



MONASH University



Faculty of Pharmacy & Pharmaceutical Sciences

Alchemy

Issue 23/Winter 2013

**Right place,
right time**

Our talented PhDs

**Pharmacy legend
hangs up his bat**

Australia ■ China ■ India ■ Italy ■ Malaysia ■ South Africa

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From the Editor

Welcome to the winter edition of *Alchemy* 2013. As you've probably already noted, we have re-designed the publication to give it a more contemporary look and magazine feel. These changes have been made in direct response to reader feedback.

Given the many stakeholders our magazine serves – alumni, government, industry, donors, prospective higher degree by research students, careers advisors, scientists, pharmacists – we wanted it to be a very readable publication.

Another change to the magazine is the inclusion of a regular column called 'The last word' where the Dean of the Faculty will comment on recent important events or things of strategic importance to the future of the Faculty.

We've deliberately focused on the people behind the science as well as the science itself in our articles and, for a bit of a chuckle, we've also introduced a regular cartoon created by one of our talented PhD students, Edwin Tan. New treatments have been given to some favourite columns, such as 'News in brief' and 'Where are they now?'

Our future plans include making the publication digital.

We hope you like the changes and enjoy reading about the talented staff, students and alumni from the Faculty of Pharmacy and Pharmaceutical Sciences, Monash University.

We welcome your feedback on this issue.

Margot Burke
Managing Editor

Alchemy

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Research heats up at Monash

They are clever, curious and totally committed to their research. But they also enjoy a full life outside of study.

We invite you to meet six of our current PhD students who are working on projects that will really have an impact on global health.



Briana Davie is a passionate cook and an avid reader with a black belt in taekwondo – which can be very handy in chemistry and pharmacology research.

It was towards the middle of Year 12 when I realised that – unlike most of the people around me – I was actually, genuinely enjoying chemistry. So I did some research and came across medicinal chemistry at Monash. I've loved it ever since.

Initially, I struggled with lab classes – until I did a six week summer research project. Working to my own schedule and driving my own topic, I really enjoyed the lab. The motivation is yours. You own the successes. You own the failures.

In my PhD I'm investigating a receptor that's expressed in the brain called the M1 muscarinic receptor. It's been identified as a promising therapeutic target for the treatment of disorders like Alzheimer's disease and schizophrenia.

I make molecules in chemistry that potentially can selectively target this receptor. Then in pharmacology I test their success. I can take my chemistry to the next level with pharmacology. Being able to work across two different but integrated departments drove me on with my honours and PhD. You won't find that opportunity in many other places.

I love cooking and reading. I'm reading *The Beginner's Guide to Winning the Nobel Prize*, which will hopefully come in handy at some point.

I do taekwondo to work the brain and body in a different way. I got my black belt in 2011. Taekwondo and research may seem very different endeavours, but they're definitely intertwined – the focus, stamina and discipline. Then there's chemistry and cooking.



Nilushi Karunaratne never planned to do a PhD but now she's pretty well up for any challenge.

I've always been interested in biology and how things work, particularly how the human brain works. Most of what I do today is neuroscience-focused. I love that part of it. After my undergraduate studies I worked for 18 months as a research assistant. That's when a career in scientific research really grabbed my interest. I decided to go on and do my PhD.

We have these cannabis-like chemicals that our brain makes called endocannabinoids. I'm looking at the specific receptors or target that these chemicals act on in the body, especially the brain. I'm trying to nut out the actual mechanism of how these receptors work.

Normally, it maintains homeostasis—or keeps balance. In many health conditions and mental health disorders—obesity, schizophrenia, depression and anxiety-like disorders—this particular system is off-balance.

I love Monash and Parkville in particular because it's such a close-knit community. You know every other PhD student. You bump into them every day. My supervisors have been great. A PhD isn't easy. You're doing work that no one's ever done before. And you're doing it by yourself. But there's always guidance and support all around you.

Being at the end of my PhD, I do spend quite a lot of time in the lab and at the desk. Here at Parkville we have a student run postgraduate association which I'm involved in. It's nice to take time out from work and catch up with the other PhD students.



For Jeremy Shonberg, communicating the possibilities of the dopamine D2 receptor is a lot like teaching kids to ski.

I was originally drawn to medicinal chemistry because it involves a lot of problem solving and can deliver interesting results and great benefits in terms of drug design.

When I completed my Bachelor of Medicinal Chemistry at Monash, I was keen to do some drug design research, so I did honours, which led to a PhD.

My research is focused on the dopamine D2 receptor, which is involved in a number of important disease states, including schizophrenia and Parkinson's disease. We're looking at making molecules that target this receptor. We synthesise novel drug-like compounds and then test them.

It's interesting work that's yielding valuable results in addressing disease states that are devastating for the general population. We've broken new ground in terms of understanding how current and future drugs can better manage and treat these disease states. I've recently completed my PhD, so now I'm focusing on following through on the research findings, publishing the work and submitting articles to peer review journals.

A PhD is a great opportunity to extend yourself and broaden your horizons. I travelled overseas several times throughout my PhD work and made presentations at multiple international conferences. Monash is full of positive energy and people who are really focused on their work and very good at what they do. It fosters a really positive, productive environment.

My favourite time when I'm not in the lab is spent skiing. Between my honours and PhD, I worked as a kids' ski instructor for six months in Canada. It was a tremendous experience. It was fun. It was hard work. I was pretty much on skis every single day. When you're working with kids, you have to be really clear and simple. You have to understand what level they're on and think like they think. And it's exactly the same when you're making a presentation to anyone, anywhere. You have to think, how can I say this clearly and simply? How can I make sure people understand what I'm talking about?

You can learn a lot about the world and yourself teaching kids to ski.



Edwin Tan was drawn to pharmacy practice by the social dimension as much as the chemistry. But that's not all he's drawn to.

I went into pharmacy for the healthcare and patient interaction aspects.

I have a background as a hospital pharmacist. I did my internship at The Alfred in Melbourne, and worked at a few hospitals in the UK while travelling. When my visa was running out, I had to decide what to do next. I decided to change my career path and do some research.

I wanted to do more with my degree and see how I could make a difference.

I commenced a PhD with Monash's Centre for Medicine Use and Safety, where I did my undergraduate degree and graduate certificate.

My research seeks to develop a new practice pharmacist role within Australian general practice. We're developing a strategy to resolve medication-related problems in the community.

There are a large number of medication management issues in Australia each year. This will increase as the population ages and individuals take more medicines to manage multiple health conditions.

I think multidisciplinary team-based care is the future of healthcare in Australia. We're encouraging GPs, pharmacists and other primary healthcare providers to collaborate to improve patient outcomes. We've seen positive results from our trial, including reductions in medication-related problems, and improvements to patient medication management in the clinics.

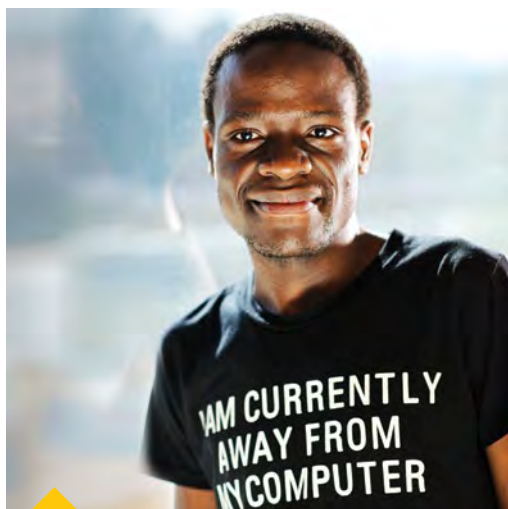
It's rewarding to see pharmacists broadening their scope of practice, as we move towards more collaborative, patient-centred care. Pharmacists are highly skilled and have important roles in the community. I guess I'm drawn to pharmacy because it's not all science. There's an important social dimension as well.

