

Student-Staff Partnership

'What you want to know about your intern year at UQ and beyond"





Acknowledgements

This guide was prepared as part of a UQ Student-Staff Partnership within the School of Pharmacy, and was prepared by:

Nanette Cawcutt Pharmacy Intern Training Program Coordinator

Emma Best Student Administration Officer

Jacob Kay-Reid, Pharmacy Intern, 2021 Hervey bay Hospital

Rebecca Zhang and Isabella Thomas, Fourth year students, 2021 BPharm(Hons)



Contents

1. Introduction	6
2. Questions from fourth year to ITP Course Coordinator	6
What is the process to gain provisional registration after graduation?	6
Who can we ask/go to if we have questions about finding internships?	
How do I decide which intern position to apply for?	7
What if I don't find an internship site?	8
How quickly can I become an intern after graduation? (Pre-reg application approval takes how long?)	8
How much support do we get during internship? From whom?	8
Do we have to do internship straight after uni?	8
What ITPs are available?	
How much do the programs cost?	9
Which intern program will best prepare me for my intern exam?	
What should students consider/look out for when they decide which intern training program to do?	
What are the differences between the intern programs such as UQ, PSA or Guild?	10
Are different programs better for different future careers	10
If our preceptor has a program preference, should we choose their preferred one?	
Why do we have to do so much extra studies for intern?	11
How do the hourly requirements work?	11
Is it possible to continue full-time study with internship hours?	11
Is part time internship allowed and if yes, how can I do it?	11
How many intern exams do we have?	11
What happens if you fail the intern exams?	12
Best tips for managing the workload throughout the year?	12
What is required in the exams as we no longer required to do the drug knowledge station?	12
What are some good study strategies for the intern exam?	12
Any general advice/tips for intern year?	13
3. Questions from fourth years to the Student Administration	13
Who can we ask/go to if we have questions about finding internships?	
How much will the fees be? (to complete the program)	13
Commonwealth Supported Place	13
When should we start applying for the UQ intern program?	14
Why is it so expensive?	14
4. Questions from fourth years to Interns	14
What did you consider/look out for when you decided which intern training program to do?	14
What kind of support have you received from your workplace and/or preceptor when you first started you intern year?	
What is expected of an intern in terms of knowledge, skills etc.?	
In the Hospital setting:	
In the Community setting:	
What daily tasks are expected of interns?	
General	15



In the Community setting:	
In the Hospital setting:	16
Was it easy to land a job?	16
In the Hospital setting:	
In the Community setting:	
What do you suggest would be the best way to schedule your time to incorporate study in addition to work	
What are your best tips for managing the workload throughout the year?	
What are some things you regret doing/not doing earlier in your intern year?	
What are some things that you did in fourth year that helped you prepare for your intern year?	
What are some things you regret not doing in fourth year in preparation for your intern year?	
What are some tips to be better prepared for internship such as for assessments and exam preparation?	
What are some good study strategies for the intern exam?	
Any general advice/tips for intern year?	
What are some things you wish you knew before going into intern year?	
Pearls O' Wisdom:	
5. Questions from Interns to post-graduate students	
How does further study affect your capacity to work as a pharmacist?	20
Post-grad student one	20
Post-grad student two	
Post-grad student three	
Post-grad student four	
What kind of time management strategies do you use?	
Post-grad student one	
Post-grad student two	
Post-grad student three	
Post-grad student four	
What is the ultimate goal you envisioned upon setting out on further study?	
Post-grad student one	
Post-grad student two	
Post-grad student three Post-grad student four	
How can you be involved in both research and clinical practice? Do I have to complete a Masters degree t	
do so?	
Post-grad student one	
Post-grad student three	
Post-grad student four	22
6. Questions from Interns to PHRM7010 course coordinator	23
I want to go on with the Graduate Certificate In Pharmacy Practice, but is the workload too much?	23
What should I expect to learn?	23
Is this course useful in community and hospital settings?	23
7. Questions from Interns to the Master of Clinical Pharmacy lead	23
I want to complete my Master of Clinical Pharmacy but am worried about the workload?	23
Where would a Master of Clinical Pharmacy get me?	
Would a Master of Clinical Pharmacy be useful in Hospital Pharmacy?	
Would a Master of Clinical Pharmacy be useful in Community Pharmacy?	
Would I get more pay if I have a Master of Clinical Pharmacy?	
Is it generally preferrable to commence a Masters program after a few years' practice experience?	



What should I expect to learn?	24
Can I study part-time?	24
8. Questions from Interns to the Master of Pharmaceutical Industry Practice lead	24
Do I need to have job in industry before I enrol?	24
Does the university help me find a job?	25
Can I do this straight after my internship or should I wait a bit?	25
How many hours a week do I need to put aside for this course? - I have a very demanding job	25
I only think I want to work in industry. If I do this course, can it help me in any other areas of pharmacy?	25
What should I expect to learn?	
Can I study part-time?	25
9. Questions from Interns to the Director of Higher Degrees by Research	26
What sort of qualifications do I need to get into academia?	26
10. Questions from Interns to an Early Career Pharmacist	26
How do you curate a competitive portfolio?	
What areas of professional or personal development do you believe has best set you up/helped you in you early career?	ur
What are the steps/opportunities you have taken or created that have gotten you where you are today?	
Do you find you still have support RE clinical decisions after you become registered, specifically in a hospi setting?	
What advice would you have given to yourself about your career in pharmacy?	27
11. Contacts	28
Intern Training Program (ITP)	28
Administrative issues (enrolments, fees, mentor/mentee enquiries etc.):	28
Master of Clinical Pharmacy:	28
Master of Pharmaceutical Industry Practice:	28
Higher Degrees by Research	28



1. Introduction

This booklet is the result of a Staff-Student Partnership within the School of Pharmacy.

It was a project designed to vertically engage the undergraduate, post-graduate students and staff within the School of Pharmacy. Pharmacy students graduate after four years but then need to complete an intern year before becoming generally registered. Currently, these aspects are distinct, despite the University providing post-graduate training within the intern year. This has resulted in less cohesiveness and communication between undergraduate and postgraduate students and staff and very little engagement with the Alumni association.

This project aimed to foster a culture of partnership and aid the forming of meaningful, collaborative relationships within the UQ Pharmacy community for the benefit of students and staff alike.

This stage of the project involved input from final year students around their concerns and hopes for their intern year (post-graduate study). The outcomes from these discussions was provided to the interns, course coordinator and administrative officer for comment.

