

The University of Sydney

**Faculty of
Pharmacy**

Academic Board Review Phase 2

**Self-Evaluation
Report**

October 2004

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Introduction and faculty context

Context

The Faculty of Pharmacy is the oldest centre of professional pharmacy education and pharmaceutical sciences studies in Australia and has long had a pioneering role in pharmacy education and research. The University's involvement with the education of pharmacists began in 1899. Pharmacy was originally a department in the Faculty of Science and, from 1998 to 1999, an academic unit within the College of Health Sciences. Then on 1 January 2000, pharmacy became a faculty of the University of Sydney and the first Dean of Pharmacy was appointed in May 2000. The faculty has experienced considerable change, as well as significant growth, in recent years.

The faculty is about to undergo a professional accreditation review by the New Zealand and Australian Pharmacy Schools Accreditation Committee (NAPSAC), a committee of the Council of Pharmacy Registering Authorities Inc (COPRA). Accreditation underpins quality assurance for boards of pharmacy (most pertinently the NSW Pharmacy Board), the public, students and prospective students, universities, and the profession. The accreditation process involves the submission of detailed information covering all aspects of the faculty's activities, with a particular focus on quality assurance processes, a three-day site evaluation team visit, and the preparation of a report to NAPSAC by the team. The site visit is scheduled to take place from 27 to 29 October 2004, in the days immediately following the visit by the Academic Board Review Team.

The detailed submission for the review by NAPSAC and the separate volume of appendices (two bound volumes in all), cover many of the areas under consideration in the Academic Board Review Phase 2. In keeping with the University's principle of efficiency in quality assurance processes, the faculty is including these two volumes as part of its submission to the Academic Board Review. The Self-Evaluation Report contains references to these volumes (referred to as the NAPSAC submission and the Appendices respectively).

It is important to note that the faculty is currently at a critical point in its planning and review cycle. In conjunction with the College of Health Sciences, it is finalising its plan for the next five years, 2004 to 2008, reordering priorities and introducing new priorities to reflect the changing needs of the profession and the community. In particular, the faculty aims to take on a more international character and to work even more closely with researchers and professionals across the health spectrum.

The *Faculty of Pharmacy Strategic Plan 2004-2008* is attached (Attachment A).

Structure

There are no school or departmental divisions in the faculty, but it is informally arranged into three disciplines: pharmaceutical chemistry, pharmaceuticals, and pharmacy practice (which includes clinical pharmacy).

Programs

- ❖ Bachelor of Pharmacy
- ❖ Bachelor of Pharmacy (Rural)
- ❖ Graduate Certificate in Clinical Pharmacy
- ❖ Graduate Certificate in Herbal Medicines
- ❖ Graduate Diploma in Clinical Pharmacy
- ❖ Graduate Diploma in Pharmaceutical Sciences
- ❖ Graduate Diploma in Herbal Medicines
- ❖ Master of Pharmacy
- ❖ Master of Pharmacy (Research)
- ❖ Master of Pharmacy (Clinical)

- ❖ Master of Pharmaceutical Sciences
- ❖ Master of Herbal Medicines
- ❖ Doctor of Philosophy

Student profile

2004	Number	EFTSU
Undergraduate	906	523.9
Postgraduate research	52	46.7
Postgraduate coursework	106	68.5
Total	1,064	639.1
-includes total international	113	67.3

As mentioned previously, the faculty is growing rapidly. For example, the faculty is projected to grow from 704 undergraduate HECS places in 2004 to 873 by 2009. Local undergraduate fee-payers are projected to grow from 111 to 161, and international undergraduates from 91 to 133 over the same period. Local postgraduate coursework Masters numbers are projected to grow from 77 in 2004 to 135 in 2009 (with the full fee-paying graduate-entry MPharm growing from 28 to 80). Over the same period, PhD enrolments are projected to rise from the current level of 46 to 65.

