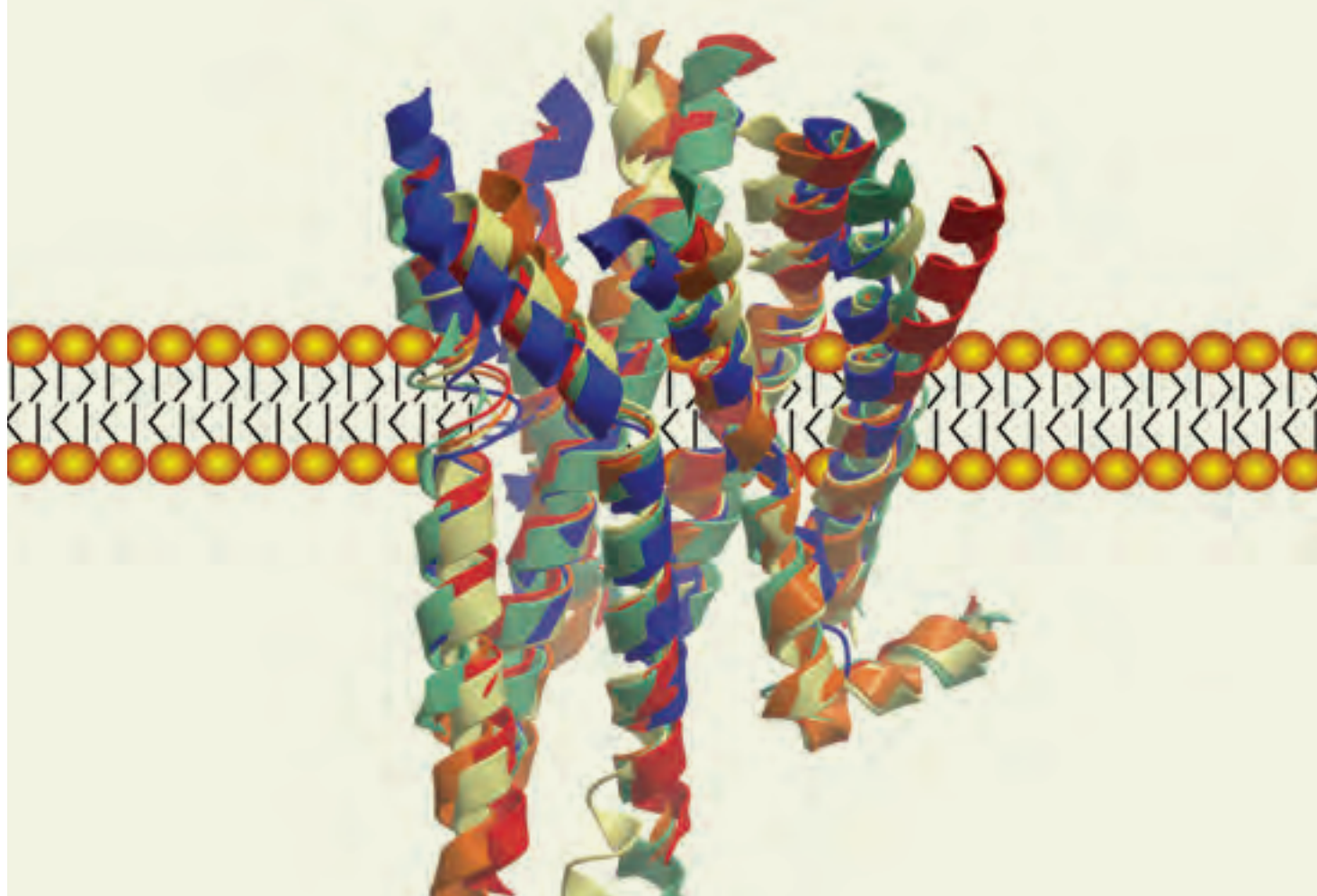




Faculty of Pharmacy and Pharmaceutical Sciences

# Alchemy

Issue 22, Summer 2012



4 Major drug discovery collaboration between Monash and Servier Laboratories, France

10 Faculty graduate wins national business owner award

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# Alchemy Issue 22



Cover image: G protein-coupled receptors to be investigated as part of a major drug discovery collaboration between Monash and Servier. Read more on page 4.

Alchemy, the alumni magazine of the Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, is published twice a year. The next issue is due for publication in May 2013. The magazine is published for the faculty community, which includes alumni (both pre and post the Monash amalgamation), current and former staff, students and their families, and friends of the faculty.

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# From the Dean

You may have heard that we have been ranked first in Australia and sixth in the world for the discipline of pharmacy and pharmacology by the reputable QS World University Rankings by Subject (2012). The significance of sixth place is further emphasised when you look at the institutions that are positioned above us – Harvard University in the United States, University of Cambridge in the United Kingdom, National University of Singapore, University of Oxford in the United Kingdom and the Karolinska Institute in Sweden.

We do not seek ‘to chase’ rankings in what we do. Instead, we continue to focus on excellence and quality in our education, research and professional activities. We also seek to attract and retain the most talented staff and students.

Global recognition for the quality of research undertaken within the Faculty is also evident by the major collaborative agreement between the Monash Institute of Pharmaceutical Sciences and leading pharmaceutical company Servier Laboratories, France, which was announced earlier this year. The agreement recognises our world-leading expertise in G protein-coupled receptors, our state-of-the-art facilities and our world leading scientists. You can read more about this on page 4. You may also be interested in the Faculty’s ambitious new plan for the Centre for Medicine Use and Safety, which is detailed on page 8.

The support we have received from the pharmacy community for our work in developing quality pharmacy education is also an important measure of our success. One clear indication of such support can be seen in the generous donations we received to build our innovative learning spaces. Earlier this year we officially launched the Faculty’s professional practice suites, wrapping up one of Australia’s most significant pharmacy education fundraising projects. Working with our industry peers on a shared vision for the pharmacy profession enables us to prepare high quality graduates. An example of such a graduate is Cathie Reid (BPharm 1991), CEO of APHS and Telstra Business Woman of the Year award recipient, who you can read about on page 10.

The key message from rankings such as the QS World University Rankings by Subject, or indeed the ‘above world standard’ ranking in the most recent Australian Research Council’s Excellence in Research for Australia report, is that our staff, programs, activities and outcomes are respected and valued by the leaders in our discipline worldwide. The QS rankings draw heavily on our academic reputation as judged by our peers, and are testimony to the fact that our students are receiving a world-class education.

Mohamman

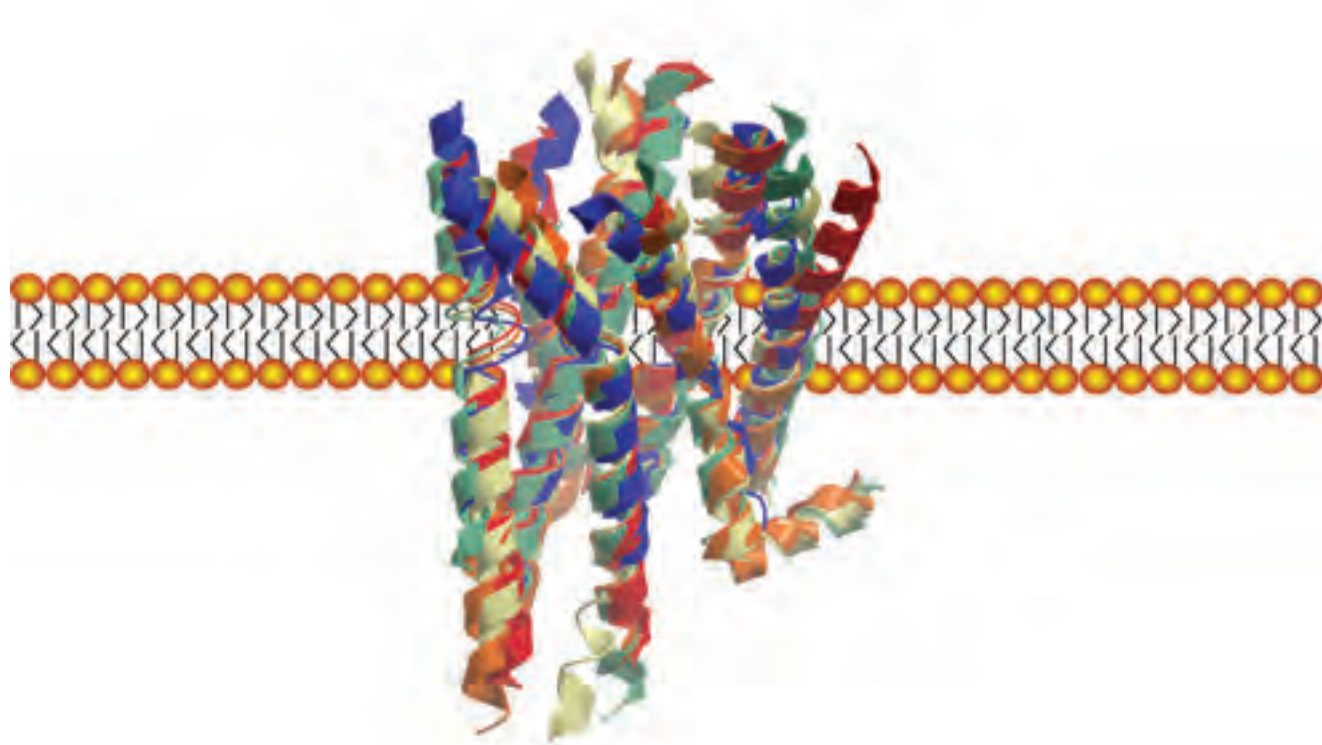
Professor William N Charman  
BPharm (1981), PhD

1st in Australia  
6th in the world  
for pharmacy and pharmacology

2012 QS World University Rankings by Subject



# Major drug discovery collaboration between Monash and Servier Laboratories, France



GPCR crystal structures.