Similarly, input from the interns was sought around identified barriers for further post-graduate studies. The outcomes from these discussions were responded to by the post-graduate academic staff.

2. Questions from fourth year to ITP Course Coordinator

In this section questions from fourth years were answered by Nanette Cawcutt, the ITP course coordinator. The questions were compiled by Rebecca Zhang and Isabella Thomas in consultation with their cohort.

What is the process to gain provisional registration after graduation?

Graduation does not mean automatic registration.

UQ will provide graduate lists to Ahpra, so you don't have to worry about providing your results etc.

First thing to do is secure your supervised practice site and determine who is your preceptor.

Once you have that organised then apply <u>online</u> for provisional registration. (Available at: <u>Pharmacy Board of</u> <u>Australia - Internships</u>)

Do this as soon as you have sorted out your preceptor and site details. You can do this now.

It takes about 4-6 weeks to process assuming all your documents and forms are <u>correct</u>. If you put it in up to 3 months before graduation, you should be registered around 2 weeks after your university results are finalised.

You must supply <u>certified</u> photo identification. (Available at: <u>https://www.ahpra.gov.au/Registration/Graduate-Applications.aspx</u>)

Your supervised practice application must identify both the premises and your nominated preceptor – this is the pharmacist who is responsible for your supervision.

After submitting the application, keep an eye on your email. The Board (via Ahpra) will send you a checklist of all the supporting documents you'll need to provide.

Part of applying for provisional registration means they will also check you meet a couple of registration standards:

• English - you must have at least two years of your high school education taught and assessed solely in English – and in a country recognised by the Board. (There are other pathways to meet this requirement).



- Health issues that may affect your ability to practice
- Criminal history you must agree to a check.
- Professional indemnity insurance- you must declare that you have this insurance

Who can we ask/go to if we have questions about finding internships?

An internship is a job, so all the job-seeking rules apply.

Have an up-to-date resume, address the criteria outlined in the application, be well-presented and on time for your interview etc.

UQ has <u>modules</u> available to guide you in creating a great resume plus a service to have your job application checked.

(Available at: https://employability.uq.edu.au/applications)

Check out:

- The UQ Student Hub https://studenthub.uq.edu.au/
- the fourth year hub on Blackboard \rightarrow Employability/Positions available \rightarrow Positions available
- SEEK website https://www.seek.com.au/pharmacist-intern-jobs
- LocumCo website https://locumco.com.au/positions-vacant/?position=Intern&keyword=&state=all
- Jora website https://au.jora.com/Pharmacy-Intern-jobs-in-Brisbane-QLD
- Indeed website https://au.indeed.com/Pharmacist-Intern-jobs

How do I decide which intern position to apply for?

Decide your preferred scope of practice. The Pharmacy Board allows for internships to be undertaken in community or hospital pharmacy settings. If you want to undertake your internship in a different setting (eg industry, compounding only pharmacy etc.) you must undertake 50% of your internship in a community or hospital pharmacy.

- Hospital
 - Consider regional hospitals you get a fabulous 'all-round' hospital experience.
 - Consider private hospitals.
 - Consider interstate hospitals.
- Community Consider the type of community practice you enjoy.
 - Business side of pharmacy consider the large pharmacy groups.
 - Having time to have a relationship with my customers maybe a smaller chain or independent pharmacy.
- Where do you want to work?
 - Metropolitan
 - Regional
 - Rural



What if I don't find an internship site?

You can't be provisionally registered without an internship site and approved preceptor. Consider regional or rural community pharmacies. Keep trying!

How quickly can I become an intern after graduation? (Pre-reg application approval takes how long?)

Allow 4-6 weeks once you have put your application in.

If you apply at least 6 weeks before graduation, you could expect to be registered 2 weeks after your results are finalised. The university will send a list of graduates directly to Ahpra.

Remember that once university results are finalised, Ahpra will be registering pharmacy, medical, nursing, paramedical, occupational therapy, dental, physiotherapy and the other 8 health professionals! So, it is a busy time!

HINT: Check your submissions VERY carefully before hitting send. An incorrectly certified document, a missing date, a misspelt preceptor name etc. will result in it being sent back to you to correct. You will go to the back of the queue when you re-submit.

How much support do we get during internship? From whom?

- <u>Your intern training provider (ITP)</u> provides some support. With the UQ ITP, we have a comprehensive system to ensure you receive guidance around time management and that you and your preceptor know how you should be progressing.
- <u>Your preceptor</u> is responsible for the overall supervision and development of you, the intern. The preceptor assumes the role of teacher during this practical training period. They provide progress reports to the ITP staff.
- <u>UQ ITP Course coordinator</u> liaises with both you and your preceptor on a regular basis to ensure you and your preceptor are supported and to respond to any issues that are identified from the progress reports.
- <u>UQ ITP Mentor</u> is available to give you emotional support, hints, and tips and simply a listening ear throughout your intern year.
- <u>UQ</u> provides the same level of support that was available to you throughout your undergraduate years. For example: access to the library, health and well-being activities, counselling, social events etc.
- <u>Your peers</u> help to decrease social isolation through group team discussions and 7-8 face to face seminar days/year.

Do we have to do internship straight after uni?

Can we do it later, i.e., after further study? Is there a limit to the gap between graduation and internship?

There is no requirement to start your internship straight after completing your pharmacy degree. However, there are a few considerations before you make that decision.

- Will delaying the start of my intern year make it more difficult for me to acquire an intern position?
- Will delaying the start of my intern year make it more difficult for me to pass the oral and written exams at the end of the year due to down-skilling?

Alternatively, if you complete your internship prior to continuing your studies or taking a gap year, you have a high capacity to support yourself along the journey. Registered pharmacists are in demand!



What ITPs are available?

Intern Training Programs are offered by National Alliance Pharmacy Educators [NAPE] (UQ, UniSyd, USA and Monash), The PSA and the Guild.

Training programs offered by workplaces such as Qld Health, Chemist Warehouse, Terry White etc. are NOT accredited. They are providing training specific to their workplace. You still must complete an accredited program.

How much do the programs cost?

Each program is relatively commensurate with each other. They all come in around the \$2000 mark.

The UQ website is confusing – it provides the cost for full-paying students to complete the two-year Graduate Certificate in Clinical Practice. This is NOT what you will pay! We are allocated Commonwealth Supported Places (CSPs) and you would be completing 50% of the program. This brings the amount you actually pay to around \$2000.