Staff profile

2004	Full-time equivalent (FTE)
Academic staff (teaching and research)	
Professors	5.0
Associate professors	3.0
Senior lecturers	5.0
Lecturers	15.0
Associate lecturers	2.4
Casual	6.8
Total	37.2
Research-only academic staff	24.4
Research assistants, technical, administrative and other support staff	37.7
Practitioner teachers	
Specialist practitioner teachers	2

Research activities

Research activities in the Faculty of Pharmacy are grouped into three broad streams: pharmaceutical chemistry, pharmaceuticals, and pharmacy practice.

❖ Pharmaceutical chemistry

Research in pharmaceutical chemistry is broadly divided into **drug discovery** and **biological mechanisms of drug actions**. The research in drug discovery focuses on the conception, design and testing of drugs (including drug quality), while research on biological mechanisms of drug actions explores how and why drugs work. In 1997 the Herbal Medicines Research and Education Centre was established within the pharmaceutical chemistry program as a focal point for scholarship and research on the quality, safety, and efficacy of herbal and complementary medicines and their

interactions with conventional drugs. The centre also promotes cooperation and linkages between the pharmaceutical and herbal and complementary medicines industries, user groups, and the University.

❖ **Pharmaceutics**

Research in pharmaceutics focuses on two broad areas. [Advanced drug delivery](#) explores the most effective means of delivering drugs to their intended sites. The faculty has a particular expertise in the study of microparticles and aerosol dynamics for potential nasal, pulmonary, or oral delivery of drugs. [Understanding and responding to individual variations in drug actions](#) includes pharmacokinetics, pharmacodynamics, pharmacogenomics, and pharmacogenetics, and seeks to identify mechanisms at the cellular level that can account for individual differences in drug reactions.

❖ **Pharmacy practice**

Research in pharmacy practice also encompasses two broad areas. [Research in community pharmacy practice](#) is concerned with the organisation and delivery of pharmacy services in the community and the role of pharmacists in the health care team, with a particular emphasis on the evaluation of cognitive pharmacy services. Areas of study include practice change management, quality use of medicines in the community, and interactions with consumers. [Research in clinical pharmacy](#) includes studies that contribute to the development and implementation of clinical policy for major health problems such as heart failure, musculoskeletal disorders, and community-acquired pneumonia, and the management of access to high-cost drugs in hospital.

The faculty's quality assurance activities and structures

The faculty uses a range of quality assurance tools, including some additional faculty-specific ones, to monitor, evaluate, and improve the curriculum and teaching.

Pharmacy's QA tools

- Teaching and Learning Plans and curriculum review (at undergraduate and postgraduate levels)
- Teaching Improvement Fund Grants
- Teaching Scholarship Index
- Support for teaching quality improvement
- Student Course Experience Questionnaire (SCEQ), Student Research Experience Questionnaire (SREQ), and Unit of Study Evaluations (USE)
- Benchmarking of research (internally and against Go6)
- PhD students' annual reviews and confidential interviews
- Annual discipline retreats
- External reviews
- Focus groups
- Staff-Student Liaison Committee, the dean's meetings with students, informal student feedback

Chapter 7 of the NAPSAC submission describes these activities and processes in detail, but of particular note is the level of scrutiny, reflection, and change that has resulted from a number of strategic reviews undertaken recently by the faculty. Apart from reviews, such as the reviews of the Mass Spectrometry facility (2003), technical staffing support (2003), administration (2004), future options for degrees (2004), and research directions and strategy (2004), the faculty has significantly restructured its committees and has undertaken, and continues to conduct, extensive reviews of its curriculum at both the undergraduate and postgraduate level. These include the second and third year review (2002, report completed 2004).

For example, the faculty is currently restructuring the Bachelor of Pharmacy, the Bachelor of Pharmacy (Rural), and the Master of Pharmacy to comprise units of study worth six credit points each while maintaining the emphasis on ensuring that graduates have the generic attributes to which the University is committed and meet the competency standards required by the profession and the community.