Apart from pharmacy practice, I have a passion for cartooning and writing. I have a blog called 'Ed's Rant' where I post my cartoons. It started when I was in the UK as a way of communicating with family and friends back home. It began as a bit of a rant, but it's progressed into musings on a range of topics—including the ups and downs of working in pharmacy and academia. I've had a few cartoons published, which is great.

“

Monash is a fabulous university to be part of, especially this faculty. It's a great place to work. We have exposure to lots of scientists from very different backgrounds. They come from all around the world, and bring a great variety of expertise and experience with them.





Victor Muleya did a lot of research before he set his sights on Monash. Good thing we built that award winning swimming pool.

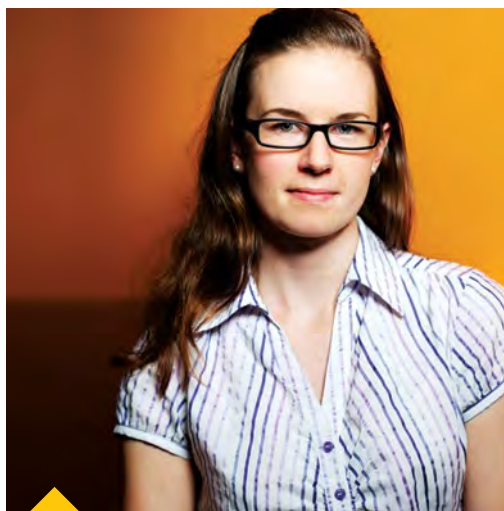
I came to Australia in 2011 specifically to study at Monash. I really wanted to study in Australia—for the location and because it's a great country. I did a lot of research and really wanted to come to Monash. I scouted for a potential supervisor and research project that correlated with my background.

I did my honours degree in biochemistry in my home country, Zimbabwe, then my masters in biotechnology in South Africa. My research involves a class of proteins found mainly on the surface of cells. Although their existence and biological function are well known, we've recently discovered an additional function that has evaded the eyes of researchers. This research has immense potential in designing novel therapeutic strategies, enabling us to find drugs that target this particular class of proteins and deliver the desired effect inside cells. Committing to a PhD is an enormous investment—in time and financial commitment. But it's a valuable investment for my career. Monash is globally renowned and enjoys an excellent reputation in academia and industry. I believe having a Monash qualification on my CV will boost my career opportunities.

I admire the professionalism at Monash—from the time I applied, to being a student today. It wasn't difficult for me to settle into campus life. Much to my delight, I now confidently call Monash my academic home and feel well supervised and supported. I enjoy living in Melbourne. It has some the friendliest people I have ever met. It's also very cosmopolitan, so it's easy for me to feel at home.

Most of my hobbies involve playing in the water—swimming and scuba diving are favourite pastimes. I've been diving on the Great Barrier Reef—it's one of the most magical places on earth. Australia is a wonderful country.

On a personal level, I'm a very spiritual person. I'd like to think that science and spirituality are horses of the same stable. And it takes an understanding of both branches of knowledge to link them harmoniously.



Anna Cook (nee Davey) embarks on an exciting new chapter as a PhD and a Mrs.

I've always been interested in science, being a scientist and making a difference through research. Although I thought I'd follow chemistry, towards the end of my undergraduate science degree at Monash I discovered that I really loved pharmacology—the study of how drugs work.

When I did my honours project, I found myself in a great lab working with great mentors, so I stayed on to do my PhD. Now I do the research I've always wanted to do.

I've just completed my PhD researching a class of proteins that are very important to the human body. Excitingly, we uncovered a new mechanism of drug action at these proteins. These findings have the potential to lead to the development of more selective drugs in the future—drugs that have fewer side effects and deliver greater therapeutic benefits.

One of the things I value most about this faculty is that there are many people working on different parts of the drug development process. Having such diversity of skills in the one place enables us to efficiently collaborate and share ideas on how to best design our research and achieve better outcomes.

Monash is a fabulous university to be part of, especially this faculty. It's a great place to work. We have exposure to lots of scientists from very different backgrounds. They come from all around the world, and bring a great variety of expertise and experience with them.

If you're thinking of going into a PhD, choosing a supervisor is probably the single most important aspect. They're the ones who'll mentor you and shape you into the scientist you'll become. They'll help you realise your potential and empower you to do great research. In this faculty, we certainly have world-class research leaders.

Outside Parkville, I enjoy travelling. I'm recently married, which I'm enjoying very much. I've done classical ballet for many years, and enjoy keeping that on the side. And I'm also involved in my local church, which is an important part of my life outside of work. Travel, marriage, ballet, faith and research—I guess they all take direction, discipline and dedication. ●

The cell buster

Ten years ago, an undergraduate biomedical science project inspired Dr Michelle Halls to take on honours research and ultimately a PhD. Today, Dr Halls is continuing her research and developing a new lab at the Monash Institute of Pharmaceutical Sciences (MIPS). A couple of National Health and Medical Research Council (NHMRC) grants and a few years at Cambridge along the way have provided further inspiration.

After completing a Bachelor of Biomedical Science (Hons) in 2003, Dr Halls decided to pursue an interest in pharmacology that had been sparked by a third year project in Professor Roger Summers' lab.

"I approached him to see if we could continue to work on that topic for an honours project and then I went on to do a PhD in his lab. He's been a great supervisor and mentor," she said.

Dr Halls completed her PhD in molecular pharmacology in 2007, focusing on the G protein-coupled receptor RXFP1 and was subsequently awarded a C J Martin Overseas Biomedical Fellowship from the NHMRC. This fellowship supports outstanding early career researchers in pursuing biomedical science research overseas and in Australia.

The fellowship enabled her to complete the overseas component at the University of Cambridge, in the laboratory of Professor Dermot Cooper – an expert in adenylyl cyclase regulation. Dr Halls says this was something of a departure from her PhD research.



> DR MICHELLE HALLS

"It involved quite different techniques and a shift in focus from my PhD.

"I progressed from the receptors at the surface of the cell, towards studying what's happening inside the cell.

"It's become apparent in recent years that these signalling molecules are contained in discrete areas within the cell. Where they're located produces different physiological effects. By understanding how these systems are regulated normally, you can understand what starts to go wrong in a disease setting."

The challenges and rewards that came with work and life at Cambridge saw Dr Halls extend her planned two-year stay. After "an amazing three and a half years", she returned to MIPS in July 2011 to complete the Australian component of her fellowship, which concludes this June. She has now received an NHMRC project grant to further extend her work.

Dr Halls sees her work today as the culmination of the studies she first commenced at Monash 10 years ago.

"The biomedical science course exposed me to a range of different fields. I chose pharmacology and an honours project that grabbed my attention. I've been following that track ever since, deviating every so often to find new approaches to problems. Now I'm down to the single cell level, trying to understand the intricacies of the normal control within a cell.

"It's early days, but if we can more accurately measure what's going on at a single cell level, then we can get an idea of how that changes in chronic diseases such as cancer, inflammation and pain. If we can see where dysregulation occurs, then perhaps we can identify a mechanism for targeting the processes of the cell itself – to facilitate future targeted drug design and potentially benefit a range of conditions.

"I'll use this latest grant to grow the lab, advance the work and develop new collaborations. I've recently had a postdoc join, and I'm now collaborating with others here in Drug Discovery Biology (DDB). I think MIPS is uniquely placed to enable this. Not many labs have the resources that we do. It's great to be able to incorporate different expertise into your research. The immediate aim is to develop the lab under the umbrella of DDB and see how we can together understand the complexities of signalling within cells and how it's dysregulated in disease. We're off to a good start!" ●

Pharmacy legend hangs up his bat



Alistair Lloyd is the Don Bradman of pharmacy.

If you've been involved in the pharmacy profession at any time over the past 50 years you may well have run across Alistair Lloyd. Following graduation in 1956, Alistair worked for many years as a community pharmacist in Geelong before becoming Registrar of the Pharmacy Board of Victoria and Branch Director, Pharmaceutical Society of Australia, Victorian Branch from 1982 to 1998. His influence and active involvement in Australian pharmacy and the Faculty is legend.

