

Alchemy

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To learn more, visit us at
monash.edu/pharm
Faculty of Pharmacy
and Pharmaceutical Sciences
Monash University
381 Royal Parade
Parkville VIC 3052
Phone: 03 9903 9635
Email: pharmacy.info@monash.edu
CRICOS Provider Number: 00008C

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Enduring bonds

Our graduates talk about why
they want to stay engaged



Fast Facts

2017 CLARIVATE ANALYTICS HIGHLY CITED RESEARCHERS (2004-2014)

No.1 worldwide in Pharmacology and Toxicology

QS WORLD UNIVERSITY RANKINGS BY SUBJECT, PHARMACY AND PHARMACOLOGY

No.1 in Australia and Asia-Pacific 2017

No.1 worldwide for academic reputation 2017

No.2 worldwide 2017

Top 10 worldwide (average 2011 – 2017)

Excellence in Research for Australia 2015

Top rating of 5 in all sectors (well above world standard)

PharmAlliance

with University of North Carolina at Chapel Hill, US,
and University College London, UK

National Alliance for Pharmacy Education

with University of Queensland, University of Sydney,
University of South Australia

NEW IN 2017:

Australia's first integrated Master of Pharmacy

Enhanced doctoral program in Pharmaceutical Science

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Managing Editor: John Palmer

Writers: Harry Azidis, John Palmer,
Melissa Barnes, Mark Easterbrook

Design:

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Photography: Paul Philipson, Greg Ford

Contact us:

John Palmer

Marketing Manager

john.palmer@monash.edu

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*All detail images in this issue
are taken from the Sissons Mural
in Cossar Hall.*

New director for MIPS



New Director of the Monash Institute of Pharmaceutical Sciences, Professor Chris Porter

World-leading pharmaceutical science researcher Professor Chris Porter has been appointed Director of the Monash Institute of Pharmaceutical Sciences (MIPS), taking over from founding Director Professor Bill Charman.

Since its launch in 2007, MIPS has rapidly become one of Australia's most successful biomedical research institutes, attracting significant external, competitively sourced research funding. It has also made a major contribution to the international reputation and ranking of the Monash Faculty of Pharmacy and Pharmaceutical Sciences.

As a research leader, Professor Porter brings significant experience to the role of MIPS Director, having led many of the initiatives that have driven research quality at the institute.

Professor Porter's research group is one of the leading drug delivery groups worldwide, specialising in oral drug absorption, lymphatic transport and nanomedicine. In these areas he has published more than 200 peer-reviewed papers and his work has been cited more than 10,000 times. He's a current Clarivate Analytics Highly Cited Researcher.

As Associate Dean (Research) in the faculty for the past 10 years, Professor Porter has played an essential role in this journey of excellence. His appointment strongly signals the next stage of strategic growth, supporting the continued development and research excellence of MIPS as it cultivates new strategic opportunities and partnerships.

MIPS key to economic growth

A report from the Victorian Government has highlighted two initiatives associated with the Monash Institute of Pharmaceutical Sciences as major contributors to one of Victoria's fastest-growing sectors.

The State of the Sector: Medical Technologies and Pharmaceuticals 2017 report provides an update on the Victorian Government's strategy for the sector, identified as vital to the state's future economic prosperity.

The medical technologies and pharmaceuticals sector is one of eight key sectors receiving support through the Future Industries Fund, employs more than 23,000 people and generates more than \$12.7 billion in revenue each year in the state.

The foreword to the report singles out two major recent investments as crucial to augmenting Victoria's position as one of the world's leading locations for the development and manufacture of medical technologies, biotechnologies and pharmaceuticals: the Medicines Manufacturing Innovations Centre (MMIC) and BioCurate.

Both are initiatives in which MIPS plays a leading role.

The MMIC, a collaboration between Monash, the Victorian Government and pharmaceutical company GlaxoSmithKline, provides Victoria's medicines manufacturers with access to specialist scientific capabilities.

BioCurate, a transformative collaboration between Monash University and the University of Melbourne, focuses on translating drug discoveries into a form that attracts investors or other commercialisation partners.

Friends of the faculty honoured

Two notable individuals were honoured by Monash University in 2017.

Jean-Pierre Changeux, one of the world's most eminent biological scientists, received an honorary doctorate in September.

Dr Changeux, Emeritus Professor at the College de France and Institut Pasteur in Paris, is internationally renowned for his contributions to multiple disciplines spanning biochemistry, molecular biology, structural biology, pharmacology and the neurosciences.

His pioneering studies unravelled a previously unappreciated yet universal mechanism that is fundamental to all life, as well as subsequently contributing to our understanding of the intricate chemical processes that occur in the brain.

Monash University researchers have a particularly special connection with Emeritus Professor Changeux, having adopted his findings on allosteric modulation and extended them to the largest family of receptor proteins encoded by the human genome.

Emeritus Professor Changeux received his honorary doctorate during a September graduation ceremony, before delivering the graduation address.

Bob Blouin, Dean of the Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, received an honorary doctorate from Monash in May.

Professor Robert A. "Bob" Blouin is the Vaughn and Nancy Bryson Distinguished Professor and serves as the Director of the Eshelman Institute for Innovation, which pursues high-risk, high-reward ideas that advance innovation in education, research and health care.

During Dean Blouin's 14-year tenure at UNC, the UNC Eshelman School of Pharmacy has experienced unprecedented growth in its research, education and global engagement programs.

Professor Bill Charman, Dean of Monash Pharmacy and Pharmaceutical Sciences, lauded Dean Blouin's contributions to education and research in the field.

"Dean Blouin has played a leading role in shaping the modern idea of what it means to be a world-leading school of pharmacy," says Professor Charman. "His international outlook and relentless pursuit of excellence have benefited his institution, our profession, our field of education and research, and patients around the world."



Professor Changeux receives his honorary doctorate from Chancellor Simon McKeon



Honorary Doctorate recipient Professor Bob Blouin

Faculty staff recognised



Professor William Charman, Dean of the Faculty of Pharmacy and Pharmaceutical Sciences, has been made an honorary fellow of the Royal Pharmaceutical Society (RPS).

The honorary fellowship recognises those individuals who have attained distinction in their pharmacy careers. As fellowships are based on nominations from members, they signify the esteem in which the individual is held by his or her peers.

Professor Charman's nomination named him as one of the most important and influential pharmacists and pharmaceutical scientists worldwide. He has worked with conviction for better global education in pharmacy and has been vocal at all the important global platforms.

In further honours, Professor Charman has also been reappointed as chair of the International Pharmaceutical Federation Education Initiative (FIPEd) Steering Committee. He was first appointed to the role in 2015 and will continue as chair until 2021.



Professor Thomas Davis has been elected as a fellow of The Australian National Academy of Science.

An internationally renowned polymer chemist and nanotechnologist, Professor Davis is the inaugural Professor of Polymer Nanotechnology for the Monash-Warwick University Alliance.

Professor Davis has been instrumental in establishing Australia as a leading nation in the fields of nanobiology and nanomedicine. His scientific contributions are world-class and wide-ranging, embracing polymerisation kinetics, nanostructured films, nanoparticles, protein conjugates, nanoparticle enhanced bio-imaging, gene delivery and targeted therapeutics.