The faculty in its curriculum review process, which has been greatly enhanced by grants from the Teaching Improvement Fund (section 7.5 of the NAPSAC submission provides details), continues to address the problem areas, identified in the undergraduate SCEQ and some USE results, of perceived inappropriate workload and assessment. Although measures have been taken to reduce the workload in second and third year, student feedback still reflects concerns in these areas. As described in section 7.9 of the NAPSAC submission and below, the faculty is now working actively with the ITL and the Faculty of Veterinary Science to improve students' levels of satisfaction in these areas.

For instance, the Associate Dean (Teaching and Learning) from the Faculty of Veterinary Science, Associate Professor Rosanne Taylor, recently gave a presentation to the Dean's Advisory Committee outlining the processes which led to veterinary science being recognised as having best practice in quality assurance in teaching. Professor Taylor has also provided the relevant policies and procedures to the Associate Dean (Undergraduate) in the Faculty of Pharmacy, for modification and implementation by the Teaching and Learning Committee. A faculty forum at which Professor Taylor will present the processes to all staff in the Faculty of Pharmacy is being planned.

The faculty has also conducted regular internal reviews of its postgraduate courses over the past few years. These internal reviews have focused on course content, aspects of delivery, assessment, and student experience. The reviews have been coordinated by the course coordinator and overseen by the Associate Dean (Postgraduate). Recently, under the auspices and leadership of the Dean of Graduate Studies, a course review template for conducting formal reviews of postgraduate coursework degrees was finalised. This template was developed in consultation with the Graduate Studies Committee's Postgraduate Coursework Subcommittee (of which Andrew McLachlan, Associate Dean (Postgraduate) and chair of the faculty's Postgraduate Coursework Subcommittee, is a member).

Formal reviews of the Master of Pharmacy (Clinical), Master of Herbal Medicines, and Master of Pharmacy (graduate entry) will take place in Semester Two, 2004, using the course review template. A review panel (including external members) will make formal recommendations on each course. These recommendations will be considered by the dean and changes made as a result will be implemented in Semester One, 2005. Details about the reviews can be found at Appendix K.

Student opinions about the quality of teaching are valued highly and are actively sought on a regular basis. For example, the faculty is currently developing a policy on videoconferencing, with the involvement of students in the BPharm (Rural) at the Orange campus (Appendix J of the Appendices). The faculty also enjoys the strong support of its graduates, through organisations such as the Pharmacy Practice Foundation and the Pharmacy Alumni Association. Their continuing

interest in the faculty's activities is evident in their significant financial support for teaching positions, physical and other resource needs. The faculty also involves part-time and practitioner staff, alumni, the wider profession, and relevant health professionals in the consideration of quality issues, for example through faculty meetings. Some units of study, such as those in clinical practice, also have their own focus groups and seek feedback from preceptors. The faculty's commitment is to seeking feedback in relation to the curriculum and teaching as widely and as thoroughly as possible and to pursuing every available avenue in dealing with identified problems.

Benchmarking activities

Benchmarking activities with other faculties in the University, as well as with other Australian universities (particularly those in the Go8), are an important component of quality assurance. For example, in relation to research, the faculty is benchmarked against the pharmacy schools at the University of Queensland and Monash University. As Chapter 8 of the NAPSAC submission demonstrates, the faculty's research performance is outstanding in both absolute terms within the University, and relative to the Go6 (the Go8 without the ANU and the University of Sydney). In the area of average research income per FTE, however, the faculty falls below its counterparts in the Go6. Research is discussed in section 3 below.

Due to continuing concern about feedback on the appropriateness of workload raised in the survey instruments (SCEQ, USE), the dean proceeded in July 2004 to ask ITL to undertake a systematic review of the faculty's SCEQ and USE data for 1999–2003, to benchmark it against other Go8 universities, and prepare a baseline report. At the same time, the faculty decided to survey all undergraduate units of study in Semesters One and Two, 2004, and to review the data against the baseline. The aim is to identify units of study where teaching quality might be an issue, while taking into account any curriculum issues that might be affecting responses on workload. The faculty will then have a reliable basis for assessing whether the earlier changes are having the intended effect and for benchmarking itself against other parts of the University seen as having 'best practice'.