However, even legends have to call time and at 80 years of age Alistair is retiring from his role as Chairman of the Victorian College of Pharmacy Foundation – a role he has held since the Foundation was established in 2001. To honour Alistair's commitment to the profession and particularly his work with the Foundation, the Faculty is establishing a major endowment fund in his name.

"Alistair Lloyd is the Don Bradman of pharmacy", said Dean of the Faculty of Pharmacy and Pharmaceutical Sciences, Professor Bill Charman. "Naming a scholarship program in his honour is a tangible way to show our respect for the major contribution he has made to the pharmacy community and Monash University over the past 50 years."



> PORTRAIT BY NORNIE GUDE, 1975

Under Alistair's leadership the Victorian College of Pharmacy Foundation has been a fundraising powerhouse for Monash University, delivering more than \$10,000,000 in funds to support scholarships, professorial chairs and infrastructure.

Alistair said that he was proud to have played a part in the continuous growth of the profession over what has been a long and rewarding career spanning more than five decades and he acknowledged the support of fellow Foundation Board members for the success of the Foundation.

He said he was very much aware of the difference a scholarship could make.

"Following graduation I received the Kodak Travelling Scholarship which allowed me to travel and study overseas, gaining valuable skills and knowledge that were crucial to my future career."


With the support of alumni, industry and other groups who share Alistair's interest in giving back, an endowment fund appeal aims to raise \$600,000 to support the Alistair Lloyd Scholarship for Excellence and Leadership. The \$10,000 scholarship will be awarded annually to a promising pharmacy student who demonstrates academic merit, community spirit and leadership skills.

Alistair will be honoured with a dinner at the RACV Club on 24 July where the Scholarship Endowment Fund Appeal will be officially launched and a portrait of Alistair unveiled.

For information about making a donation to support the Alistair Lloyd Scholarship Endowment Fund contact Angela Maplestone, T: +61 3 9903 9087 or e: Angela.Maplestone@monash.edu ●



**Right
place,
right
time.**



**Successful
relationships aren't
just about being in
the right place
at the right time.
But it certainly helps.**

In 2009 GlaxoSmithKline (GSK), the world's third largest pharmaceutical company, had developed a new chemical steroid in the UK that needed to be packaged in Australia.

About the same time, the Monash Institute of Pharmaceutical Sciences (MIPS) was welcoming Associate Professor David Morton, an international expert in particle engineering, particle surface modification and drug delivery.

"GSK has a major Australian manufacturing base at Boronia in Melbourne," Associate Professor Morton says. "We knew that there were difficulties with autoclaving a new packaged formulation, so we met and talked it through with the GSK people, then we designed a solution. It was a perfect fit; a real product brought to Australia for manufacture – and we had the skills required. Everybody was happy."

Not long after, the Victorian Government announced the Victorian Science Agenda scheme, a program to fund industry-academic collaborations. Although the Faculty and MIPS already had strong links with GSK, Professor Bill Charman, Dean of the Faculty and Director of MIPS, knew it was the right time to formalise a relationship with GSK.

He developed a business plan that would work for both organisations, and that addressed tricky issues such as intellectual property and ethical concerns. GSK Boronia management was ready to streamline and focus on developing products that require exceptional technical skill.

The Victorian Government liked the proposal for the collaboration and the Australian Centre of Pharmaceutical Innovation and Industrialisation was born in January 2010. The centre received \$3.3 million, which funded a laboratory with \$800,000 worth of specialist equipment and six new scientists.

At the time, Professor Charman described the collaboration as an exciting and significant step for MIPS that leveraged the unique skills in pharmaceutical science and nanotechnology with the industrial knowledge and world-class medicine development capabilities of GSK Australia.

Three years on, the collaboration is going from strength to strength. Along the way, MIPS has shown how academia and industry can work together well.

Right place, right time.

What

The Australian Centre of Pharmaceutical Innovation and Industrialisation

Who

Monash Institute of Pharmaceutical Sciences, Australia's top-rated pharmaceutical science institute

GlaxoSmithKline Australia, a global research-based pharmaceutical and healthcare company. GSK's Melbourne site manufactures medicines for conditions including migraine, herpes, epilepsy, smoking cessation, hypertension, asthma, pain relief and anti-virals. It also has the blow-fill-seal antiseptic process, which produces containers for the delivery of unpreserved, sterile product.

When

Since January 2010

Outcomes: Drug innovation, manufacture and delivery; student opportunities; research funding; job creation

The collaboration received a Vice-Chancellor's Award for Innovation and External Collaboration in November 2012



"Many academic institutions see working with industry as a real challenge," Associate Professor Morton says. "Academia, after all, is driven by funding that results from positive peer reviews, publications and highly innovative science, whereas industry needs to produce and deliver drugs and maintain a competitive edge; pharmaceutical companies don't have to have scientifically exciting results."

"Academia often means experts are creating terrific solutions, but not necessarily to real and current problems."

Working with GSK has meant that MIPS researchers can work with real problems.

"There has been an enormous amount of trust built between us and that's helping our researchers and students, the company – and most importantly, the people who need the drugs," Associate Professor Morton says.

The business model is also working for GSK. The entire industry is financially tight, and the money that was once available for in-house research and development is no longer there.

"The big companies are finding it much more difficult to discover blockbuster new drugs," Associate Professor Morton says. "Major income drugs are coming off patent and there are not enough new ones to replace them."



The big pharmaceutical companies have had to change their business models, especially finding ways to bring products to market quicker and more cost effectively.

"As an innovative and willing academic institution, our researchers are filling the gap and helping GSK with its specific needs."

GSK Boronia site technical head, Philip Leslie, describes the centre as unique. "There is nothing like it anywhere in the world in the pharmaceutical industry and GSK would like to replicate it. A key barrier it has surmounted is trust – GSK trusts Monash with information and Monash trusts GSK not to exploit them. The agreement around publishing and intellectual property is key and plays to each party's core principals."

Associate Professor Morton says the collaboration is helping build Australia's reputation in the industry, which in turn is helping the economy.

"Over the years Australia has been very successful in drug discovery, but we haven't had the capabilities for the next step," he says. "MIPS has found a way to address that dilemma, so we can work much further with the product."

During the past three years, the expertise of MIPS has helped enable GSK to keep producing Ventolin Rotacaps, a 30 year old product that faced problems due



> QANTAS DOSING SYSTEM, PHOTO COURTESY OF METTLER TOLEDO

to regulatory changes. With the help of MIPS, the refreshed product has been launched into new markets – mainly developing countries – where huge numbers of people have never before had access to asthma medication.

The collaboration is also assisting MIPS and other Monash students. Since 2010, more than 20 Monash students and postdoctoral researchers have worked on projects and in the MIPS-GSK laboratory.

“This is providing unique opportunities for our students to enter industry,” Dr Morton says. “People can get their Monash degree and receive practical industry experience at the same time. This is great for local and international students.”

The Victorian Government funding ended in 2012. Boronia site director Troy Webb says that, while GSK Australia does plan to close the tablet packaging part of the business, the company is building on its strong capability in higher technology manufacturing.

“Our vision is to be the GSK centre of excellence worldwide for supplying low cost unit dose, blow-fill-seal and dry powder inhalation medicines,” Mr Webb said.

Associate Professor Morton says that despite continuing challenges in the industry, the commitment of GSK to higher technology manufacturing would mean an exciting future for the Faculty and its students. ●

“

As an innovative and willing academic institution, our researchers are filling the gap and helping GSK with its specific needs.

Dr Stephanie Parker **Lean Leader, Operations – GSK Australia**

Qualifications

Bachelor of Formulation Science (Hons)

Doctor of Philosophy (PhD)

Graduate Certificate in Commercialising Research

As a formulation science student, Dr Stephanie Parker thought she would probably need to leave Australia to work in industry. However, the 29 year old now finds herself in a senior operations role in Melbourne. She was promoted to her current role in May this year, after working in GSK’s technical department for two years. Dr Parker is now Lean Leader in Operations, working in the blow-fill-seal manufacturing area.

