia. She worked as project manager at a company that provided pharmacy systems for hospital pharmacies, which led to her completing a Graduate Certificate in Health Informatics before she undertook key project and coordinating roles at the college.

To find out more about post-graduate courses at the college contact Fleur Royds, email fleur.royds@vcp.monash.edu.au or tel: 613 9903 9509.

Pharmaceutical Science Society dinner



Held on 19 April, the Pharmaceutical Science Society dinner was a huge success, with students, staff, graduates and sponsors taking the time to socialise, network and party.

"We had such a fun night – it was a night nobody will forget," said Ranelle Anderson, vice-president of the Pharmaceutical Science Society and third year Bachelor of Pharmaceutical Science student.

Butleigh Wootton provided a lovely setting for the evening and the dance floor was a hive of action.

"The challenge is now on for the society to make the event bigger and better for next year," said Gigi McLaren, president of the Pharmaceutical Science Society and third year Bachelor of Pharmaceutical Science student.

The Society would like to thank Hospira, Synertec and the Monash Parkville Student Association for their support in 2007.

Alumni privileges

All college graduates are entitled to alumni privileges and benefits from Monash University. This includes access to Monash library resources and online databases, career services, Monash news, IT short course discounts and much more. For further information visit www.monash.edu.au/alumni/privileges/

2007 Chemistry Challenge

Twenty talented Year 11 students tested their chemistry and formulation science skills as part of a two-day workshop over the September school holidays.

Teams from 24 schools across Victoria competed in the college's Chemistry Challenge for a prize of two iPod nanos.

The aim of the challenge was for the students to work out how to make a moisturising cream. The teams had opportunities to gather some basic information in a series of workshops and tutorials on topics such as skin structure and function, and moisturisers, why we use them and how they work.

They also developed packaging for their products, learning that there is more to labelling than meets the eye.

Aided with this new-found knowledge and a list of ingredients, the challenge was on as students attempted to formulate a moisturiser in a hands-on laboratory session.

With some successful and other less successful outcomes in the lab, students had the chance to ask a panel of lecturers from the college's Bachelor of Pharmaceutical Science 10 questions. Some insightful questions were posed as to why their attempts to formulate the cream had succeeded or failed.

On the afternoon of the second day, teams presented their findings to a panel of judges who announced the winners Sarah Tan and Berenice Cheng from Methodist Ladies' College as the college's Chemistry Challenge winners for 2007.

The Challenge gave students an insight into university-level chemistry and, in particular, pharmaceutical science. It focuses on medicinal chemistry, which deals with how drugs work, how drugs are designed and how drugs are made, and formulation science, which addresses the making and testing of new pharmaceuticals, cosmetics, foods and industrial products. Both medicinal chemistry and formulation chemistry are major areas of study in the college's Bachelor of Pharmaceutical Science.

Pharmaceutical Science success

The Bachelor of Formulation Science course was introduced at the college in 2000, one of the first courses of its type in the world.



The scientific basis for the degree is drawn from pharmaceuticals, which has long been a strength at the college. The degree has evolved slowly, with an increased emphasis on pharmaceutical biology, a change in name to the Bachelor of Pharmaceutical Science and the inclusion of a major in medicinal chemistry from 2008.

The course structure now includes majors in both medicinal chemistry and formulation science, with approximately two-thirds comprising common curriculum. The course is highly tailored to the needs of the industry and graduates are well prepared to become immediately productive.

Since its inception, approximately 100 students have graduated from the course, with a very high proportion either easily finding employment or going on to higher study. More than 70% of graduates have undertaken an honours year and many have continued in PhD programs, with the first Bachelor of Formulation Science students expected to submit their PhD theses this year.

TeamMONASH – Mother's Day Classic

As the sun rose over the Alexandra Gardens on Mother's Day, 623 Monash staff, students, alumni, friends and family members came together as part of TeamMONASH to raise \$17,000 for the National Breast Cancer Foundation.



The annual Mother's Day Classic, comprising a four kilometre run and an eight kilometre run/walk, is the biggest community fundraiser for breast cancer research in Australia.

College staff member Marnie Southward and her family registered with TeamMONASH to take part in the Mother's Day Classic.

"Having my family do the walk with me was a great way to start Mother's Day, while supporting an important event," said Marnie.

Over 20 college representatives joined TeamMONASH, including third year Bachelor of Medicinal Chemistry student Alice Brandli, who hopes to make the event a yearly tradition.

"It was fun taking part in the run as part of TeamMONASH," said Alice. "There's a feeling of camaraderie."

People in Monash shirts cheer you on during the race and there's a real sense of belonging."

To make the early rise just a little bit easier, the TeamMONASH tent provided breakfast, massages and flowers for every mother. Over 60 volunteers kept the marquee running and cheered on participants.