The Teaching and Learning Committee plans to first set a minimum standard of 3/5 for units of study evaluated using the USE form (based on discussions with ITL and the Faculty of Veterinary Science). Any units that fall below this score will be specifically targeted for improvement. Following a strategy successfully used in the Faculty of Veterinary Science, the minimum standard for all units will be raised gradually.

Analysis of the outcome of recent reviews

A brief summary of the findings of student surveys, reviewed by the ITL, is provided in the table below.

❖ Findings of student surveys

	Good and improving	Negative
Undergraduate	<ul style="list-style-type: none"> • Clear goals and standards • Information technology is assisting learning • The course stimulates enthusiasm for further learning • Student administration • Computer Centre • Overall satisfaction 	<ul style="list-style-type: none"> • Inappropriate workload • Excessive assessment

Postgraduate coursework	<ul style="list-style-type: none"> • Staff work hard to make their subject interesting • Clear goals and standards • Generic skills development 	<ul style="list-style-type: none"> • Problem-solving skills not developed • Workload too high
Postgraduate research	<ul style="list-style-type: none"> • Technical support • Support of supervisor • Opportunities to become involved in broader research culture • Overall satisfaction 	<ul style="list-style-type: none"> • Lack of financial support

The dean, heads of discipline, associate deans, and the Teaching and Learning Committee, are committed to addressing the issues raised by students in the feedback, as discussed above.

Committee structure

The dean is responsible for the resource and academic management of the faculty, including course governance. The dean is supported and advised by the pro-dean, associate deans, committees (chaired by associate deans and senior members of staff) and subcommittees as follows:

- ❖ **Dean's Advisory Committee** (Dean)
- ❖ **Programs Committee** (Associate Dean, Admissions and Administration)
- ❖ **Research Committee** (Associate Dean, Research)
 - Postgraduate Research Subcommittee (Dr Mary Collins)
- ❖ **Teaching and Learning Committee** (Associate Dean, Undergraduate)
 - Postgraduate Coursework Subcommittee (Associate Dean, Postgraduate)

The committees have recently been restructured in order to define more clearly their areas of responsibility and to lessen the workload of some of the associate deans. Staff discussed the issue of committee structuring and function at the annual Faculty Retreat and they were agreed that what was required was fewer main committees, but more sub-committees to spread the workload more evenly. Also, committees should have clearly defined planning priorities and terms of reference (to avoid duplication or overlap).

Section 1 Follow-up to Phase 1 Review

The Academic Board's Phase 1 review concentrated on Goal 1 of the University of Sydney, namely that the University will maintain and enhance its position as an outstanding provider of high quality undergraduate and postgraduate teaching, both in Australia and internationally. At the same time, the Phase 1 review looked at the research training aspect of Goal 3, excellence in research.

The table below sets out the faculty's responses to the recommendations arising from the Phase 1 Review. All sections other than Phase 2 update contain information already on record (where any information was recorded). The Phase 2 update sections contain the most recent information from the faculty in relation to the recommendations.

The faculty has also taken some initiatives of its own to improve the quality of teaching and research training following the Phase 1 Review. These are set out more fully in Chapter 7 of the NAPSAC submission, but an example to illustrate developments is:

❖ the **faculty's Teaching Excellence Awards** instituted in 2003. The inaugural recipients were Andrew McLachlan (category: full-time academic staff member) and Henk Roubos (category: demonstrator/tutor). In 2004 there are three award categories: academic staff member (\$2,000), teaching support staff member (\$1,000), and technical officer (\$500) - new category. These awards are prestigious, bringing public recognition at a graduation ceremony. Student involvement in nominations (now called for in each semester) signals the importance the faculty places on high quality in its teaching.