Bonus: Enrolling in UQ ITP means you can receive HECS, so you don't have to pay anything up-front at all!

Which intern program will best prepare me for my intern exam?

UQ ITP consistently has a pass rate higher than the national average for both the written and oral exams.

What should students consider/look out for when they decide which intern training program to do?

All ITP courses are accredited, so the reach the minimum standard required. However, they are not all the same!

Consider what you want out of your intern year.

Choose UQ if

- You want to progress with further qualifications. The UQ ITP gains you two post-graduate subjects towards your GCPharmPrac. The final two subjects in this qualification are also subjects in the MClinPharm, so you can directly pivot into that program.
- You want a program with a great track record when it comes to exam preparation. UQ ITP consistently has a pass rate higher than the national average for both the written and oral exams.
- You don't want to pay any money upfront but would rather add it to your HECS. The UQ (NAPE) programs are the only ITPs that facilitate this.
- You want a program that caters for both hospital and community pharmacists. Our cohort is usually a 50:50 split. This allows for greater discussion amongst your peers and easy identifications of gaps in your knowledge/experience.
- You want the support of a large organisation (UQ) but be part of a smaller course. The benefits include:
 - Direct access to coordinator
 - Access to library, student support services
 - UQ Alumni
 - Networking
 - Social events
 - Career hub



- You want to cover topics other than clinical scenarios, that will improve your employability:
 - Cultural competency
 - Working in a team
 - Wellness and selfcare
 - Interprofessional collaboration and more!
- You want a flexible program that provides some structure. As we run on the university semester system, there are a couple of items that need to be submitted by a set date, however the rest is when you are ready. You are provided with a suggested timeline and a monthly 'To Do' list to keep you on track. You don't have to have completed all the items by the end of the academic year. When you do complete them is when you attain your ITP completion certificate.

What are the differences between the intern programs such as UQ, PSA or Guild?

Such as training program structure, the type of assessments or workshops offered.

- All three programs offer online discussions, face-to-face workshops, and assignment type activities.
- UQ ITP offers 7-8 face-to-face days/year whilst the PSA and Guild offer 4 face-to-face days in a year.
- We also offer a compounding workshop and First Aid/CPR courses to ensure you meet the Board requirements.

Are different programs better for different future careers

(e.g. hospital, community, aged care)?

Anecdotally, the UQ ITP course is considered to be the course best suited for hospital pharmacy.

This does not mean it is not suited to community. We usually have a 50:50 split.

Our online discussions and/or assignments cover aspects of all scopes of practice including aged care.

If our preceptor has a program preference, should we choose their preferred one?

Discuss with your preceptor why they prefer a particular course. Often it is the course they are most familiar with.

UQ ITP provides the following support for preceptors:

- Online training sessions at the commencement of the program.
- An online preceptor hub on Bb so they have all the latest information on what is going on within the program.
- Direct access to the course coordinator.
- Timeline including key dates provided in advance to facilitate staff rostering etc.
- Individual contact three times a year to ensure they have enough support to fulfill their preceptor role.

Ultimately however, it is your decision as to which course you choose.



Why do we have to do so much extra studies for intern?

The Australian Pharmacy Council, on behalf of the Pharmacy Board of Australia, sets out the performance outcomes framework for pharmacy students and interns. This sets out the performance outcomes to be achieved and demonstrated by pharmacy degree program graduates and applicants for initial general registration (interns).

Undergraduate degree and ITPs differ in purpose, design, and delivery, so they differ in outcome.

Essentially, undergraduates need to demonstrate, participate, or show awareness in an outcome whilst an intern finishing the ITP should implement, contribute, advocate, respond to those same outcomes.

An ITP does not aim to teach you anything new, rather to facilitate you implementing all that you know.

How do the hourly requirements work? Is it certain hours a month we fulfil or weekly?

You cannot start counting your hours until your details appear on the register as provisionally registered.

Currently the Pharmacy Board requires all interns to complete 1575 hours. This may revert to the standard 1824 hours next year if the pandemic is under control.

Every week you must get your *Statutory Declaration form: Weekly record of supervised practice hours* (SPWR-60), signed by your preceptor.

There are rules around what are acceptable hours to the Pharmacy Board, for example you can't count sick leave or days off. You can count the hours spent at ITP seminars.

You also must work not less than 80 hours and not more than 180 hours in any four consecutive week period.

You must work a minimum of 152 hours with an approved preceptor. So, if you change jobs or preceptors and have done less than 152 hours, they can't be counted.

Is it possible to continue full-time study with internship hours?

In theory, maybe!

You must work 80 hours each 4-week period which equates to 20 hours/week. You also must complete your Intern Training Program. Depending on how motivated you were and how hard you were willing to work, you might be able to manage all the commitments.

Is part time internship allowed and if yes, how can I do it?

You must work 80 hours in any consecutive 4-week period, so the Pharmacy Board does allow it. You would need to discuss a part-time arrangement with your preceptor.

How many intern exams do we have?

There are two registration examinations.

One is a written exam conducted by the Australian Pharmacy Council (APC) on behalf of the Pharmacy Board. This is a 2-hour multiple choice exam with references allowed but no internet.

The other is a 35-minute oral exam with three sections. There is a section on Primary Healthcare/OTC, Legal and ethical practice, and Problem solving & communication. References (no internet) are only permitted for Part C (problem solving and communication).

Both exams are held three times a year in February, June, and October.



You must have completed 75% of the Board mandated hours to sit them, which means most interns will take them in October.

You can sit them during the same session or decide to sit them in separate sessions.

What happens if you fail the intern exams?

Once you have completed your Intern Training Program successfully, you do not have to complete it again.

You must successfully complete both the written and oral examinations within 18 months of each other.

If you fail an exam, you can re-sit it as many times as is needed but each attempt incurs a cost which currently sits at \$710 for the written exam and \$415 for the oral exam.

The Pharmacy Board requires recency of practice to be generally registered. This means that when applying for general registration you must have either practised a minimum of:

- 450 hours in the three-year period prior to applying for general registration,
 - or
- 150 hours in the 12-month period prior to applying for general registration.

This is significant if you are no longer employed as an intern due to failing your exams. Some employers may keep you on, but often your employment is ceased to enable them to employ an intern from the next cohort. If you are no longer working as an intern pharmacist, you would need to pass your exams within 2 years of completing your hours.

Best tips for managing the workload throughout the year?

The best tip is to keep on top of the workload and not let it bunch up at the end of the year. Work on the requirements steadily throughout the year.

