Alchemy

Faculty of Pharmacy and Pharmaceutical Sciences



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#### Alchemy has gone digital

Check out the digital version of Alchemy. The interactive digital magazine comes complete with staff interviews and videos supporting the latest news from the Faculty.

monash.edu/pharm

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## Dean's message

Welcome to the Winter 2015 edition of Alchemy. Our ambitious vision and commitment to innovation in research and education continues to drive all that the Faculty does, and many of our recent achievements are covered in this issue.

In March we announced PharmAlliance, a transformative partnership with The Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, USA and The School of Pharmacy, University College London. All three partners have similar philosophies and values – and this new partnership will allow us to rapidly and collaboratively address major, global pharmacy and pharmaceutical science issues in a more effective manner than we could have working alone.

In April, a very special documentary was released describing the 130 history of the faculty. The film portrays the circumstances of crucial events which moulded the faculty and the profession in this country. It is a wonderful production and I highly recommend viewing it on our faculty website (monash.edu/pharm).

Our graduates and students continue to shine on the world stage having an impact from Sierra Leone to Singapore. Closer to home, John Ware has been honoured by the International Pharmaceutical Federation (FIP), and we have awarded the inaugural Alistair Lloyd Scholarship for Excellence and Leadership to an outstanding young student. Scholarships like this are only possible with the generous support

of donors, and we are pleased to also announces a new scholarship being funded by alumnus Peter Beaumont.

You can read about our award-winning education leaders who are changing the way pharmacy is taught in the classroom, and on the research front, we have continued to excel. We have signed a new drug discovery partnership with Takeda, a Monash-invented drug delivery technology was acquired by Capsugel, and three of our latest PhD graduates have taken up post-doctoral research positions at some of the leading research universities in the world.

We have looked to new ways of sharing our stories. We have refreshed the look of our printed magazine and are thrilled to release our first digital edition of Alchemy. Including all of the stories and imagery you can see in print, the digital magazine allows a more enriched viewing experience with animations, videos and interviews for you to peruse.

Whether you are reading a print edition, on a computer at work, or an iPad at your leisure, I hope you enjoy this update from your Faculty.

Professor Bill Charman



# Monash pharmacists at large

"By January, the number of Ebola cases started to fall... you could see that all the interventions were having an impact." For Erin and Michael Nunan, a Monash pharmacy degree has provided the foundation for a challenging, rewarding and diverse working life – from the Solomon Islands Ministry of Health to an Ebola clinic in Sierra Leone. It also introduced them to each other.

Erin and Michael completed their Bachelor of Pharmacy degrees degrees at Monash in 2005. As part of his course Michael worked in Vanuatu for six weeks, thanks to the Mathew Peck Travelling Scholarship. The experience changed his perspective.

"The Mat Peck Travelling Scholarship was a defining experience," Michael says. "Working in Vanuatu, I had one of those light bulb moments. For an undergrad pharmacy student to spend time working in a developing country was amazing. This was what I wanted to do."

After completing their internships and working in Victoria and Queensland, Erin and Michael were keen for an international experience. Responding to an Australian Volunteers International advertisement, they went to work in the Solomon Islands in late 2007. For the next two years they worked as pharmacists with the Solomon Islands Ministry of Health.

Erin and Michael returned to Australia to work for a year in 2010 before heading back to the Solomons early in 2011. Erin joined the World Health Organization to work in health resource development and distribution. Michael took an AusAid/PACTAM deployment specialising in primary healthcare pharmaceutical supply.

In mid-2013, Erin moved to Swaziland to work with the Clinton Health Access Initiative as a Pharmacy Oversight Associate. Michael continued to work in the Solomons until mid-2014, when he went to join Erin in Africa and the couple travelled around the continent for six months.

As Michael explains, it was around this time the Ebola crisis was escalating. "We were hearing a lot about Ebola. We were close to the epicentre. I felt that I should try to contribute in some way. Save the Children needed a pharmacist to work in a Sierra Leone facility they were furiously trying to set up, so I went over in December."

Michael worked to help set up the pharmacy at an 80 bed facility providing hospitalisation for Ebola patients – a large task at a frantic pace. "It was incredibly demanding and stressful. Every day

there was another story. We had patients dying as they were coming out of the ambulance; another collapsed and died in the driveway. There was an overwhelming sense of crisis and urgency."

But the facility was quickly up and running, and a remarkable team of people got on with a difficult job. "The camaraderie was amazing. By January, the number of Ebola cases started to fall. Though we were just a small cog in a very big wheel, you could see that all the interventions were having an impact."

For Erin and Michael, the opportunity to apply their knowledge and skills in developing countries, in situations of need, has been a rewarding outcome. "The people we worked with, in both the Solomon Islands and Africa, were just incredible," Michael says. "It was great motivation and reward. There's a sense that we had these skills we could contribute – that we could help, so we should help."

Now back in Australia, Erin is completing a Juris Doctor with the University of New England, combining postgraduate law with pharmacy. She is also working on a World Bank contract for drug funding in the Solomons and Pacific. Michael is currently completing a PhD with the University of Melbourne. He has also previously completed a Graduate Certificate in Pharmacy Practice at Monash and a Masters of Public Health at the University of Sydney.

So what's the next adventure for the intrepid Erin and Michael? Baby Nunan! "We found out I was pregnant while Michael was in Sierra Leone," Erin explains. "So, needless to say, I couldn't join him to work there too.

"We'll wait and see what this next adventure involves. It's been good timing to work overseas before we had a family. But we've seen so many other families with little kids working in foreign countries, and what a great time it can be, I don't think it'll stop us. So I think there's certainly some more of these adventures in our future."

We wish Erin and Michael well for their next big adventure, which is due in September.

# Alistair Lloyd Scholarship paves way for future leaders in pharmacy

Monash pharmacy student Lauren Crawley is the inaugural recipient of the Alistair Lloyd Scholarship for Excellence and Leadership. Offered for the first time in 2015, the scholarship was established by the Faculty in recognition of Victorian College of Pharmacy graduate and past Foundation Chair, Alistair Lloyd AO RFD ED.

Valued at \$10,000 per year, the Alistair Lloyd Scholarship is awarded to an outstanding student with demonstrated leadership capabilities undertaking the Monash Bachelor of Pharmacy (Honours) degree. In the spirit of the philanthropist and pharmacy industry champion it is named for, the scholarship encourages students to achieve their full potential and make a real difference to people's lives and the future of pharmacy.

Scholarship recipient Lauren Crawley says that, while studying pharmacy at Monash was always her first choice, the offer of a scholarship came as something of a surprise. "After I'd applied to study pharmacy at Monash and been accepted into the course," Lauren explains, "I received an email asking if I'd like to apply for the Alistair Lloyd Scholarship – if I could demonstrate leadership experiences. I quickly googled Alistair Lloyd and the scholarship and excitedly put an application together!"

With an admirable record of leadership initiatives, Lauren's efforts spoke for themselves. "I was fortunate to be involved in a lot of leadership activities during high school. I was school captain. I was on various sporting teams. I'd received school awards for leadership. I'd been on a mission trip to Thailand, volunteering in orphanages and a leprosy hospital."

Although Lauren is the first person in her family to pursue pharmacy – both her parents are in IT – she says she felt drawn to the profession. "I love science, I enjoy interacting with people, and I'm really interested in public health and personal wellbeing," she said. So pharmacy seemed like a logical choice that was full of potential."

As the Alistair Lloyd Scholarship recipient, Lauren will undertake a leadership program throughout her studies, and participate in the Student Ambassador program.