His election as a fellow of the Academy is a well-deserved recognition of his leadership in these fields and the contribution he has made to Australian science.



Associate Professor Kirstie Galbraith has been awarded an International Pharmaceutical Federation Fellowship.

Professor Galbraith, who is the Director of Monash Pharmacy and Pharmaceutical Sciences' Experiential Development and Graduate Education unit, was one of 11 pharmacists honoured at the recent International Pharmaceutical Federation (FIP) world congress in South Korea.

The fellowships recognise FIP members who have exhibited strong international leadership, distinguished themselves in the pharmaceutical sciences and/or practice of pharmacy, contributed to the advancement of pharmaceutical sciences and/or practice of pharmacy, and who have served FIP.

Taking learning to the EDGE

New unit will enhance experiential learning and professional connections.

Associate Professor
Kirstie Galbraith



Workplace learning is the focus for a new organisational unit within the faculty, covering the learning spectrum from commencing students to advanced practitioners.

The recently launched Experiential Development and Graduate Education unit (known as EDGE) expands on the work of the faculty's successful Postgraduate Studies and Professional Development unit but has a broader remit. EDGE's focus will be on strengthening the connections between education and practice.

This is great news for current and future students, as well as graduates. The primary goal is to improve links across all experiential programs at the faculty and at all points in the practitioner development pathway. A key shift will be increased recognition of the value of lifelong learning. EDGE will be working to create a stronger bridge between the faculty's new undergraduate degree and its pharmacist graduate programs, including the Intern Training Program, Intern Foundation Program and Master of Clinical Pharmacy.

Leading the way for EDGE is Associate Professor Kirstie Galbraith, an international expert in practitioner development.

"EDGE is designed to cater to the changing reality of the pharmacy workforce," says Associate Professor Galbraith, "and to better reflect the nexus between experiential development, education and ongoing practitioner development."

The change has been prompted in part by the launch of a new course within the faculty, the Bachelor of Pharmacy (Honours)/Master of Pharmacy. A key feature of this course is early and enhanced experiential training.

The establishment of EDGE is also a response to recent initiatives from the International Pharmaceutical Federation (FIP), which in 2016 ratified 13 global Pharmaceutical Workforce Development Goals. Five of these goals have a specific focus on professional development of the pharmaceutical workforce, and provide strategies to strengthen health systems in improving patient care.

Associate Professor Galbraith is excited about the potential of EDGE. "This new approach will enable a stronger focus on collaborations with workplace partners," she says. "We can better recognise the contribution they make to experiential development, and it ensures our students have a much richer appreciation of the context in which their learning is to be applied."

"For our preceptors and clinical educators it means greater insight into students' skill development, and for our students it ensures exemplary preparation for internship and registration."

Students enrolled in programs at the faculty will have a seamless pathway throughout their undergraduate program and internship, and into practitioner development pathways supported by graduate master's programs.

Practitioners interested in being part of this important work can register their interest at pharm.EDGE@monash.edu

“I was so inspired by the work, facilities and research undertaken by Monash that I took the opportunity to be employed as a scientist with MIPS.”

Sally Sim

Graduated, but not gone:

Alumni discuss the benefits of staying in touch with the faculty.

Just because you've graduated doesn't mean your university days are behind you. There's a number of ways alumni can benefit from engaging with their alma mater. We spoke to 11 former students from across the years who've found that staying involved has enabled them to develop professionally, provided access to resources, stimulated them intellectually, or simply provided a great way to reconnect with their old friends.



The employee

Sally Sim, BPharmSci (Hons), class of 2009

Monash has been a big part of my career progression. I specialised in formulation science. I chose a career in industry through my research at Monash University, where I received an industry placement as a student with GlaxoSmithKline (GSK).

My honours project was designed as a collaboration between the Monash Institute of Pharmaceutical Sciences (MIPS) and GSK to optimise drug delivery by targeting both formulation and device designs.

In achieving this, various dry powder inhalers were tested and powder fluidisation and their impact on dose delivery were examined. Powder formulations were also modified to improve understanding of the effects of each formulation on the performance of these devices. All this contributed to important research that could potentially save lives.

I continued my work as a research assistant/analytical chemist for MIPS, in collaboration with GSK, for the Department of Drug Delivery, Disposition and Dynamics Centre of Innovation and Industrialisation. I then worked at GSK as a project validation officer.

I was so inspired by the work, facilities and research undertaken by Monash that I took the opportunity to be employed as a scientist with MIPS. My current position is as a research officer/lab manager with the Medicines Manufacturing Innovation Centre (MMIC).

As a Monash pharmaceutical science graduate, I certainly benefited from the faculty's industry collaborations on real business projects. The MMIC was established this year as a partnership between MIPS and the Victorian Government. My role involves managing the new MMIC research laboratory in Parkville and working with a variety of business customers looking to export from Victoria.



The preceptor

David Harris, BPharm (Hons), GradCertPharmPrac, class of 2012

Preceptorship involvement provides a range of continuous self-education opportunities. Monash offers leadership programs, feedback programs and all sorts of learning development skills designed to help support the way you supervise students and interns.

Monash provided excellent moderating support with the use of online practice sessions and regular meetings so you're well aware of all the expectations. There is valuable on-call support, which is great when you're combining this with the demands of full-time work. There are seminar days, and staff are always open to feedback from a clinical point of view – it's a good way to introduce practical experience and problem-solving skills into the course.

A preceptor is generally an allocated one-on-one educator and mentor. While I did precepting, I don't manage any one student now, but I have preceptors that I manage, liaise with and support.

Medicine is such a rapidly changing area. Acting as a preceptor you get to keep up to date with new products, legislative changes and guidelines. For example, a new advanced inhaler for asthma or emphysema, not seen in my current practice, needs to be evaluated and researched before teaching students. This results in greater exposure to new practices in pharmacy. It's a good way of maintaining your own practice beyond the hospital environment.

My connection with the University has brought about tremendous opportunities. I've always been interested in being an educator. It helped being involved with Monash where the lecturers remember you as a student. I did a placement at the Austin, a hospital Monash placement, followed by an internship and then progressed incrementally from there.



Networking through Monash has become more productive. Now that my role at the Austin is education-based, I've gotten to know the faculty's Professor Tina Brock, who is originally from the USA. Through her I got in touch with her colleague and visited a hospital there. I got to see different ways of teaching and some new technology. It probably gave me an insight on things to come here.

Another opportunity that my studies and learnings have granted me was to present at the Indonesian Hospital Pharmacy Conference in Lombok, helping to globally improve pharmacy services – in particular, hospital manufacturing services and clinical pharmacy in psychiatry.

I love and adore precepting, giving students and interns opportunities I never had when I studied, and to have a positive supportive influence on the pharmacy practice. My involvement with the program has helped me with my communication styles, time management, presenting skills and gives me the chance to reflect on my own practice with current teachings at Monash.

David Harris works as the Intern and Student Placement Program Coordinator for the Austin Hospital, and works directly with patients and health care professionals as a clinical pharmacist.



The Internship Foundation Program (IFP) preceptor

Jeff Davies, BPharm, class of 1978

The opportunity to be an IFP clinical educator with Monash was unexpected but tremendously fulfilling, and I've enjoyed every minute of it.

I've been aware of Monash University and remained in contact over the years, so it's nice to be called upon for such opportunities.