In January, leading European pharmaceutical company Les Laboratoires Servier (Servier) and MIPS announced a collaborative agreement for drug discovery and research on G protein-coupled receptors (GPCRs).

The collaboration will make use of MIPS's acknowledged world-leading capability in the identification of novel GPCR targets, in the understanding of GPCR functional biology and in the design of new chemical entities to modulate GPCR activity. MIPS has developed GPCR expertise comprising technology, research facilities and world-leading scientists that enable it to conduct fundamental research, drug discovery and preclinical drug development activities on GPCR targets with therapeutic potential.

The collaboration will initially run for three years, with the research program including known and novel GPCR targets covering various potential therapeutic fields including metabolism, cardiology, neurology and psychiatry, rheumatology and oncology.

Under the terms of the agreement, MIPS will receive annual support from Servier for research activities undertaken as part of the collaboration and support for up to 15 (full-time equivalent) staff to work exclusively on collaborative projects. In addition, MIPS will receive progress milestone payments for each collaborative project and royalties for any product developed as a result of the collaboration. Servier will receive exclusive worldwide rights to any product resulting from the collaboration, as well as first right of negotiation for any GPCR targets not immediately selected as part of this collaboration.

"We are delighted to partner with Servier to advance our research and to translate our GPCR-based drug discovery insights to design new therapeutic agents for major human diseases," said Professor Bill Charman, Director of MIPS and Dean.

"Servier is a company dedicated to the discovery and research of novel therapeutics for the treatment of human disease," commented Emmanuel Canet, President of Servier Research and Development. "This alliance with MIPS, an acknowledged leader in the field of GPCR biology, will significantly enhance our capacity to identify and address original targets that may lead to therapies for untreated needs."

Bernard Marchand, General Manager of the Institut de Recherche Servier, said that GPCRs have shown promise as the source of targets for human diseases.

"However, there is still a lot to learn about functional specificity," he noted. "At Servier, as with other academic and industrial laboratories, substantial efforts have been made to modulate GPCRs for therapeutic use and we are now very excited to be working with leading experts in the field on a truly collaborative research program to extend our understanding of GPCR biology."

Servier is the leading independent French pharmaceutical company. The Servier Group is established in 140 countries, with its main therapeutic products used to treat diabetes, cardiovascular diseases, central nervous system disorders, oncology and rheumatological diseases. More than 25 per cent of Servier's revenue is invested in research and development. •

# Esteemed chemist joins MIPS

Leading Australian medicinal chemist and new Monash University Larkins Fellow, Professor Jonathan Baell, has joined MIPS.

Professor Baell, who was recently awarded a National Health and Medical Research Council Senior Research Fellowship, will bring a number of well-funded drug discovery programs to MIPS.

"I have a range of research interests including the discovery of new anti-parasitic compounds for the treatment of malaria and neglected diseases, the design and synthesis of peptidomimetics and the development of selection criteria for quality high-throughput screening," Professor Baell said.

Before his appointment to the University Professor Baell was based at the Walter and Eliza Hall Institute, where he played a central role in establishing and leading a first-class medicinal chemistry group.

Professor Peter Scammells, leader of the MIPS Medicinal Chemistry theme, said he was delighted to have a professor with such an outstanding track record of cutting-edge research join MIPS.

"This appointment will play a key role in establishing the Australian Translational Medicinal Chemistry Facility at our Parkville campus and make important contributions to the medicinal chemistry aspects of the recently announced drug discovery collaboration with Servier Laboratories," Professor Scammells said.

"Professor Baell and his research team will further add to the critical mass of the MIPS Medicinal Chemistry theme, which will assist us in attracting the highest quality research fellows and postgraduate students."

The Larkins Fellowship program aims to allow high-performing, early-to-mid career researchers to expand their research capabilities at the University. •





# Professional practice suites launched

Over 80 people gathered on 12 April for the official launch of the faculty’s professional practice suites. The event marked the conclusion of one of Australia’s most significant pharmacy education fundraising projects and acknowledged the contribution of donors, alumni and the profession to its success.



L-R: Irvine Newton OAM, Darcy Brennan, Simon Yu, Professor Bill Charman, Helen Kouzmin, David Nolte.

The professional practice suites complete a range of space, technology and curriculum initiatives implemented by the faculty that are set to transform pharmacy education in Australia.

Professor Bill Charman said the \$1.8 million education and professional development facility is part of the faculty’s long term vision for pharmacy education and the future of the profession.

“We want to teach our students to lead change and establish tomorrow’s practices,” he explained. “The suites are a unique design that will facilitate the teaching of contemporary dispensing, primary care and patient communication skills in a hands-on manner.”

The professional practice suites can accommodate up to 80 students and offer a combination of contemporary and purpose designed teaching spaces, computer enabled tutorial spaces, consulting rooms with video recording capability and social learning spaces. They incorporate MyDispense, a new program designed and developed by the faculty that will enable students to develop their dispensing skills in a paperless environment using virtual patients, barcodes, labels and products.

The Victorian College of Pharmacy Foundation funded the development of the professional practice suites, along with a number of major industry partners, alumni and other supporters.

Professor Charman thanked all donors and acknowledged the significant contribution of individuals and industry partners to the success of the project.



Fourth year pharmacy student Vanessa Kleijn.



Consulting rooms with video recording capability.

The Quality Pharmacy Consortium, comprising the Quality Pharmacy Group, Rose Health, Willach, Abbott Pharmaceuticals, Ascent Pharmaceuticals and Rajan Pharmacies, was the first pharmaceutical industry partner to make a lead gift to the project, followed by pharmaceutical wholesaler Australian Pharmaceutical Industries (API).

Other significant contributors include the Pharmacy Guild of Australia (Victoria) and a number of individual alumni pharmacists who are leaders in their fields of practice, including Darcy Brennan (PhC 1960, GradDipCommunPharm 1986, PGDip(Clinical Pharm) 2001), Irvine Newton OAM (BPharm 1970), Professor Bill Charman (BPharm 1981), David Nolte (BPharm 1976) and Helen Kouzmin, Bill Scott (BPharm 1970) and Helen Scott (BPharm 1971), John Ware OAM (PhC 1950), Alistair Lloyd AO (PhC 1956) and Simon Yu (BPharm 1972) and Swe Chin Yu.

Speaking on behalf of the profession Charles Khallouf (BPharm 1976), convenor of the Quality Pharmacy Consortium, said that supporting this educational initiative is an investment in the long term future of the profession.

“Historically, the role of pharmacists has been primarily the dispensing of prescriptions with some advice services,” he noted. “There is now the opportunity to expand the pharmacists’ role to do much more. The professional practice suites will facilitate the development of a new breed of pharmacist trained to take responsibility for the overall health condition and deliver improved outcomes for their patients.”

Representing the student body, fourth year pharmacy student Vanessa Kleijn spoke of the value the suites will add to students’ skill sets as they prepare for a career in pharmacy.

“What we learn here is preparing us for placement in third and fourth year and everything beyond,” said Vanessa. “By the time we go on placement, we will have a grasp on the dispensing process so we can focus our energies on counselling our patients.”

Vanessa also thanked faculty staff and donors for their vision and philanthropy.

“As students our words of thanks are small, but our thoughts are big,” she said. “As is our commitment to you, and the profession, to be the best pharmacists we can be and to lead the profession to new futures.” •

## API pledges \$300,000 for education excellence

API has donated \$300,000 to support Excellence in Pharmacy Education, an initiative of the Victorian College of Pharmacy Foundation. The 10-year commitment from API will support the Faculty’s innovative approach to teaching and learning.