Recommendation 1	Noting the extensive objectives identified in the Faculty's Strategic Plan, the Review Team recommends the identification and prioritisation of the main objectives to facilitate earlier achievement of those that are most important.
Action taken by the Faculty	At the beginning of the year, each Associate Dean with his/her committee identified their three top priorities for 2003 and then focussed on achievement of these by the end of the year. Faculty funds were set aside to assist with the achievement of the top priorities.
Faculty's evaluation of the success of action taken	During the year, the Associate Deans gave regular progress reports to the Dean's Advisory Committee. All priorities for 2003 will have been achieved by the end of the year or shortly thereafter.
Phase 2 update	The new faculty Strategic Plan 2004-2008 specifies priorities and measurable outcomes in each area. The plan is attached (Attachment A).

Recommendation 2	The Review Team recommends that the Faculty consider ways of ensuring consistency of the staff mentoring process across the Faculty.
Action taken by the Faculty	<p>The three discipline heads (Professors Armour, Roufogalis and Murray), reached an agreement for mentoring of new staff to ensure consistency across the Faculty.</p> <p>All new staff will have a formal two-part mentoring process: the existing Research Committee mentoring, which focuses on assisting the staff member to become research active as soon as possible, and mentoring from the discipline head in the form of regular meetings (weekly for the first month, then monthly for the next six months, followed by bi-monthly for a further 6 months). The purpose of these meetings is to allow new staff members to raise issues which may be hindering their assimilation and for the head of discipline to provide guidance in terms of career progression and workload. Teaching, research and administration will be covered in the discussions.</p>
Faculty's evaluation of the success of action taken	The Faculty's research mentoring scheme has been judged highly successful by recent participants. However, the dean's view is that it is still patchy across the disciplines and that further discussion is needed with the professors most concerned.
Phase 2 update	The Programs Committee is responsible also for mentoring staff with respect to teaching. The committee has sought expressions of interest from newer staff who wish to be mentored and also staff willing to be mentors. So far 2-3 staff have requested mentoring, which will commence early in 2005.

Recommendation 3	The Review Team recommends that the Faculty consider the development of a policy on the appointment, recruitment and training of demonstrators
Action taken by the Faculty	The Programs Committee has been working on the development of a policy on the appointment, recruitment and training of demonstrators for implementation in 2004. Key elements, which have been approved by the Dean's Advisory Committee, will include the provision of duty statements for demonstrators and paid compulsory formal training prior to the commencement of duties.
Further action planned but not yet implemented (if appropriate)	The training will be run by the Faculty of Pharmacy and will be based on materials developed by the ITL and Faculty of Science for training of demonstrators; it will involve one face-to-face session and completion of 3-4 on-line tasks over the course of the first semester. Specialist training in each particular experiment will be provided by the person in charge of each experiment.
Phase 2 update	<p>The faculty's Programs Committee organised specialised training for 24 tutors and demonstrators in the faculty. This successful course was facilitated by staff from pharmacy and the ITL and involved training by the course coordinators and online exercises using WebCT. On completion of the training, staff were given a certificate signed by the dean.</p> <p>Encouraged by the positive feedback from participants, the Programs Committee plans to run the course annually and to explore the possibility of arranging for more advanced training.</p> <p>A similar training program was also organised for the teacher-practitioners and tutors in Pharmacy Practice by Associate Professor Ines Krass, who is also a member of the Programs Committee.</p>