The ability to help and influence students early on at the internship stage gives you great satisfaction.

The IFP is a really interesting and a valuable accreditation component. As part of the IFP, the intern will work in a Monash Credentialed Workplace, be supervised by a Monash Credentialed Pharmacy Clinical Educator and work through Monash Credentialed Workplace Learning. The University offers the clinical supervisory online training program and equips you with the tools and rubric measurements to help with assessments for the IFP.

You get to learn about the way you teach and present, and the way interns learn and process things, so it's intellectually stimulating. The program is in its second year. While the interns do more work than students who are not undertaking the IFP, we are trained to support them and to make it doable.

Communication is a big part of what we do. You have to like people and learn to build a connection with patients. By empowering patients with knowledge, they become grateful. All interns have something to offer.



They work hard and come to us brimful of knowledge. We want to encourage them to use it. I'm also trying encourage the interns to drive the feedback from their supervisors. It's enriching that you can use your knowledge and experience to help guide interns. Sometimes I see at least five or six students that I have interned acting as Pharmacy Board examiners, which is amazing.

I was a graduate when it was called the Victorian College of Pharmacy. Back then it was all lecture theatres and labs, but nothing like the high-tech learning labs currently on offer at the Faculty of Pharmacy and Pharmaceutical Sciences. While I've been in the same job for 40 years, opportunities such as the IFP credentialing make each year refreshing and different – I never get bored.

Jeff Davies has a longstanding affiliation with Monash University. He is an IFP clinical educator, supervised for the Internship Training Program, and sits on the faculty's Postgraduate Pharmacy Practice Advisory Group Committee.

The graduate student

James Polmear, MCLinPharm, class of 2015



Graduate study really accelerated my career. I now feel more confident in my research and decision-making abilities. I did my master's over two years as part of a concurrent fellowship with the Alfred Hospital, looking at creating pharmacy specialists. Not only does it look good on your CV, coming out of a master's degree I developed more skills – you become more of an expert clinician, especially in clinical pharmacy.

Monash was quite supportive of the process, as I was part of the first-year pilot program. The fellowship looks at developing future leaders as pharmacy experts. It was a lot of work to get through, but you really reap the benefits career-wise for the sacrifice.

A master's gave me greater knowledge and understanding of the scientific literature but also how to apply it to everyday work conditions. Given that it was a clinical-based degree, the idea was not so much to learn everything there is to know, but learn how to apply the evidence that's out there. How to access and understand the literature helps in making decisions – it becomes part of your work. Some decisions can be daunting, but you make them regularly so it becomes the norm.

"I find teaching rewarding – it makes me feel good to share my expertise and see how students are developing in other areas."

I'm responsible for the direction and maintenance of the clinical pharmacy service across Barwon Health. Clinical pharmacy services are spread across three sites and consist of approximately 40 pharmacists.

I was encouraged by my interaction with the University. I'm also a teaching associate for Master of Clinical Pharmacy, and Chair of Monash University Master of Clinical Pharmacy Advisory and Stakeholder Committee, as well as a Master of Clinical Pharmacy student mentor.

I find teaching rewarding – it makes me feel good to share my expertise and see how students are developing in other areas. You're learning from other people too, and I'm looking forward to marking some of the research papers to see what developments are happening – it's like a self-motivating way of ongoing learning and development, a good way of keeping updated and being involved.

I feel lucky to have fallen into what I have done, but in the work environment today a master's has definitely become the requirement.

James Polmear is Associate Director of Clinical Pharmacy at Barwon Health. He completed a Master of Clinical Pharmacy at Monash University and a Clinical Pharmacy Fellowship specialising in general medicine at Alfred Health.



The connector

Jenny Chen, GradCertPharmPracInt, class of 2014

I attended the Pharmacy Education Symposium 2017, in Prato, Italy. It was a collaborative opportunity to share and discover best practice with colleagues committed to better pharmacy education and improved global health.

It was a great opportunity to connect further with the faculty and my peers. As a clinical educator, networking with local and international academic members of pharmacy was a valuable experience. Out of Prato, my name came up to help out with an alumni panel for the faculty's Open Day event to inform potential students of the possibilities with a pharmacy degree and about my own career path.

I completed my Graduate Certificate in Pharmacy Practice (Internship) and am in the process of completing the Master of Pharmacy Practice with Monash University. I have had a number of years of clinical experience across areas such as general medicine, surgery, specialty medicine programs, intensive care, as well as experience in clinical trials.

I now work as the Senior Education and Training Pharmacist at Eastern Health, developing workplace training programs and supporting the professional development of pharmacy teams, ranging from undergraduate students to pharmacy fellows.



I feel strongly connected and engaged with Monash as one of its official clinical educators. I coordinate pharmacy student placements across five Eastern Health campuses for Monash University and other education providers. I also work closely with the Monash Intern Training Program and Intern Foundation Program teams to support the training for intern pharmacists.

I enjoy mentoring and working with junior pharmacists, interns and students, and seeing them grow in their confidence, skills and knowledge makes this role highly fulfilling.

Jenny Chen is the Senior Education and Training Pharmacist with the pharmacy department of Eastern Health.



The Employability Week partner



**Dr Matthew Crum, MPharm (Hons), Sunderland, UK;
PhD Pharmaceutical Science, Monash, class of 2016**

When I was a PhD student at Monash, I assisted with a student tour to Pfizer, and now I work here on the Professional Development Program (PDP). I'm presenting a similar Employability Week presentation to the one that was given when I visited the site to the current Monash students.

There are many ongoing networking benefits by remaining connected to Monash University. Partaking in Employability Week is a good opportunity to access new talent, which is difficult once you're out of the university environment. It's also a good way for me in the pharmaceutical industry to connect with students and give something back from my own experiences and learnings. I work with many faculty alumni on this site – which shows Monash helped them develop the right skills set to fit in here.

I was one of the first here and I'm now in my third rotation of the PDP. As part of the program, I'm involved in the interview process for prospective PDP scientists, which I think is important for leadership development. With Employability Week, we invited the students onsite to see our research activities, our laboratories and hear from senior leaders about their personal experiences and professional development pathways.

Getting students job-ready with critical thinking skills and building on communications skills is a key part of Employability Week. It's not just achieving top marks, but developing communication and basic soft skills are vital.

The reputation of Monash and the faculty really helps with employment opportunities. While there are all these opportunities and great lecturers, I also learnt from Monash that you need to be proactive to make the most of opportunities.

As a university, I found Monash to be very inclusive – you see collaborations across all disciplines without the hierarchy structure. At Monash, you work with students from a diverse range of cultures, and this has been useful working in an international biopharmaceutical company such as Pfizer.

Matt Crum is a PDP (Professional Development Program) scientist for Pfizer Melbourne.

“Getting students job-ready with critical thinking skills and building on communications skills is a key part of Employability Week.”



The mentors

**Simon Furetti, BPharm, class of 2010;
MPharmPrac, class of 2016**

When I started as a pharmacist I had a great support network and wanted to provide that to others. For me, being involved in mentoring is professionally rewarding in part because it keeps me connected to the University and in contact with many up-and-coming young pharmacists.