This significant and generous contribution has been invested in the Faculty’s professional practice suites.

Stephen Roche, API CEO and Managing Director, said that in supporting Monash to develop future pharmacists’ professional practice skills, patients will receive more positive health outcomes.

“In a changing health and retail environment, we believe that investing in the skills of young and upcoming pharmacists is an important contribution to the future of the industry,” said Mr Roche.

Alistair Lloyd AO, Chair of the Victorian College of Pharmacy Foundation recognised the support of API and the many other donors that have allowed the faculty to develop this specialised teaching facility.

“We are delighted that a firm like API with such a big stake in the future of the pharmacy profession has seen great benefit in supporting this initiative.” The Faculty is grateful to our alumni and supporters for their generosity. It significantly contributed to helping us achieve our enviable international standing. •



# An ambitious plan for the Centre for Medicine Use and Safety

In the last 12 months, the Centre for Medicine Use and Safety (CMUS) has mapped out an ambitious plan aimed at growing its contribution to the safe and effective use of medicines.

CMUS is already delivering innovative research to optimise the health outcomes of individuals and the community, both nationally and internationally.

“To support our plan we have and will continue to attract highly skilled staff who are national and international leaders in their research area,” said CMUS co-director Professor Carl Kirkpatrick.

“Our researchers are experts in pharmacy practice, with the necessary research methodology and mathematical techniques to undertake high quality research. Their extensive links with the healthcare sector ensure that their research is modelled on best practice outcomes and their prime concern is to enhance outcomes for patients.”

As part of its plan, CMUS has identified expertise in five defined research areas. These include health services, pharmacometrics, pharmacotherapy, public health and education.

Using the above skill sets and multidisciplinary collaborations, CMUS is able to offer high quality, timely and context specific research that has real world applications.

CMUS continues to be based at two Melbourne locations – at the faculty, and within the Department of Pharmacy at The Alfred. These integrated research nodes provide CMUS with an ideal position to address issues around medicine use and safety across all sectors, including the home, the broader community, hospitals, residential aged care facilities and the interfaces between these sectors. •

For more information

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# Pharmacometrics – enhancing the translation of science to benefit patients

Dr Jurgen Bulitta smiles when he says there’s no such thing as an average day. And why should there be, when alongside Dr Connie Landersdorfer and Dr Kashyap Patel he works in an exciting and dynamic area of pharmacology that formally emerged in the early 1980s.

Pharmacometrics is the quantitative science behind drug effects, disease and biological variability between patients. It is now an integral aspect of drug development and is used from pre-clinical through to phase IV. It is also integral to therapeutic and regulatory decision making. The strength of pharmacometrics is that it helps explain similarities and differences between *in vitro* and *in vivo* data in pre-clinical and translational drug development.

Pharmacometrics uses models based on pharmacology, physiology and disease for quantitative analysis of interactions between drugs and patients. It also uses disease models to describe the progression of disease over time, placebo effects and the relationships between biomarkers and clinical outcomes.

Dr Landersdorfer, Dr Bulitta and Dr Patel join CMUS as the newest senior research fellows in pharmacometrics. Each comes to the faculty with extensive experience, international recognition and track records for their pharmacometric work. The pharmacometric team is led by Professor Carl Kirkpatrick and the trio is a key part of CMUS’s ambitious plan for the future.

## Dr Cornelia (Connie) Landersdorfer

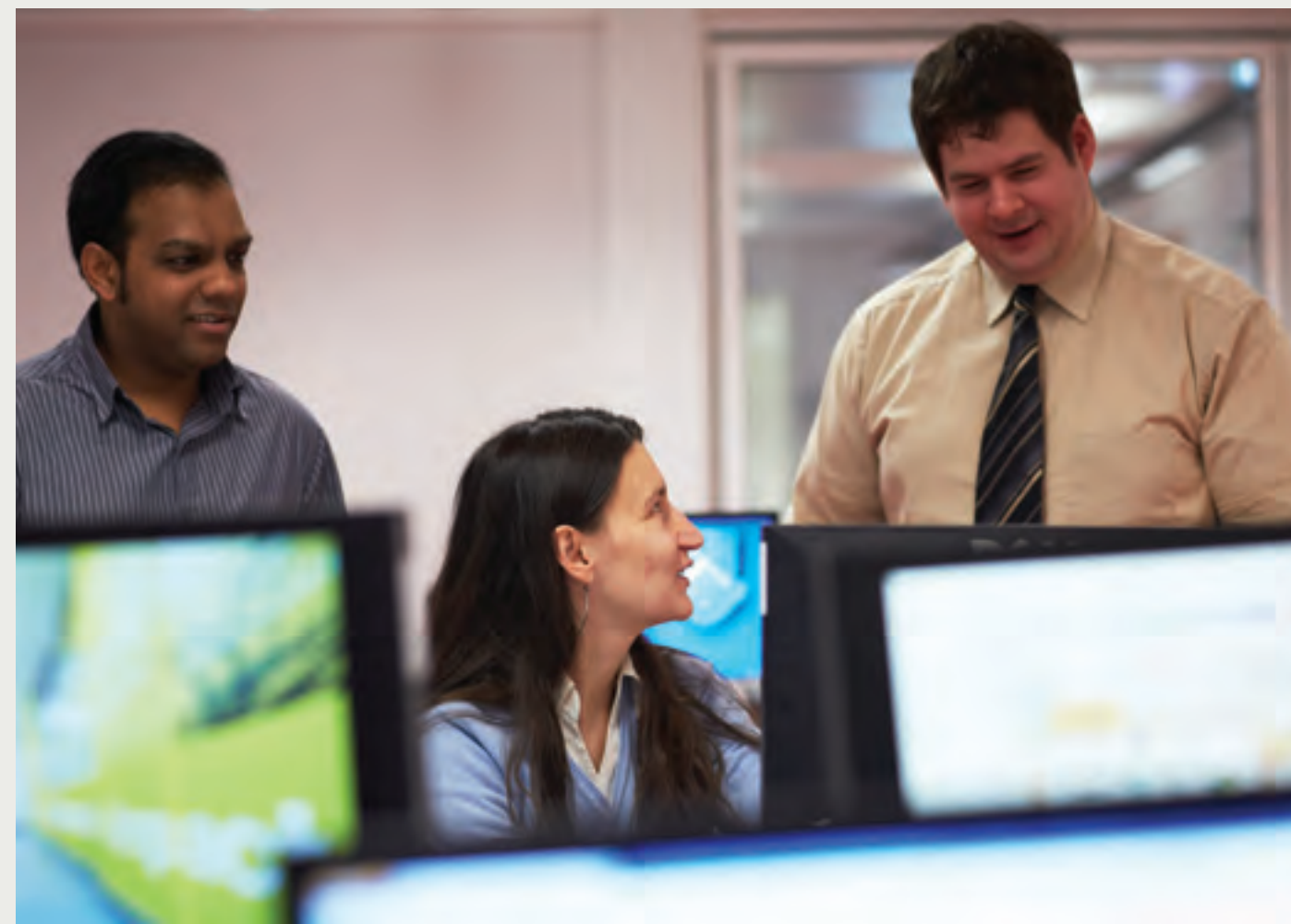
It was while working in a hospital in London as part of her pharmacy internship that Dr Landersdorfer became interested in using modelling to optimise patient treatment therapies. She incorporated this interest into her PhD on pharmacokinetics/pharmacodynamics of antibiotics, where she utilised mathematical modelling in her clinical studies.

“One of the main outcomes of mathematical modelling is the ability to predict ‘what if’ scenarios,” said Dr Landersdorfer. “By including patient characteristics (within models) we can make predictions of drug exposure and effect for specific patient groups, for example elderly patients or ICU patients.”

In recent years, among other things, Dr Landersdorfer has been investigating drug effects and disease progression in type 2 diabetes and is an internationally leading scientist in mechanism-based modelling of diabetes therapy.

“I have developed models on diabetes management that look at the biomarkers of glucose, insulin and GLP1 concentrations in patients. These models describe the underlying physiology of how these biomarkers relate and interact with each other. By then combining this with the effects of new and old anti-diabetic drugs, this model becomes a powerful tool designing optimal combination therapy for patients with diabetes.”

The outcomes of Dr Landersdorfer’s work will optimise the development of new diabetic medications. In fact by combining *in vitro* studies with mathematical modelling, the results can assist in the early stages of drug discovery or drug development.



L-R: Dr Patel, Dr Landersdorfer and Dr Bulitta.