As for the man himself, Alistair Lloyd sees pharmacists playing a vital role in the community, and hopes the scholarship that bears his name will encourage future leaders in the profession. "Over a long and rewarding career, I have had the privilege of being part of the continuous growth of our profession and witnessing the real life impact it can have on the community," said Mr Lloyd.

"I was awarded the Kodak Travelling Scholarship in 1957, which allowed me to travel and study overseas, gaining invaluable skills and knowledge that were instrumental for my professional future. I hope this scholarship gives promising young pharmacists the same opportunities I've had to pursue a fulfilling and worthwhile pharmacy career."





If you would like to support the Alistair Lloyd Scholarship Fund, visit: community.monash.edu.au/alistairlloyd

"I love science, I enjoy interacting with people, and I'm really interested in public health and personal wellbeing."

Lauren says she's enjoying the challenge of university, and the scholarship provides valuable support and encouragement. "It's a really challenging course, but I'm loving it. It's an honour to receive the Alistair Lloyd Scholarship. It will help me to complete my studies and pursue future work and volunteer opportunities. And Mr Lloyd is an ideal role model and great inspiration for an aspiring pharmacist."

We are delighted to welcome Lauren to the Faculty, and congratulate her on being the inaugural recipient of the Alistair Lloyd Scholarship. This scholarship will continue to be awarded to a Bachelor of Pharmacy student every two years.

# Renowned pharmaceutical scientist awarded honorary doctorate

"...internationally recognised thought-leader, scientific innovator and entrepreneur in drug discovery and delivery."

Globally respected pharmaceutical scientist Dr Ian Wilding has been recognised with an honorary doctorate from Monash University. The honorary degree of Doctor of Laws honoris causa, was conferred on Dr Wilding at a ceremony at the University's Clayton campus in May.

Dr Wilding, a pharmaceutical drug development consultant and entrepreneur, was recognised for his major contributions to international medicine development, regulatory authorities and pharmaceutical science organisations in Europe, Japan and the US.

Professor Bill Charman, Dean of the Faculty of Pharmacy and Pharmaceutical Sciences and Director of the Monash Institute of Pharmaceutical Sciences (MIPS), said Dr Wilding was an internationally recognised thought-leader, scientific innovator and entrepreneur in drug discovery and delivery.

"These advances have had a direct and beneficial impact on patients across the world through better design and manufacture of more clinically effective oral and inhaled medicines." he noted.

Dr Wilding has published over 250 research papers, abstracts and patents and shared his thoughts on the future for pharmaceutical scientists as guest speaker at the 2015 Emeritus Professor Barry L. Reed Distinguished Lecture, attracting a record attendance of over 300 quests.

In 1997 he was appointed as an expert scientist for the FDA in the area of food effects on drug bioavailability.

He has also served on several UK and European Innovation and Enterprise Advisory Boards including the UK CBI Technology and Innovation Committee and the European Commission FP7 Advisory Committee for SMEs.

In 2005 Dr Wilding received the Controlled Release Society career achievement award in oral drug delivery and in 2013 became an Eminent Fellow of the UK Academy of Pharmaceutical Scientists.

Dr Wilding is also the inventor of the Enterion capsule, a remote controlled device for site-specific delivery within the human intestines to evaluate drug absorption properties that has now been dosed to several thousand subjects.

In a long career commercialising science,
Dr Wilding was the cofounder of R5
Pharmaceuticals, Zysis, Modern BioSciences
and BioCity Nottingham. In addition to several
Board roles, he currently consults for over 30
pharmaceutical and biotech companies on a wide
range of strategic and technical drug development
issues. He has published over 250 research
papers, abstracts and patents.

Dr Wilding's honorary doctorate comes just months after Professor Brian Kobilka MD, a Nobel Prize winner for chemistry, was similarly recognised for his research into the pharmacology and biology of G-Protein-coupled receptors.

"Education is an essential agent of global practice change – and FIPEd has positioned itself to accelerate this journey by identifying and implementing a structure to support its global vision."

#### Global education role

Professor Bill Charman, Dean of the Faculty has been chosen to lead the International Pharmaceutical Federation Education Initiative (FIPEd) Steering Committee.

The FIP is the global federation of national associations of pharmacists and pharmaceutical scientists, and is a non-governmental organisation in official relations with the World Health Organization.

FIPEd brings together all FIP's education actions and its purpose is to support the reform of pharmacy education so that there will be sufficient and competent pharmacists everywhere in the world.

Professor Charman was selected by the FIP Bureau at its meeting in the Netherlands on 19 March, and will take office as the Steering Committee chairman from 1 August 2015.

Professor Charman said that while the FIPEd has achieved much since its inception, the next five years will be critical to building on its many successes and in demonstrating the tangible benefits of its programs to stakeholders around the world.

"Education is an essential agent of global practice change, and FIPEd has positioned itself to accelerate this journey by identifying and implementing a structure to support its global vision," he said.

"I'm looking forward to helping the FIPEd team rapidly execute their respective plans, to broadening the depth of engagement with educators around the world, and for the impact of FIPEd-related activities to be tangible, relevant and welcomed."

The FIPEd chair mandate is two years, renewable once. This year, FIPEd's work includes an update on the global pharmacy workforce and research into pharmacy advanced practice/specialisation and on inter-professional education.

Professor Charman said he was thrilled and humbled to be selected to work with the team of talented individuals.

"Integrity, transparency, broad and energetic stakeholder engagement, accountability and inclusiveness will be hallmarks of my chairmanship," he noted.

The appointment adds to the growing list of accolades bestowed on Faculty staff this year, reinforcing the international reputation of Monash pharmacy and pharmaceutical science educators and researchers.

# American Association of Pharmaceutical Scientists honours MIPS researcher

Professor Chris Porter, Associate Dean of Research at MIPS, has been recognised as a Fellow by the world's largest international pharmaceutical science organisation for his outstanding achievements.

Professor Porter, was inducted as a Fellow of the American Association of Pharmaceutical Scientists (AAPS) at their Annual Meeting in San Diego, USA, in late 2014.

AAPS Fellows are granted each year to individuals who make sustained remarkable scholarly and research contributions to the pharmaceutical sciences through original articles, scientific presentations or patents.

Founded in 1986, AAPS is an individual membership society of approximately 11,000 pharmaceutical scientists. This year 17 Fellows were elected, Professor Porter is now the third AAPS Fellow at MIPS, joining Professors Bill Charman and Colin Pouton.

Professor Porter said he was delighted to be recognised as a Fellow.

"This was great news. AAPS is in many respects the de-facto international pharmaceutical science organisation. To be recognised by them in this way is an honour and a great reflection of the efforts of the research group here at MIPS," he said.

Professor Porter's research looks at ensuring that drug doses are absorbed efficiently and are effectively transported to their site of action to target disease.

His team is currently investigating ways to combine drugs with fats, 'piggybacking' onto natural processes where fats are absorbed and distributed throughout the body. The method, which could increase the effectiveness of drugs used to treat a range of clinical problems including autoimmune and metabolic disease, aims to enhance absorption and to target drugs to specific sites in the body including the lymph nodes.

Professor Porter graduated with a Bachelor of Pharmacy and a PhD from the University of Nottingham in the UK, before moving to Australia and Monash approximately 20 years ago. A research leader with impact across a number of fields of research he has published widely with over 160 peer reviewed publications, given over 50 invited presentations and graduated 20 PhD candidates.

Professor Porter is a Chief Investigator within the Australian Research Council (ARC) Centre of Excellence in Convergent Bio Nano Science and Technology, headquartered at MIPS, and maintains funding across all major national competitive grant programs.