TeamMONASH was recognised on the day for a fantastic effort, and awarded a certificate for entering the largest community based team.

Staff, students, alumni and friends of Monash University are welcome to join in the fun, meet new people and improve fitness. For more information on participating or volunteering, visit www.sport.monash.edu.au/events/index.html

PSA Alphapharm Student of the Year – Victorian finalist



Thomas Flanagan has been named the Victorian finalist of the PSA Alphapharm Pharmacy Student of the Year competition.

Aimed at final year pharmacy students, the award recognises the importance of communication and counselling skills in best pharmacy practice. Using real life pharmacy scenarios, participants assess patients' healthcare needs before judges Jane Mitchell and Irvine Newton.

Thomas, a fourth year Bachelor of Pharmacy student, was selected from 10 participants statewide.

"The competition provided me with a good opportunity to measure

how my counselling skills were developing," said Thomas. "The prize is a great reinforcement that I am on the way to where I need to be for the future."

As Victorian state finalist, Thomas received a travel prize from Alphapharm to attend the Pharmacy Australia Congress (PAC) in August.

"I'm looking forward to attending PAC, meeting practising pharmacists and learning about current issues relating to pharmacy," he explained.

PSA national president Brian Grogan (PhC 1960) highlighted the competition's important role in providing professional recognition for outstanding counselling skills.

"The PSA Alphapharm Pharmacy Student of the Year competition provides the ideal opportunity for pharmacy students to demonstrate to our profession the high level of counselling skills they possess," he said.

Thomas follows college students Ashlea Siacchi (BPharm 2007) and Michael Nunan (BPharm 2006) as Victorian state finalists in the competition. In 2008, he will be taking his counselling skills to Berwick Amcal Pharmacy as a pre-registrant.

Pharmacy Ball 2007



The Atrium in Flemington was transformed into a circus extravaganza for the annual Monash Parkville Student Association Ball, which was held on 31 August. The circus theme was brought to life by fire-breathers and jugglers, who met guests at the door.

Over 700 students enjoyed the night, which was – as always – the highlight of the college social calendar.

Invitation to Academic Prize Giving

Each year, the college celebrates academic success at the Academic Prize Giving evening.

An invitation is extended to the college community to join staff, students, industry and friends at this important event to help congratulate the college's high achieving students.

In 2008, the Academic Prize Giving evening will be held in Cossar Hall on Monday 10 March from 6.30pm. RSVP is essential. Contact Jessica Dobbie, tel: 613 9903 9119 or email jessica.dobbie@vcp.monash.edu.au



Inaugural Retired Pharmacists' Group meeting

The Victorian College of Pharmacy Foundation held the inaugural meeting of the Retired Pharmacists' Group on 31 July.

Over 20 retired pharmacists attended the first meeting. The group was updated on college activities and events by dean of the college, Professor Bill Charman, and head of the Department of Pharmacy Practice, Professor Roger Nation.

Professor Charman and Professor Nation also led group members on a tour of the college's new building and campus.

Retired pharmacists were delighted to see the college's facilities, reminisce on days gone by and catch up with colleagues. The group meets monthly and provides a great opportunity for retired pharmacists to re-connect with the college in a relaxed social atmosphere.

The second meeting was held on 28 August from 11.00am to 12.30pm, with Steven Marty (BPharm 1970), registrar at the Pharmacy Board of Victoria, speaking about the current activities of the Board.

For a full listing of scheduled dates and speakers for the group, visit <http://vcp.monash.edu.au/alumni/retired-pharmacists.html> or if you would like to join contact Vanessa Williams, tel: 613 9903 9087 or email vanessa.williams@vcp.monash.edu.au.

Honorary doctorate for Geoff Vaughan

Dr Geoffrey Vaughan AO was awarded an Honorary Doctorate of Laws at the Monash University graduation ceremony on 26 April.

Dr Vaughan was a member of the college staff for 27 years. In 1986 he left his position of dean and became the director of the Chisholm Institute of Technology until it was absorbed into Monash University, where, in 1990, he became the deputy vice-chancellor. From 1992 to 1996 he was national manager of the Therapeutic Goods Administration, where he helped improve performance standards.

Dr Vaughan was chairman of the Cooperative Research Centres Committee from 1996 to 2005 and a member of the Industry Research and Development Board from 2000 to 2006. He has also been a committee member for the Red Cross Blood Service and a council member for a number of government and corporate organisations. He is on the board of the Victorian College of Pharmacy Foundation, a director of the Institute of Drug Technology Australia Ltd and a director of Cytopia Ltd.

In 2003, he was awarded a Centenary Medal for his outstanding service to medical and pharmaceutical research. He was made an Officer of the Order of Australia in the 2006 Queen's Birthday Honours List for service to scientific research and development, particularly through contributions to the development of government policy initiatives, to the growth of innovative technology based Australian companies, and to education as a mentor and supporter of young scientists.