## Dr Jurgen Bulitta

Dr Bulitta started his research career at 17 with a junior scientific project on antibiotics in Germany. At this time, his mentor Professor Fritz Sörgel recommended he start with basic science in chemistry to give him a solid foundation in core techniques and concepts that subsequently supported his mastering of more complex microbiological and mathematical techniques. Developing out of this was Dr Bulitta’s interest in experimental *in vitro* models. He is now working intensively on innovative approaches that optimise the simultaneous use of two antibiotics to minimise the emergence of bacterial resistance. Through this combination of experimental and mathematical modelling skills, Dr Bulitta is one of the international leaders in this field.

“My work revealed that unique drug combinations with beta-lactam antibiotics can lead to substantial and synergistic killing without emergence of resistance,” he said. “We now can utilise these findings to develop strategies to combat resistance supported by both experimental studies and mathematical models, which was not possible 30 years ago when these beta-lactam antibiotics were originally developed.

“Antibiotic resistance is a very exciting field to be in as there’s a huge medical need to optimise the safe and effective use of available antibiotics. *In vitro* and mathematical models are incredibly useful tools to support the optimal use of antibiotics in patients.”

## Dr Kashyap Patel

Dr Patel undertook his PhD at the University of Auckland in New Zealand. His research investigated the pharmacology of a novel prodrug that is activated only at low oxygen concentrations in tumours. Dr Patel modelled the activity and diffusion of both the prodrug and its metabolites, in a representative tumour where the blood vessels were mapped in three dimensions.

“When a tumour develops the blood vessels are chaotically organised, thereby compromising drug and oxygen delivery to all cells,” explained Dr Patel. “My model suggested that the arrangement of tumour blood vessels may be important when using hypoxia-activated prodrugs in chemotherapy.

“You couldn’t see the significance *in vitro* or in an animal model alone. It only became clearer when exploring drug transport in a mathematical form.”

Dr Patel is currently working on building a mechanism based model for anti-malarial drugs.

“Murine models are useful for studying malaria infection, because all stages of the parasite’s life cycle can be measured. I have developed a model that describes the stage-specific growth of the malaria parasite, and the killing effect of antimalarial drugs,” he added.

“I’m hoping to translate this animal model so that it may predict the data observed in humans. It can then be used to better optimise antimalarial treatment strategies in countries where the disease is prevalent.” •



# Faculty graduate wins national business owner award

Cathie Reid (BPharm 1991), CEO at APHS, won the Commonwealth Bank Business Owner Award at the 2011 national Telstra Business Women's Awards. APHS is a national supplier of pharmaceutical and clinical services for the hospital, oncology and aged care sectors.

As CEO, Cathie is responsible for delivering community pharmacies with an outsourced solution for their medication compliance packaging. This solution is offered at up to a third of the cost of manual packing, and increases safety and independence for tens of thousands of Australian self-medicating customers.

In her acceptance speech Cathie acknowledged the role APHS plays in meeting the needs of Australia's ageing population.

"Medication compliance is a challenge for our nation. Our compliance sachet gives elderly Australians the ability to be safe and independent when dealing with medication," said Cathie. "In an ageing society where the working population is also decreasing, being an innovator in healthcare is essential.

"This award is recognition for the entire APHS team and a reflection of the integral role pharmacists play in delivering quality healthcare to Australians. We are a sector that isn't often recognised, but this award truly demonstrates the value of our contribution to society."

Professor Bill Charman congratulated Cathie on her win.

"This is an outstanding result for APHS. As someone shaping pharmacy for the future, Cathie is an inspiring role model for pharmacy students," he said. "She is a great ambassador for pharmacists and the important role they play in society."

This award is not the first time Cathie has been recognised. In 1998 she was named Victorian Pharmacy Manager of the Year, an accolade that inspired her to co-found the Active Care Pharmacy group with her husband and fellow graduate Stuart Giles (BPharm 1992). The success of the group led them to merge with the APHS Pharmacy Group in 2002, of which they took full ownership in 2010. APHS has also recently received a National MedicineWise Award in the Excellence in Labelling and Packaging category, recognising its innovative medication sachets.

"We've pushed the boundaries of a traditional pharmacy business with our move into compliance sachet manufacturing and we'll continue to push it with the introduction of technology like our Medido Monitored Compliance Device," said Cathie.

"This device supports the next level of medication assistance for elderly Australians. It is the discovery and application of this type of technology, and the impact that it can have in our community, that motivates me and the team at APHS every day." •



## About the Medido Monitored Compliance Device



Finding smart, cost-effective technologies to assist with optimum care is a vital step in keeping our elderly population safe and well. Currently around 90 per cent of seniors take medication, so the risk of adverse events and medication-related hospital admissions can be high.

The Medido device is tailored to each client's needs by having their basic medication data uploaded to a web portal. This information concerning how many DAA sachets are to be ejected, at what time and on what day is sent to the machine via mobile phone technology. The Medido uses visual and audio alerts to alert a client to when they need to take their medication and is also able to monitor compliance.

The result is improved safety, less stress and increased independence for the elderly. •

# Where there are no pharmacists

When Beverley Snell OAM (PhC 1957) decided to leave community pharmacy to explore other ways that pharmacy could help people, she never imagined she was embarking on a long and distinguished career in international health. For her work in this area, Beverley was recognised in the 2012 Australia Day Honours with a Medal of the Order of Australia.



L-R: Dr Qassem Chowdhury, Chairman of Health Action International and Beverley Snell OAM.

"After graduating, I worked in community pharmacy but found that my role was increasingly moving away from focusing on people, which I believe is the core of being a pharmacist," she said. "In 1980 I was encouraged to apply for a position in a Community Aid Abroad project that implemented a primary healthcare approach to helping refugees in Somalia.

"At the time, there were 1.5 million refugees dying of malaria and other conditions, many of these preventable. It was the first time anywhere in the world that this approach had been implemented in a complex emergency setting and I saw the difference it made. I knew then which path I wanted to follow."

Primary healthcare is essential healthcare based on scientifically sound and socially acceptable methods and technology, made universally accessible to individuals, families and communities. It includes education concerning disease theory and prevailing problems, and focuses on finding methods of prevention rather than emphasising cure.

Since her first encounter with health systems in developing countries, Beverley has worked in a variety of roles, training healthcare workers and working with local pharmacists to help strengthen systems to buy, store and dispense essential medicines.

Her work as a consultant with the World Health Organization, governments and other organisations has seen her undertake reviews of national drug policies in many countries including East Timor, Fiji, the Solomon Islands, Cambodia and Tuvalu. From 1990, Mrs Snell was involved with the development of national Standard Treatment Guidelines in the essential drugs sector in Eritrea.

Closer to home, Beverley has also worked as pharmaceuticals advisor and a member of the primary healthcare team at the Victorian Aboriginal Health Service.

In 2010 she co authored *Where There are No Pharmacists: A Guide to Managing Medicines for All Health Workers*, which has a strong focus towards those working in developing countries or remote and rural areas.

Beverley is currently a Principal Fellow at the Centre for International Health at Macfarlane Burnet Institute for Medical Research and Public Health, where she has been based since 1994.

"The Burnet Institute has given me a solid platform from which I can explore opportunities to work in various facets of public and international health, including the education and mentoring of pharmacists and other healthcare professionals," she said.

She also teaches in the Master of Public Health course at Monash University,

and mentors Australian volunteers in Pacific Island health ministries and recipients of the faculty's Mathew Peck Travelling Scholarship.

"I'm really passionate about helping students and young professionals understand how they can contribute to sustainable development while becoming familiar with dimensions of pharmacy they had not known existed," she said.

"Assisting them to gain practical experience in an international setting is key in enabling them to explore the breadth of the pharmacist's role as researcher, educator, manager and administrator as well as medicine expert and an integral part of the primary healthcare team."

Beverley's nomination for an OAM was instigated by her colleagues at the Burnet Institute.

"It was a real surprise, but I'm delighted that the things I've been doing have been recognised in such a special way," she added.

Professor Bill Charman noted that it is always a source of great pride to see faculty graduates being recognised for the vital role they and the profession play in improving lives.

"This is a most deserving recognition of Beverley's professional skill, talent and work and a testament to the role pharmacy can play in addressing important healthcare issues in a national and international setting," he said. •

# Where are they now?

## 1950s

**Sam Gandolfo** (PhC 1951) was a relieving pharmacist in Melbourne before working at Gear's Pharmacy in Ballarat. In 1953 he joined RE Charles and Son Pharmacy in Richmond, which serviced Bethesda and Epworth hospitals. In 1954 he purchased his first pharmacy in Black Rock, followed by pharmacies in Glen Waverley, Blackburn North, Mulgrave, Waverley Gardens and Chirnside Park. He retired in 1995. During his career, Sam chaired several shopping centre committees and served on the state branch of the Pharmacy Guild of Australia. He was a demonstrator at the Victorian College of Pharmacy in pharmaceutical dispensing compounding and delivered lectures for the Asthma Foundation. After further studies, he developed and delivered a marketing lecture at RMIT. He was made an honorary life member of the Pharmaceutical Society of Australia in 2003.