While AAPS members primarily come from a pharmaceutics, biopharmaceutics, or pharmacy field of study, they also represent those scientists from complementary disciplines, such as chemistry, biology, engineering, and medicine, who are involved in the discovery, development, and manufacture of pharmaceutical products and therapies.

#### A landmark alliance

"These are the leading pharmacy programs on three continents and the partnership will create new and transformative training, development and exchange opportunities for students and staff."

Monash, the University of North Carolina at Chapel Hill (UNC) and the University College London (UCL) have joined forces to advance and transform research, education and practice in pharmacy and the pharmaceutical sciences.

An initial five-year Memorandum of Understanding was signed in March 2015 and provides the framework for creation of the PharmAlliance partnership between the UNC Eshelman School of Pharmacy, the UCL School of Pharmacy and Monash's Faculty of Pharmacy and Pharmaceutical Sciences.

The partners will work together to transform education and curriculum development, pursue new and transformative research initiatives, and enhance professional practice in pharmacy and the pharmaceutical sciences.

Professor Bill Charman, Dean of the Faculty, said the alliance would address issues too complex for one institution.

"With similar philosophies and ambitions for our field, we see collaboration as the best means to rapidly and effectively address them in a global context," Professor Charman said.

"We will form new research collaborations that will enable us to more effectively and rapidly address major international issues in the fields of drug discovery, nanomedicine development and nanotechnology."

The alliance will have the opportunity to access research funds that each nation allocates for international research partnerships and will work to inspire and train future leaders and practitioners of the profession on a global stage.

Professor Robert Blouin, Dean of the UNC Eshelman School of Pharmacy, said the strategic partnership would enhance the three institutions, access to resources, talents and opportunities.

"These are the leading pharmacy programs on three continents and the partnership will create new and transformative training, development and exchange opportunities for students and staff." Professor Blouin said.

Professor Duncan Craig, Director of the UCL School of Pharmacy agreed and said the geographic and quality aspects of this alliance allowed a global perspective on pressing healthcare issues.

"The possibilities afforded by the partnership are unprecedented, and we are very excited to begin exploring these activities," he said.

While the alliance is in its infancy, discussions about research exchange and joint postgraduate courses are well under way.

Watch this space!





# **Open House 2015 Sunday 16 August**

- Course information
- Kids activities
- Research Showcase
- Live music and much more

monash.edu/ pharm-open-house



To watch the film online, visit monash.edu/pharm

## Faculty history hits the silver screen

"We have a very long and proud history and it is the people past and present that make this place what it is." Over 130 years after opening Australia's first school of pharmacy, Monash University has released an inspiring documentary telling the story of a small school that went on to become an international leader in pharmaceutical research and education.

The documentary Years of Determination: From College to Faculty was launched in April at a special premiere held at Parkville. Professor Bill Charman, Dean of the Faculty, said the film pays homage to the pioneers of the College/Faculty and the profession.

"This film traces the roots of pharmacy in Australia and highlights the generations of visionaries who have established and grown the profession of pharmacy, beginning in the newly settled Victoria of the 1800s," he said.

"Alistair Lloyd inspired this project when he proposed capturing the history of the college and Faculty, and it was wonderful to see our long and proud history burst to life in a half-hour documentary."

Based on interviews with prominent pharmacy identities, the film portrays the crucial events that moulded the Faculty and the profession. The launch signifies the culmination of 18 months of research, editing and post-production work.

Jenny McDowell co-produced the film and said the final product is something that will move students, staff and alumni alike. "It has been an honour to have worked on this project and know that we have released something that is really quite special," she said.

"This film will evoke a lot of fond memories for graduates and will help current students understand and fully appreciate the rich history of the Faculty."

Professor Charman agreed, saying that the films captures the essence of what the Faculty is about.

"We have a long and proud history and it is the people, past and present, that make our Faculty what it is. The film tells the story of these people, as much as the institution, and we now have a tangible means by which to portray our compelling history and story," Professor Charman said.

The documentary is the second Faculty film that has been released, following the launch of The Sissons Mural Revealed in mid-2014.

Both films can be viewed online and a DVD has been produced that can be collected from the Monash University Student Services reception at the Parkville campus (free of charge).

## New drug delivery technology acquired by Capsugel



#### "Our continuing work with Monash holds great potential for additional drug-delivery innovations in the future..."



A novel drug delivery technology, developed by researchers at MIPS, has been acquired by Capsugel, a global leader in innovative dose-form development.

Monash and Capsugel announced in January that Capsugel had acquired the intellectual property pertaining to proprietary ionic liquid technology developed by researchers at MIPS led by Professors Chris Porter and Peter Scammells.

The novel technology uses lipid-like counter-ions to transform crystalline drugs into ionic liquids. This leads to significant increases in drug solubility in lipid-based liquid, semi-solid and multiparticulate formulations.

Under the terms of the agreement, Monash transferred its patent application and associated results and know-how to Capsugel, and Capsugel extended its existing research collaborations with Professors Pouton, Scammells and Porter at MIPS by funding additional research positions to accelerate the ionic liquid technology and future drug-delivery projects.

Professor Chris Porter said the technology was the result of a collaborative effort involving a number of MIPS labs and was excited to see the technology being implemented by industry.

"The ionic liquids technology will allow Capsugel to significantly increase drug solubility, reduce absorption variability, decrease excipient levels and reduce pill burden," he said.

Capsugel has a long history of collaboration with MIPS-based researchers in lipid-based drug delivery science. This includes co-founding the Lipid Formulation Classification System (LFCS) Consortium to advance and standardise evaluation protocols for lipid-based drug-delivery systems.

Professor Bill Charman, Director of MIPS, said the technology licence and research collaboration agreement was a further and substantial step in a decade-long partnership with Capsugel.

"We are thrilled to partner with Capsugel to advance the development of the ionic liquids technology and to accelerate our current and future collaborative drug-delivery projects," he said

"Our partnership with MIPS demonstrates Capsugel's commitment to advancing high-calibre science for improved drug delivery and better healthcare solutions," said Keith Hutchinson, Senior Vice President Research and Development at Capsugel.

"Our continuing work with Monash holds great potential for additional drug-delivery innovations in the future and this represents a valuable addition to our capabilities in designing and developing innovative immediate and modified-release dosage forms."

The team behind the novel drug delivery technology (L-R): Professor Colin Pouton, Yasemin Sahbaz, Professor Chris Porter, Dr Leigh Ford and Professor Peter Scammells

## Pharmacy in the blood

This year sees a third generation of one family commencing their pharmacy studies with Monash (and the Victorian College of Pharmacy). For the Lee family, the ability to convey complex medical information and support patient wellbeing is a tradition worth passing on.

It all began in Kuala Lumpur in the early 1960s. Jin Lee recalls her eldest brother recommending that she study pharmacy when she grew up. Jin took his sage advice and began something of a family tradition.

After relocating to Melbourne to complete her secondary schooling, Jin commenced the pharmaceutical chemist qualification with the Victorian College of Pharmacy. She completed her training and started work as a pharmacist with Box Hill Hospital.

In the late 1960s, Jin worked in retail pharmacy and as a locum pharmacist in Melbourne, while raising two small children. In the early 1970s, the family relocated to Kuala Lumpur, where she worked as a pharmacist for an international pharmaceutical company and a wholesaler.

In the early 1980s, Jin co-established a wholesale pharmaceutical agency. From the late 1980s, she worked in management with pharmaceutical and medical product laboratories, until her retirement in the late 1990s.