“The two years I spent in the technical area allowed me to develop a good understanding of the dose forms that are manufactured at Boronia, as well as the manufacturing processes,” she says. “In my role now I support the production staff to ensure patients have the medications that they need when they need them.”

Dr Parker’s pharmaceutical science career began in the Centre of Pharmaceutical Innovation while completing her PhD.

“My grand plan was to finish my PhD and probably head overseas as I didn’t think there would be many opportunities here - but being at the Boronia site opened all sorts of doors. I could apply what I’d learned through my studies to the development of a new pharmaceutical product. I had the foundations I needed to take the step into industry.”

Dr Parker hopes to have a long career with GSK. “Over the next decade, I hope to develop a broader understanding of the business by working across different functions, and I hope that this will give me a strong base and the tool set that I need to be in a site leadership position in the future, and then to work in a global role.”

Dr Parker has some important advice for pharmaceutical science students.

“Network! Take all opportunities that are presented to you. Create opportunities. Do what you can to get workplace experience because often it’s just about getting your foot in the door.”

Danny's in the swing



> L-R: PETER SCURRAH, HONORARY SECRETARY AND DAVID GORR, PRESIDENT WITH THE INAUGURAL RECIPIENT OF THE VICTORIAN CHEMISTS' GOLF CLUB SCHOLARSHIP, DANNY LAY.

While he doesn't play golf regularly the inaugural winner of the Victorian Chemists' Golf Club (VCGC) scholarship, Danny Lay, now has an open invitation to join his sponsors on the green. Fourth year pharmacy student Danny was delighted to meet with club President David Gorr and Honorary Secretary Peter Scurrah recently to personally express his thanks for his award.

"I am grateful of the support of the scholarship to help fund many of the day to day expenses associated with my studies and look forward to a lesson or two from David and Peter to improve my handicap," said Danny.

The VCGC established the new merit based scholarship with the aim of making the award annually to a student studying pharmacy at the Faculty.

"Pharmacy has been good to us, and we are proud to be able to give something back to our profession by helping the next generation of pharmacists," said David.

The club was founded some 65 years ago by a small group of pharmacists who shared a love of golf and who

understood that quality time away from the pharmacy was an important ingredient of any successful business.

"Lifelong friendships and significant business partnerships have and continue to be born out of members balancing the daily rigours of running a busy pharmacy with some exercise in a relaxed environment in the company of their peers," said David.

With over 170 members, the club has noted a significant increase in membership by younger members over the past two years.

"The current Board of VCGC sees the next generation of young pharmacists as the key to the ongoing success of the club and has a policy of actively promoting it to the younger members of our profession.

"We hope that this scholarship will not only assist pharmacy students with their studies but also encourage budding and more experienced golfers to join us and experience the camaraderie, social and professional networking opportunities offered by our club," added Peter.

For more information about the VCGC, visit www.vcgc.com.au ●

Tick of approval for BPharm courses

The Australian Pharmacy Council (APC) has accredited Monash's latest suite of undergraduate pharmacy courses – without conditions and with significant commendations.

The APC Site Evaluation Team visited the Faculty last September as part of the latest round of assessments, which are conducted every five years. The assessors commended the Faculty's innovative approach to teaching, excellence in research, quality of staff, world-class facilities, strong industry relationships and high calibre of students.

The APC accreditation applies to the Bachelor of Pharmacy, the pharmacy component of the joint Bachelor of Pharmacy/Bachelor of Commerce and the Bachelor of Pharmacy Scholars Program – a new entry mode for high performing students that offers additional training and mentoring opportunities, along with a Dean's Scholarship. All courses are delivered at the Parkville campus.

Following the last accreditation in 2007, the Faculty redeveloped a more therapeutic and practice-focused program.

This was built on a strong fundamental science foundation, while emphasising the development of skills and attributes in students.



To enhance student learning, the BPharm course has been developed as four streams – enabling sciences, drug delivery, pharmacy practice and integrated therapeutics.

The development and assessment of both professional and generic skills have been embedded into the course.

While APC accreditation is fundamental for all pharmacy courses and education providers, Professor Peter Stewart, Deputy Dean and Professor of Pharmaceutics, says the assessment process is a valuable and integral part of the Faculty's continuing self-review and curriculum development.

“We take it very seriously,” Professor Stewart says. “We use the time to evaluate ourselves in numerous areas, including infrastructure, teaching facilities, curriculum, staffing, governance, our quality assurance processes and the quality of our graduates.

“As a leading pharmacy school, we need to continue to provide leadership, set the standards and prepare our students for the pharmacy careers of the future.

“For me, ongoing skills development and how we teach are key. I think our facilities, teaching and graduates are as good as anywhere in the world. We've become well known internationally for our innovation in teaching and technology.

“Our industry perception is high. The feedback we receive from pharmacists and our stakeholder and advisory group is always very positive, as the latest accreditation demonstrates. I think our staff and students can all be pretty proud of that. We're aiming to produce graduates who will have the skills, values and vision to guide the profession in the future.” ●

Jennifer Marriott moves on to grander things

Associate Professor Jennifer Marriott has retired from Monash and her role as Director of the Bachelor of Pharmacy – to concentrate on pharmacy education development on a global scale. And grandmotherhood!

Associate Professor Marriott will be leading the FIP-UNESCO University Twinning Network for Pharmacists project, which aims to improve pharmacy education globally, advancing the quality of graduates and the workforce in developing countries.

Working in a voluntary capacity, Associate Professor Marriott will be developing a series of centres of excellence around the world.

This furthers her longstanding involvement with and contribution to the FIP – the International Pharmaceutical Federation, which represents three million pharmacists and pharmaceutical scientists worldwide.

Associate Professor Marriott will continue in her role as a member of the FIP Education Initiatives Steering Committee. She was previously President of the FIP Academic Pharmacy Section.

Associate Professor Marriott joined Monash's Department of Pharmacy Practice in 2000, after completing her PhD with the Faculty of Medicine. This built on a considerable career in community and hospital pharmacy.



> ASSOCIATE PROFESSOR JENNIFER MARRIOTT

She was awarded a Cyril Tonkin Fellowship in 2007, which enabled her to visit pharmacy schools in the US, Canada and the UK, evaluating curriculum design and delivery, and benchmarking what we were doing at Monash.

Shortly after, Associate Professor Marriott was appointed Director of the Bachelor of Pharmacy degree. She ultimately transformed the way clinical pharmacy was taught, integrating science, pharmacology and practice. She developed innovative teaching and learning programs, such as Pharmville and MyDispense.

Faculty Manager Marian Costelloe says Associate Professor Marriott has made a great contribution to pharmacy and education. "Associate Professor Marriott has been a trailblazer for pharmacy education and women in pharmacy," Marian says.

"She was the first female director of our pharmacy program. She has transformed the curriculum and led the development of a number of education innovation projects. Beyond the Faculty, she has been a major contributor to two international platforms – the Monash Prato Pharmacy Education Symposium and FIP. She's an amazing person doing amazing things. Her enthusiasm and commitment are admirable and very infectious!"

For Associate Professor Marriott, it was a logical and opportune time to move on and hand over the BPharm reins. "I feel that we've achieved a great deal," she says. "I'm leaving the BPharm in good shape, and my successor has five years to put their mark on the course before the next accreditation. I have a passion to contribute to pharmacy education worldwide, as well as locally. Now, as lead of the UNITWIN Global Pharmacy Education Development Program, I have the opportunity to do so. So I think it's the right time to go and the right thing to do."

Associate Professor Marriott will continue to have a fractional appointment with Monash. We look forward to continuing working with her and strengthening our connections with FIP.

But all this pales in comparison to what will undoubtedly be Associate Professor Marriott's greatest role in education and development yet – she has recently become a grandmother for the first time. ●

The key to better health

When Professor Kamal Midha, immediate past president of the International Pharmaceutical Federation (FIP), delivered the annual Barry L Reed Lecture at Monash University's Parkville campus on 4 June, he used an image of a small red tricycle to get his message across about what is needed to obtain better health outcomes.