I actually dislike the word mentor – it's simply a supportive relationship. Each person is motivated differently and all you do is help them make the right choices for themselves. It's more about clarifying in their mind about the reasons behind their proposed career paths. For example, some people are unsure about community pharmacy because it may not be clinical enough and then think about hospital pharmacy as an alternative. What I try to do is help them identify why they think it would be better and if they're doing it for the right reasons, then I would help connect them to a hospital pharmacist for a different perspective.

At Monash, my lecturers were a big influence as quasi-mentors. They have been supportive with their opinions for some of my ideas and set me on the right path. Monash has given me many good opportunities. You don't succeed on your own; it's important to give something back to the University through mentoring your future peers.

“I actually dislike the word mentor – it's simply a supportive relationship.”

Pharmacy is a profession where you may feel unrewarded because you might not receive a lot of positive reinforcement from patients. I try to instill into people that they're doing good, valuable work and encourage them to be proud of their profession – many have had the same concerns that I had. A big focus for me is to improve the profession where possible and ensure its sustainability. Who knows, I may even go on to do a PhD.



Simon Furetti is a director of the Pharmacy Improvement Centre Ltd, a teaching associate in the Postgraduate Studies and Professional Development unit at Monash University, and a member of the Master of Clinical Pharmacy Course Advisory Committee.



**Dr Carol Gee, BFormSci, class of 2006;
PhD, 2011**

For me, mentoring is a good way of going back and connecting with the University. I really enjoy it.

My previous role with Monash as a demonstrator, tutor and exam marker has helped me build a good foundation to be mentor. As someone who has been in their shoes, I know students have a lot of questions about their future career path.

As a formulation scientist, I reverse-engineer a product currently selling on the shelves by a competitor to develop a generic version.

The purpose of this is to add value to an existing product and release it into the market as soon as the innovator patent expires. My day in the office involves equal time desk work and lab work but changes depending on the status of a project. It's a challenging and dynamic role, as I'm constantly learning and doing different tasks every day. After all, the world of science of endless.

Dr Carol Gee is a formulation scientist at Pfizer. She has experience in parenteral product scale up to manufacture, and process development.



The reunion attendees



“Reunions help us feel connected to what is happening with the faculty, and we are impressed that it is No.2 in the 2017 QS World Rankings by Subject.”

Geoffrey Oscar AM, PhC, class of 1954

Reunions provide a great social benefit for us. They're an opportunity for us to get together to enjoy our stories and reminisce about what we've done. Beverley Gorr (one of the 30 women enrolled in my year) has been organising most of the reunions since graduation. We've had very good times in our career and had guests travelling from as far as Canberra and regional Victoria, who said they wouldn't have missed it. The faculty helped by offering the venue on campus for our Class of 1954 reunion.

The reunion was held at Cossar Hall, which hosts the magnificent Sissons Mural, symbolising the long, historic journey of pharmacy, and we feel a part of that ongoing legacy. Pharmacy gave us our Pharmacy College and gave us our career – it's appropriate that we started at 360 Swanston Street with ATS Sissons as Dean, and then many years later have our reunion in front of the Sissons Mural in the amazing world-class campus at Parkville.

The Faculty of Pharmacy and Pharmaceutical Sciences is built on a foundation of collective building blocks from where we came from. Although we didn't go through the Parkville campus, we like to regard ourselves as being part of it anyway because we're pharmacists; we studied pharmacy, and this is now the home of pharmacy in Victoria.

If you are interested in holding a reunion and would like faculty support, please get in touch via pharmacy.alumni@monash.edu

Our profession has changed and I think we herald the finish of an era. Our textbooks related to the art of pharmacy. We were exposed to all sorts of chemicals and formulations, where Latin terms and extemporaneous dispensing were the norm. We saw how the introduction of new pharmaceuticals, such as the birth control pill, pretty much revolutionised society.

Reunions help us feel connected to what is happening with the faculty, and we are impressed that it is No.2 in the 2017 QS World Rankings by Subject. Pharmacy has moved on from being an art to a specialised science. At our reunion on the campus, you only have to walk around the faculty to exactly understand how things have advanced, with all the new technology and research.

Geoff Oscar served as President of the PSV, the Victorian College of Pharmacy, and was the first President of the Pharmaceutical Society of Australia. Geoff married his classmate Enid and owned a pharmacy for 27 years. He had a successful career in state and local government, since serving on numerous state and community-based boards and committees.

Kavita Nadan, BPharm, class of 2007

The 10-year reunion is truly a milestone for us. I hadn't really engaged with the University prior to the reunion, apart from our intern intake, but it's something I'm happy to consider. Reunions are an exciting time; we were like a family when we studied together.

We still keep in contact with each other on social media, but the reunion is a good way to see what everyone is up to, how they've progressed and what they've decided to do with their lives, besides their career.

I'm part of the Advantage Pharmacy Group and I'm a partner in a store in Endeavour Hills. I have a good work/life balance since maternity leave, working four days a week. I've been here since I graduated and gradually progressed since through the group, and eventually bought into it.

We have a strong internship intake from Monash – my Monash intern from last year is now working for us. Most of our students come from Monash. The faculty was a great help with email invites and getting the ball rolling for the reunion. Other alumni, John Ly and Linda Kervorkian, mainly organised it all, and I helped a little also.

It was pretty cool to have one of our former lecturers there just to hear about how the faculty has progressed and changed. It's also interesting to catch with the lecturers as a non-student, to get some insights into what they thought of our year level. We were all like a close-knit family. For example, my pharmacist in charge at work, Mark, is also from the class of 2007. The reunion was a great way of getting updates about Monash and a fun catch-up with all the others.

Kavita Nadan is part-owner of Chemist Discount Centre, Endeavour Hills.



The Senior Pharmacists' Network member

Val Constable, PhC, class of 1954

As a graduate of the Victorian College of Pharmacy, I feel we benefited since its merger with Monash University 25 years ago. Monash has been so welcoming and inclusive where we have been invited to all sorts of alumni events as friends and supporters of the faculty.

We have a dedicated website for Senior Pharmacists' Network alumni events to see what's coming up. We were invited to the 3MT Three Minute Thesis competition, where we saw students explain their varied and wonderful research in just three minutes! We enjoy these events.

I was the first female President of the Victorian Branch of the Pharmaceutical Society. Today I'm very much involved with the Pharmacists' Support Service (PSS).

Volunteer pharmacists take calls from pharmacists, interns and students who are in distress for any reason, including those feeling stress during the transition from intern to pharmacist. We provide a listening ear, support and counselling in a non-judgmental, anonymous and empathetic way. There are some great online resources, links and useful coping tools on the PSS website. It's a great service but needs more financial support.

Pharmacy has changed over the years and all the different cultures involved have added to it. My husband, Bob, was also a pharmacist. We worked together at our pharmacy in Pascoe Vale for 36 years and employed many trainees who came from all parts of the world.



“Pharmacy has changed over the years and all the different cultures involved have added to it.”

We also partnered with a Vietnamese-speaking former trainee to open a pharmacy in Footscray. The diversity of students accessing the faculty today adds to the broader pharmacy family.

I don't think many alumni are aware of the benefits – I am happy being part of Monash and its support with organising our Senior Pharmacists' Network. I really appreciate how inclusive the University has been to us from the former college – I think it has been amazing!

Val Constable is a fellow of the Pharmaceutical Society, an opportunity shop volunteer and sometime navigator for her daughter, who is a wildlife rescuer and transporter.