The UQ ITP provides you with a timetable at the beginning of the year with all the key dates and a month-bymonth timeline to advise you of where you should be up to with the ITP activities.

However, don't stress! Your primary aim must be to be a satisfactory employee – you don't want to lose your job because your focus is elsewhere! If the workload becomes a bit too much, UQ ITP will work with you to determine a more manageable timeline for you.

What is required in the exams as we no longer required to do the drug knowledge station?

The oral exam still assesses drug knowledge and counselling but not as a stand-alone section. This aspect is embedded into the other sections of the exam. Drug knowledge is also assessed in the written exam.

In the oral exam, you are assessed on your primary healthcare knowledge, your ability to practice legally and ethically, your problem-solving ability and your communication skills.

In the written exam, you are assessed on your professionalism, ethics and knowledge of the legal framework, medication management and patient care. It includes calculation questions

What are some good study strategies for the intern exam?

Take advantage of all the available resources.

With UQ ITP you are provided with revision quizzes and other resources to help you prepare for the written exam. These resources include sample exams, calculation modules, Medicare modules and dermatology diagnosis aids.



You will also complete a written exam that mirrors the APC written exam.

Seminar 4 is dedicated to preparation for the Board oral exam. You will undertake a workshop focused on each section of the exam and also sit an oral exam which mirrors the Board exam. Additionally, you are provided with sample oral exams to study singly or within a group and your preceptor is provided with sample exams to practice with you under exam conditions.

UQ ITP consistently has a pass rate higher than the national average for both the written and oral exams.

Any general advice/tips for intern year?

Enjoy it! Like anything in life, you get out what you put in. Take advantage of all the learning opportunities, be happy when you succeed and reflect when you don't. This year is about putting into practice everything you know and learning practice skills along the way.

3. Questions from fourth years to the Student Administration

In this section questions from fourth years were answered by Emma Best, Student Administration Officer. The questions were compiled by Rebecca Zhang and Isabella Thomas in consultation with their cohort.

Who can we ask/go to if we have questions about finding internships?

Fourth year Blackboard Hub Site - Employability/Positions Available

Positions Available - BPharm 4th Year Hub 2021 HABS0128C... (uq.edu.au)

How much will the fees be? (to complete the program)

Use the UQ Fees Schedules to estimate your fees.

Example:2021 Course fees for UQ Interns

Using the Fee Schedule table, the cost of a 2 unit PHRM postgraduate coursework

(Commonwealth supported) course is\$993.

Therefore, the total cost for the UQ Intern year (2x2 unit courses)=\$1986

Commonwealth Supported Place

- A Commonwealth Supported Place (CSP) is a place in a higher education program
- which is partially funded by the Australian Government.
- The Australian Government subsidises a CSP by paying part of the fees for the place
- directly to the university. The subsidy amount is not a loan and students do not haveto pay the subsidy amount back. However, students are required to contribute towards their study and pay the remainder of the fee known as the 'student contribution amount' for each unit they are enrolled in.
- A student enrolled in a Commonwealth Supported Place is referred to as a Commonwealth Supported student.

Commonwealth supported places (CSPs) | StudyAssist



When should we start applying for the UQ intern program?

Applications are open all year; they must be lodged via the Online Application Form.

Apply online to study at the University of Queensland (uq.edu.au)

Closing date - To commence study in semester 1 - January 31 of the year of commencement.

Why is it so expensive?

- The UQ Intern program is a similar price program compared to the PSA (approx. \$2000) and The Guild program (approx. \$1850).
- The UQ Intern program also provides pathway towards Postgraduate study such as Graduate Certificate Pharmacy Practice.
- Some Intern year programs on their own are not classified as Postgraduate level tertiary study.

4. Questions from fourth years to Interns

In this section, answers to questions from the fourth years were facilitated by Jacob Kay-Reid in consultation with his cohort. The questions were compiled by Rebecca Zhang and Isabella Thomas in consultation with their cohort.

What did you consider/look out for when you decided which intern training program to do?

- I wanted an ITP that would communicate with me well. I had heard that historically PSA and The Guild had pretty average communications with its interns UQ ITP was a more humane option.
- My preceptor recommended the UQ ITP.
- The UQ ITP gives credit towards a Masters if that is something that you are interested in.
- I recommend that if you are in a position where there is more than one intern, having a discussion with them/your preceptor as to what everyone's preference is. I have found that having your fellow intern on the same program makes life easier.
- I looked at what program I thought I would get the most benefit out of. This included talking to the other interns at my site, as well as my preceptor and looking into each program to see if I could do anything further with the ITP (for example, UQ ITP allows credits towards further study).

What kind of support have you received from your workplace and/or preceptor when you first started your intern year?

- Early on expectations were set [by my workplace]– I found it grounding walking into a novel work environment with the knowledge of what specifically I need to do to make my Preceptor / Director happy.
- Organising to have regular check ins with my preceptor. As I work in community pharmacy, I have regular contact with my preceptor which has been very beneficial to my progress. Having the one-on-one time (which is not always feasible in every setting) has allowed me to be able to discuss areas where I think I am needing more support and also gives my preceptor an opportunity to be able to identify gaps in my learning and together we can implement a plan to address these gaps.
- I received a lot of support from both my workplace and preceptor at the start of the year. My preceptor made sure to show all the interns around the large department and set expectations early. They also



stressed that if we had any problems, no matter how small, to come to them. Similarly with the entire workplace, all staff were very supportive at the beginning, ensuring that interns did not get lost and knew who they could go to.

What is expected of an intern in terms of knowledge, skills etc.?

In the Hospital setting:

- I think enthusiasm is far more important early on more so than knowledge.
- But being able to counsel a patient and take a solid medication history will make the first few months much easier.
- Probably just being able to recognise which common medications belong to which class and their respective indications.
- You are definitely not expected to know everything, but you are expected to have the skills to be able to find the information. To expand your clinical knowledge, get involved, attend journal clubs, and ask loads of questions.
- The skills and knowledge expectations are dynamic throughout the intern year.
 - The first few months were about building the foundation skills of hospital pharmacy such as medication histories, medication reconciliation, patient reviews, discharges and presenting medication related issues with doctors.
 - Once those foundation skills are established, then we learnt time efficiency skills because hospital pharmacy is BUSY, and your day can dramatically change as soon as someone says 'unexpected discharge'.
 - You are definitely not expected to have a massive clinical knowledge background because this will definitely grow with every experience and every patient.
- It's busy on the wards and the pharmacists have nurses and doctors fighting for their attention and so there isn't time for them to sit and answer every question that comes to mind (especially in the first few months when we have a million questions).
- Being able to take feedback and integrate it into practise.