After completing her apprenticeship at Hores Pharmacy in Melbourne, **Glenis Ponsford** (nee Turnour) (PhC 1954) undertook locum work in the country and worked at Coates Pharmacy in Collins Street before travelling overseas. She married **Geoff Ponsford** (PhC 1953) in 1957 and together they purchased Woodend Pharmacy and Gisborne Pharmacy. In 1979 they travelled to the UK for a year, where they worked as hospital pharmacists and travelled extensively. Geoff and Glenis sold the pharmacies in the 1980s and moved to Mullaway, NSW. Between 1994 and 2003 they worked in community and hospital pharmacy, as well as registering in Queensland and working in small mining towns there. Glenis also served as a Justice of the Peace. They returned to Melbourne in 2008.

## 1960s

**Michael Jobling** (PhC 1961) managed a Melbourne retail pharmacy before operating pharmacies in Ascot Vale and in Preston. He studied theology and was ordained an Anglican priest in 1970, maintaining his pharmacy registration and continuing to practise until 1981. He was a parish priest for seven years before joining an Anglican Family Services agency, establishing marriage education services throughout the Diocese of Melbourne. In 1973 he was involved in setting up the Maroondah Social Health Centre, the first community health centre in Victoria, and obtained his Bachelor of Social Work in 1986. He was executive director of the Victorian Marriage Guidance Council for five years before establishing a private practice in marriage and family therapy with his wife Heather in 1991 and obtaining further qualifications as an accredited mental health social worker.

## 1970s

**Sally Dean** (BPharm 1973) undertook her traineeship at the Queen Victoria Hospital and then worked at the Austin Hospital. In 1977 she travelled to Texas, where she volunteered as a hospital pharmacist and moved to the UK where she worked as a paid pharmacist. During her time abroad, Sally gained valuable insights into pharmacy practices overseas. She returned to Australia in 1980 and worked as a pharmacist, senior pharmacist and ultimately Deputy Director of Pharmacy at PANCH for 15 years, working closely with students and trainees. Sally subsequently worked in community pharmacy, where she enjoyed counselling and interacting with clients. She currently works as a pharmacist in St Vincent's Private Hospital, a role she has been in for the past 11 years.

After graduating, **Grahame Beecroft** (BPharm 1976) purchased pharmacies in Wentworth and Dareton, NSW. Returning to Melbourne in 1985, he became a partner in Noble Park Pharmacy. He married **Janette Bain** (BPharm 1976) in 1987. Grahame was a Director of Guardian Chemists Australia and Chairman for five years. In 2000 he left community pharmacy to work for an online health information business for two years. In 2005 he was appointed to the Victorian Pharmacy Board and later to the Victorian Pharmacy Authority, as Deputy Chair. He is a Fellow of the Australian Institute of Company Directors, a Fellow of the Australian College of Pharmacy Practice and has completed an MBA. Janette and Grahame are still partners in a number of pharmacies.

What are you doing now? We'd love to hear your story. If you would like to be included here, email [vcp.foundation@monash.edu](mailto:vcp.foundation@monash.edu) with your name and a short description of what you've done since graduating.

## 1980s

After training at the Austin, **Robin Whyte** (BPharm 1980) worked as a clinical pharmacist at the Western Hospital before travelling overseas. In the UK she worked as a formulation scientist, clinical trials manager and marketing manager in the pharmaceutical industry. After completing a Master of Business Administration at the London Business School, Robin returned to Australia to join Accenture Consulting, where she became a senior manager in the Health Care Strategy Practice. Robin has held roles as CEO of a number of health, aged care and community services organisations. Currently, she is CEO of the Frankston Mornington Peninsula Medicare Local, part of a nationwide network established under the Australian Government's National Health Reform to address service improvements in primary healthcare.

## 1990s

Following completion of his internship at the Austin Hospital, **Puneet (Sunny) Rewal** (BPharm 1998) worked in Cairns before returning to Melbourne. For the next six years, he worked in community pharmacy before joining HPS Pharmacies at Melbourne Private Hospital. Subsequent to that, he was offered a partnership with HPS Pharmacies. He is the Chair of the Professional Services Group at HPS, a committee that benchmarks clinical standards in private hospital settings across the company's sites around Australia. He is a member of the Australasian College of Health Services Managers and the Emerging Health Manager Special Interests Group, which provides a forum and networking opportunities for new managers in the sector. Sunny is also an observer for the Pharmacy Board of Australia and a consultant pharmacist with the Australian Association of Consultant Pharmacy.

## 2000s

As a student, **Dani Li** (BPharm 2007) worked at Quality Pharmacy and undertook her internship at the same company. She continued working at Quality Pharmacy Group for a year before becoming manager of Quality Pharmacy Werribee Medical. In this role she developed her leadership skills and is now the managing pharmacist at Quality Pharmacy Keilor Downs. Dani has always enjoyed being involved in the development of young pharmacists. She attends Careers Day at Monash and supervises numerous students for their three-week community pharmacy placements. A firm believer in the pharmacist's role in community health and health promotion, she conducts monthly health information talks at local retirement villages and child care centres. Dani has completed a Diploma of Management through the Pharmaceutical Society of Australia.



# Bringing health education to Nepal

Pharmacists Sharlina Lingam (BPharm(Hons) 2007, GradCertPharmPrac 2010) and Mahisha Thiruvanagan (BPharm2007, GradCertPharmPrac 2009) recently travelled to Nepal on a volunteer health education project. Here they describe their experiences.

"Health education has always been a huge passion for us and we were thrilled to be accepted for a five-month health education project with Volunteer Service in Nepal (VSN).

Because the health education project was new, we could choose the areas we wanted to focus on. We selected schools, children's homes, health posts and women's health.

Our sessions were held in both public and private schools. Topics suggested by teachers included basic health and hygiene, sexual health, puberty, environmental concerns and the impact of population growth. After experiencing an earthquake first hand ourselves in Kathmandu (a new experience for both of us!) we also included what to do in an earthquake and during a fire.

Curricula are taught in Nepalese in public schools and English in private schools. Without a doubt teaching at the public school was a greater challenge. Sometimes we had a teacher assist us with translations but mostly we were helped by students with superior English skills. Another difference between private and public schools was class size. The largest class in the private school was 20 students compared to 57 students in the public school. We tried to incorporate activities and games in our teaching to keep lessons as interesting as possible, and this also helped with the language barrier.



Our women's health topics included maternal health (pre and post pregnancy as well as care during pregnancy), sexual health, menstruation, menopause, cervical prolapse prevention, abortions, rape, sexual and physical abuse, home breast checks, pap smears and mammograms. In particular, cervical prolapses are extremely common throughout Nepal due to unsupervised childbirth, long periods of squatting and heavy lifting. Most of the women who came spoke little or no English and we were fortunate to have a Nepali doctor attend and present our work at these sessions. The confidence we saw in them when discussing women's health as a group was a stark contrast to their usual conservative demeanour. At these sessions we identified proactive women who could keep the program going and we developed summary take-home sheets so they could spread the information.

During our stay we visited a health post within Kathmandu Valley that was manned by a single senior healthcare worker and nurse. Only medications on the Nepal Essential Medicines List were available and provided free of charge to patients. But this list hadn't been updated for more than 15 years and the drugs didn't meet people's needs. We'd been asked to provide education on heart and respiratory disease, but we found most patients were of a much lower socioeconomic group that we had expected or previously met in Nepal. This was one of many confronting experiences. We left feeling that we hadn't contributed anything but we intend to assist this health post now we're back in Melbourne.

Being pharmacists, we were always going to be curious about Nepali pharmacies! Very little counselling is provided by pharmacists, dispensing doctors or healthcare workers. We assembled a list of drugs commonly dispensed in community pharmacies and made business card sized drug counselling cards that were well received by health professionals. Although these may not be useful for the illiterate population, many people may at least have a family member or friend who can read Nepali. We were fortunate to meet a senior Professor of Health Education at Teaching Hospital in Kathmandu (the largest tertiary hospital in Nepal). She was very encouraging and appreciative of all our material and ideas, and is hoping to implement the counselling cards in the hospital pharmacy.

We also created resource packs that included soft and hard copies of all our materials and teaching tools, including games, handouts and activities. Throughout our time in Kathmandu we'd identified proactive teachers and health professionals, and we distributed our resource packs to them.

Our placement was during Nepal's main festival season and staying with a host family meant we could experience it all as locals. The entire atmosphere – the colour, vibrancy, enthusiasm and music – was simply amazing. Throughout our stay, we were blown away and humbled by the continuous hospitality of Nepali people and of VSN. We were frequently asked if we felt homesick, but Kathmandu became our home very quickly and our friends became family.