"I'm very honoured to be recognised by the university in this way and I feel that the award is also a tribute to the many people I have worked with in academia, government and industry," said Dr Vaughan. "I've always tried to work as a member of a team and the degree recognises the team effort of many people."



"I'm very honoured to be recognised by the university in this way and I feel that the award is also a tribute to the many people I have worked with in academia, government and industry."

New role to direct Foundation

John Allen recently joined the staff of the college as executive director of the Victorian College of Pharmacy Foundation.

In this newly-created role, John is responsible for fundraising, liaising with external stakeholders and engaging with alumni. He will also direct all Foundation activities and assist the Foundation Board across each of its operations.

John brings a wealth of community development experience to the Foundation, with over 22 years of experience in the not-for-profit sector working in animal welfare, youth welfare, health and the environment. These areas reflect his personal interests, as he believes that a fundraising professional can be more effective when a genuine interest in the cause is involved.

John is a past president of the Fundraising Institute Australia (Victoria) and was a board member of the national body for six years.

He was made a Fellow of the Institute in 2005. He is currently a director of Melbourne's iconic Lost Dogs' Home.

His vision for the college is to build strong relationships between the Foundation and the philanthropic and commercial communities in seeking financial support that will drive the college's ambition to be a world-class teaching and research facility.

Particular focus will be placed on the education of the college's pharmacists of the future and on cutting-edge research developments.

"The focus will be to engage with potential funding sources who already have some links with the college and to motivate them with our exciting developments in teaching and research," said John.



"In my short time at the college I've been very impressed by the enthusiasm and professionalism generated by the college," he added. "I'm sure that this enthusiasm will extend to external stakeholders and help to create a successful fundraising environment."

John is also impressed that the Foundation is set up so that all donations are put to maximum

use without a percentage allocated to administrative costs.

"Every dollar raised will go directly to the project for which it is intended," said John. "Donors can choose to direct their money towards particular research projects, scholarships, endowments or equipment in the knowledge that 100% of their money will be used for that purpose."

PSA (Victorian branch) celebrating 150 years



Alistair Lloyd AO RFD ED (PhC 1956), Val Constable (PhC 1955) and Hon Geoffrey Cossgard.

The college congratulates the Pharmaceutical Society of Australia (Victorian branch) on celebrating its 150th anniversary.

The PSA organised a series of events to celebrate this historic milestone. A cocktail reception at Queen's Hall, Parliament, was attended by Governor of Victoria Professor David de Kretser, over 200 pharmacists and representatives from all national and state pharmacy organisations.

A public lecture series was held on obesity and diabetes to highlight the role of pharmacists in providing healthcare and advice on these

issues. And in August, a range of PAC events celebrated the profession's history.

"The events have been chosen deliberately to fete our members and to use the 150th anniversary to highlight the ongoing importance and relevance of the profession to the public, other health professionals and government," said PSA CEO John Illot.

The final occasion of the year will be a historic dinner that will bring together past PSA councillors and presidents.

Invitation to Cossar Club launch

The Victorian College of Pharmacy Foundation would like to invite all graduates to the launch of the Cossar Club.

The Cossar Club is a society that acknowledges those who are prepared to support the college with a bequest. In recognition of the leadership of the Cossar family with previous and current appeals, the society is named after them.

Professor Geoffrey Blainey, special guest speaker at the launch, will talk about the history of the profession of pharmacists. Dean of the college Professor Bill Charman will outline current activities and speak about the future of the college. Tours of the college will also take place to allow graduates to become re-acquainted with the Parkville campus.

Date: Wednesday 31 October
Venue: Cossar Hall,
Victorian College of Pharmacy,
381 Royal Parade, Parkville
Time: 11.30am – 1.30pm

Lunch and refreshments will be served.

RSVP by Wednesday 24 October 2007 to Vanessa Williams, tel: 613 9903 9087, email vanessa.williams@vcp.monash.edu.au or fax: 613 9903 9058.



Supporting the college's future through thoughtful philanthropy.

Queen's Birthday Honours



Aleck Miller OAM

For service to the community through a range of Freemasonry, Jewish and sporting organisations and roles.

Aleck Miller graduated from the college in 1953, commencing work for Henry Francis and Co. in the Myer Emporium in Bourke St. Three years later he purchased a pharmacy in Prahran, which he ran for over 18 years with his wife, Alice Steinberg, a pharmacist who graduated from the college in 1954.

They soon expanded their business interests to include a second pharmacy in Bundoora. Sadly, Alice passed away last year.

While running these successful businesses, Aleck still found time to join the Freemasons and work for the community. He is currently ranked part junior grand warden and is behind the organisation's annual charity bowling day, which raises funds for the Royal Freemasons' Homes of Victoria.