Jin's career covered many facets of pharmacy – hospital, retail, wholesale, distribution, manufacturing and corporate. Jin's daughter Visakha Lee says her mother was always pleased and proud to be a pharmacist. "Mum always said that it was a rewarding and enjoyable career. It made a big impression on me," she said.

Melbourne-born Visakha grew up in Kuala Lumpur until the age of 15, when she followed in her mother's footsteps and moved to Melbourne to complete her secondary schooling and study pharmacy. Visakha completed the Bachelor of Pharmacy with the Victorian College of Pharmacy in the early 1990s, completing her training at The Alfred. She worked as a retail pharmacist in various locations prior to operating her own pharmacy in Glen Iris for 10 years.

Since that time, Visakha has completed further studies in numerous fields, including management and traditional Chinese medicine (acupuncture and Chinese herbal medicine). In recent years, she has divided her time between working as a locum pharmacist in retail and hospital pharmacies, and as a traditional Chinese medicine practitioner in her business Sukhalaya, through clinics in St Kilda and Glen Iris.

This year, Visakha's son Nicholas Kolotsos has commenced the Bachelor of Pharmacy with Monash. (Nicholas's late father, Peter Kolotsos – who sadly passed away in April – was also a pharmacist and Victorian College of Pharmacy graduate. Peter operated retail pharmacies in numerous locations, including Glen Iris, Preston, Gladstone Park and Inverloch.)

Nicholas says growing up in a pharmacy family has shaped his life and outlook. "With both my parents being pharmacists and owning their own respective pharmacies, retail pharmacy has always been part of my life," he said. My parents have always shared their knowledge and life experience. I've worked in their pharmacies. I've seen how they help people and play an important role in the community. While I thought about doing medicine, I decided to follow my parents and grandmother and do pharmacy. I guess it runs in my blood! I know it's a valuable profession and a fulfilling career."

Visakha says her pharmacy degree has provided a strong foundation for a diverse career – as it did for her mother, and she trusts it will for her son. "Being a pharmacist, I have a wide medical knowledge of health conditions that I can apply in my practice and patient treatment. It provides the foundation for my work in traditional Chinese medicine. Today I work in pharmacies and treat my patients from a GP clinic and a TCM/ naturopathic clinic."

For Visakha, practising pharmacy is more than just dispensing medicines. "We play an important role in promoting public awareness and supporting patient safety and wellbeing in the community. The role of the pharmacist is so diverse. As primary health professionals, we are trusted because we have the education, training and experience. The pharmacy degree prepares you for so many different areas of practice."

While much has changed since Jin Lee began her pharmacy journey in the 1960s, the profession's core commitment to patient safety and wellbeing remain the same. It's an honour to have a third generation pharmacy student in our faculty – from such a diverse line of pharmacy professionals. We wish Nicholas well in his first year of study at Parkville.

"While I thought about doing medicine, I decided to follow my parents and grandmother and do pharmacy. I guess it runs in my blood! I know it's a valuable profession and a fulfilling career."

Does your family have several generations of pharmacists who have studied with Monash/Victorian College of Pharmacy? We'd love to hear your story. Please get in touch at pharmacy.alumni@monash.edu

Family ties: (L-R): Jin Lee, Visakha Lee and Nicholas Lee



## A citizen of the world

"The problem with seeing the world is that you want to see more of it, but you also want to return to the places you've been. I can think of a dozen places where I haven't been and a dozen more that I want to go back to."





Earlier this year, we sat down with Annalise Tindal and discovered there is more than meets the eye to our Academic and Student Services Manager. Coming to Australia via Europe, Asia, North America and the Middle East, Annalise shares her insights from a life abroad and why she admires the way international students embrace their time in Oz.

#### What is your role at the Faculty and how long have you been with Monash?

As Academic and Student Services Manager I look after – with the help of my team – all aspects of the student academic life cycle from admissions to enrolment to results and finally course completion. I also represent the Faculty at a number of central committees, ensure compliance with various University policies and procedures, and work closely with Faculty course education teams. I've been here for six years.

#### What has been your career path to Monash?

My intention was to become a travel writer with Condé Nast Traveller magazine and I moved to New York to do just that, but somehow I ended up managing a bar in Singapore. While working in hospitality, training staff became a particular passion of mine and I decided to work in education instead. I pursued a teaching role at Perth Institute of Business and Technology (PIBT), Edith Cowan University in Perth, WA. That led me to a role at Curtin International College (CIC), Curtin University both teaching and working as the Student Services Manager. When I decided to leave Perth, I applied for a variety of roles in Singapore, Thailand, Tasmania and Melbourne. I figured I'd move to wherever I got a job. Melbourne and Monash won. Of course, I was only meant to be here for a year on a contract basis.

#### So it was a job that brought you to Australia?

Partly. My parents had decided to settle on a vineyard in Margaret River. That was certainly a huge drawcard! My brothers had also moved to Perth. We'd lived in a lot of places both together and apart so the thought of us all being in the same place was incredibly appealing to me.

#### When you say you have lived in a lot of places, how many places are we talking?

Having bought my first home at the end of last year, I counted the addresses I've had in my lifetime and the total came to 31! That breaks down to 10 in the US, 10 in Australia, three in the UK, five in the Middle East (Cairo, Jeddah and Tehran), and three in Singapore. One great thing about changing your address is that you give yourself a brand new base from which you can shoot off and enjoy more travel experiences. Living in Cairo we could have beach days in El Alamein, or safari in Nairobi or sail the Greek islands. Of all the bases I've had, Singapore was likely the best and I ticked a lot of places off my bucket list while there.

### Wow, you really are a citizen of the world! Do you find your past allows you to better relate to international students?

Absolutely. I was an international student everywhere I went. It didn't really matter where I was in the world, I was always a foreigner. Cultural shock can be overwhelming, but it's the reverse cultural shock that's even more of a surprise. You go back home, to what should be the familiar, and you realise you've changed and nothing is what it once was. International students are to be admired for the adjusting they must do, particularly those speaking another language.

#### Having been at Monash for six years, what are your favourite things about the Faculty?

The location is superb and I like the community feel of the campus. We're a small faculty doing big things and that feels good. It's also a challenge working here because at times there can be so many conflicting priorities. We're always looking at what's next and where we're headed as a faculty. There's never a dull moment. It's interesting to see the direction learning and teaching is taking, having been educated in both the UK and the US. We're definitely leaning more toward the US approach and I think our students will be better off as a result. I certainly retained more knowledge from my US education due to the active class participation.

#### And what about Melbourne? Any plans to explore another part of the world?

Melbourne is such a cosmopolitan city and that suits me perfectly, especially when it comes to the food. There are not many places in the world where you can find both fresh produce and such a medley of cuisines. Whether I feel like Egyptian mahshi, Singaporean laksa, or a Danish smörgåsbord, I can find it in Melbourne. The fact that the city is in Victoria, which is such a beautiful and varied state in terms of scenery, is another plus in my book. As far as further exploration goes, I have to admit that it's always a test for me to choose what's next on the travel agenda. The problem with seeing the world is that you want to see more of it, but you also want to return to the places you've been.

I can think of a dozen places where I haven't been and a dozen more that I want to go back to. For the former, I think I'd like to see Iceland and for the latter, Scotland will always top the list.



### Digestive brilliance of breast milk unravelled

"Human breast milk is key to the survival and development of humans, yet until now we had no idea of the rich structure formation when it is digested." Scientists from MIPS have discovered that human breast milk forms into highly organised structures during digestion in the body. Their study was published in Angewandte Chemie – a leading international chemistry journal.