In the Community setting:

 Having a good grasp on OTC products has been super beneficial as a lot of the time people will require OTC and non-pharmacological advice. Differential diagnosis has played a big role in my development of my OTC skills (particularly with skin conditions).

What daily tasks are expected of interns?

General

- Your expectations will vary depending on what area you move into (whether hospital or community or somewhere else).
- Your expectations will likely start out relatively simple and as you become more confident and competent and more familiar with the way your workplace operates, your role will expand.



In the Community setting:

- I am trusted to do everything that the registered pharmacists do (except for checking prescriptions of course).
- Currently I am running our sleep apnoea testing and management clinic and doing most of our vaccinations (under supervision) as well as general dispensary, front shop and NDSS tasks.

In the Hospital setting:

- Early on you're under full supervision with everything. After I finished my Imprest / Dispensary rotation I was just gradually introduced to tasks as I could tolerate them. It started with taking patient medication histories and doing the morning prep work and went from there.
- I'm in a regional hospital and I essentially do everything that a registered pharmacist does.
- Being an intern pharmacist in a regional hospital you are lucky enough to be given experience everywhere. I am expected to be able to work both on the wards and in the dispensary. I also go out and do community outreach education talks with the public and once a month am responsible for completing the DD safe count.
- The daily tasks that are expected of an intern change throughout the progression of the year.
 - Initially, it is very observatory and tasks are very basic.
 - As the year progresses, you are introduced to and given responsibility for more tasks.
 - The first couple of months my tasks centred mostly around taking histories and doing preliminary reconciliations, which progressed to more involved reconciliations, contacting prescribers and now at this point in my internship I am also taking on discharges.
- The daily expectations are always evolving throughout your intern year. As you develop the necessary skills of a hospital pharmacist you progress from an observatory role to more independent work. Currently being six months in, as interns at a major Brisbane hospital we are expected to be able to manage a small patient load of approximately 10 patients.

Was it easy to land a job?

In the Hospital setting:

- Heck no but I definitely didn't help myself missing out on basically all the QLD hospital internship applications
- Yes, it feels difficult, hospital applications are stressful and incredibly competitive given there are so many less positions than community however you can't allow that to stop you applying!
- I missed out on a metropolitan hospital but chose to apply for a regional role. I'm so pleased I did.

In the Community setting:

- Networking has been a big part of how I managed to find my intern position and also engaging with opportunities that are presented to me to make myself the 'most employable' that I can be. Being able to have as many 'transferable skills' as possible has also helped.
- Community Pharmacies were super keen to have me on board I randomly applied for a Community
 Pharmacy spot in Canberra that specialised in fertility meds and the owner called me up the next day
 and offered to fly me down to check the place out.



What do you suggest would be the best way to schedule your time to incorporate study in addition to work?

- Depends first on your tolerance for full-time work first adjust to that.
- I recommend time blocking at home. Presently I set aside 30 minutes each day to summarise what I learnt today at work, then I spend 90 minutes once or twice a week doing ITP / other study type things.
- Some sites have dedicated intern time with clinical educators.
- It was tough at first to find time to study. I was a student who would study for hours on end, lived in the library, and always aimed for very high grades. Now adding full time work to a part time study load and a massive exam in October looming over my head, it was tough to balance.
- It has been a valuable year to learn the importance of self-care and the incredible impact it has on my study efficiency and 'enjoyment' (if that's the right word). My study routine consists of minimal pharmacy work on weeknights to allow time for me. On the weekends I block a designated time period (e.g. 1pm to 6pm) to live and breathe pharmacy. This allows me to enjoy my time off but also feel prepared for upcoming hospital rotations or assessment.

What are your best tips for managing the workload throughout the year?

- Make your workload fit your lifestyle not the other way around probably cancel Netflix for a year, maybe give the PS5 / Xbox a miss next year.
- UQ ITP has a great learning pathway which I check every week to make sure I'm up to date and decide what I need to do.
- Buy a calendar! You can plan out when assessments are due and when important dates are coming up e.g., oral and written exams
- Know what needs to be done and by when. I find it easy to use a calendar but also to make checklists, that way hopefully nothing slips through the cracks.
- Setting reminders in your phone when assessment is due or exam applications open.
- Designate time each week for yourself. Prepare lunches ahead of time (you will thank yourself for the extra few minutes sleep in).

What are some things you regret doing/not doing earlier in your intern year?

- I regret spending so much time comparing myself to the other pharmacists at my work and interns at mine / other sites.
- I regret not habitually preparing my meals for the week ahead of time.
- Getting in and doing my CPD as early as possible so you don't have to worry about doing it before the end of the year when you are trying to study for exams (although some of the modules can be helpful for study)
- Making a calendar with all my important assessment dates and setting aside time each week initially to work through ITP and study otherwise you get to the end of the year and end up stressed and exhausted.



What are some things that you did in fourth year that helped you prepare for your intern year?

- Learn Excel, learn to emotionally self-regulate, built up my friendships.
- Build lasting friendships with my peers, they have been great support for me during this year.
- Getting involved in my tutes. i.e. volunteering to role play scenarios/ history taking. It honestly builds so much confidence for when you need to do it in a real setting.
- Being okay with not knowing everything. Throughout fourth year we did a lot of case-based discussions, and I often was unaware of certain things, and that is okay. I used it to my advantage and learnt ways to figure out what I do and don't know. It also allowed me to pick tutors brains about certain topics, because I was unsure, which has helped me do the same thing at work.

What are some things you regret not doing in fourth year in preparation for your intern year?

• Taking SBAR format more seriously in tutorial settings. In hospital I think I initially really struggled with handover and talking to doctors as I couldn't summarise nicely.

What are some tips to be better prepared for internship such as for assessments and exam preparation?

- A little bit of prep most days. Remember there is no grading scale for your intern exams, all you need to do is pass.
- Do the practice exams, they can be an invaluable resource.
- Be aware of how you learn best and study to your strengths. This will allow you to study efficiently when you are time poor. For me, I made a study plan of topics and have made loads of flash cards. (Find an online flashcard app or website you like)

What are some good study strategies for the intern exam?