Research *with* IMPACT

Recent highlights from MIPS and CMUS

MIPS research sparks major change in editorial policy

Monash University drug discovery research has led to a change in editorial policy of the world's largest scientific society, in a move that could save government and industry millions of dollars a year in preventing dead-end research.

Research by Monash Institute of Pharmaceutical Sciences' Professor Jonathan Baell identified key types of compounds that can create false positives in early-stage research. These false positives can lead to researchers wasting many years optimising promising-looking drug candidates that can't be developed into drugs for the disease they were designed to treat.

His research was originally published in the *Journal of Medicinal Chemistry* in 2010, and *Nature* in 2014. Recently, in an effort to alert the scientific community to this problem, and prevent more researchers going down blind alleys, the American Chemical Society (ACS) announced a stringent and uniform editorial policy across all its journals. It will no longer publish research containing the misleading compounds identified by Professor Baell and his co-authors.

With almost 160,000 members, the ACS is the largest scientific society in the world and publishes many of the most-cited journals in the chemical and related sciences.



Game-changing strategy for chronic and acute pain relief

MIPS researchers have developed a new drug delivery strategy able to block pain within nerve cells, in what could be a major development of a long-lasting and immediate treatment for pain.

About 20 per cent of Australians suffer from chronic pain at some point in their lives. This percentage is expected to grow, driven by the increased life expectancy and increasing incidence of diabetes and cancer, combined with better survival rates, often leaving patients with severe and poorly treated pain. The global market for nerve pain treatments is more than US\$6 billion and yet current pain therapies are incompletely effective and often result in unwanted side effects.

The research, published in the journal *Science Translational Medicine*, reveals how a target protein long known to be associated with both chronic and acute pain works within the nerve cell. This protein is the NK1 receptor, the receptor of the neuropeptide substance P, which mediates pain transmission.

Because of its association with pain and other diseases of the nervous system, many drug development attempts have focused on inhibiting this receptor, but the efficacy of these treatments has been very limited. This new work shows that such ineffectiveness could be in part because the treatments targeted the protein on the surface of the nerve cell.

Dr Michelle Halls and Dr Meritxell Canals, from the Monash Institute of Pharmaceutical Sciences and the ARC Centre for Excellence in Bio-Nano Science (CBNS) at Monash University, have worked with Professor Nigel Bunnett, previously at Monash and now at Columbia University in the US, and Professor Chris Porter (MIPS/CNBS). Together they have found that the NK1 receptor controls pain once it is inside the cell, so drugs that merely block it when it is on the surface of the cell have little efficacy. Instead, this new research shows that, in animal models, if the NK1 receptor is blocked once it enters the nerve cell, it is possible to suppress pain more effectively.

Dr Halls said that the new strategy of "targeting receptors inside the cell represents a new frontier in drug delivery and a novel therapeutic strategy for dealing with pain".

Working with a multidisciplinary team of cell biologists, pharmacologists, physiologists and drug delivery experts, the researchers developed drugs that specifically target NK1 receptors within the nerve cell. Animal studies showed that using the drugs – which have an engineered lipid attachment that targets the drug to the NK1 receptor inside the cell – could block pain for extended periods in several animal models.

According to Dr Canals: "This is a proof-of-concept study that shows that we can re-engineer current pain drugs and make them more effective. The challenge is now to translate the technology into human clinical trials. This is a complex and challenging path – but the ultimate benefits to patients with nerve pain are potentially highly significant."

"Every year, more than 300,000 women in low and low-middle-income countries die during pregnancy and childbirth."



Inhaled oxytocin succeeds in first trial in humans

The first-in-human study of a new, inhaled form of oxytocin developed at MIPS has been successful. The results open the possibility of a streamlined pathway to registration, meaning that the medicine could be accessible to mothers much sooner than would otherwise be possible.

The study demonstrated, in a small cohort of non-pregnant female volunteers, that the effects that inhaled oxytocin has on the body are not meaningfully different from its injected counterpart. This gives confidence that the inhaled form of oxytocin will deliver similar effects in prevention of postpartum haemorrhage (PPH) when given to mothers immediately after giving birth.

The results present the possibility that the new medicine will be able to take advantage of a streamlined pathway to registration, meaning it could reach the mothers who need it much sooner.

Every year, more than 300,000 women in low and low-middle-income countries die during pregnancy and childbirth. PPH is the single-largest cause of these deaths.

PPH can be prevented by administering oxytocin, which is recommended by the World Health Organisation and is widely used in wealthy countries.

However, as an injection, oxytocin requires refrigeration and a skilled medical professional to administer it safely. In low and low-middle-income countries, one or both of these requirements may not be available.

To address this unmet need, researchers at MIPS, in collaboration with GlaxoSmithKline in London, which sponsored the study, have been developing an inhalable, dry-powder form of the medicine.

The study was conducted and funded by GSK, with Monash support funded by the McCall MacBain Foundation, the Planet Wheeler Foundation and Grand Challenges Canada, and the government of Canada.

New framework promises to improve medicines access

A new proposed framework designed by researchers including CMUS Director Professor Carl Kirkpatrick bridges the disciplines of pharmacology, epidemiology and health economics to allow meaningful dialogue between industry, regulators and payers. Ultimately this will create better outcomes for everyone.

Traditional models of drug development have not been ideal for either patients or payers. In the model employed in most of the world, drug development is considered complete when regulatory approval is attained. This arrangement has not proven ideal for payers, who have been obliged to provide reimbursement with little influence on what they were receiving or whether they chose to accept it.

An alternative arrangement, currently being employed in Europe, requires patients to wait for developers to navigate the payer landscape before the new medicine becomes available. This can take up to two years – an unacceptable delay where lifesaving medicines are concerned.

Professor Kirkpatrick's collaborators include faculty alumnus Dr Craig Rayner from Certara, a leading drug development stewardship organisation, along with a team of international collaborators from pharmaceutical industry, consulting agencies and academic institutions. Together, they have designed a quantitative framework called Pharmacology to the Payer ("P2P") that has the potential to address these concerns.

Drawing upon pharmacology, epidemiology, and health economics, P2P supports meaningful dialogue between industry, regulators and payers, bridging the gap between different competencies and motivations.

While the P2P framework to date has been applied to indications in infectious diseases, this approach is readily expandable to other acute and chronic diseases. The approach may inform early target product profile (TPP) requirements for investigational drugs, procurement strategies, and strategic pricing and deployment decisions, including combination with adjacent non-therapeutic interventions.

Should the framework withstand stakeholder scrutiny, it offers sponsors the possibility of earlier certainty of a path to market and business case, and earlier revenues through "provisional pricing".

Regulators would get earlier alignment with regulatory requirements, and payers would benefit from earlier alignment with reimbursement requirements and opportunities to risk/cost share.

And finally – and most importantly – it would give patients earlier access to new medicines.

A pharmacist *for the environment*

Grace Wong
BPharm, MPH AACPA MSHPA, class of 2012

Grace Wong is the founder of Pharmacists for the Environment Australia (PEA), which is committed to advocacy and promotion of sustainable pharmacy practices for better human and planet health.

The Parkville campus was a memorable and enjoyable time for Grace. “I fondly look back on the day-long practical sessions in white lab coats, Dr John Hurley’s colourful handwritten overhead projector slides, having semester exams in Cossar Hall, and all the crazy University balls.”