Recommendation 4	The Review Team recommends that the Faculty give priority to building up its professorial staff members, and in so doing reduce the workload (for example on Faculty committees) of junior staff to enable them to undertake more research.
Action taken by the Faculty	<p>Since the Board's visit to the Faculty of Pharmacy, the following professorial positions have been advertised: Chair of Pharmacogenomics (Pharmaceutics), Sesqui Chair of Herbal Medicines and Sanofi Synthelabo Associate Professor of Clinical Pharmacy (joint appointment with Royal North Shore Hospital). Furthermore, two staff were promoted to Associate Professor in January 2003 and one other staff member has been promoted to Associate Professor, effective January 2004.</p> <p>All Associate Deans have now been provided with significant administrative support to reduce their workloads.</p>
Phase 2 update	<p>The Postgraduate Studies Committee has been divided into two committees: Postgraduate Research Subcommittee and Postgraduate Coursework Subcommittee. The Associate Dean (Postgraduate) now chairs only the Postgraduate Coursework Subcommittee, with a new chair appointed for the Postgraduate Research Subcommittee.</p> <p>Also, see Recommendation 5 below. In addition, it is hoped to make an appointment to an associate professorship in Herbal Medicines later in 2004. A chair in Pharmacy (Aged Care) is expected to be advertised soon. These are externally funded positions.</p> <p>A review of the administration in 2004 has resulted in a change management proposal which is currently being implemented. The restructure should ensure a more cohesive administration with greater support for associate deans.</p> <p>The associate deans concerned have maintained an impressive research record. The faculty's view is that its action to address the recommendation has been successful.</p>

Recommendation 5	The Review Team recommends the Faculty appoint a professor and other academic to the Pharmaceutics discipline. This will relieve the workload pressure from other staff within the discipline.
Action taken by the Faculty	<p>The new Chair of Pharmacogenomics (Pharmaceutics), Professor Michael Murray, officially commenced duty in July 2003, but was a regular participant in faculty activities from January 2003 onwards.</p> <p>The following Pharmaceutics staff were also appointed during 2003: Dr Allan Coombes (Senior Lecturer), Ms Poonam Kamboj (Associate Lecturer 0.6 FTE), and Dr Mano Chetty (Sesqui Lecturer with specific responsibility for implementation of new programs in Pharmaceutical Industry). Another Lectureship in Pharmaceutics is currently under advertisement and it is expected that recruitment will be completed shortly.</p>
Faculty's evaluation of the success of action taken	<p>The Faculty is very pleased that, with the completion of recruitment for the position currently under advertisement, the Pharmaceutics staff will be at full strength for the first time in more than three years.</p> <p>The Faculty has found it very difficult to attract suitably qualified candidates for appointment to academic positions in Pharmaceutics, despite concerted advertising campaigns in the national and international press, as well as directly through the relevant professional bodies and other universities. Each position has had to be advertised two or three times. Unfortunately for the Faculty of Pharmacy, holders of doctoral degrees in the pharmaceutical sciences are readily able to secure positions in the pharmaceutical industry which pay much more highly than academic positions.</p>

Phase 2 update	The following current Pharmaceutics staff have been appointed: Dr Allan Coombes (Senior Lecturer), Mr Shahid Ahmed (Associate Lecturer 0.6 FTE), and Dr Mano Chetty (Sesqui Lecturer with specific responsibility for the implementation of new programs in Pharmaceutical Industry), Dr Nerida Cole (specifically in association with the Master of Pharmacy degree) and Dr Romano Fois (short-term lecturer). Two Lectureships in Pharmaceutics were advertised recently and it is expected that recruitment will be completed shortly.
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Recommendation 6	The Review Team recommends that the Faculty makes the provision of postgraduate coursework materials on WebCT a priority
Action taken by the Faculty	<p>Whilst the main priority in 2003 was for all undergraduate coursework materials to be on WebCT, two postgraduate units, Pharmacoeconomics (PHAR 5010) and Introduction to Pharmaceutical Technology of Herbal Medicines (HERB 5008), were made available on WebCT in Semester 2. These were very well received by the students and have set the benchmark for the other postgraduate coursework units.</p> <p>Material for all postgraduate coursework units will be on the WebCT by the beginning of Semester 2, 2004.</p> <p>The Faculty has now also commenced development of new materials for the Master of Pharmacy which will commence March 2004. The MPharm (2 yrs coursework) will lead to vocational registration.</p>
Further action planned but not yet implemented (if appropriate)	The Faculty has applied to the Vice-Chancellor's Development Fund for seed funding to establish an Education Unit within the Faculty. The provision of expert assistance in the use of information and communication technology in teaching and for the development of internet-based and multi-media teaching materials will assist staff to maintain high research productivity whilst at the same time expanding the programs on offer in the Faculty.
Faculty's evaluation of the success of action taken	WebCT materials completed to date have been extremely well received by the students.
Phase 2 update	<p>All materials for the first year of the new Master of Pharmacy by coursework which commenced 1 March 2004 are available on WebCT, and there is a high priority on adding the remaining postgraduate units of study.</p> <p>The faculty has yet to be advised of the outcome of its application for support to establish an Education Unit.</p>