Researchers believe this self-assembly process might be key to releasing the nutrients in human breast milk to ensure an infant's healthy development.

The findings, which show for the first time the structure of human breast milk during digestion, could potentially be used to develop new food supplements and nutritional formulas that are easily digested.

Funded by the ARC and led by Dr Stefan Salentinig and Professor Ben Boyd from MIPS, in collaboration with the Mercy Health Breastmilk Bank, the team looked at the nanostructure of milk to gain new insights into how milk interacts with the digestive system.

Lead researcher Professor Ben Boyd said while the nutritional value of human breast milk and other types of milk are well known, little research has been conducted until now into the detailed structure of milk during digestion and how the fats in milk interact with the digestive system.

"Human breast milk is key to the survival and development of humans, yet until now we had no idea of the rich structure formation when it is digested." he said.

"Finding out what happens to milk during digestion will allow us to better understand how the essential nutritional components for building brain tissue and other parts of the body are absorbed. Potentially we could use these findings to design more effective food and nutritional supplements."

The research team developed an 'artificial tummy' to simulate digestion, and conducted tests that mimicked people with an underdeveloped digestive system such as a pre-term infant. The structures formed in the digesting milk were then studied using specialised instruments at the Australian Synchrotron, revealing that highly organised structures are formed from the by-products of milk when digested.

Professor Boyd said results indicated that, in people lacking normal mechanisms to aid digestion, the structure of milk adapts to overcome this. The finding may be particularly important for premature infants, whose digestive system is often not fully functional.

"We suspected that the fats in milk form structures to aid the digestive process but until now we've not been able to prove this. The Synchrotron was essential to this work because it allowed us for the first time to see what happens during the digestive process," he said.

"We need to do further work. But this study suggests that if you're lacking normal mechanisms to aid digestion, there is a compensatory system present in human breast milk that adapts to allow those individuals to survive."

The research into human breast milk builds on previous work by the MIPS team on cow's milk, which also revealed a highly organised structure.

Professor Boyd said the major difference between cow's milk and human breast milk is that the latter contains enzymes that enable the highly organised structures to form all on their own. With cow's milk, to induce digestion, something needs to be added – an enzyme called lipase, to initiate the digestive process.

"In both cases, the highly organised structures are formed on digestion of mammalian milk, whereas subjecting soy milk to the same digestion process does not result in the formation of these structures." he said.

"The next step is to actively link the formation of these very interesting colloidal structures to the absorption of digestion products. We expect that different structures will have different abilities to transport and release nutrients."

Understanding this link will allow us to design more nutritious supplements and infant formulas, as well as give new insights into why these structures form under some conditions and not others.

### Monash and Takeda partner to tackle human gastrointestinal diseases



Professor Bunnett is one of the world's leading experts in gastrointestinal diseases and disorders. He received his PhD degree from the University of Cambridge, spent most of his career at the University of California, San Francisco, and joined MIPS in 2011.

With several gastrointestinal diseases and disorders in humans poorly understood and inadequately treated, MIPS and Takeda Pharmaceutical Company Limited have signed a new strategic research alliance to develop new medicines to address significant unmet medical needs in gastroenterology.

Irritable bowel syndrome, abdominal pain, chronic itch, severe constipation and diarrhoea are examples of some of the common and debilitating disorders that afflict millions of people worldwide and that will be the focus of the research alliance.

Funding from Takeda will enable MIPS and Takeda scientists to work together to research the mechanisms that underlie these diseases and develop new and highly innovative approaches for their treatment.



Dr Giang Le, Professor Jonathan Baell, Dr Luigi Aurelio, Dr Romke Bron, Dr Simona Carbone, Professor Nigel Bunnet, Dr Nicholas Veldhuis, Dr Bim Graham, Dr Laura Edginton-Mitchell, Josh Conner, Dr Daniel Poole

Professor Nigel Bunnett (Deputy Director, MIPS), who together with Dr Daniel Poole, also from MIPS, will lead the initial three-year research program, said gastrointestinal diseases are a major cause of human suffering.

"There is no cure for many gastrointestinal diseases and current treatments are either inadequate or have major sideeffects. If we can understand the mechanisms that trigger these diseases we can go on to develop effective drugs to treat them," Professor Bunnett said.

"Monash possesses the expertise, technology and materials at its research facilities necessary to conduct drug discovery, research and preclinical pharmaceutical development activities into gastrointestinal diseases."

Professor Bunnett said the research program will build on work by MIPS to better understand the causes of disorders of gastrointestinal function and sensation and could potentially lead to powerful therapies for digestive and sensory diseases.

"A major thrust of the work will be to make use of our expertise in nano-medicine to deliver drugs to the source of disease within the body," he said.

Dr Tetsuyuki Maruyama, is the General Manager of the Pharmaceutical Research Division at Takeda, said the alliance was the perfect fit.

"Takeda's gastroenterology (GI) Drug Discovery Unit is a highly specialised research team that works collaboratively with academic and industry partners. The team is actively seeking to leverage the best scientific and pharmaceutical expertise all over the world," he said.

"We are so pleased to work with Professor Bunnett and his team who have a proven track record for collaborative delivery of clinical candidates. Together we will advance GI research much faster than working alone, ultimately bringer greater benefit to patients sooner."

# FIP recognises decades of outstanding service

I couldn't have done this without the support I've had from my wife.

A meeting with a persuasive family friend was the deciding factor in John Ware OAM switching from studying law at The University of Melbourne to pursuing a career in pharmacy. And what an outstanding choice he made, and a career he has enjoyed.

John was presented with the Distinguished Service Award at the 2014 FIP annual congress in Bangkok, in recognition of his long-term dedication and service to FIP – a commitment that has spanned more than 60 years.

John began his career as a community pharmacist with pharmacies in both country Victoria and Melbourne, and he has played an active role in professional associations for many years. He served as the national president of the Pharmaceutical Society of Australia and helped establish the FIP/World Health Organisation (WHO) Western Pacific Pharmaceutical Forum, before serving as the inaugural president.

John said he was humbled by this award and grateful to FIP for recognising his contribution.

"My experience with FIP has been professionally fulfilling and has allowed me to develop international friendships with a wonderful range of people," he said.

John's wife Nariel Ware has had her own significant career in Australian pharmacy, working at the Pharmaceutical Society of Australia (Victorian branch) for 14 years and becoming active with FIP as Executive Secretary of the Western Pacific Pharmaceutical Forum in retirement.

Nariel was in Bangkok to see John presented with the award and he was quick to recognise the important role she has played over the years.

"I couldn't have done this without the support I've had from my wife," he noted. She is my greatest critical encourager."

The couple spend considerable time each year travelling for regional meetings and arranging and developing conferences in the Western Pacific region to support the work of FIP and WHO in the development of the practice of pharmacy as part of their voluntary duties.

One of their most recent projects was to Vietnam to create guidelines and legislation relating to the manufacture and distribution of medicines. In making the presentation, the President of FIP said it was this kind of ongoing contribution that set the Wares apart.

"Their teamwork and dedication is an inspiration to the pharmacy community," he stated.

Throughout his extensive career John has been a dedicated supporter of the development of pharmacy education and believes the focus must be on more than just science.

"The scientific basis that underpins pharmacy education must be maintained and I believe in highly qualified pharmacists advancing their practice for improved public health outcomes" he said.

"But I also believe strong communication skills are critical to be a successful pharmacist," he said

John's association with FIP is set to continue after being invited to join the board of the FIP Foundation, which aims to provide research scholarships and assist the development of pharmacy practice globally.