The tricycle's back two wheels, he designated as 'science' and 'practice', which can be adjusted to move the front wheel – 'education' – forward to deliver a whole system's patient centred approach to healthcare.

It was an image that resonated with the capacity audience of pharmacy professionals, academic staff and students who attended the presentation.

Professor Midha identified one of the challenges for the science component of his trilogy for improving health outcomes as the need to change the emphasis of the healthcare spend.

"Currently more than 30 per cent of the global healthcare spend is expended on just three diseases, while some 30 other neglected diseases kill more than 11,000,000 people worldwide every year," he said.

The challenge for practice, according to Professor Midha, is to improve access to essential medicines and to adhere to clinical guidelines when treating common diseases.



> EMERITUS PROFESSOR BARRY REED AND PROFESSOR KAMAL MIDHA AT THE LECTURE.

"Less than two thirds of children suffering from diarrhoea are provided with oral rehydration therapy, while more than 40 per cent are treated with antibiotics, often unnecessarily," he told his audience.

On the access front, Professor Midha cited World Health Organization statistics that show more than 30 per cent of the world's population lacks regular access to medicines, with this figure rising to more than 50 per cent in parts of Africa and Asia despite the increasing availability of low cost generic medicines.

"While essential medicines are only one element in the continuum of healthcare provision, they are a vital element," said Professor Midha.

When it comes to education as a means of boosting health outcomes, Professor Midha expressed his concern about the capacity of countries where there is limited local education to deliver research into local solutions because of the lack of pharmacists to support the implementation.

While Australia is in the fortunate position of having 12 pharmacists for every 10,000 population, there is in fact a worldwide shortage of pharmacists.

"There are two pharmacists per 1,000,000 population in Somalia for example and 250 per 1,000,000 in South Africa," said Professor Midha.

The 2012 Global Pharmacy Workforce Report commissioned by FIP shows that in the 82 countries surveyed there are just 2,500,000 pharmacists servicing over 1.3 billion people.

Professor Midha's message for professional associations, global health organisations and higher education bodies around the world was to take a focused and collaborative approach to improving pharmacy practice and science to enable better discovery and development.

Governments must also act to provide better access to cost effective quality medicines while simultaneously improving the use of existing medicines to provide the best possible healthcare for patients. ●

Where are they now?

What are you doing now?
We'd love to hear your story.
If you would like to be featured here,
email vcp.foundation@monash.edu with
your name and a short description of
what you've done since graduation.

Ken Cooper



At the completion of his apprenticeship at R E Charles & Son in Richmond, Ken Cooper (PhC 1961) worked as a community pharmacist supplying the Epworth and Bethesda Hospitals until their amalgamation in the mid 1980s.

He continued working as a community pharmacist at the Epworth Hospital and later in Scoresby before joining the Casey Medical Centre in Cranbourne.

He was a volunteer pharmacist in the athlete's village during the Commonwealth Games in Melbourne 2006 and a locum for the Community Pharmacy Group in Wantirna South until his retirement in 2009.

He is member of the Pharmaceutical Society of Australia and the Australian College of Pharmacy, a Fellow of the Society of Hospital Pharmacists, a keen lawn bowler and grandfather of three.

Anne O'Shea

Following the completion of an MPharm (Pharmacology) in 1977, Anne O'Shea (BPharm 1975) joined Glaxo Australia Pty Ltd and worked in the areas of Medical Information, Regulatory Affairs and Clinical Trials before transferring to the Marketing Department as Product Licensing Manager.

In 1986, she established O'Shea & Associates, a regulatory consultancy for Australian and international pharmaceutical companies that facilitates the registration and subsequent licensing of prescription medicines in Australia.

She also provides consultancy services relating to the approval and management of clinical trials, the preparation of Pharmaceutical Benefits Advisory Committee submissions, orphan drug registration, assessment of product opportunities in the biotechnology area and medical information.

She has published in many scientific journals and has been a member of the Association for Regulatory and Clinical Scientists since its establishment.

Andrew Rewell

Andrew Rewell (BPharm 1980) spent two years travelling in Europe which included working in corporate pharmacy in the UK before purchasing a pharmacy in Melbourne.

In 2000, he completed an MBA at Monash University and in conjunction with Priceline and two partners, opened the first Priceline Pharmacy in Australia in 2002.

He is currently the Pharmacy Strategic Relationship Manager at Australian Pharmaceutical Industries and Priceline, a role that encompasses strategy development, strategic relationship management, professional services development and pharmacy industry education.

Andrew was a member of the Guardian Board and Sigma Pharmacist Advisory Board, has chaired an Aged Care Board and served on the national board of the Australian College of Pharmacy.

He is a regular presenter at pharmacy conferences and pharmacy education events.

Christine Tzimos

Christine Tzimos (BPharm 2005) completed her internship at Western Hospital, Footscray campus.

Progressing to the role of Clinical Coordinator of Pharmacy Services at Sunshine Hospital, Western Health, she is responsible for the management and coordination of clinical pharmacists and the provision of clinical pharmacy services. She also oversees quality assurance activities and professional development opportunities for clinical staff.

She completed a Graduate Certificate of Pharmacy Practice 2012 and is a member of the Western Health Medication Safety Committee, a quality improvement committee which aims to improve patient safety related to medication use.

Christine has always enjoyed being involved in the development of young pharmacists, having held positions such as Intern Preceptor, Student Placement Liaison Officer and membership of the Society of Hospital Pharmacists of Australia (SHPA) Professional Experience Placement working party.

She is currently seconded to the role of Deputy Director of Pharmacy at Sunshine Hospital until September 2013.

Jason Sun



Before entering the government sector in Victoria, Jason Sun (BPharm 1997) completed his internship at the Mercy Hospital for Women.

He subsequently worked in community and hospital pharmacy, as a Medical Information Specialist at

GlaxoSmithKline and as a medication project manager and business analyst for Health SMART, a Victorian Government project enabling the sharing of patient electronic medical records across a range of health professions.

He is currently Manager, Performance Support and Strategy at the Department of Health Victoria advising on the performance of public hospitals in Victoria and overseeing the gathering of business intelligence on a range of key performance indicators in the Victorian health system.

Jason completed an MBA in 2008 and became a Fellow, Australasian College of Health Service Management in 2011.

Alex Bongers

After winning the Mathew Peck Travelling Scholarship and working in Tuvalu for six weeks, Alex Bongers (BPharm 2010, GradCertPharmPrac Health Economics 2012) knew it was only a matter of time before he returned to the Pacific Islands.

He completed his internship at the Royal Melbourne Hospital in 2011 and travelled to Fiji as a Pharmacy Advisor under the Australian Youth Ambassadors for Development Program. In this role, Alex was responsible for developing a sustainable clinical pharmacy service for a divisional hospital, healthcare communications, and training local pharmacy and medical staff.

He was also involved in the creation of an 'Introduction to Clinical Pharmacy' course for the Pacific Online Learning Health Net, an initiative of the World Health Organization.

He is currently Team Leader Pharmacist at Priceline Pharmacy Bourke St Mall and a Teaching Associate in Pharmacy Practice and the Intern Training Program at the Faculty.

Superbugs meet their match

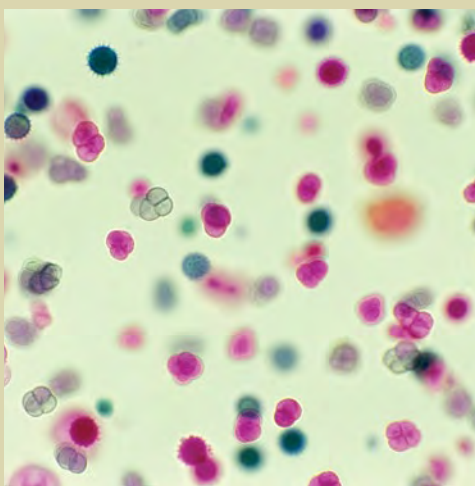
Doctors treating infectious disease who are down to the last line of defence against antibiotic-resistant superbugs will be buoyed by a \$4.48 million investment in designing new treatments and therapies.