- Use the chapter summaries in AMH
- Make / find flash cards for the top 100 drugs.
- Try and construct a clinical rationale with as many of your daily patients as you can manage (ie: Patient X is taking Clozapine for schizophrenia, and taking Metformin for Diabetes but why are they related?)
- Take some time to reflect on what you learnt at work each day/ week you'll be surprised at home much you learn on the job.
- Talking to co-workers about the exam. You will be working with people who have sat the exam before and will be able to provide tips and sometimes even study notes.

Any general advice/tips for intern year?

- Embrace being the dumbest, least qualified person in the room: it's the last year you'll get to be.
- Get involved with things outside of work/ study. Having time for yourself is super important so you don't burn out early on in your career.
- Embrace opportunities to develop skills in areas of pharmacy you are interested in.



- Ask lots of questions, this is your time to be able to be unsure and to have close guidance. In saying that, do try to figure out a possible answer to your question yourself, but there is nothing wrong with being unsure and asking those around you for help.
- Take your time, you are in the perfect position to ask questions (when appropriate) and investigate conditions you find on the ward.
- If there is an instance where a prescription/ medication issue has been identified by yourself or your colleague and you are the one who must speak to the prescriber about said issue, ensure that you have thought about viable solutions to the problem before picking up the phone. That way, you are not just coming to the Dr with an issue, but rather a recommendation for what may be appropriate. The Dr may not ask/ want your input, but this is still a valuable exercise to carry out as it will help to develop your understanding and problem-solving skills.
- If you become a hospital intern, ask lots of questions of not only pharmacist but other health professionals. Learn the roles of everyone on the ward.

What are some things you wish you knew before going into intern year?

- You will be tired all the time and that's okay. I don't think I was fully aware of how tired I was going to be heading into full time work and that it really is super important to take down time/ establish routines, so you don't burn out.
- That I have exceedingly high expectations of myself that don't align with the expectations of me in the workplace.
- The expectations of my supervisor / preceptor are much lower than those that I impose unto myself.
- How much learning occurs on the job, and how important it is to maintain connections made at university, whilst forming new ones.
- As a QH intern how to utilise my ILF to get structured feedback throughout the year to learn and develop as much as possible / to have a good resource for my portfolio.
- How to structure a solid and applicable clinical review process.

Pearls O' Wisdom:

- Go schedule in to see your careers counsellor, they can iron out any problems you have in your resume, selection criteria and help you with interview preparation.
- If you are moving for your new job next year (and if this is feasible for you), be as organised as possible for when the job starts and if possible, move a bit earlier than just before your new start date so that you can become accustomed to your new surroundings, figure out a good route to work and where to buy the best coffee and get your groceries.
- Take some time off between the start of your internship and the end of fourth year/part time jobs. I worked at my part time job the night before I started my internship and I regret not taking a holiday. It is the last time your holidays must go through management and get approved, so take full advantage.
- Be organized. Learn what food you can make in bulk, cheaply, quick but is the most delicious.



5. Questions from Interns to post-graduate students

In this section questions from the interns were answered by current post-graduate students. They were all PhD students (past and present) who followed different paths. Some were doing lab research, others doing QUM research and there was a mix of hospital and community pharmacists. The questions were compiled by Jacob Kay-Reid in consultation with his cohort.

How does further study affect your capacity to work as a pharmacist?

Post-grad student one

Completion of the Graduate Certificate in Pharmacy Practice didn't affect my capacity to work as a pharmacist, similar to my intern year, I did a little extra study each day after work to complete this certificate.

My comment would be that, in hospital pharmacy, some level of extra study is expected so there will be instances of some workplaces granting a small amount of "offline" time to assist with completion of further study.

The PhD has been a bit more of a juggling act. I started the PhD part-time and maintained almost full-time work hours. When I then increased the PhD to full-time, I dropped to part-time hours. The COVID-19 situation has made things interesting as I had to take a break from the PhD to help with extra workload at work during the start of the pandemic in March 2020.

I would say the biggest way that further study has affected my capacity to work is more about job security. Up until recently, QLD Health has not offered permanent part-time positions for pharmacists, so I gave up a permanent job and went back to a temporary, part-time contract to allow me to focus on my PhD.

My current work schedule involves working late shifts and weekend work with the PhD taking priority during usual business hours. My supervisors are incredibly supportive and allow me to undertake lab work outside of usual business hours if need be.

Take home message: there will always be work for pharmacists who want it so make your study and work schedule work for you. A bit of flexibility in both work and study definitely helps!

Post-grad student two

Post-graduate studies have definitely impacted my capacity to work. I have had to reduce my hours of work to keep up with course work as I have a growing family and I like to keep some time free in my weekend.

Post-grad student three

If you choose to pursue postgraduate study, it is definitely feasible to continue working as a pharmacist.

Of course, how much you can work depends on your study load (i.e. full-time vs part-time), but for me, I have been working two-days per week throughout my PhD which I am doing full-time. The key for this is time management.

Post-grad student four

It doesn't – I still work as a casual hospital pharmacist every weekend, while doing my PhD full time. It is important to negotiate with your workplace for a schedule/roster that suits you. I opted for a casual weekend position as it provides more flexibility. During busy/stressful periods, I can request not to be rostered so I can focus more time on my PhD.



What kind of time management strategies do you use?

Post-grad student one

Ha! What time management strategies!? I perhaps am not the best person to ask for this, I have a difficult time saying "no" and therefore often end up with too much on my plate.

I write EVERYTHING down in my phone diary. My phone is with me almost all of the time, so when I agree to something, I put it in the diary straight away so that I don't forget about it.

I use a combination of short-term and long-term planners. Each week, I write out my to-do list for the week and break it down day-by-day and each quarter, I reassess my long-term research goals (and usually find that I am running behind, but it is a good check-in tool)

Post-grad student two

I try to give myself some deadlines and if I am able to stick to completing tasks by these deadlines, then usually I can keep on top of the study load.

Post-grad student three

- Use a diary as it allows you to visualise what work and tasks are due in the upcoming days/weeks/months.
- Have a set schedule and stick to it as it sets you up into a routine.
- 'It's not the hours you put in your work that counts, it's the work you put in the hours' as cliché as it sounds, not being distracted in your study hours, allows you to complete a lot of your work without dedicating endless hours. Putting your phone away in another room, and avoid social media, online shopping etc while you are studying. To help with this, having daily, weekly, and monthly goals to achieve, helps you stay on track, and gives you a sense of satisfaction/achievement when you tick an item off the list.