After graduating, Grace worked in regional Victoria before moving to Melbourne to work in hospital-based Home Medications Reviews (HMR). “This is a comprehensive clinical review of a patient’s medicines in their home by an accredited pharmacist. It was a good opportunity to safely dispose of any unwanted or expired medicines.”

Grace travelled overseas, working as a pharmacy technician in the UK. She then returned to Monash as a sessional tutor for the Graduate Certificate in Pharmacy Practice.

“A Master of Public Health opened up a whole new perspective on career opportunities. I did volunteer work that was confronting but a good opportunity to use the skills obtained from my master’s.

“I volunteered for Calcutta Rescue, a not-for-profit organisation based in West Bengal, India, where I was involved with the organisation’s medicines procurement system and clinical work with the medicine team in the slum areas of Kolkata.

“I also worked in the Northern Territory as the renal pharmacist for Central Australia, managing the needs of dialysis patients in the Red Centre. It was a stark reminder of the health disparity that exists in our country and the crucial role pharmacists play in remote and regional areas.”

Returning to Melbourne with a broader outlook on the world, she founded PEA. “I was nominated as ‘Green Champion’ for the Western Health Pharmacy Department, and involved in our Five-Year Sustainability Action Plan. This led me to start PEA, to be able to reach pharmacists beyond my workplace.”

PEA looks at what practical and tangible environmental solutions we can commit to in the pharmacy profession. “Going to India, I saw first-hand the environmental and human health consequences of pharmaceutical pollution.

“The chairman of one of the world’s largest drugmakers, recently interviewed by Reuters, said: ‘Pollution from antibiotics is causing antimicrobial resistances. Antibiotic concentrations in effluent from a treatment plant used by drug factories were higher than would be expected in the blood of patients undergoing a course of treatment.’”

Grace has shared with us some of her top tips for ways pharmacists can minimise their impact on the ecosystem.

Grace’s five top environmental tips

1
2
3
4
5

Talk to your suppliers, find out where the pharmaceuticals are coming from and the impact they are having on the environment. There should be a criterion of sustainability to win tender for suppliers.

Wastage and packaging. We need to do more about non-recyclable waste such as soft plastics. I’m also canvassing for ideas on what to do with non-recyclable foam fridges used to transport medicines.

Go paperless and electronic with your drug charts and prescriptions.

Stock control is important, but keep a balance of having enough without overstocking. Manage your inventory appropriately. Be wary of expiry dates, defective packaging and wastage from refrigeration or power failures.

Returned Unwanted Medicines (RUM) is a free service for disposal and incineration. Pharmaceutical pollution is a big issue.

Grace Wong



When *opportunity* knocks

Jessica Bailey
2017 Australian Pharmacy Student of the Year

Jessica Bailey has always had a passion for people and health care. As a strong performer in mathematics and chemistry, she completed first-year university chemistry while still in Year 12 as part of the Monash Extension study program.

With a number of options available to her, career flexibility is what ultimately drew her to pursue pharmacy. When Jessica started university in 2014, a decision to step out of her comfort zone set her on a path that has created some exciting personal and professional opportunities. “We were the only first years there, but I met a girl who was looking to hire someone, and it’s where I got my first pharmacy-based job. I still work there now,” she says of her decision to go on a club pub crawl in her first semester of first year.

This chance encounter made her realise there were so many opportunities to be had as a student if you were willing to put yourself out there, so she became involved with clubs on campus. She signed up to the Victorian Pharmacy Students’ Association (“the VPSA”), starting as assistant treasurer in her first year, progressing to education officer and then vice-president. Jessica believes that being involved allowed her to form networks not only with her fellow students, but also with staff and industry. As well as various roles in VPSA, Jessica has also been involved with the faculty as a mentor for incoming students, helping them navigate their way through transition from high school to university.

Despite moving out of home to live at the local residential college, Jessica wasn’t content to stay still for long and took up an intercampus exchange in the second semester of her second year. “I always wanted to go on exchange. When I heard about the Malaysia-Australia intercampus exchange, I thought, why not?” She spent a semester studying in Malaysia in what she said was a real eye-opening experience, immersing herself in the Malaysian culture and way of life, and living with other exchange students from around the world, creating long-lasting friendships that have afforded her many more international experiences.

By that stage well and truly bitten by the travel bug, Jessica then reached out to a pharmacist in the UK – who she didn’t know – to find out about pharmacy practice in the UK, which in turn led to her undertaking a placement at King’s College as part of her program.

On returning to Australia, Jessica continued to take up any opportunity presented to her. This included completing a summer research project, on the development of novel irreversible biased agonists for the adenosine A1 receptor, under Dr Lauren May. Working on this project allowed Jessica to present her work at the International Conference of Undergraduate Research, which she regards as a career highlight – not only being involved in an international event, but presenting her work to researchers across various disciplines.

When asked about her Pharmacy Student of the Year win, Jessica laughs at how she applied for the counselling competition just to practise for her exit OSCE, so it came as a surprise when she made it to the Victorian finals. After success in the Victorian finals competing against students from RMIT and LaTrobe universities, she was able to take time out from her rural placement to attend the national conference PSA17 held in Sydney in July, where she competed in the final and won.



Jessica found presenting in front of an audience to be a nerve-wracking but amazing experience. “I just wanted to go and say something coherent and beneficial, and then I ended up winning!”

In addition to her studies, Jessica is working on the PharmAlliance project, assisting with establishing a student platform to nurture relationships between Monash University pharmacy students and students from our partner institutions, University of North Carolina and University College London. She’s also recently accepted an internship at The Alfred Hospital, a position she’s keen to start.

She credits the mentorship she’s received throughout her time at Monash as a huge part of her success – “individuals are very passionate to share their knowledge and expertise – adding that she’s received mentorship not only from academic staff but also from her peers. “They’ve been really helpful with applications for things like internships and discussing future options.”

The future’s bright for Jessica, and while her priority now is completing her internship, she’s excited there are so many opportunities available to her; she’s considering a residency, an overseas posting and research all as viable options.

A final word from Jessica as to how to manage it all: “It’s challenging, I can’t deny that, but you never know what opportunities exist unless you put yourself out there.”



Super pharmacists *providing super care*

Meet three alumni who are changing the face of community pharmacy.



“Around 30 per cent of Supercare Pharmacy visitors would have gone to hospital if the pharmacy or nursing service had not been available.”

Monash Pharmacy and Pharmaceutical Sciences and its predecessor, VCP, have a long history of educating the future leaders of the pharmacy profession.

Here we profile three pharmacy alumni who have played key roles in piloting Victoria's new Supercare Pharmacies, which are open 24 hours, seven days a week.

The program has been so successful that it will increase to 20 Supercare Pharmacies, from an initial pilot group of five.

According to the Victorian Government: “... since July 2016, there have been more than 81,000 visits to Supercare Pharmacies between 10pm and 7am. There have also been more than 5000 episodes of care provided by nursing staff. Around 30 per cent of Supercare Pharmacy visitors would have gone to hospital if the pharmacy or nursing service had not been available.”