"I am honoured to be given this opportunity," John added.

"This role will allow me to combine my experience and knowledge to work towards ensuring pharmaceutical education is well placed for the future."

Dean of the Faculty, Professor Bill Charman said the Wares' long-term dedication to the profession has been significant and deserved to be recognised and celebrated.

"John and Nariel Ware are part of Australian 'pharmacy royalty'. They have worked tirelessly at both a national and international level to assist pharmacists improves health outcomes."

"They are renowned by their peers for their industry commitment as well as their genuine warmth and interest in people."

Originally from Melbourne, John and Nariel now live in Seymour, Victoria where they enjoy local fame as olive growers. At some point in the future they would like to permanently make the move back to Melbourne.



#### **JOHN WARE**TIMELINE

- John was the inaugural President of FIP WHO Western Pacific Pharmaceutical Forum in which he assisted development.
- One of the areas of focus during his term of presidency was raising awareness of issues around counterfeit medications. Another of his significant achievements was chairing the Faculty Council of the Victorian College of Pharmacy.
- As Chair he led the team that integrated the Victorian College of Pharmacy into Monash University in 1992. John has continued his strong relationship with Monash University through his continuous interest in future education goals and as a board member of the Victorian College of Pharmacy Foundation.
- John was recognised with the Order of Australia for service to pharmacy education and professional development of pharmacy in the 2002 Australia Day Honours List.

# Parkville campus leads a revolution in the lecture theatre



The Faculty is at the forefront of something of a revolution in the lecture theatre, as 'active learning' supplants the traditional didactic lecture. Alchemy talks to the two learning activists spearheading the campaign – Director of Learning and Teaching, Dr Ian Larson (IL), and Associate Dean (Education), Dr Paul White (PW).

So I've done some research and have read the info you sent me on active learning.

IL: Good, make sense?

Sort of. But what's so bad about lectures? We've been doing them for hundreds of years.

PW: Well, yes, but while the didactic lecture may be a time-efficient method of delivering information, it's far from the most effective method for retaining information.

IL: When you present students with an hour of information, they then need to spend perhaps another two hours trying to work out what it all meant. This is the traditional model that universities around the world have used. There's now a lot of literature to demonstrate that, while this may be efficient for information delivery, it's completely inefficient for student learning.

Really? But you guys love talking about stuff for hours on end. And students need to know lots of stuff to do well in exams.

PW: There's growing recognition in the university sector that we need to change the way we think about teaching. We have a lot of knowledge now about how students learn, and they don't learn very well by sitting for an hour passively taking in a lot of information. Globally, there's a move away from traditional didactic lectures – the content-heavy presentations with a passive student

experience – towards one of active learning, where the student is an active participant in the learning experience and discovering knowledge.

IL: We wanted to improve our student learning, so we changed the way we teach, encouraging students to do more in class and participate in the learning process. Our model is that for every three traditional lectures, one should go. That gives students time to prepare for the next two classes where they'll be engaged in applying their understanding.

PW: We call it the flipped classroom. We take the content we used to present in the didactic lecture, and we give it to the students in advance. So they can take it in, then come to class and get to grips with it at a deeper level – with us there. In the old model, they'd hear the stuff from us, then go away and try to figure it out for themselves.

Hmmm, OK, so active learning kind of takes the lecturing out of the lecture. You're changing your role from an authority in knowledge to something more like a facilitator for the student to discover knowledge themselves.

IL: Yes, that's very well put.

Thanks.



Ian Larson and Paul
White are both recipients
of the Faculty Award for
Teaching Excellence
and the Vice-Chancellor's
Education Award
for Teaching Excellence.

Dr Paul White and Dr Ian Larson are leading an education revolution at Parkville.

IL: Active learning emphasises critical thinking and analysis. Everything we get students to do should involve them thinking and uncovering knowledge that they can then fit into their understanding and apply for themselves.

PW: Our goal and challenge are to make classes more engaging, so the experience in the class is better than watching a recording. So they encourage and reward participation. There's plenty of strong evidence that active learning improves attendance, engagement and retention. Neurobiology demonstrates that your learning is very dependent on your personal connection. If you're sitting in a boring lecture, you have no connection to the information coming at you. But if you've successfully nutted out a problem, it's rewarding and that reward makes you remember it better. The vast majority of students say they learn better in active learning.

IL: How much do students remember at the end of four years? They can't remember everything. We have to concentrate on learning better rather than learning more. Learning deeply rather than just skimming across a whole lot of areas no one remembers when they walk out the door.

So, for active learning, less is more? IL: Exactly.

#### But students need to be well prepared for the real world.

PW: We don't just want students to be able to just regurgitate information. And we don't want to leave to chance their ability to think critically, solve problems, communicate effectively and work collaboratively.

IL: There's strong demand by the profession for our graduates to be more well-rounded – to not only have a deep understanding of the knowledge, but also those strong generic skills Paul mentions. By engaging students, active learning enables us to develop these skills as part of the teaching process.

### But why here? Shouldn't we let someone else be the guinea pig? Why not those humanities people?

PW: Science education has been at the forefront of active learning worldwide. Perhaps because we're often grappling with abstract concepts, we need to find new ways to share them. And a key driver for us as scientists and clinicians here today is to teach in a way that's evidence-based. We've gathered a lot of evidence that shows if you have students prepare for classes, it promotes uptake and retention.

IL: Our faculty is well-known for its use of technology in teaching. Geeks like us love technology. But we need to think beyond the next bit of software to consider how we can engage the students in all aspects of teaching. Parkville has been an ideal proving ground for the active learning model. It's unique in that it's one faculty on one dedicated campus. We have an ambitious leadership and an integrated team. There's a strong commitment to education as well as research.

### Impressive. Well thanks guys, that's very interesting. I really feel like I learnt something today.

IL and PW: Touché.

Dr Ian Larson and Dr Paul White are both recipients of the Faculty Award for Teaching Excellence and the Vice-Chancellor's Education Award for Teaching Excellence.

They recently published a paper in the Higher Education Research and Development Journal on the Faculty's active learning initiative and achievements.

#### In brief



#### "Simply a matter of giving something back"

It was in a past issue of Alchemy that Peter Beaumont read about a new scholarship established by fellow pharmacy alumnus, Michael Halprin. The story inspired Peter to do something similar.

Peter has been a generous supporter of the Faculty for many years. This year, he decided to formalise this support by funding a scholarship. The Peter Beaumont Scholarship will provide encouragement and support for students whose location and financial situation may hinder their introduction to university.

To be introduced in 2016, the \$5000 scholarship will be awarded to a commencing Bachelor of Pharmacy (Honours) student living at least 50 km outside Melbourne at the time of application, and on assessment of financial need. The scholarship will be awarded for the first year of study.

Hailing from regional Victoria (and a long line of pharmacists and other medical professionals), Peter graduated from the Victorian College of Pharmacy in 1957, having commenced training in Daylesford. He enjoyed a long career as a retail pharmacist, establishing two pharmacies in Shepparton, and acquiring others in Aspendale and Seaford. He continued to operate the Aspendale Pharmacy until his retirement in 1994.

Peter sees supporting scholarships as the ideal way to acknowledge the education that fostered a rewarding career. "It's a way of saying thank you to my country, which granted me a Commonwealth Scholarship," Peter says. "It's also a thank you to the profession and the many people who contributed to my education.

"I hope this scholarship helps future pharmacy professionals in commencing their studies. And I hope this story may inspire others to support scholarships themselves. It's simply a matter of giving something back."

Peter has made provision in his Will to continue funding the scholarship for at least an additional 10 years.