Awarded by the National Institutes of Health (NIH) in the US, the grant will support researchers from Monash Institute of Pharmaceutical Sciences (MIPS) and Rempex Pharmaceuticals in California to design and develop new antibiotics that are effective against bacterial 'superbugs' which cause life-threatening infections and are resistant to all current antibiotics.

The NIH has been a major funder of this innovative research program, with the new grant being the third large RO1 grant received over the last five years.

Antibiotic resistance is an urgent global medical challenge. Currently, a class of antibiotics known as polymyxins is used to treat multidrug-resistant bacteria but infections that are unresponsive to this last-line therapy have recently been reported in many countries.

The MIPS team comprises Associate Professor Jian Li, Dr Tony Velkov, Professor Roger Nation, Associate Professor Philip Thompson and Dr Kade Roberts.



Associate Professor Li and Professor Nation have been investigating polymyxins for more than a decade and are regarded as international leaders in the field. Rempex is a San Diego based pharmaceutical company focused exclusively on developing drugs to combat emerging antibiotic resistance.

Associate Professor Li, program director of the project, said timing was critical as rising resistance to polymyxins would mean virtually a complete lack of treatment options for some life-threatening infections.

"It is not an exaggeration to state that the world is on the brink of a return to the pre-antibiotic era," he said.

"In recent decades, bacteria that are resistant to all available antibiotics have emerged, while at the same time there has been a marked decline in the search for new drugs to combat these superbugs."

The five year project will design and develop new antibiotics to address bacterial resistance and allow successful treatment of acute and chronic infections.

"We're aiming to develop at least one new drug candidate for future clinical trials," said Associate Professor Li.

Senior Vice-President for Research and Development and Chief Scientific Officer at Rempex, Dr Michael Dudley, said that industry-academic partnerships are a very important mechanism for developing new anti-infectives.

"Rempex is looking forward to working with the MIPS team on identifying new drug candidates to meet the serious challenge of antibiotic resistance," said Dr Dudley.

The Infectious Diseases Society of America has identified a 'hit-list' of six multidrug-resistant bacteria as being the most difficult to treat. These bacteria will be targeted by the MIPS researchers and their Rempex collaborators in California. ●

Advancing pharmacy's future

Improving professional recognition for advanced practice is a step closer to reality after the release of the Advanced Pharmacy Practice Framework for Australia in late 2012.

The framework describes Advanced Practice as 'practice that is so significantly different from that achieved at initial registration that it warrants recognition by professional peers and the public of the expertise of the practitioner and the education, training and experience from which that capability was derived'.

The framework, released by the Advanced Pharmacy Practice Framework Steering Committee (APPFSC), provides a generic advanced pharmacy practice framework in a range of patient care and other areas of professional practice and is linked to the profession's competency standards.

The National Alliance for Pharmacy Education (NAPE), a partnership between Monash University, University of Queensland, University of Sydney and the University of South Australia, submitted a number of recommendations relating to professional practice, recognition and education during the consultation process.



"NAPE views the recognition of Advanced Practice as key to the pharmacy profession's future and is pleased to contribute to its national development and recognition as an important step in advancing the profession and enhancing healthcare within Australia," said Kirstie Galbraith, Director, Postgraduate Study and Professional Development Unit at the Faculty.

The APPFSC has recently commenced work on the next stage of the advanced pharmacy practice project involving the implementation of the framework.

"NAPE is committed to working with the profession to embed this framework in practice and assist the

“

NAPE sees a crucial role for universities in providing high quality, rigorous education to assist current and future pharmacists to become advanced practitioners.

APPFSC in the development of a possible pathway for formal recognition of advanced pharmacy practice," added Kirstie.

NAPE sees a crucial role for universities in providing high quality, rigorous education to assist current and future pharmacists to become Advanced Practitioners. The four partners are well recognised for delivering a suite of high quality postgraduate programs including the NAPE Intern Training Program, now offered through each university partner.

For more information on NAPE visit nape.edu.au ●

Multi-million dollar NHMRC windfall



This NHMRC project grant and fellowship outcome is the Faculty's most successful.

Researchers from the Faculty have been awarded \$10 million in the latest National Health and Medical Research Council (NHMRC) grants recently announced by Minister for Health, Tanya Plibersek.

The Faculty received 10 major grants for initiatives led by researchers from Monash Institute of Pharmaceutical Sciences (MIPS) and the Centre for Medicine Use and Safety (CMUS), an additional two collaborative grants administered through the Faculty of Medicine, Nursing and Health Sciences at Monash University, and six grants administered by collaborating partners at the University of Queensland and the University of Melbourne.

Testament to the excellence of MIPS and CMUS researchers, four Research Fellowships were also awarded. Some of the areas in which grants were awarded include combating bacterial 'superbugs' in a way to prevent resistance developing, new treatments for immune disorders, Alzheimer's disease, neuropsychiatric disorders and tuberculosis as well as research towards a malaria vaccine and a better understanding of pain.



This NHMRC project grant and fellowship outcome is the Faculty's most successful.

Professor Bill Charman congratulated the grant and fellowship awardees on their outstanding success and commented that this outcome is yet a further example of the development and implementation of the Faculty's inspiring education and research vision.

These grants will provide the foundation for a meaningful and positive impact on improving health in Australia and overseas.

Monash University as a whole was awarded more than \$86 million in research projects, fellowships and equipment grants from this NHMRC funding round and led Australia with the largest number of successful project grants funded. ●

Making a difference

When Leon Hain (PhC 1958) embarked on a career working to improve the lives of some of Melbourne's most disadvantaged, he didn't realise the impact that choice would have in bringing about significant changes in health, education, road safety and housing.

"I knew from an early age that I wanted to work in healthcare, but my life as the child of refugees and the daily struggles of a working class upbringing made me realise that I wanted to be someone who was there for people at a grassroots level – pharmacy seemed the obvious choice," says Leon.

Seven years of locum work throughout Melbourne, witnessing the very different needs of various communities, reinforced Leon's career choice.

In 1965 he purchased a pharmacy in North Melbourne. It was a suburb experiencing a boom in housing commission high rise estate buildings to accommodate an elderly, low income, migrant and refugee population.

"There were no other health professionals within a mile and no paramedical, welfare or trained staff, lifts too small for a horizontal stretcher, no hot water in kitchens or bathrooms and very few residents could afford telephones. The local pharmacist became the first aid and help adviser.



> LEON HAIN

"It wasn't just about providing medications, but preventing physical illnesses and stress, at home, in the workplace, at school. The challenge was to create the necessary facilities," said Leon.

Leon actively lobbied the state government to improve services and conditions in the housing estate and nearby schools, including a request to the Victorian Education Minister in 1972 to trial the use of ethnic migrant teachers not qualified for Australian schools as interpreters and aides.

The trial of a Turkish teacher was so successful that within one term the teaching of other languages spread in primary schools across the city.

During the rebuild of the North Melbourne Primary School, pupils were bussed to a portable temporary school at Fisherman's Bend through heavy industrial traffic.

Concern about student safety prompted Leon's 20 year crusade to improve bus safety and pedestrian safety around schools.

Leon's advocacy between 1985 and 2006 as a member of a number of working parties resulted in several significant safety features being implemented, including seatbelts for school, tourist and charter buses, as well as reduced speed limit zones around schools.

Leon continued practising community pharmacy, including locum work both in community and hospital settings until his retirement in 2008.

"Much of my community involvement and activism is the direct result of speaking with my clients at grass roots level. For me, this is what is at the core of being a pharmacist – focusing on people, their health and overall welfare."

In recognition of his lifelong contribution to the community, the Pharmaceutical Society of Australia presented Leon with a Life Membership in 2004 and a Certificate of Appreciation for 'lifelong contribution to the community' in 2011. ●

Antipsychotics accelerate patient sedation

Certain clinically used drug combinations are faster and more effective in sedating highly aggressive patients in emergency departments.