Post-grad student four

- Treat my PhD as a 9-5 job
- Spend 5 minutes every morning to write and prioritise my 'to do list' (I find it very satisfying to tick them off as I complete them)
- Set achievable goals for the upcoming week every Sunday night
- Prioritise my health and wellbeing schedule time to exercise, relax, socialise etc

What is the ultimate goal you envisioned upon setting out on further study?

Post-grad student one

My ultimate vision looks something like a combination of clinical practice/ research/ teaching. There's not really a great model for what I want to do yet, so I sort of have to create my own path as I make my way further through my PhD. I have an additional struggle as my type of research (lab-based) is not necessarily well-incorporated into pharmacy practice. There are better models of lab-based research intersecting with clinical practice in the medical space. I will let you know if and when my vision comes true!



Post-grad student two

The ultimate goal was a hope that further study would make me a better pharmacist to suit the time we live in now. I hoped that studying would add variety to my skill set which allows me to adapt to any work situation.

Post-grad student three

Learn the tools and build connections required to succeed in my clinical/research area of interest, which will hopefully allow me to be the go-to expert in that respective field.

Post-grad student four

I decided to do my PhD as I wanted a career in research.

How can you be involved in both research and clinical practice? Do I have to complete a Masters degree to do so?

Post-grad student one

I don't believe it is necessary to complete a higher degree to be involved in clinical research. Although, I think completing either a PhD or a Masters degree gives you a better grounding in good research methods and practice.

There are lots of opportunities in the hospital pharmacy setting to be involved in research without necessarily having a higher degree.

A large source of research in the clinical setting actually involves the work done by our QUM students on placement so I suspect that a lot of your interns will have already had some experience of this during their fourth-year placements.

My suggestion would be to identify an area that you are interested in and think about a small way to start maybe gathering some data and identifying any gaps in our knowledge base and then designing a research project from there.

A reminder that, depending on the setting, there will be ethics considerations that need to be taken into account.

Post-grad student three

- There are a lot of exceptional researchers who work clinically concurrently, and do not have research higher degrees (i.e. master or PhD), for example Karl Winckel. In order to do so, I believe a key component for success is having a good research team that has experience and can help guide and mentor you. Most hospitals will have pharmacists with research expertise who can help.
- If you want to be involved, find that person and express your interest. If you don't know who they are, a senior pharmacists / director / assistant-director should know. You can either bring them a research idea you have, or they would have projects you can join on.
- Keep in mind, you can seek out people from different workplaces too we are always so keen to get junior researchers involved.

Post-grad student four

Not something I have looked into. However, pharmacists at my hospital can be involved in clinical research – predominantly retrospective studies on QUM projects. You do not need a masters degree to be involved.



6. Questions from Interns to PHRM7010 course coordinator

In this section questions from the interns were answered by the 2021 course coordinator for PHRM7010, Jason Wang. PHRM7010 is the next subject to be completed in the GCPharmPrac. It is also a course within the MClinPharm program. The questions were compiled by Jacob Kay-Reid in consultation with his cohort.

I want to go on with the Graduate Certificate In Pharmacy Practice, but is the workload too much?

The workload depends on how much is going on with everyone's life.

For example, are you staying at the same pharmacy, or a new job? Are you doing another training pathway such as the hospital residency program? These will affect how much time you can spend on the postgrad course.

Typically, you will need a minimum of about 10 hours per week per course.

What should I expect to learn?

This course covers motivational interviewing, introduction to critical appraisal skill, written and verbal presentation skills, drug information, evidence-based medication, Complementary medication, Diagnostics, Drug Interactions and Pharmacogenomics.

Is this course useful in community and hospital settings?

Feedback from current students is that the course contents are useful for all practice settings. So, whether people are in community or hospital, they are finding the information applicable.

7. Questions from Interns to the Master of Clinical Pharmacy lead

In this section questions from the interns were answered by the MClinPharm Lead, Dr.Judith Coombes. The questions were compiled by Jacob Kay-Reid in consultation with his cohort.

I want to complete my Master of Clinical Pharmacy but am worried about the workload?

The workload depends on how many courses you do per semester.

Some students do 2 courses, and some do one course, you can enrol to suit your other commitments.

Where would a Master of Clinical Pharmacy get me?

We have a combination of students in our program from different states and a range of work environments e.g., community pharmacy, public hospital, and private hospital. Where the qualification gets them is quite individualised.

Would a Master of Clinical Pharmacy be useful in Hospital Pharmacy?

All activities to develop professionally can be useful, but sometimes the timing is important for the most benefit.

A combination of work site-based and academic development activities can work well.



It is best to reflect on what development you want to do at this time and consider what development you might want to do in the future.

Would a Master of Clinical Pharmacy be useful in Community Pharmacy?

At present we have up to 30% community-based pharmacists in our program.

Would I get more pay if I have a Master of Clinical Pharmacy?

In QLD health there is a pay incentive (Higher education incentive increment or allowance).

Is it generally preferrable to commence a Masters program after a few years' practice experience?

One of the important parts of the program is working together with your colleagues and providing each other with feedback. A range of experiences makes the groups have plenty to share with each other. To make the most of this process you might think about your experience related to the individual courses.

What should I expect to learn?

The Master of Clinical Pharmacy will allow you to enhance the contribution you make to a healthcare team.

The program focuses on contemporary clinical pharmacy practice in all settings and emerging roles for pharmacists throughout the health system. You will develop the skills and knowledge needed to advance your professional practice.

An interdisciplinary approach is used in the delivery of the programs, including input from clinical pharmacists, medical practitioners, specialist nurses and academia.

Our programs provide students with the opportunity to learn with and ask questions of peers and experts through interactive modules, online real-time tutorials and group activities

Can I study part-time?

Yes, you can. To meet the demands of current work and other commitments the program is available in a part-time mode.

The program is delivered externally to practising pharmacists working across Australasia, featuring innovative online teaching methods that support active learning and skill development.

Optional face-to-face weekend workshops are offered in some courses.

8. Questions from Interns to the Master of Pharmaceutical Industry Practice lead

In this section questions from the interns were answered by the MPharmIndPrac Lead, A/Prof Pete Cabot. The questions were compiled by Jacob Kay-Reid in consultation with his cohort.

Do I need to have job in industry before I enrol?

Not at all



Does the university help me find a job?

I guess this depends on perspective, but no we aren't a recruiting agency, the placement aspects have provided students with exposure and experience that has led to them getting jobs....so the program is focussed on work readiness and employability.

Can I do this straight after my internship or should I wait a bit?