Peter Fell managed a 24-hour store in Ballarat. He is now Pharmacy Clinical Advisor, Deputy Operations Manager of UFS Dispensaries, a not-for-profit, community-based organisation running 19 pharmacies, mainly throughout Western Victoria.

Peter said the new pharmacy far exceeded his expectations about the impact on consumer shopping habits.

“We were an extended-hour store anyway, but we saw a significant growth since our further extended shopping hours – it was substantially busier.”

“There are additional obligations of clinical compliance, KPIs to meet and statistical data recording. It's challenging to manage, but it's a nice problem to have and a good business model that suits the regional area.”

UFS is looking at additional programs for sleep apnoea and immunisation, along with ‘complementary’ medicine.

“We have very good staff and a good supply of over-the-counter products. This combination, with our longer hours, certainly increased our business.”

Now that Peter is in a different role and has a bird's-eye view of the various UFS stores, he says “there is really no place for a cookie cutter approach in this industry if you aspire to provide excellent health care and service to your community, as the demands and demographics of each store are different.”

Jane Mitchell is co-owner of Ascot Vale Supercare Pharmacy with Dimitra Tsucas.

Jane's grandfather owned a pharmacy, and she trained as a pharmacist at the Ascot Vale pharmacy, where she's spent her entire career – she loved the pharmacy so much, she bought into the business.

The pharmacy has an after-hours nurse onsite from from 6pm to 10pm. Jane believes there's a need for this service. “Sometimes these hours are the only times people can get here.”

The store aims to embrace medicine and pharmaceutical care, and also expand to support illness and disease prevention with a focus on a more personalised and preventative method of care. “We have a vision to make it more of a professional pharmacy service, employing pharmacists with unique specialised skills such as clinical pharmacy, wound care or diabetes education.”

“Opening 24 hours gives us more exposure and enables us to draw on a greater pool of talent, offering up to 12 professional services. We're getting positive feedback and word-of-mouth recommendations coming in,” says Jane.

“The pharmacy industry faces many challenges in a dynamic industry – we can see how some of our alumni have adapted these changes into opportunities that benefit customers.”

Peter O'Connor, a pharmacist with a legal background, is the proprietor of Carnovale Supercare Pharmacy in Yarraville.

He understands the impact of events such as thunderstorm asthma can have on people as they are desperate to seek relief. “I've experienced thunderstorm asthma before, so I rushed out to get more ventolin inhalers. When I got back with boxes full, I got applause from customers queuing out into the street. It was a terribly busy time,” says Peter.

“Customers were receptive to the new-concept stores. They felt looked after in the western suburbs. They were keen to sign any supportive evaluation forms because they don't want to lose this kind of service.”

Peter confirms there are more challenges to maintain the compliance and statistical data, but it definitely fits with the business model. “So many people do shift-work now, and it suits people's shopping habits. Sometimes people have sick children at all sorts of hours. I've left work at 1am and seen the customer carpark full. Consumer shopping habits have definitely changed – and we're obviously accommodating that demand,” Peter says.

“I've experienced thunderstorm asthma before, so I rushed out to get more ventolin inhalers. When I got back with boxes full, I got applause from customers queuing out into the street. It was a terribly busy time.”



Professor Tina Brock

Course Director Update: BPharm(Hons)/MPharm

News from our #pharmacistsintraining

By the time you read this, we'll be almost ready to launch the second year of the BPharm(Hons)/MPharm course, affectionately called the VIM, for "vertical integrated master's" and synonymous with the energy and enthusiasm the course conveys. As our P1 pioneers (first-year students) move up to P2 (second-year student) status, they will once again be forging new ground as pharmacists in training. We thank our staff, alumni and community partners for supporting the first year of this exciting journey.

"We hold the VIM instructional model D.E.A.R. in our hearts."

Remember when going to class meant sitting quietly in lectures and completing pracs on your own? If so, you would find today's learning environments noisier and more collaborative. For each unit, our students spend two hours in preparation (Discover), two hours in interactive lecture (Engage), and two hours in workshop (Apply). Following this, they upload evidence of skills development from the weekly workshop activities and use this to write a personalised learning plan (Reflect). Their plan is reviewed by a skills coach – either an academic or a practitioner – and from the feedback provided by their coach, the students commit to a measurable action.

This model is time and staff-intensive, but our preliminary evaluation suggests that we're on the right path. And we know that not only because of their exam scores, but also because of how they're performing in simulated and actual practice – more on that below. For a contemporary look at a day in the life of a Monash Pharmacy student, check out this video created by our students: <https://vimeo.com/235461251/074aa85f66>

"The OSCE was the knot on the string that really tied everything together for me, as it really helped me consolidate all my acquired skills from my workshops." **P1 student**

To demonstrate their counselling skills in a simulated setting, the P1 students participated in Objective Structured Clinical Examinations (OSCE). This type of activity shows not just whether the students know facts about common ailments – such as hay fever, headache and common cold, but whether they can combine these facts with the communication skills they've been practising in their weekly workshops. As compared with previous years, these students were asked to demonstrate appropriate counselling in more areas, and their overall communication skills were deemed to be on par with those of students more advanced in their studies. If you'd like to learn more about the OSCE process, please check out the video posted at this link: <https://vimeo.com/220583505/e8a0111a51>.

"My initial impression of a pharmacist was just that they dispense. But there is so much more than that. They are clinical, compounding, dispensing, consulting pharmacists, and antimicrobial specialists. I can't wait to go back!" **P1 student**

Send first-year students out into the actual practice environment? Some academics were worried – they don't know enough about medicines, they'll be overwhelmed! Yet when we were challenged by the practice community to get our students into practice within their first year, we knew it would be a great opportunity.

This year, each P1 student arranged to visit a community pharmacy in semester one and then participated in a one-day hospital visit in semester two. The preliminary results of this approach suggest that the chance to see what pharmacists do so early in the course has broadened student attitudes about the profession and influenced the way they approach their studies.

This was a pilot year for this approach and we are so grateful to the community pharmacists who welcomed our students, and to our hospital partners at Alfred Health, Austin Health and Monash Health for helping us to meet this target. For a look at how we're promoting the variety of opportunities available for pharmacy graduates, check out the video here: www.youtube.com/watch?v=M4zQZCJsAgs

We look forward to sharing how we're progressing in future issues, and please do let us know if you'd like to be part of the course-building process!



Course Director Update: BPharmSci

The student numbers in the BPharmSci course continue to grow, matching the strong demand in the pharmaceutical sector for our graduates. A recent report of the pharmaceutical and medical technology sector in Victoria shows growth in the industry in excess of 30 per cent per annum. There are 23,000 employees supporting the manufacture of \$1.35 billion in exports and bringing in revenue to the state of more than \$12 billion.

For our graduates who move into research careers, the news is also great – Melbourne is ranked in the top three significant cities for biomedical research outputs, along with London and Boston.

During 2017, the faculty increased activities around employability skills, such as training on social media platforms such as LinkedIn, interview skills and curriculum vitae writing. Students in all of the three specialisations (drug discovery biology, medicinal chemistry, formulation science) have a professional placement unit in the second semester of third year; these are allocated on a competitive basis. This year more than 20 private sector companies and 15 academic staff provided four-week placements for 60 students.

A new initiative in the course for 2018 will be the introduction of micro-credentialing, which is gaining traction in higher education as a way for students to collect evidence for future employers around specific skills. Within the PharmSci course we will offer certification for some technical/laboratory competencies, as well as skills such as public speaking, written communication, problem-solving and teamwork.