Words can never describe how amazing this entire experience was for us; the work we were involved with and the incredible people that we met have left a lifelong imprint. If you have ever had an interest in this type of work, don't hesitate! Currently, all our materials are being translated into Nepali to be of maximum effectiveness. Our work has also been passed on to South India and Vietnam for translation into local languages. •

For more information

Email: [moshar.healthed@gmail.com](mailto:moshar.healthed@gmail.com)



L-R: Mahisha Thiruvanagan and Sharlina Lingam.



Teaching at a children's home.



# Delivering award-winning results

Drug delivery advances that could lead to more effective administration of medicines and save patients from regular, painful injections have earned MIPS researcher Associate Professor Ben Boyd peer recognition via the 2011 American Association of Pharmaceutical Scientists Lipid Based Drug Delivery Outstanding Research Award and an Australian Research Council Future Fellowship.

Associate Professor Boyd is investigating novel light-responsive nanomaterials for application in the treatment of macular degeneration, cancer and other critical unmet therapeutic needs.

Macular degeneration is the world’s leading cause of blindness, affecting 30 per cent of people over 70. Current treatments work only temporarily and must be directly injected into the eye. To maintain their vision, patients must endure repeated monthly injections into the eyeball.

However, Associate Professor Boyd’s team is developing a novel form of drug delivery that utilises light-sensitive materials which release a dose of drug only when ‘switched on’ by the use of an external laser.

Using naturally occurring lipids (molecules such as fats that bond together to form cell membranes), Associate Professor Boyd’s group is developing new materials that contain and then deliver drugs where and when they are needed.

This process would mean patients undergo a single injection to implant the material and report to their ophthalmologist only as symptoms appear for a simple laser activated dose of sight-restoring drug, instead of requiring multiple repeated injections.

Associate Professor Boyd’s team is also working on a targeted delivery system using the same materials. Broken down into smaller particles, these drug-carrying materials would be introduced to the body and travel dormant through the blood stream until they are ‘switched on’ by a laser focused on the specific site where they are needed.

“While this research is still very much focused on understanding the materials at this stage, the fellowship will allow me the freedom to concentrate our efforts on translating our work into real prototype delivery systems to meet some proof of the challenges of on-demand drug delivery,” said Associate Professor Boyd.

“This is a fantastic achievement and one that serves to again confirm the quality and significance of Ben’s work,” said Professor Chris Porter, Associate Dean Research.

“Triggerable nanomaterials is an exciting technology that has the potential to revolutionise drug delivery. We are thrilled that the award of this fellowship will allow Ben to expand and enrich his work here at MIPS.” •

## Exhibitions and awards for academic merit 2011

Each year the faculty awards and celebrates its highest achievers.

Bachelor of Pharmacy			
	Recipient	Donated by	Prize
First year exhibition	Yen Mei Chuah	Pharmaceutical Defence Ltd	\$500
Second year exhibition	Li San Yeoh	Pharmacy Guild of Australia	\$500
Third year exhibition	Amy Scott	Society of Hospital Pharmacists of Australia (Victorian branch)	\$500
Fourth year exhibition	Yijun Pan	Guild Insurance	\$500
Neil Naismith award	Yijun Pan	Therapeutic Guidelines	Subscription

Bachelor of Pharmaceutical Science			
	Recipient	Donated by	Prize
First year exhibition	Gracia	CSL	\$500
Second year exhibition	Pooja Lallbeeharry	The Australian Society of Cosmetic Chemists	\$500
Third year exhibition	Xiang Ren	Monash Institute of Pharmaceutical Sciences	\$500

Gold Medallists			
	Recipient	Donated by	Prize
Bachelor of Pharmacy	Yijun Pan	Pharmaceutical Society of Australia (Victorian branch)	\$500
Bachelor of Pharmaceutical Science	Xiang Ren	GlaxoSmithKline	\$500

Postgraduate			
	Recipient/s	Donated by	Prize
Monash Pharmacy Internship prize	Rachael Raleigh	Pharmaceutical Defence Ltd	\$500
Master of Wound Care prize	Marnie Cooper	Postgraduate Studies and Professional Development Unit	\$500
Master of Pharmacy Practice prize	Namita Anil Warrior	Pharmacy Guild of Australia	\$500
Master of Clinical Pharmacy prize	Choon Ean Ooi	Postgraduate Studies and Professional Development Unit	\$500
Faculty Honours prize	Michael Lee	FB Rice	\$500
	Rohan Volpe	FB Rice	\$500
Monash Vice-Chancellor's Hons/PhD Scholarship	Lisa Babaro	Monash University	Scholarship
Mollie Holman Doctoral Medal	Dr Mark Agostino	Monash University	Medal
Dean's Commendation for Doctoral Thesis Excellence	Dr Rachel Soon	Faculty of Pharmacy and Pharmaceutical Sciences	Certificate

The faculty would like to thank all donors who supported the 2011 academic prizes.

### Stan Robson Rural Pharmacy Equity Scholarship recipient

Congratulations to Ashleigh Baird, who is the recipient of the 2012 Stan Robson Rural Pharmacy Equity Scholarship. Originally from Rosebery in Tasmania, Ashleigh moved to Melbourne earlier this year to commence her first year of a Bachelor of Pharmacy degree.

“I was inspired to pursue a career in pharmacy by my great aunt, also a pharmacist and graduate of the faculty. Leaving home, especially moving interstate, is a big step both emotionally and financially. I am grateful for the opportunity the scholarship has given me to pursue my dream of studying at the faculty,” she said.

The Stan Robson Rural Pharmacy Equity Scholarship is awarded annually to a first year pharmacy student from a rural or isolated area. It was generously established by Dr Graeme Robson in honour of his father, Stan Robson, a respected pharmacist from Gippsland. •

### Thea Pärnamäe Bursary

Pharmacy student Anne Bradman has been awarded the 2012 Thea Pärnamäe Rural Pharmacy Equity Bursary. A resident of Ballarat, Anne commutes to university daily.

“The bursary has been a great help with managing the costs associated with attending university so far from home,” she said.

The bursary was established by Dr Kersti Nogeste in memory of her aunt, Swedish pharmacist Thea Pärnamäe. It supports female students from rural or isolated areas. •





## MIPS welcomes \$60m GSK investment in new Melbourne manufacturing capability

The Victorian Minister for Technology, Gordon Rich-Phillips, announced in February that GlaxoSmithKline (GSK) Australia will invest \$60 million to expand its Boronia manufacturing site and create 58 new highly-skilled jobs by 2017.

“This investment by GSK is of major significance to Victoria’s pharmaceutical industry and the Victorian economy,” he said.

GSK’s manufacturing plant in Boronia is the company’s largest site globally for the production of sterile liquid products that utilise state-of-the-art ‘blow-fill-seal’ (BFS) technology. This technology, which is an advanced antiseptic process, produces a range of container sizes suitable for the delivery of unpreserved, sterile products.

The Minister said the \$60 million investment would allow GSK to potentially double its current BFS manufacturing capacity by installing new BFS production technology.

An additional benefit of the investment is the creation of a pilot scale industrialisation

facility for the development of new powder and sterile liquid pharmaceutical products that will support the continuation of GSK’s successful research and development collaboration with MIPS. This collaboration was established in 2009 with \$3.3 million initial funding from the Victorian Science Agenda (VSA) Investment Fund and GSK, and it leverages the unique skills MIPS has in pharmaceutical science and nanotechnology with the industrial know-how and world-class medicine development capabilities of GSK Australia.

“I applaud GSK’s commitment to expanding its state-of-the-art pharmaceutical manufacturing here in Victoria, and welcome the opportunities it offers for the next stage of our ongoing collaboration with GSK,” said Professor Bill Charman. “The initial VSA funding was the catalyst for this significant expansion in world-class pharmaceutical manufacturing and medicine development.”

GSK Boronia Site Director Troy Webb said this was a unique opportunity to put

Victoria and Australia on the map when it comes to scientific innovation, particularly around respiratory, ophthalmic, biological and consumer healthcare products.

“With the Victorian Government as a key supporter, this investment will build a sustainable manufacturing capability within the local community while driving manufacturing technology,” he said.

GSK is a significant contributor to the Victorian economy in terms of employment, exports, manufacturing and local research and development investment, expending on average more than \$30 million a year on research and development in Victoria and consistently exporting more than \$300 million a year in pharmaceutical products from the state. •

## Palliative care: a unique perspective on treating patients



**We are all living longer. And as the number of elderly patients multiplies, the need for effective and ethical palliative care is becoming increasingly important.**

Since the 1900s, life expectancy for Australians has increased by almost a quarter of a century. Eradication of infectious diseases, improvements in public hygiene and rising living standards have led to a worldwide surge in the number of people living well into their eighth decade, with the projected number of centenarians increasing every year at a rate of 5.5 per cent. Despite an obvious growth in demand, few health professionals are given the opportunity to specialise their studies in the field of palliative care.