A new study is shedding light on the use of sedative drugs in hospitals and has proven certain clinically used drug combinations to be faster and more effective in sedating highly aggressive patients in the emergency department (ED).

In an Australian study detailed in the *Annals of Emergency Medicine*, researchers from Monash University, Austin Health, Royal Melbourne Hospital and St Vincent's found when antipsychotic drugs droperidol or olanzapine were used in combination with midazolam, adequate sedation of severely agitated emergency patients was achieved faster and they were less likely to require re-sedation.

Investigators Dr David Kong and Dr Esther Chan, from the Centre for Medicine Use and Safety (CMUS), said although a wide range of drugs and drug combinations (including droperidol or olanzapine) were used in clinical settings to sedate very agitated patients, the clinical evidence to support the combinations was lacking.

"Agitation and aggression is frequently observed in patients admitted to the emergency department as a result of mental illness, drug and alcohol intoxication, or both," Dr Kong said.

"We have compared three commonly used drug regimens in order to evaluate their safety and efficacy for the sedation of acutely agitated patients."

Researchers found antipsychotic drugs droperidol or olanzapine, in combination with midazolam, shortened the time to sedation by an average of four to five minutes. "Our findings provide important evidence about how patients with acute agitation in EDs could be optimally managed by clinicians utilising a combination of medications," Dr Kong said.

"More effective management of acute agitation could significantly reduce stress and maximise the safety of both the patients and health professionals in clinical settings."

The study involved 336 adult patients with acute agitation requiring intravenous sedation in three Australian EDs. Professor David Taylor from the ED at Austin Health said four to five minutes was a long time to wait for effective sedation of emergency patients with mental illness and/or intoxication.



"This drug combination is safe, fast and inexpensive and we found no negative effects," Professor Taylor said.

"The findings underscore the need for rapid and lasting sedating regimens in the ED and are good news for emergency physicians who deal with agitation and aggression among their patients on a daily basis."

The study was supported by the NHMRC and Australian Rotary's Ian Scott Scholarship in Mental Health. ●



Designer medicines beat ‘food factor’

Disease-controlling drugs can be absorbed in the body more efficiently and without food, in a new development by scientists. Researchers from Monash University in collaboration with the University of South Australia showed tablets and capsules could be made to imitate the effect of food when the medication reached the stomach or intestines, using nanotechnology research.

The research, detailed in international journal *Angewandte Chemie*, could allow for adjustments in medicated dosages ensuring people get the most effective and efficient delivery of drugs for the control of pain, inflammation and various other conditions.

Associate Professor Ben Boyd, from the Monash Institute of Pharmaceutical Sciences (MIPS), said the new formulation enabled more of the drug to enter the bloodstream and should lead to more reliable and predictable oral medications.

“Prior to this development, some medications needed to be taken with food because the fats in food help the body to dissolve the drug so that it can be absorbed,” Associate Professor Boyd said.

“The problem is that different diets across different cultures have widely varying fat content, which can lead to wide variation in the effect of food. As a result this can cause variable effects of the drug.

“Capsules containing oils have been one approach to get around this, but they are difficult to manufacture and have other problems that meant only a few products have used this approach. The new approach in our research takes advantage of the effect of small particles that allow the drug to stay dissolved and further boost the amount and consistency of drug absorption.”

The technology is now available to drug manufacturers, but comprehensive clinical trials are still required before approval. ●

In brief

An Australian first for John J Abel Award



Professor Arthur Christopoulos has become the first Australian to win the prestigious John J Abel Award in Pharmacology, for his groundbreaking research into designing targeted new drugs with fewer side effects.

The American Society for Pharmacology and Experimental Therapeutics gives the award for original, outstanding research in pharmacology and/or experimental therapeutics by a researcher aged 45 or younger.

The 2012 award recognises Professor Christopoulos's investigations of alternative drug recognition sites on G protein-coupled receptors in the human body. Professor Christopoulos received his award at the Experimental Biology conference in the US in April.



GSK Medal winner

Clinical practitioner, researcher and educator Rohan Elliott has been awarded the prestigious GlaxoSmithKline Medal of Merit.

Awarded annually by the Society for Hospital Pharmacists (SHPA), and sponsored by GlaxoSmithKline, the Medal of Merit is considered one of the most prestigious industry awards, recognising outstanding contributions to the practice of hospital pharmacy.

Rohan Elliott, of Monash University's Centre for Medication Use and Safety (CMUS) and Austin Health, has a long history of collaborative research in aged care. He is a fellow of the SHPA and has been an active member for more than 20 years.

Rohan is a member of the editorial board of the Geriatric Therapeutics section of the Society's *Journal of Pharmacy Practice and Research*.

ASCEPT award for new investigators



Congratulations to Dr Celine Valant (MIPS) and Dr Jurgen Bulitta (CMUS), recipients of the 2012 Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT) Denis Wade Johnson & Johnson New Investigator Award. The award is judged by the ASCEPT Scientific Advisory Committee and by members of the ASCEPT Council.

These are prestigious and highly competitive awards that recognise and highlight the research contributions of

ASCEPT's brightest new investigators to the discipline of Clinical and Experimental Pharmacology and Toxicology within Australia. Dr Valant and Dr Bulitta presented their research in a dedicated symposium at the joint ASCEPT/APSA meeting in Sydney in December 2012.

Previous winners of the ASCEPT New Investigator Awards from DDB include Arthur Christopoulos (1999), Dana Hutchinson (2006), Michelle Halls (2010) and Lauren May (2011).

New development role



Margot Burke has recently joined the Faculty as Development Director. In this newly created role, Margot will lead and have overall responsibility for the combined functions of marketing, recruitment, fundraising, alumni engagement and as Executive Officer for the Victorian College of Pharmacy Foundation.

Margot brings extensive and highly relevant experience to this new role. Most recently, Margot was Director, Marketing Services at the University of New South Wales

where she developed whole of University marketing and brand management strategies and provided high level advice to the senior management team.

Previously, Margot also held the top fundraiser role as the Director of Development and Alumni Relations at the University of Queensland. Margot has also held senior marketing and recruitment roles at Adelaide University, Griffith University and Victoria University.



A healthy global village

A new educational website designed for young people interested in global health issues has been launched by alumni and staff of the Faculty.

The Healthy Village, developed by recent pharmacy alumni Glen Swinburne, Frances Cameron and Melanie Dunford as well as fourth year Bachelor of Pharmacy student Daniel Roitman, is a free and not-for-profit site aimed at young professionals who want to both learn about and help address the various health issues faced by communities all over the world.

The site aims to highlight both larger and lesser known global health issues, and deliver information to an audience that is keen to be involved, but isn't sure how. Articles covering issues relating to the Eight Millennium Development Goals developed by the World Health Organization will be published on the site each week. In addition, complementary news links will be promoted through The Healthy Village's social media channels. More information on The Healthy Village is available from www.healthyvillage.org.au



5 decades of continuous teaching at the Faculty

Honorary Associate Professor Louis Roller (BPharm 1963) is celebrating a 50-year milestone as the longest serving member of the Faculty's teaching staff. Louis joined the Victorian College of Pharmacy in 1963 and since then has served in a variety of academic and administrative roles including Associate Dean Teaching and Head of Department of Pharmacy Practice as well as holding the role of Director of the Bachelor Pharmacy program. Although he officially retired in 2008, Louis continues to lecture as a sessional member of staff at the Faculty and over the course of his career has taught varying aspects of therapeutics to pharmacy, dental, medical, podiatry and nursing students. He also delivers postgraduate lectures to various professional organisations and particularly continuing professional development lectures to pharmacists. He is the author of a large number of articles, letters and book chapters, and co-author of a book as well as a major contributor to various editions of the *Australian Pharmaceutical Formulary & Handbook* and the *Therapeutic Guidelines: Antibiotic* and *Oral and Dental*. In 2012, Louis was honoured by being made the inaugural life member of the Australasian Pharmaceutical Sciences Association.



Young researcher recognised

PhD student Caroline Le was one of two Monash students recognised for their communications skills in May 2013. Caroline Le and Monique Topp were acknowledged at an awards ceremony held by the Cooperative Research Centres Association in Melbourne, celebrating exceptional research and communication.