Aleck has also been an active member of the Jewish community. He is a past president of the Kew Hebrew Congregation and has worked for various Jewish charities, including Jewish Homes. He has also made a significant contribution to the game of bowls, with involvement at the Commonwealth Games as a voluntary bowls scorer as well as the Asia-Pacific Bowling Carnival.

"I am humbled but proud to be identified as someone who has contributed greatly to the wonderful Australian community," said Aleck.

If you are interested in joining the Victorian Chemists' Bowling Association contact Aleck Miller, tel: 613 9015 7073. The group meets every few weeks over the summer at various Melbourne bowling clubs.



Simon Appel OAM

For service to pharmacy through a range of professional organisations, and to the community.

A 1967 college graduate, Simon Appel owned three community pharmacies in metropolitan Melbourne from 1975 to 1989. He was elected to the council of the PSA (Victorian branch), becoming vice-president and remaining with the organisation until 1983.

In 1981 Simon became a director of Sigma, where he served for 10 years, being appointed chairman of the board from 1986 to 1991.

From 1993 to 1997, Simon continued his service to pharmaceutical organisations by becoming executive pharmacist for the Pharmacy Guild of Australia National Secretariat. From 1994 to 1998, he was a member of the Pharmacy Board of the ACT. During this time he was involved in the development of consistent regulations for pharmacy across all state and territory Pharmacy Boards.

Simon is currently project manager for the National Return and Disposal of Unwanted Medicines project, which facilitates the return and disposal of unwanted and out of date

medicines from consumers through community pharmacies across Australia. Actively involved in education, he is also currently chairman of the board of management at Mentone Grammar School.

"Receiving acknowledgment by peers is at this level quite overwhelming," said Simon. "Pharmacy makes such a wonderful contribution to health management and I am very proud to be part of such a profession. The award is a recognition of the part we, as pharmacists, can play in medication management."



Associate Professor Peter Little AM

For service to people with diabetes, particularly through executive roles with Diabetes Australia, and to research into the vascular effects, treatment and prevention of the disease.

After graduating from the college in 1972, Associate Professor Little went to work for Abbott Australasia as a research and development chemist. Within a short time, he developed two products – Selsun Blue and FeFol2. However he soon returned to study, completing his Masters and PhD at the University of Sydney.

He first started working with cardiovascular disease and diabetes in 1979, when he became Post-Doctoral Visiting Fellow at the National Institute of Environmental Health Sciences in Florida, USA.

Recruited to the board of Diabetes Australia (Victoria) in 1987, Associate Professor Little went on to become its chairman. He also joined the board of Diabetes Australia Ltd and in 2003 was appointed national president and chairman. His achievements included overseeing the National Diabetes Action Plan, research funding increasing to \$3 million per year and annual grants reaching 60. He also renegotiated a new National Diabetes Services Scheme agreement, which

will see greater pharmacy access to the scheme. Today, he is still a on the board of Diabetes Australia (Victoria).

According to Associate Professor Little, his career highlights include receiving the coveted National Health and Medical Research Council Senior Research Fellow Level B in 2006; having 'Insulin resistance and atherosclerosis' published in *Endocrine Review* (publication impact factor 22); and training his first PhD student.

"This recognition is extremely pleasing, as the award also recognises the many people in Australia who are living with diabetes," he said.

Where are they now?

**What are you doing now?
We'd love to hear your story.**

**If you'd like to be included here,
email alumni@vcp.monash.edu.au
with your name and a short
description of what you've done
since graduating.**

50s

After selling his business, John Veal (PhC 1959) worked part time as a locum in country Victoria for eight years for his niece, Catherine Vassie (BPharm 1982). Now retired, John spends his time travelling, in choir work and with the 3Gs – golf, gardening and grandchildren that include the recent addition of twin grandsons. He has been married to his wife Dorothy for 46 years.

60s

Retirement for Didimo Tonelli (BPharm 1968) has been anything but quiet. Having undertaken some sailing and travelling around Australia and overseas, Didimo has gone on to complete his Certificate III in fitness and is now a qualified gym instructor. Didimo and his wife both volunteer as gym instructors and have seen the vast difference exercise has made to the quality of life for the older people in their classes.

70s

Caroline Fisher (formerly Padbury, nee Siekmann) (BPharm 1974) is living in New York and is a clinical editor for *Medscape*. If you would like to contact Caroline, email cmfisher@medscape.net

80s

David Manallack (BPharm 1982) this year celebrates 25 years since receiving his pharmacy degree. David went on to complete his Masters at the college and a PhD at the University of Melbourne. He gained international research experience when he worked at Smith Kline and French in the UK, a two-year position stretched to 15 years after he met his wife Anna and had two children. Returning to Australia in 2004, David worked in hospital pharmacy at the Dandenong Hospital and the Monash Medical Centre. Since 2006 he has been a senior lecturer in the Department of Medicinal Chemistry at the college and greatly enjoys having the opportunity to pass on his skills to students.