Another new feature of the course will be the introduction of an academic mentoring program for all first-year students, which has been modelled on the success of the skills coaches in the pharmacy degree. In previous years students have moved into their specialisation stream during semester two of second year; however, all students commencing in 2018 and beyond will complete the first two years of the course together with specialisation and elective units in the third and fourth year of the course.

New teaching spaces purpose-designed for the PharmSci students to support small and large-group learning activities will be available this year. New teaching equipment has been introduced to support authentic learning tasks, which include a benchtop NMR, UHPLC and LC/MS instruments. Several academic staff are working on the development of virtual reality activities, so I think it's fair to say we're keeping pace with technology!

I would like to thank the Pharmaceutical Science Advisory Group for their input into the course review that informed many of the new initiatives mentioned, and the members of the course team, who are passionate about providing our students with an exceptional education.



Associate Professor Michelle McIntosh



Where are they now?



Vale Geoff Vaughan

Dr Geoffrey Vaughan, AO, who was dean of the VCP from 1979 to 1986, passed away peacefully on 4 January, 2018. He was aged 84.

He was a member of staff at for 27 years, starting in 1961 as a lecturer in medicinal chemistry. He was then promoted to head of department, before his appointment in 1979 as dean of the college.

During his time as dean, he initiated a strong focus on research into drug development and health advancement, establishing some of the global links that have been fundamental to the international reputation that the faculty continues to enjoy today.

He also led the college through a period of growing emphasis on medicine use and safety. The undergraduate course was reviewed in 1980, and one of the innovations in the revised course was the introduction of lectures on communications, pharmacy practice and human behavior. The VCP was the first institution in Australasia to introduce a human behaviour component into its pharmacy course.

“Geoff was a leader – he had great foresight and vision. He was generous to those he worked with, and always saw opportunities that made tomorrow better. He had a big personality, and it was always enjoyable to be with him. the Faculty would not be what it is today without Geoff’s contributions and leadership”, said Bill Charman, Dean, Faculty of Pharmacy and Pharmaceutical Sciences.

Professor Charman isn’t the only staff member to remark upon the strength of Dr Vaughan’s personality.

Former dean, Emeritus Professor Colin Chapman, described him as “... a larger-than-life presence, but very friendly and approachable”.

“He was a good fellow with a big strong voice, and everybody loved him. He built on the work begun by Nigel Manning in transforming a small technical college to an academic institution of some note,” said Alistair Lloyd, AO, former PSA president, executive officer of the college and longtime friend of the faculty.

Dr Vaughan took his bachelor and master degrees from the University of Sydney and obtained his PhD from the University of Melbourne.

He was also a former rugby union prop forward who represented Australia. He was selected for the 1957–58 Wallabies tour of Britain, Ireland, France, the US and Canada. He was also vice-captain of the team that played three matches against the New Zealand Maori side.

Foundation board member John Ware, AO describes how Dr Vaughan’s proudest memory was running on the field in Cardiff as a Wallaby.

“Geoffrey was a great team player, a natural at all things he did. He was a devoted family man and created a sense of family among the pharmacy fraternity. He always remained connected to the faculty,” Mr Ware said.

Following his tenure as dean of VCP, Dr Vaughan became the director of the Chisholm Institute of Technology and led

that institution through its merger with Monash University. He then served as deputy vice-chancellor (research) at Monash until 1992, after which he was appointed to the position of national manager and CEO of the Australian government’s Therapeutic Goods Administration (TGA).

In 2003, Dr Vaughan was awarded a Centenary Medal for his outstanding service to medical and pharmaceutical research. In 2006, he was recognised with an Order of Australia (AO) in the Queen’s Birthday Honours List. The citation for his award read: “For service to scientific research and development, particularly through contributions to the development of government policy initiatives, to the growth of innovative technology-based Australian companies, and to education as a mentor and supporter of young scientists.”

He continued his record of overachievement well into retirement. In the 2012 Royal Melbourne Show he scooped the pool in the cooking section for handmade breads. His five entries won two firsts, two seconds and a third.

Dr Vaughan was a generous donor to the faculty. The scholarship that bears his name, the Vaughan Scholarship, offers additional financial support to high-performing PhD candidates in the chemical and biological sciences at the Monash Institute of Pharmaceutical Sciences.

The faculty is forever grateful for Dr Vaughan’s significant contributions, and his friendship. As an academic and professional community, we are deeply saddened by his loss.

'80s



Domenica Davies

GradDipHospPharm 1980

Team leader, Monash Health Pharmacy

I’m the team leader for Monash Health’s occupational health and safety management systems. I have an interest in photographing my workplace, local cricket and football clubs, and family. I have photographs of pharmacy interns and archives dating from 1974 at the Queen Victoria Hospital though to 1987 at Clayton, and now at Monash Health. I’ve published four books on family, cricket history and the cultural influences of migration.

'00s



John (Nguyen) Ly

BPharm 2007

Director, Imes Pharmacy, South Melbourne

After graduating I worked at Alfred Health – I’m now the owner of Imes Pharmacy, which has been around since 1877. The pharmacy is in South Melbourne where there’s a strong heritage culture as one of Melbourne’s oldest suburban areas, with its well-preserved Victorian-era streetscapes. The International Pharmaceutical Federation (FIP) has a Young Pharmacists Group (YPG) that I chaired. As for personal interests, I like sports cars and Harley Davidson motorcycles.



Francesca Sgroi

BPharm 2008

Trainer/assessor at the Pharmacy Guild of Australia; pharmacist

I gained a lot of management experience in the early part of my career as a business manager for one of the Priceline pharmacies. I was also a teaching associate and research assistant at Monash University. In addition to working as a pharmacist and manager, I was a proprietor and a presenter for a pharmaceutical company. I’m now a trainer and assessor for the guild. I like to travel, and good food is my passion.

'10s



Kenneth Lee

BE(Hons)/BPharmSci 2016

Engineering graduate, CSL Behring

I recently graduated, so I’m still an engineering graduate. During my studies, I worked in process optimisation for Tatura, a Bega Cheese company in regional Victoria. It was interesting work because of the way the core chemistry principles I learnt from the pharmaceutical sciences could be applied to the dairy industry. I’m interested in photography. I started with portrait photography and moved on to astrophotography and filmmaking. I find the practice motivating – it’s an interesting balance of being creative and technical.



Jeenal Patel

BPharm(Hons) 2015

Clinical pharmacist, Eastern Health

I’m primarily based at Box Hill Hospital. I completed my internship at Eastern Health in 2015. I’ve worked in surgical, general medicine, neurology, cardiology, rehab and geriatric mental health. I’ve also completed a Graduate Certificate in Pharmacy Practice and am currently completing a clinical educator course at Monash University. At Monash, I was a student ambassador involved in the mentoring program. I now have two mentees who I meet up with once a month to discuss university life, internships and interview skills. I find it very satisfying to see my mentees flourish as they gain vital skills such as time management, confidence and experience within the pharmacy world.

We’d love to hear what you’ve been up to since graduation. Please contact the Alumni Engagement Officer on 9903 9087 or email pharmacy.alumni@monash.edu to share your story with your fellow alumni.