Whatever suits your circumstances, we have had pharmacy graduates do both. There are many recent graduates from many degrees and many also that have worked for a number of years before deciding to do further study or change their career path.

How many hours a week do I need to put aside for this course? – I have a very demanding job

It's a typical degree load, you can of course undertake it part time (a number do), except for the placements courses that is. Many students work part time.

I only think I want to work in industry. If I do this course, can it help me in any other areas of pharmacy?

The program is designed to provide an insight into the many professions available within the industry sector. The placements then allow you to build skills and experience in specific roles or parts of the industry. Pharmacy of course covers aspects of many areas and having a pharmacy degree is an advantage so a good launchpad for a career in the pharmaceutical and medical devices sector.

What should I expect to learn?

This program will provide you with industry-ready skills to support a career in the medicines and devices development sector. Through the program, you'll develop a depth of understanding of all aspects relating to the pharmaceutical industry in both drug and device development.

You'll gain insight into contemporary industry practice and at the end of the two-year full-time (or part-time equivalent) degree, you'll understand the complete life cycle management of a product and how it eventually gets to market.

You'll undertake more than 1000 hours of supervised experience, in one or more areas related to a product's life cycle from discovery to post registration surveillance, including discovery, chemical processes, formulation, manufacturing, preclinical, clinical trials, pharmacovigilance, pharmacoeconomics, regulatory, medical affairs, marketing and biometrics.

Can I study part-time?

All the coursework in year 1 can be done part time. The placement part in year 2 can only be done full time...it's a whole semester for a course.



9. Questions from Interns to the Director of Higher Degrees by Research

In this section questions from the interns were answered by the Director of Higher Degrees by Research, Dr. Ben Ross. The questions were compiled by Jacob Kay-Reid in consultation with his cohort.

What sort of qualifications do I need to get into academia?

A Doctor of Philosophy (PhD) degree is the qualification required for most academic and research positions in universities and industry. A PhD is one of the highest degrees that can be awarded.

The PhD program helps students to develop the independent research skills needed to conduct research, which is an important part of academia. During their PhD candidature, many PhD students also gain experience tutoring in university courses and participating as a member of university committees, which helps them to develop teaching and service skills that are important in academia.

A PhD also gives students high level transferrable skills that are highly sought-after by employers outside of academia. These are sometimes called "soft skills" and includes qualities such as written and oral communication skills, teamwork, problem solving, decision making, time management, and data processing.

Students are supported throughout their PhD candidature by a team of academic advisors, and scholarships are available to help cover living costs. The UQ School of Pharmacy provides advice and assistance to students who are interested in joining the PhD program. Please email the School of Pharmacy Higher Degree by Research Liaison Officer (<u>hdr.pharmacy@enquire.uq.edu.au</u>) with your enquiry.

10. Questions from Interns to an Early Career Pharmacist

How do you curate a competitive portfolio?

Have a diverse range of involvement within your university community to showcase your integration within the professional cohort.

Work experience (both paid employment and university placements) are essential to list as well as documenting the relevant tasks you did during these times.

Above all else, it would be a short summary of where your passion within the profession lies, what appeals to you and where you see yourself heading. This gives the reader a glimpse into your professional aspirations.

What areas of professional or personal development do you believe has best set you up/helped you in your early career?

One of the greatest things that I achieved was searching for the RIGHT internship where I was going to learn from not only a good Pharmacist but a great mentor.

I left the city for my internship, and I was in an area 2 hours away from the city, so I was still close enough for visits back. The pharmacy was a perfect place to learn the values of community spirit within community pharmacy and our role as an integral part of the community. Not being able to easily refer to Dr's, Dentists, no hospital or after hours care really helped to develop my primary care skills and understand the challenges our profession faces.

Once I completed my Internship, I stayed on with this pharmacy for another year where my preceptor really mentored me in my first year of registration and helped me on my path to management. Having a mentor is crucial for any young aspiring Pharmacist.



What are the steps/opportunities you have taken or created that have gotten you where you are today?

Leaving the city to do a rural Internship really allowed my skills as a pharmacist to develop much faster that being in the city. Although rural is classed as only an hour or so away from a major city, it didn't really feel like I was far away.

When I was newly registered, I had the attitude of wanting to learn as much as possible and I was willing to go to new locations to learn if it meant that it was going to help me on my pathway to management and ownership. I chose my opportunities carefully, but I always chose Pharmacies where I had excellent mentorship and support so as I could be sure to learn as much as possible.

After I had been registered for a year, I completed the PSA Diploma of Management where I learn some valuable skills regarding people management, time management and organisation. I was then offered an opportunity to manage a very large Pharmacy, and at the time I was very daunted and felt I wasn't ready, but it was the best decision I ever did as I learnt very quickly how to manage a large team of people and it then gave me the experience and confidence to know exactly what type of Pharmacy I wanted to be involved in.

Do you find you still have support RE clinical decisions after you become registered, specifically in a hospital setting?

You always have support. You just need to look for it in different places that you do at university.

There are many resources and references available online now to quickly reference clinical guidelines or protocols.

Working in community pharmacy you have the support of other pharmacists, nearby stores, GP's, and in hospital settings you are part of a large multidisciplinary team and establishing good professional working relationships is critical for you to ensure you have support if you need it.

What advice would you have given to yourself about your career in pharmacy?

Be patient and trust your instincts with career opportunities.



11. Contacts

Intern Training Program (ITP)

Nanette Cawcutt Phone: 07 3346 1939 E-mail: <u>ncawcutt@uq.edu.au</u>

Administrative issues (enrolments, fees, mentor/mentee enquiries etc.):

Student Administration Team Phone: 07 3346 1900 E-mail: <u>pharmacy@enquire.uq.edu.au</u>

Master of Clinical Pharmacy:

Dr. Judith Coombes Phone: 07 3346 1944 E-mail: <u>i.coombes@uq.edu.au</u>

Master of Pharmaceutical Industry Practice:

A/Prof Peter Cabot Phone: 07 3346 1854 E-mail: <u>p.cabot@pharmacy.uq.edu.au</u>

Higher Degrees by Research

Dr. Ben Ross Phone: 07 3346 1888 E-mail: <u>b.ross@pharmacy.uq.edu.au</u>



CREATE CHANGE

Contact details

School of Pharmacy T +61 7 3346 1900

- E pharmacy@enquire.uq.edu.au W pharmacy.uq.edu.au

CRICOS Provider Number 00025B