“Palliative care is an approach that looks at the physical, psychosocial and spiritual wellbeing of the patient and their family when faced with a terminal illness,” explained Laura Dean, coordinator of the new palliative care subject offered by the faculty’s Postgraduate Studies and Professional Development Unit (PSPDU).

“While it affirms life, it regards dying as a normal process and aims to provide a support system that allows the patient to live as actively as possible until death.”

Monash is currently one of the only universities in Australia providing postgraduate education in palliative care specifically for pharmacists. Offering the unit via distance education means it is accessible to students across Australia.

“Semester one this year we had 20 students enrolled from Victoria, New South Wales, Queensland and the Northern Territory,” says Laura.

Palliative care is usually associated with cancer. However, medical advancements that have prolonged our lives by eliminating many forms of sudden death have resulted in increasing deaths from non-malignant diseases such as heart, renal and respiratory failure. The complex nature of palliative care means it is best delivered by a multi-disciplinary team, and the pharmacist has an important role to play in this team – conducting medication reviews, identifying drug-related problems and making recommendations to optimise cost-effectiveness, patient outcomes and quality use of medicines.

To help students prepare for this professional collaboration, PSPDU has been working with Associate Professor Lyn Clearihan from the Clinical Education and Professional Development Unit at the School of Primary Health Care with a view to providing palliative care education jointly to a cohort of pharmacists and general practitioners.

Enhancing the competence and confidence of healthcare professionals working together in the community to provide quality palliative care will allow patients the choice to remain at home and minimise the need for hospital admissions. Effective symptom management and delivery of all aspects of palliative care will help support patients and their families at a significant time, and enable them to have some control over what is an intensely emotional experience. •

### Palliative care

**Unit code:** PGP5018

**Unit Coordinator:** Laura Dean

**Credit points:** 6

**Offered:** Semester one and semester two (off-campus)

This unit will focus on the pharmacist’s role in management of pain and other common symptoms associated with palliative care patients. When new symptoms develop, or the patient’s condition deteriorates, knowing how to adjust medication appropriately and source uncommon medicines is an important part of providing optimal care.

This unit is delivered via online distance education as part of the Graduate Certificate of Pharmacy Practice and the Master of Pharmacy Practice.

**For more information**

Visit: [www.monash.edu/pharm](http://www.monash.edu/pharm)

### Also new this year: Infectious diseases pharmacotherapy

**Unit code:** PGC6010

**Unit Coordinator:** Sharmila Khumra

**Credit points:** 6 points

**Offered:** Semester one and semester two (off-campus)

This unit will provide a broad overview or introduction to the treatment and management of infectious diseases. The focus will be on common infections seen in community and hospital settings, principles of microbiology and infectious diseases, antimicrobial use and antimicrobial stewardship. The broad unit objectives are for students to develop and apply infectious diseases and antimicrobial use knowledge and skills in the care of patients, especially those with infections. These may be patients in the community or hospital settings. The knowledge and skills developed will be at a general level rather than at the level required for a specialist infectious diseases pharmacist.

This unit is delivered via online distance education as part of the Master of Pharmacy Practice.

**For more information**

Visit: [www.monash.edu/pharm](http://www.monash.edu/pharm)



# Pharmacy in the country

When Garrick Stevenson (BPharm 2006) and Mary Nguyen (BPharm 2006) were sent to Ararat on their fourth year rural placement in 2005, they felt right at home. Fast forward five years and the young couple, now married, have joined the town's healthcare community as part of the Healthwise Pharmacy team.



Both Garrick and Mary started their careers in busy Melbourne pharmacies and, although enjoying the pace and energy, they soon realised that it wasn't the work-life balance they wanted.

"At least six days a week we were ships passing in the night," said Garrick. "As one of us finished for the afternoon, the other left to start the night shift."

They decided to pursue job opportunities in the country, knowing it would offer the lifestyle they were aiming for.

"When we were here as students, we knew we wanted to return," he added. "Ararat had shown us what rural pharmacy was like and what a positive experience rural life could be."

While on placement, Garrick and Mary had worked at local pharmacies with preceptors who were open to teaching them and helping them develop skills. Best of all, they were made to feel very welcome.

"From recalling a patient's regular medication as soon as they walked through the door to socialising outside work hours, our preceptors showed us that being someone's pharmacist doesn't necessarily end at the dispensary," Mary said. "Being a small community, people tend to look out for one another and this was evident in the service provided by pharmacy staff. They'd go to great lengths to take care of customers and spend time on friendly banter about the footy or town happenings. This kind of customer interaction left a lasting impression on us."

According to Professor Carl Kirkpatrick, Head of the Department of Pharmacy Practice, the faculty works with the profession to identify rural preceptors committed to student learning and who can offer a broad learning and professional experience.

"We see rural placements in Victoria as an excellent opportunity for students to develop their skills and knowledge in the context of a rural community and the challenges that are associated with delivering health services in these settings," he said. "And these placements would not be possible without the Pharmacy Guild of Australia providing significant financial support to offset the costs of rural placements for our pharmacy students."

"The faculty places a strong emphasis on the practical elements of the Bachelor of Pharmacy degree, with all pharmacy students participating in a Professional Experience Placement program over third and fourth year. The program includes placements in hospital, community and rural pharmacy settings. It enables students to develop specific skills in clinical pharmacy, problem solving, medication history taking, patient counselling and therapeutic planning. They also gain an appreciation of the role of pharmacists in healthcare teams.

"The skills that the practical placements teach us really come to the fore in a rural setting," said Mary. "Because this is a small community with fewer healthcare resources

than you'll find in a big city, pharmacies are often the place people go when they're seeking healthcare. Customers are more likely to have time for everything you offer as a healthcare professional. Their visit to the pharmacy is an important part of their day. They'll often want to know as much about you as you want to know about them. Add to that the familiarity of a close-knit community and you have the opportunity to practise pharmacy the way it's meant to be practised – serving people at a grass roots level," she said.

Ararat has a population of over 7000 people and, like all communities, faces a range of healthcare challenges including mental health, obesity and caring for the aged. As pharmacists, Garrick and Mary are part of a team of professionals working to address some of the community's most pressing healthcare needs.

"Ararat's ageing population means our pharmacy has to be adaptable in providing services such as mobility aids and dose administration aids, and efficient in our work with nursing homes and hostels. Our local residents are also catered for through our free delivery service," said Garrick.

"Another issue in our community is obesity and pharmacy can have a positive impact on this. We promote a weight loss program with incentives and events such as taste-testing days. Our aim is to prompt patient action and provide ongoing motivation," he added. "We're also helping to address mental health illnesses by liaising closely with local psychiatric services and with patients themselves."

Garrick and Mary say that living in the country has been an adjustment, but it has given them the opportunity to experience a more relaxed lifestyle and increased personal and professional satisfaction.

"In the country you don't have the entertainment options you have in the city. But we enjoy making the most of Victoria's beautiful countryside, fresh air and quietness. We know most of our patients' names, who their family members are, what footy team they barrack for and what they did last weekend," said Mary. "This makes providing healthcare easier and the job more rewarding. We've really been embraced by the community and they've adopted us as their own." •

# Faculty Research Award and Young Investigator Award recipients

Congratulations to MIPS researchers Professor Arthur Christopoulos (BPharm 1990, PhD 1999) and Dr J. Robert Lane, who received the faculty's 2011 Research Award and Young Investigators Award, respectively. Both researchers are based in the Drug Discovery Biology theme of MIPS.

## Professor Arthur Christopoulos

Professor Christopoulos was recognised for his outstanding contributions to the study of GPCRs. He is one of the world's leading receptor pharmacologists, having made fundamental contributions to the application of analytical pharmacology in the study of allosteric modulation of GPCRs and functional selectivity (ligand-biased signalling).

Since relocating to MIPS in 2009, his interactions with the faculty's medicinal chemists have grown to include new collaborations. In addition, his new links with pharmaceutical biology researchers at MIPS have already resulted in multiple publications and student co-supervision over the last two years, with more in the pipeline.