They were among six finalists from more than 50 entries in the Showcasing Early Career Researchers competition. Caroline took out the award with her 30-second video showcasing how stress can affect the progression of cancer.

Caroline is a PhD student at the Monash Institute of Pharmaceutical Sciences (MIPS), and is a student member of the Cancer Therapeutics (CTx) Cooperative Research Centre. She was also the winner of the Monash's three-minute thesis competition in 2012.



New Chair for VCP Foundation

Steve Marty has been elected as Chair of the Victorian College of Pharmacy Foundation. Steve practised in community pharmacy before working with the Pharmacy Board of Victoria. In 1992 he was appointed Deputy Registrar of the Board and Deputy Branch Director of the Pharmaceutical Society of Australia, then Registrar of the Board in 1998.

He is currently an Adjunct Associate Professor in the Faculty, and a member of each of the scheduled medicines advisory committees of the Optometry, Osteopathy and Podiatry Boards of Australia. In 2009 he was appointed as the Inaugural Chair of the Pharmacy Board of Australia and in 2010 Registrar of the Victorian Pharmacy Authority.

He is a member of the Health Workforce Australia Prescribing Project Advisory Group and the Advanced Practice Framework Steering Committee. He also is Chair of the Australian Health Practitioner Regulation Agency Forum of Health Registration Board Chairs.

In memoriam



It is with sadness that the Faculty has learned of the passing of Emeritus Professor Tom Watson, Dean of the Victorian College of Pharmacy from 1988 to 1991.

Dr Watson played a key role in the amalgamation negotiations with Melbourne and Monash Universities. He instigated a review of the undergraduate course which was progressively introduced from 1991 and placed a greater emphasis on pharmacy practice focusing on primary healthcare, problem solving and greater integration of subjects.

He was the author of a large number of published scientific papers with a research interest in natural products.

He came to the college as interregnum Dean and Director after a long and distinguished career in the Department of Pharmacy at the University of Sydney since 1956 and as Professor of Pharmaceutical Chemistry since 1970.

A celebration of Dr Watson's life was held in Sydney on 10 October 2012.

In memoriam



Esteemed pharmacist, politician and supporter of the Faculty the Hon. Geoffrey Connard AM died peacefully on 27 January 2013 aged 87.

Mr Connard graduated from the Victorian College of Pharmacy in 1948 and practised as a community pharmacist before entering politics as a member of the Victorian Parliament's Legislative Council from 1982 to 96. He played a crucial role in a number of Victorian, Australian and international health reforms and continued to work in the health sector following his retirement from parliamentary life.

Mr Connard was inaugural Chair of the Macfarlane Burnet Centre from 1986 to 1990 and was a member of the Burnet Institute Board until 2007.

A strong believer in the role of pharmacy as a key contributor to delivering better health outcomes, he generously founded The Hon. Geoffrey Connard AM Travelling Scholarship and award at the Faculty, which supports international conference travel for postgraduate students and academics.

Mr Connard is survived by his wife Judith and children Jane, Phillip and Timothy.

Reunited we stand



Pharmacy graduates from the '50s, '60s, '70s and '80s have reunited to celebrate their achievements, renew friendships and reminisce about their student days at the Victorian College of Pharmacy!

The Class of 1953 celebrated its Diamond Jubilee at the Point Lonsdale Guest House in March with a group of 31 alumni and friends attending and enjoying a program of sightseeing, fellowship and fine dining.

2012 marked 50 years since the completion of the last four year part-time apprenticeship pharmacy course in 1962. A buffet luncheon was held in the cafeteria at the Faculty in Parkville in November to celebrate this momentous occasion. Elizabeth Ross (Druitt) welcomed over 65 attendees before Len Castle recounted a few amusing anecdotes from the college days.



> THE CLASS OF 1982.

Over 50 graduates of the Class of 1975 got together in October 2012 for a cocktail party at Green Acres Golf Club in Kew to celebrate 40 years since commencing their first year at pharmacy college. Organiser Anne O'Shea (BPharm 1975) said it was a wonderful opportunity to catch up with friends from student days and hear of their personal and professional journeys. A DVD of photos taken during student days was played throughout the event and brought back vivid memories for many guests.

Cossar Hall was the venue of choice for a dinner celebrating 30 years since graduation for the Class of 1982, held in March. Organising committee member and academic Dr David Manallack shared his memories of the re-enactment of the Royal Wedding between Charles and Diana during a lecture in 1981, the staff vs students football matches and who could forget the Bachelor of Pharmacy Degeneracy (BPD)? 23 beers in 23 pubs around Melbourne in four hours!

Interested in organising a class reunion?

Contact Angela Maplestone,

E: Angela.Maplestone@monash.edu

or T: +61 3 9903 9087.

Monash donates time, talent and teaching resources



A new online education innovation that is transforming the way valuable resources are accessed and shared among the global pharmacy community has helped the Faculty further demonstrate its international leadership.

SABER (Sharing and Building Education Resources), a web-based networking site which houses contributed resources from world-leading institutions and makes them freely available to the pharmacy and pharmaceutical science community is a Monash initiative that is the first of its kind.

The unique repository focuses on the collaboration and sharing of teaching resources with an emphasis on supporting pharmacy schools in developing countries.

SABER was established in conjunction with the International Pharmaceutical Federation (FIP) and the United Nations Educational, Scientific and Cultural Organization.

Faculty Manager Marian Costelloe, said the University embraced new technologies in the delivery of innovative educational activities and learning outcomes.

“SABER is free, internationally accessible and houses valuable resources for teaching staff and the wider pharmacy community that may not be accessible through traditional approaches.

“It is important to note that SABER has a social aspect to it as a way of creating opportunities for interaction among pharmacy education providers. The philosophy behind the development of SABER is to discover, collaborate and share.”

Launched at the FIP centennial conference in Amsterdam in 2012, SABER was developed using a shared practice model and hosts a variety of online teaching tools and resources, including the Faculty’s unique virtual learning spaces, Pharmatopia, MyDispense and Pharmville.

Monash leads Australia in pharmacy and pharmacology and is ranked in the top ten in the world according to the 2013 QS World University Rankings by subject.

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The last word



I am personally thrilled at our world ranking of number seven and number one in Australia because the ranking draws heavily on our academic reputation as judged by our peers.

What do the QS World University rankings mean? QS World University Rankings are based on differentially weighted criteria drawn from a survey of 70,000 academics and graduate employers. They look at academic reputation, employer reputation, research citations and h-index citations.

Since 2011, a category for subjects has been included. It is within this field that the Faculty has claimed a unique position. Not only are we ranked within the World Top 10 in the Life Sciences & Medicine: Pharmacy & Pharmacology subject discipline, but we are the only program awarded a five-star plus rating, which the rankings body describes as 'not just world-class, but an elite destination for students and faculty worldwide'.

I am personally thrilled at our world ranking of number seven (equal with the National University of Singapore) and number one in Australia because the ranking draws heavily on our academic reputation as judged by our peers.

Achieving this ranking is something that every staff member and higher degree by research student has contributed to through the rigour of their research, the quality of their teaching, the effectiveness of their external presentations and the manner in which they regularly represent Monash to our national and international colleagues.

The actual ranking number itself is not as important as our achievement of gaining the respect of the national and international leaders in our discipline – and of now entrenching our education and research programs among the global elite.

This recognition confirms the direction we are heading in with our future agenda and will enable us to be bold in our thinking as we continually refine and craft ambitious new opportunities for our Faculty.

To be in this position is a direct result of the endeavours of our academic, research and professional staff, our students and the successes of our more than 6000 graduates within Australia and throughout the world.

I offer my congratulations and a sincere thank you to all who have been, and are, part of the inspiring education and research enterprise that is our Faculty of Pharmacy and Pharmaceutical Sciences.

Professor William N. Charman
Dean, Faculty of Pharmacy and
Pharmaceutical Sciences
Director, Monash Institute of
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