90s

Sunil Narula (BPharm 1993) is state manager for My Chemist and Chemist Warehouse in Western Australia, where he is directing and managing the expansion in the state. His role involves the selection and planning of sites, beginning with the purchase of the pharmacy and doing everything in between until the pharmacy is up and trading. He also oversees the training of graduate pharmacists, educating them on the practice of pharmacy as well as pharmacy management.

Alison Duncan (BPharm 1990, GradDipClinPharm 1999) is now a senior clinical pharmacist at The Alfred, where she leads a group of pharmacists working in the medical specialty directorate, caring for patients under the hematology, medical oncology, radiotherapy, infectious diseases and palliative care units. Her passionate interest is for infectious diseases, and she has specialised in the area of HIV and AIDS for 10 years now. Her specialist knowledge has seen her go to India (sponsored by the Australia India Council) on several occasions, providing education to nurses about HIV, opportunistic illnesses and their therapies. Alison has also given lectures and presentations to students, doctors, pharmacists and community workers in Melbourne and throughout Victoria, when requested.

Reunions in 2007

1967



Forty years on – the pharmacists who graduated in May 1967 met again for a convivial lunch on 5 May. Our next reunion is planned for early May 2011. It is planned to be a joint celebration with 1966 graduates with whom we celebrated our 25th – this will coincide with their 45th year and our 44th.

In 2005, of the 110 (75 male and 35 female) graduates from 1967, 75 were still registered with the Pharmacy Board of Victoria. Some of the graduates still only used log books (no slide rules) and can still read and understand scripts written in 1840, when labels were handwritten as 'the tablets' or 'the mixture' because no content information was allowed for the client.

May & Baker provided tins which, when holed, were ideal to sterilise eye drops. A placebo had to be red, bitter and expensive, with lengthy instructions. And Ritalin was available over the counter in small tins of 10.

Please remember that May 2011 is our next reunion. For more information email bhbaxter@hotmail.com

Bev Baxter (PhC 1967)

1982

The class of 1982 held their reunion on 6 October. Further information on this night will be available in the next edition of *Alchemy*.

Why not plan a reunion in 2008?

If any members of the graduating classes of 1958, 1983, 1998 and 2003 would like to organise a reunion of their year group, contact Vanessa Williams, tel: 613 9903 9087 or email vanessa.williams@vcp.monash.edu.au

1958 – 50th anniversary

Elvis Presley is inducted into the US Army; Monash University is founded; Robert Menzies is Prime Minister of Australia; and Baystone wins the Melbourne Cup.

1983 – 25th anniversary

The Ash Wednesday bushfires in Victoria and South Australia claim the lives of 71 people in Australia's worst-ever fires; ALP leader Bob Hawke is elected Australia's Prime Minister; Australia II wins the America's Cup ending the New York Yacht Club's 132 year domination of the race; Hawthorn defeated Essendon to win the 1983 VFL premiership; and Kiwi wins the Melbourne Cup.

1998 – 10th anniversary

An estimated 70 million viewers watch the last episode of *Seinfeld*; US president Bill Clinton is impeached on two charges of perjury and obstruction of justice; *Titanic* becomes the highest grossing film of all time; legendary singer Frank Sinatra passes away; the Adelaide Crows beat North Melbourne to win the AFL Grand Final; and Jezabeel wins the Melbourne Cup.

2003 – 5th anniversary

The Iraq war begins and Australia sends in 200 troops; *Harry Potter and the Order of the Phoenix*, the sixth instalment of J.K. Rowling's popular series, hit the shelves in June and rocketed up the best-seller lists; Space shuttle *Columbia* explodes, killing all seven astronauts; Brisbane Lions defeat the Collingwood Magpies to win the 2003 AFL Grand Final; and Makybe Diva wins the Melbourne Cup, the first of three Melbourne Cup wins.

Gearing for success

Entrepreneurship and pharmacy combine in the work of Dr Timothy Morgan, who has forged a career path where entrepreneurial risk-taking has led to personal success.



Dr Morgan recently participated in a panel of young achievers who identified how they reached their goals as part of 'Gearing for Success', a professional development seminar run by Monash University.

"I was pleased to be recognised as a young achiever and I'm proud to come from a college that continues a tradition of excellence in research and development that reaches the customer," said Dr Morgan.

Dr Morgan is the founder of Lachesis Biosciences Pty Ltd, a company that aims to tackle preventable disease. It is about to launch a new consumer-driven health care initiative called Personal Health Optimiser®.