We thank Peter for his generosity and lifelong contribution to the pharmacy profession. And we wish him many happy returns for a landmark birthday in June!



#### MIPS docs secure prestigious postdoc Fellowships

Three PhD graduates from MIPS were recently awarded prestigious international postdoctoral Fellowships.

Dr Phuc Ung has been awarded a VESKI Victorian Postdoctoral Research Fellowship. Dr Ung has relocated to Switzerland to work for two years at the University of Zurich under Professor Gilles Gasser in the Department of Chemistry. He will return to MIPS to work for a third year with Professor Ben Boyd in Drug Delivery Sciences.

Dr Ung will be investigating multimodal lanthanide theranostic agents for luminescence imaging, MRI and photodynamic therapy in cancer treatment. Or, more simply, how cancer treatment would change if we had a safe, localised, non-invasive method for targeting tumour cells. The research will use advanced techniques in cooperation with Professor Gasser's group, a world leader in the field of metal-based phototoxic compounds.

Dr Sandeep Chhabra was awarded a CJ Martin Biomedical Research Fellowship by the National Health and Medical Research Council. NHRMC. He has joined the hallowed halls of Harvard in Boston, furthering his work in the laboratories of Professor Gerhard Wagner at the Harvard Medical School.

Dr Chabra's research will investigate the mechanisms and structural basis of multiple drug resistance for the development of more effective therapeutic strategies to combat cancer and bacterial/fungal infections. He also received

an Australian Society for Biochemistry and Molecular Biology Fellowship to travel to the US and present at the Experimental Nuclear Magnetic Resonance Conference in California in April.

Also in Boston is Dr Lori Ferrins. With the ink barely dry on her thesis, Dr Ferrins has commenced a research Fellowship at Northeastern University. Working in the Neglected Diseases Laboratory of Professor Michael Pollastri, she will be furthering her research into inhibitors for the treatment of human African trypanosomiasis. Dr Ferrins was the 2014 recipient of the BASF Science and Technology prize in the 2014 Victorian Young Achiever of the Year Awards.

Dr Ferrins sees the MIPS doctoral program as a gateway to groundbreaking research. "The MIPS PhD program is globally connected," she says. "It fosters collaboration and enhances your future prospects as a researcher. I've been mentored by world-class researchers and had exposure to a community of experts in drug discovery, in both academia and industry."

Professor Bill Charman, Dean of the Faculty, says these international postdoctoral Fellowships are testimony to the calibre and international standing of MIPS. "It's exciting to see Lori, Sandeep and Phuc furthering their research internationally. It demonstrates that our doctoral program delivers great researchers, and research that is truly world class."

"It demonstrates that our doctoral program delivers great researchers – and research that is truly world class."

#### In brief

To find out more about The Skin Pharmacy, visit theskinpharmacy.com



### Monash graduates develop formula for unique pharmacy in Singapore

Monash graduates Mei Hui Mah and Min-tsek Lau are the pharmacists behind a unique, boutique pharmacy in Singapore specialising in bespoke skincare. The Skin Pharmacy enjoys a strong local following, and Mei Hui and Min-tsek hope to bring the brand to Australia.

It was at Monash that Mei Hui Mah and Min-tsek Lau first met. "He used to borrow my notes," jokes Mei Hui. "He wouldn't have passed without me!"

After completing their pharmacy studies and training in Melbourne in the mid-1990s, Mei Hui and Min-tsek relocated to Singapore. They worked in the pharmacy and pharmaceutical industries for several years before starting The Skin Pharmacy in 2009.

The Skin Pharmacy develops skincare products from scratch, tailored to individual skin types, skin conditions, lifestyles and locations. And pharmacists are the backbone of the business.

Mei Hui says it was their mutual interests in compounding that sparked the business. "I worked in a community pharmacy in Carlton when I did my training. It was very traditional and did a lot of compounding. All these bottles and scales you never see today. I loved it. It was like alchemy. I remember a lecturer at Monash saying that the unique skill the pharmacist has is the skill of compounding. It's a skill we have to nourish and appreciate."

Min-tsek's family in Singapore had an operation manufacturing generic medications. As Mei Hui explains, this capability supported the possibility of developing a new compounding business. "There was a great opportunity to use all this knowledge and equipment we had to explore a unique area and develop our own product. My husband was able to develop the manufacturing skills and capabilities. So we established The Skin Pharmacy and started exploring the potential of skincare.

"We use the compounding skills that pharmacists have, which are very relevant in skincare, and apply it in a community setting. People come to us with skin conditions, such as acne or eczema, and we make customised skincare products for them. We don't make crazy claims like cosmetics companies! We base our products on tried and tested, evidence-based ingredients. Everyone behind the products at The Skin Pharmacy is a qualified pharmacist."

Mei Hui and Min-tsek hope to bring their and family to Australia in the near future. "We are permanent residents of Australia," Mei Hui says. "We'd like to bring our children to Australia for their education. And we hope to expand our business and bring our brand to Australia. We have a lot of Australian customers in our Singapore shops. And I guess it makes sense to bring it back to where it all began!"

Interested in organising a class reunion? Contact Iliana Findikakis, Email: Iliana.findikakis@monash.edu or Phone: +61 3 9903 9087.



#### The class of '55 reminisce

1955. Robert Menzies was the Prime Minister of Australia. Melbourne defeated Collingwood in the VFL Grand Final. And the Victorian College of Pharmacy was teaching students at the Swanston Street campus. Sixty years on, the stately Butleigh Wooton was the venue of choice for a luncheon to celebrate six decades since graduation for the pharmacy class of 1955.

Organising committee members Alistair Lloyd and Keith and Elizabeth Smith did some tremendous detective work, collating new addresses and spreading the word among friends and pharmacy colleagues to attract more than 60 guests to the event.

Mr Lloyd welcomed the guests and spoke of the remarkable changes the Faculty has gone through since their graduation, motivating man to hear more and re-establish contact with their alma mater.

With a treasure trove of 1950's photos and mementos on hand, old friends reunited and former classmates reminisced about their student days at the Victorian College of Pharmacy.

"It was a wonderful opportunity to catch up with friends, reconnect with many lost ones and hear of their personal and professional journeys," said Mr Lloyd. "The reunion was enjoyed so much, that we've already booked our 65th reunion at Butleigh Wooton in five years' MIPS time."



#### In brief



#### First clinical pharmacy Fellows complete joint Masters program

Launched in 2013, the Alfred Health Clinical Pharmacy Fellowship Program provides hospital pharmacists with a formal program to facilitate progression to advanced practice in a clinical speciality.

The program involves a two-year, full-time Grade II appointment within the Alfred Health Clinical Pharmacy Service. It also provides scholarship funding towards the Masters of Clinical Pharmacy at Monash, which runs in conjunction with the Fellowship.

The Fellowship builds on existing clinical practice, providing a thorough grounding in acute adult medicine in the first year and focusing on a selected clinical specialty in the following year. On successful completion of the program, participants are awarded the Alfred Health Clinical Pharmacy Fellowship and the Monash Master of Clinical Pharmacy.

Kirstie Galbraith, Faculty Director of Postgraduate Studies and Professional Development, says the profession-wide initiative to credential advanced practice pharmacists provides an excellent opportunity to develop advanced knowledge and skills. "The combination of a Monash master's degree with workplace support, mentoring and increased opportunities has allowed the first cohort of Fellows to demonstrate the value of undertaking this program. A number of the fellows have already moved into more advanced positions, and we expect them to be future leaders in our profession."