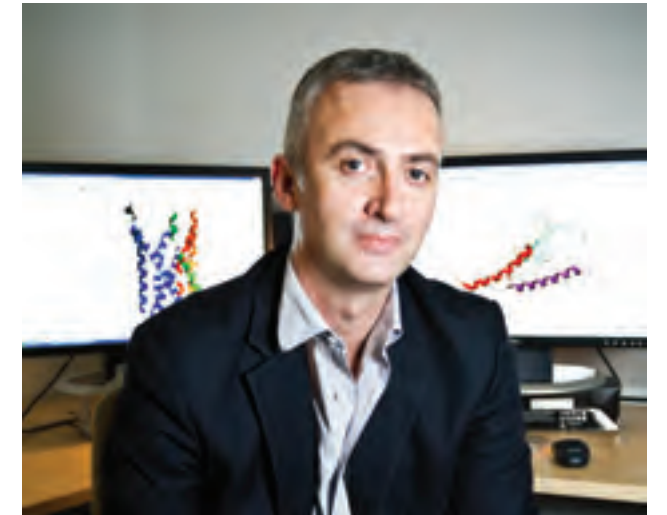
Professor Christopoulos's research has made it into the textbooks and he has been cited multiple times in the latest editions of *The Pharmacological Basis of Therapeutics* and Rang and Dale's *Pharmacology*. He is considered to be within the top 1 per cent of pharmaceutical sciences and pharmacology scientists internationally.

## Dr J. Robert Lane

Dr Lane was recognised for excellent progress as a young investigator and outstanding early career researcher with a developing international reputation in the molecular pharmacology of GPCRs, in particular in the study of ligand-biased signalling and functional selectivity.

He has made a significant impact in GPCR research, as evidenced by his authorship of 13 international peer-reviewed papers in leading discipline and generalist journals, including a breakthrough paper in *Science*. The outcomes of his research have led to a re-evaluation of how ligands are thought to interact with GPCRs. Dr Lane's impact on the field is also highlighted by his many awards and other recognitions, including 11 invitations as a speaker at international and national scientific meetings, invitations to contribute review articles to international journals and editorship of a special edition of *Drug Discovery Today: Technologies*.

These awards to faculty members are in addition to the previously announced 2011 Early Career Research Award that went to Dr Erica Sloan, and to Professor Susan Charman's Faculty Annual Research for Excellence Innovation and Collaboration Award (she then went on to win the Vice-Chancellor's Award for this category). •



Professor Arthur Christopoulos.



Dr J. Robert Lane.





**Award-winning continuity of care**

At last year’s Victorian Public Healthcare Awards a combined team of CMUS and hospital partners won the Excellence in Service Provision category for their program ‘MedGap: Improving continuity of medication management on discharge to residential care’.

The development of MedGap was led by Rohan Elliott (BPharm 1991, GradDipClinPharm 1999, BPharm(Hons) 2000, MClinPharm 2005) of CMUS and Austin Health after an audit found one in five patients experienced a medication error when being transferred from hospital to residential care, and one in three required a locum doctor attendance at the residential care facility.

“Patients were taking an average of 11 different medications and required a dose within four hours of arriving from hospital. Problems such as missed doses usually arose because there was no up-to-date medication chart available,” Rohan said.

MedGap addresses this problem by having the hospital pharmacist prepare detailed medication charts prior to discharge, allowing patients’ drug regimens to continue uninterrupted.

An evaluation of MedGap found medication errors had fallen to 2 per cent, and locum attendances to 11 per cent. It has now been rolled out across all Austin Health campuses and several hospitals in Victoria and Queensland. •



**PhD students take home prizes**

Julia Gilmartin (BPharm(Hons) 1999, GradCertPharmPrac 2012) of CMUS was awarded the Australasian Pharmaceutical Science Association (APSA) 2011 prize for best student presentation at the APSA conference for her talk *A review of dose administration aids: improving medicine management*.

Julia also received an award in the category of ‘Education for health professionals to build quality use of medicines skills’ at the National Medicines Symposium for her presentation. A component of Julia’s PhD work, titled *Be alert and work together for medicine safety: DAA incident awareness toolkit* won her the award.

PhD student Souhiela Fakih (BPharm(Hons) 2009) of CMUS received an honourable mention at APSA for her presentation *Comparing women pharmacy consumers’ experiences with weight loss treatment in Victoria and Nottingham: a cross sectional study*. •



**Graduate receives Victorian International Research Scholarship to study with MIPS**

Yijun Pan (BPharm(Hons) 2012) is one of five PhD students in Victoria to receive a Victorian International Research Scholarship. An outstanding undergraduate student, Yijun received the Bachelor of Pharmacy 2011 Gold Medal.

“My experience of completing the applied research project elective as part of my undergraduate degree made me interested in research,” said Yijun. “The next few months will be challenging but interesting as I commence my PhD candidature and learn more about how to research.”

The \$90,000 scholarship will enable Yijun to undertake his PhD with Dr Joseph Nicolazzo (BPharm 1999, BPharm(Hons) 2001, PhD 2005), Professor Chris Porter and Associate Professor Martin Scanlon at MIPS. His project will investigate the role of fatty acid binding proteins at the blood brain barrier, and their involvement in Alzheimer’s disease, with the potential to further clarify a link between blood-brain barrier dysfunction and Alzheimer’s disease development. •



**Honours for Professor Bill Charman**

Potentially life-saving malaria research and the establishment of Australia’s pre-eminent pharmaceutical science institution have earned Professor Bill Charman one of Monash University’s highest honours.

Professor Charman was appointed as a Sir John Monash Distinguished Professor, just the eighth academic to have been awarded this prestigious title.

The professorship is awarded to academics of distinction who have made an outstanding contribution to their discipline and the University. It recognises Professor Charman’s leadership in pharmaceutical science and his role in the strategic development of both the faculty and MIPS.

Professor Charman has an impressive record of research achievements in drug discovery and development. He has published more than 350 scientific papers and communications and has been honoured by some of the world’s leading scientific bodies. He was a key member of project teams that received the Drug Discovery Project of the Year Award from the Medicines for Malaria Venture (Geneva, Switzerland) in 2001, 2006, 2007 and 2010.

“I am honoured to have been recognised by the University community,” Professor Charman said. “I view this appointment as reflecting the incredible innovation and teamwork of the colleagues I have been fortunate to work with during my career at Monash.”

Professor Charman was also awarded a Doctor of Science *honoris causa* by The School of Pharmacy, University of London, which is one of the leading pharmacy schools in the world. •



**Monash excels again in international clinical skills competition**

Faculty students have showcased their clinical skills at the 58th International Pharmacy Students’ Federation Congress held in Egypt.

In the team event, Monash won first place for the second year in a row. The winning team was made up of Lee Ross, Lucy Holmes, Kahlinda Mahoney and Catherine Brown.

“It was great to have the opportunity to take part in such a competition on an international scale,” said Kahlinda. “The scenario provided the perfect chance to put some of what we’ve learnt at uni into practice.”

This year Monash was also runner up in the team event and filled six of the top eight positions in the individual event thanks to the efforts of the Scott Joseph (BPharm(Hons) 2012), Diana Sandulache (BPharm(Hons) 2012), David Vien (BPharm 2012) and Kyall Homberg (BPharm(Hons) 2012). •



**Monash positions Abu Dhabi as leader in healthcare science**

Monash has further strengthened its reputation for excellence in healthcare sciences with the signing of an agreement to provide curricula to the United Arab Emirates.

Fatima College of Health Sciences, a new university enjoying the patronage of the ruling family of Abu Dhabi, has been awarded a licence to deliver four undergraduate programs in the United Arab Emirates in a six year agreement with Monash University.

Under the agreement, Fatima College will gain access to the Monash curriculum for courses in pharmacy, physiotherapy, medical imaging and emergency health (paramedics) to meet the healthcare workforce needs of Abu Dhabi into the future.

“We are delighted to share our innovative pharmacy curriculum and education program with Fatima College as they establish a leading healthcare sciences education offering,” said Professor Bill Charman. •



**Taking pharmaceutical science to future students**

To help inspire the next generation of pharmaceutical science students, the faculty has collaborated with John Monash Science School to develop a pharmaceutical science elective for its Year 10 students.

Showcasing both drug discovery and formulation science, the teaching materials focused on microbiology and antibiotics. David Manallack (BPharm 1982, MPharm 1985) provided ideas and resources for practical exercises to reinforce the core teachings and acted as judge for students’ talks on their investigations into particular diseases. •



**Victorian Pharmacy Student of the Year**

Monash student Kahlinda Mahoney has been named the 2012 Victorian Pharmacy Student of the Year. As the state finalist, Kahlinda will represent Victoria at the 2012 Pharmacy Australia Congress in October. Run by the Pharmaceutical Society of Australia and aimed at final year pharmacy students, the competition recognises the importance of communication and counselling skills in best pharmacy practice.

“Congratulations to Kahlinda. She is an impressive representative of Monash’s pharmacy degree,” said Professor Carl Kirkpatrick, Head of Pharmacy Practice. “To have the expertise of our final year students recognised by the Society’s judges is a great endorsement for our program and the graduates it produces.”

Kahlinda will be taking her counselling skills to the Royal Children’s Hospital, where she will be an intern in 2013. •



**Further information**

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