This unique service involves consumers subscribing from the convenience of their home to receive a quarterly health report that they can share with their doctor. The service should encourage users to identify health risks and focus on these in order to prevent disease.

Lachesis Biosciences is not the only company this young entrepreneur has played a part in. Acrux, a pharmaceuticals research company that Dr Morgan co-founded in 1998 based on his PhD research, recently gained FDA approval to market the drug EvaMist.

Rural workshops

In conjunction with the PSA, the Victorian College of Pharmacy Foundation has been running professional development workshops for pharmacists in rural areas of Victoria. Workshops have taken place in Albury-Wodonga, Seaford, Shepparton and Traralgon.



In Seaford on 3 June and Shepparton on 12 August, Greg Duncan (BPharm 1985) and Kirstie Galbraith, lecturers from the Department of Pharmacy Practice at the college, delivered 'Putting evidence into practice'. This workshop enabled participants to learn how to get the best therapeutic outcomes for their patients by integrating their clinical expertise and knowledge with their patient's needs and preferences, and the most current information available.

"The workshop was an opportunity for skill development that will improve clinical decision making in a structured and systematic way and contribute to their continuing professional development every time they use these skills," said Greg.

The last workshop of the year took place in early October. Pharmacists from Traralgon and surrounding

areas participated in 'Heart failure and psychiatry', a workshop on current treatments in heart failure and associated medications on the markets, with the psychiatry element of the workshop discussing clinically significant medication interactions in psychiatry and adjunctive strategies for the care of psychiatric patients. Presenters were Anne Leversha (BPharm 1971), director of pharmacy at Latrobe Regional Hospital and Lyn Billington (BPharm 1972), deputy director of pharmacy at Latrobe Regional Hospital.

All workshops were a great opportunity for pharmacists to earn Continuing Professional Development points and improve their knowledge base.

For more information on the workshops contact Vanessa Williams, tel: 613 9903 9087 or email vanessa.williams@vcp.monash.edu.au

Wanted: mentors for student leaders

Community pharmacists and pharmacists in industry are needed to mentor the college's new Student Ambassadors.

The Student Ambassador program selects students who have demonstrated leadership ability and provides them with opportunities to develop these skills and represent the college.

An integral part of this program is linking Student Ambassadors with graduates working in the profession who can offer an insight into working life and tips on achieving career objectives. Mentors and students are encouraged to meet approximately four times over a 12-month period.

While mentors from all areas of the profession are involved, the college is currently seeking community pharmacists and representatives from the industry sector.

If you are interested in becoming a mentor contact Jessica Dobbie, email jessica.dobbie@vcp.monash.edu.au or tel: 613 9903 9119.

Student Enhancement Program activities

Careers Week

The annual college Careers Week, held in the last week of April, had students contemplating the many options available to them after graduation.

Over 600 students checked out the opportunities showcased by Careers Expo exhibitors. Monash Careers and Employment Service offered a forum to brush up on interview techniques and resume writing skills. Students enjoyed mingling with industry representatives at the annual pharmaceutical science wine and cheese night and at the Grimsey's and Associates Pty Ltd networking evening. The SHPA also ran their annual information evening during this week, which was well attended. A highlight for students was hearing about the career paths and daily roles of industry representatives at the 'How do I get a job like that?' expert panel.

Careers Week is part of the college's 2007 Student Enhancement Program. The program would not be possible without the support and involvement of the pharmacy profession and the pharmaceutical industry, and the college would like to thank the following companies and organisations for their sponsorship: GlaxoSmithKline Australia, Pharmaceutical Defence Limited, the PSA and Pulse Pharmacy Management Services as principle partners, and supporting partners Ego Pharmaceuticals, Quality Pharmacy Group, Hospira, Therapeutic Guidelines Limited, Symbion Pharmacy Services and PHARM-A-TEMP Pty Ltd.

2007 Careers Expo exhibitors

- GlaxoSmithKline
- HealthWise Pharmacy Group
- Hospira
- National Pharmacies
- PBS Services Pharmacy Group
- Pharmacists Division of APESMA
- Pharmacy Board of Victoria
- Pharmacy Guild of Australia
- PHARM-A-TEMP
- Pharmaceutical Society of Australia
- Pharmore Pharmacies
- Pulse Pharmacy
- Quality Pharmacy Services
- Society of Hospital Pharmacists of Australia
- Slade Pharmacy

For information on how to take part in the 2008 Careers Expo contact Jessica Dobbie, tel: 613 9903 9119 or email jessica.dobbie@vcp.monash.edu.au.

Rural road trip

Warrnambool recently provided fertile ground for college students to explore some of the issues facing rural health practitioners.

On 15 September, the college and student club WILDFIRE (Working in Leading Development for Indigenous and Rural Education) lead a rural road trip to Warrnambool. The day included a visit to the local hospital, the Warrnambool campus of Southwest Healthcare and the opportunity to meet with local community pharmacists.