The first four fellows are now in the final stages of the program. Hadley Bortz specialised in haematology/bone marrow transplant, Cia Connell in cardiology, and Suzie Olding and James Polmear in general medicine.

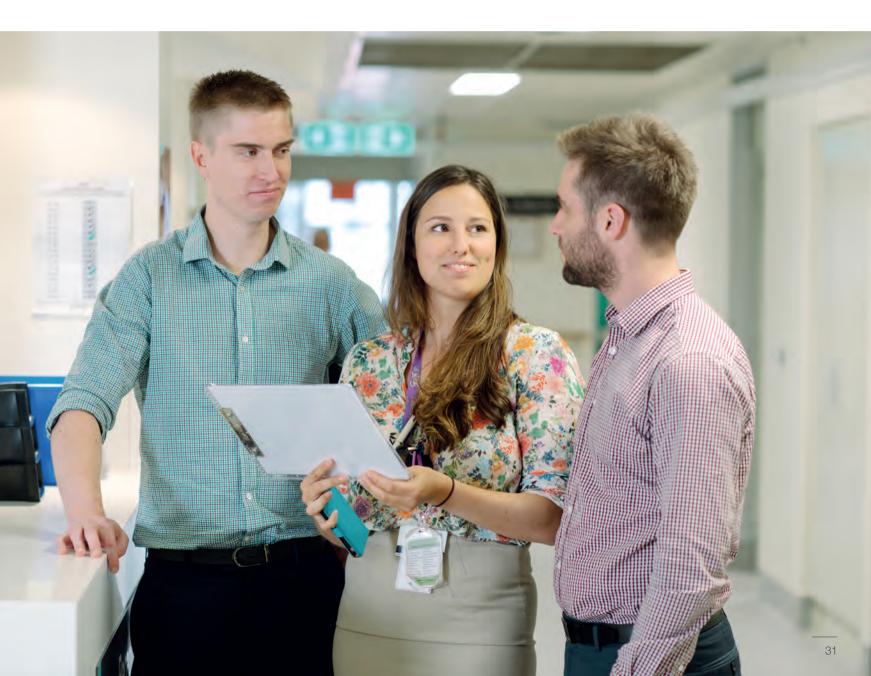
For James Polmear, the program provided a valuable boost for his skills, qualifications and career. "The Fellowship has helped me develop management and leadership skills, along with advanced clinical skills," James says. "I was at a point in my career where I was considering doing my master's degree. The Fellowship provided a great solution. Since completing the program, I've gained a more senior position with Barwon Health."

Hadley Bortz says the Fellowship was a valuable expansion and extension of his existing employment with The Alfred, and education with Monash. "To show that you've attained a high level of qualification and experience within a specialist area is a valuable addition to the résumé and an extra feather in your cap, he said". "We've gained advanced clinical training, a master's degree, and a Fellowship from a recognised centre of clinical excellence. It's certainly helped to consolidate our level of practice. It was exciting to be involved in a new program. And it was a challenging experience."

The Alfred Health Clinical Pharmacy Fellowship is offered annually. In 2016, four Fellowship positions will be offered across cancer services, cardiology, critical care, emergency medicine, respiratory medicine, transplantation and psychiatry.

Applications for the 2016 intake will open in October this year and close on Monday 7 December.

"A number of the fellows have already moved into more advanced positions, and we expect them to be future leaders in our profession." For more information, contact Daniel Guidone, Lead Pharmacist Educational Programs, Alfred Health at d.guidone@alfred.org.au



# Where are they now?

**'10** 

**'**09

Simon Furletti (BPharm 2010) completed his internship at My Chemist Northland and worked as a community pharmacist at My Chemist/ Chemist Warehouse in Preston, becoming Pharmacist Regularly and Usually in Charge in 2012. In addition to his regular responsibilities as Manager, he also became involved in the company's Intern Training Program primarily in the development of learning materials focusing on pharmacology. In 2013, Simon returned to study, completing a Graduate Certificate in Pharmacy Practice (Internship) at Monash. A year later he was appointed National Intern Training Program Coordinator for the My Chemist/ Chemist Warehouse group with responsibility for over 300 interns Australia wide.

Simon said "Completion of my postgraduate qualification opened up a range of opportunities."

He took on a greater educational role and expanded his skills and knowledge in other areas including dermatology and consulting with medical practitioners on mental health and geriatrics.

Outside of work, Simon enjoys playing music and seeing live bands, travelling, skiing and is starting to put his practical pharmacy skills to use in brewing beer! Gemma Lay (BPharm 2009) completed her intern year at Latrobe Regional Hospital, progressing to the role of Senior Clinical Pharmacist in 2014. In 2011 she completed the Graduate Certificate of Pharmacy Practice (Intern Stream), studying units in Mental Health and Infectious Diseases. She is also Clozapine Co-Ordinator for the Latrobe Regional Hospital Mental Health Service, responsible for ensuring that all patients prescribed clozapine are strictly monitored to minimise severe adverse effects.

Gemma is actively involved in the professional development of pharmacists though her involvement with the Society of Hospital Pharmacists of Australia. She is on the organising committee for the 2015 SHPA Annual Conference and has served as President and Secretary to the Latrobe Young Professionals – a group which promotes social connectedness, professional development and community links to young professionals in the Latrobe Valley.

After a long day at work (or even before one) you'll probably find Gemma at the gym or baking, often turning up at work with a plate of baked treats to share with her colleagues.

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

If you would like to be featured here, email: pharmacy.alumni@monash.edu with your name and a short description of what you've done since graduation.

#### **'07**

After finishing her undergraduate degree (BMedChem 2007) and a successful honours year (BMedChem(Hons) 2008), Susan Northfield (PhD 2013) undertook her PhD in Medicinal Chemistry specialising in peptide chemistry. Her research interests are around the synthesis of cyclic peptides, so following completion of her PhD, she spent two years as a postdoctoral researcher working for Professor David Craik in the Institute for Molecular Bioscience, at the University of Queensland, During this time. she worked on a collaborative project with Pfizer in the US, investigating ways to design more orally bioavailable peptides, a project with the potential to have a great impact in the field of pharmaceutical peptide chemistry if successful.

Currently working as a postdoctoral fellow in the Department of Pharmacology and Therapeutics at the University of Melbourne, Susan is continuing her research into cyclic peptides and hopes to discover an improved synthetic approach to generate increased yields in the synthesis of INSL5, a peptide belonging to the insulin family. This would be useful for related drug-discovery projects for INSL5 and other peptides in the insulin family.

With the demands of completing a PhD out of the way, Susan enjoys teaching herself the basics of painting and putting her chemistry skills to use in the kitchen.

#### **'68**

One of three pharmacists in his family, David Robinson (PhC 1968) has enjoyed a fulfilling 40 year career in community pharmacy. Shortly after graduating, David opened a pharmacy in Doncaster and soon went on to form a partnership with his brother Ian Robinson (PhC 1962) who already owned a pharmacy in Glen Waverley. They sold the Doncaster pharmacy in 1972 and bought Tooronga Village Pharmacy operating both Tooronga and Glen Waverlev until lan's retirement in 2002, when David's son Andrew Robinson (BPharm 1999) stepped into his uncle's shoes. David continued to work until 2007, topping off a career that included being a member of the Pharmaceutical Society of Australia and participant in a number of health professional consultation groups run by pharmaceutical companies on new medications.

He is retired with three children and loves golf, racehorse breeding and has been a passionate lifelong supporter of Hawthorn Football Club. David fondly remembers the relationships and sense of community that were an integral part of being a community pharmacist.

To learn more, visit us at monash.edu/pharm

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