A presentation by college staff member Kevin McNamara looked at the major health issues facing rural practitioners in the area and investigated how the demographic of the area affects practice.

The highlight of the trip was the opportunity to visit Tower Hill Reserve, home to an abundance of wildlife and vegetation and situated in the crater of a dormant volcano. The Worn Gundidj Co-operative, in association with Parks Victoria, provided an opportunity for students to explore the natural ecosystem and local indigenous culture. They also participated in a cross-cultural program and learned about traditional herbal medicines.

WILDFIRE has grown over the last few years and has strong links with other healthcare courses at Monash University. For more information on WILDFIRE visit www.med.monash.edu.au/wildfire/

The Warrnambool Rural Road Trip is part of the Student Enhancement Program and would not be possible without the generous support of our sponsors.

Student Leaders' function



John Coppock, Tammy Van Wisse and Professor Bill Charman.

The Victorian College of Pharmacy Foundation ran a very successful Student Leaders' function in the college's Snake Pit in July.

Designed to help student leaders to understand what it means and takes to become a leader in pharmacy and pharmaceutical science, the evening enabled the students to mingle with industry leaders.

A highlight was a presentation by marathon swimmer Tammy Van Wisse who captivated her audience with stories of her achievements, including six world records. Her three-month journey in the Murray River to raise awareness for conservation was particularly moving. Tammy's crusade to ensure that the river is there for future generations highlighted how a good leader can have an enormous impact.

For the first time, this event involved industry leaders answering questions from students. The panel was chaired by Professor Bill Charman and included John Coppock (PhC 1955), chairman, Pharmaceutical Defence Limited; John Illot, CEO PSA; and Michael McNamara, research and development director, Generics & ICEs, Mayne Pharma. Panel members gave some invaluable insight and knowledge on what it means to be a successful leader today.

At this function, the 2007 Mathew Peck Scholarship was officially awarded to fourth year pharmacy student Jaya Soma. The scholarship will enable Jaya to work towards her long term career goal of contributing to higher standards of health and education in underprivileged areas.

"It was fantastic to see our student leaders gaining insight and inspiration from leaders in our profession and community," said Professor Bill Charman, dean of the college.

Experiencing rural pharmacy



In May, Horsham welcomed final year college students Loo Yee Cheah, Tran Huynh, Jenny Lau and Jing Yi Tan, who were completing their Professional Experience Placements (PEPs).

PEP placements involve self-directed learning designed to develop skills in clinical pharmacy, problem solving, patient counselling and therapeutic planning. In addition to spending time at their placement sites, the students visited other local healthcare providers to gain an understanding of how healthcare in rural areas varies from their experiences in Melbourne.

"We visited a medical clinic, ambulance service, Aboriginal Health Service, vet and optometrist to learn about their activities," explained Jenny.

As part of their PEPs, every college student is required to spend a few weeks in rural Victoria. Rural placements are an important part of the college's commitment to

addressing the shortage of pharmacists in rural and remote areas. As well as being an opportunity to explore the unique issues facing rural practitioners, the placements allow students to experience being part of a rural community and encourage them to consider practising in rural areas.

"One of the biggest advantages of working in Horsham was the opportunity to be part of a close-knit population and to impact positively on their healthcare needs," said Loo Yee.

In 2007, 205 third and fourth year Bachelor of Pharmacy students have visited 21 different communities from Mildura and Warrnambool to Shepparton. For some students, it is the first time they have visited a rural community.

To register as a preceptor for the 2008 PEP program contact Kelly Lloyd, email kelly.lloyd@vcp.monash.edu.au or tel: 613 9903 9043.

Rural high school visits in Alice Springs

Fourth year Bachelor of Pharmacy student Charmaine Hammond recently travelled to Alice Springs to speak with local young people about university healthcare studies.

"We were six university students, chosen to rouse high school students in Alice Springs to the challenge of becoming healthcare professionals.

Our aim was to encourage kids to finish high school and go to university.

Those of us who didn't come from particularly affluent backgrounds were able to speak about the financial hurdles. Others talked about the academic hurdles to university entry, with talk about rural entry schemes and course transfers.

We also discussed the UMAT, the military, accommodation and our own courses.

We hosted small group sessions where students become familiar with blood pressure monitors, plaster dressings, placebo inhalers and more. Visits to an Indigenous high school and a bush (primary) school were preceded by cultural awareness training, and it was quite eye-opening to realise the depth of the cultural differences. We were told that for every extra year that an Indigenous student attends school, their life expectancy is extended four years, so these schools are incredibly important.

The visit organisers, General Practice and Primary Health Care NT (GPPHCNT), arranged visits to remote healthcare facilities including the Tennant Creek and Alice Springs hospitals, an Aboriginal health centre, a bush clinic, and the Royal Flying Doctor Service. It was a valuable opportunity to get a feel for the more unusual career options we have as future healthcare professionals. I would encourage all interested health students to visit GPPHCNT's website and apply."



Professional Experience Placement: a new name

From September this year, the practical placement program undertaken by third and fourth year pharmacy students at the college will be known as the Professional Experience Placement (PEP) program. Other elements of this 12-week program remain unchanged. The new title better reflects the professional nature of this program, and the high standards expected of students undertaking it.

Pharmacy in the NT



Third year pharmacy student Tania Swan recently travelled to Western Australia to see what remote pharmacy entails.

"When political attention and media coverage on Aboriginal issues was at its peak, I was preparing for my placement in Ngaanyatjarra Lands. Australia's only full time remote pharmacist, Andrew 'Robbo' Roberts (BPharm 1987), had agreed to let me follow him around to see what his job entails.

The role of a pharmacist in a remote area is incredibly varied. Robbo's daily tasks ranged from one-on-one

counselling with the patient to developing systems to cope with frequent staffing changes. During my stay, we drove over 2000km and visited six health clinics. I was amazed to see the dedication of health workers. With such a high rate of chronic diseases, communities require a lot of care. Conditions range from chronic diseases such as diabetes to very rare sexually transmitted diseases.

During my placement, I assisted Robbo in completing an audit on standards of care for patients with diabetes. While it was a little disheartening to see some of the

results such as the low rate of immunisation in this subgroup, there was also evidence of some great work being done in the Lands in relation to compliance with medication regimes. Reviewing medication charts was of great practical benefit to me and will no doubt be of assistance in the future.

Thanks to WILDFIRE and the college for financial support, to the health clinic nurses for their help and to the Mantamaru community for their friendship. Most of all I am indebted to Robbo, who allowed me to have this incredible experience."

6th Asia Pacific Pharmaceutical Symposium



More than 150 delegates from across Asia Pacific flocked to Nepal in July for the 6th Asia Pacific Pharmaceutical Symposium (APPS).

APPS is the main annual event for the International Pharmacy Students' Federation (IPSF) Asia Pacific Regional Office and the main forum for students to gather and discuss ideas and issues. It is also a prime opportunity for IPSF to conduct a 'Training for Trainers' program, where students are trained in skills such as

leadership, public speaking and project management through a highly interactive program.

The Symposium schedule was packed, with educational sessions on 'The future of biologicals', 'Nanotechnology for drug delivery' and 'Targeting and liposomal delivery systems for natural medicines' just to name a few. In addition, many high quality posters were submitted for the poster presentation, based on the topic 'Role of pharmacists in your country for a better healthcare system'.

In APPS tradition, a public health campaign was conducted in Kathmandu on HIV/AIDS. HIV/AIDS is still a prevalent disease in Nepal so it was extremely satisfying to go out into the streets to increase awareness and dispel some myths.

The 7th APPS will be held in Khon Kaen, Thailand in 2008. For more information, visit <http://apro.ipsf.org>

IPSF Congress

In August, over 20 college students were given the opportunity to combine pharmacy education and networking at the 53rd annual IPSF Congress in Taipei, Taiwan.

More than 300 pharmacy students from 38 countries attended a variety of lectures and workshops relating to issues faced by the pharmacy profession and pharmacy schools worldwide. Congress attendees also had the option to compete in the Patient Counselling Event.

Congratulations to the two college students in the advanced final, Peter Cheng and Pui Wen Loh, who were unfortunately out-counselled by a representative from Canada.

"I have fond memories and made many international and Australian friends and I'm pretty sure it's the same for everyone involved," said Matthew Loft, a third year Bachelor of Pharmacy student. "Next year, the congress will be held in Romania. Don't miss it!"

Invitations

Inaugural Professor Barry L. Reed Distinguished Lecture
see page 6

Academic Prize Giving
see page 15

Cossar Club launch
see page 17

Alchemy, the alumni magazine of the Victorian College of Pharmacy, a faculty of Monash University, is published twice a year. The next issue is due for publication in November 2007.

The magazine is published for the Victorian College of Pharmacy community, which includes alumni (both pre and post the Monash amalgamation), current and former staff, students and their families, friends and colleagues of the college.

To contact *Alchemy*, telephone: 613 9903 9504, email alumni@vcp.monash.edu.au or write to *Alchemy*, Victorian College of Pharmacy, 381 Royal Parade, Parkville, Victoria 3052, Australia.

Student Enhancement program: This program, featured on page 22, would not be possible without the support and involvement of the pharmacy profession and the pharmaceutical industry. We thank the following companies and organisations for their sponsorship:

Principal partners:



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