Recommendation 7	The Review Team recommends that the Faculty consider the development of its own Faculty specific strategies, policies and decisions in relation to international student support to complement those at University level. The appointment of an international students' coordinator would be a positive move.
Action taken by the Faculty	This matter was referred to the Programs Committee for consideration. Advice was sought from a number of other Faculties, particularly those similar in size or with similar numbers of international students, as well as from the International Office and Welfare Services. No other faculty with specific strategies, policies and decisions in relation to international student support to complement those at University level (or useful model) was found. The Programs Committee was not convinced of the need for an International Students' Co-ordinator at this time but will review this on an annual basis.
Faculty's evaluation of the success of action taken	The Faculty is willing to reconsider this matter again at a future date.

Phase 2 update	The associate dean responsible for the Programs Committee monitors the progress of international students and participates actively in moves to expand exchange arrangements. In this respect, the faculty has an effective coordinator in the associate dean. Further, the progression rates for international students in the faculty are outstanding (see section 4.3 below for figures).
Recommendation 8	The Review Team recommends that the Faculty consider ways to address the uneven distribution of support for postgraduate research students across disciplines, and provide students with clearer advice about how funds are allocated.
Action taken by the Faculty	<p>This issue was referred to the Faculty's Postgraduate Studies Committee for consideration. The <i>perceived</i> uneven distribution of support may have arisen as a result of the PRSS funding in 2002 or the observation by some students that computers were more readily available in Pharmacy Practice than the other disciplines.</p> <p>The committee reviewed its procedures for advertising the PRSS, criteria for allocation of funds and communication of the results of applications for PRSS funding. The issue of computers was discussed at length within the committee and also with senior staff in the Faculty and the discipline of Pharmacy Practice. It was recognised that computers were essential research tools in Pharmacy Practice. It should be noted that students in the other two disciplines (Pharmaceutics and Pharmaceutical Chemistry) receive similar levels of support for their research equipment and research maintenance.</p> <p>The issue of support was discussed with students at the next Postgraduate Students Meeting in the Faculty.</p>
Faculty's evaluation of the success of action taken	The recent round of interviews with all postgraduate students in the Faculty (November 2003) did not identify support as an ongoing issue.
Phase 2 update	The SREQ Quality of Infrastructure Scale (percentage agreement) for 2003 was 71%, which is higher than both the CHS average of 63% and the University average of 59%.

Section 2 Goal 2: Diversity, access and equity

Goal 2: Diversity, access and equity

The University of Sydney will continue to provide access to tertiary study and appropriate support for students from a diversity of backgrounds

2.1 Objectives

The aspirations of the faculty, set out in its strategic plan, are to:

- ❖ improve opportunities for Indigenous Australians to engage in pharmacy education and research, and
- ❖ improve opportunities for rural Australians to engage in pharmacy education and research

This will be achieved by contributing to college-wide teaching, research and service initiatives that are accessible and useful to Indigenous Australians and rural Australians. These include improvements in coordination of support services for Indigenous and rural students and encouragement of research programs that are relevant to Indigenous and rural communities. The faculty's priorities and measurable outcomes in each area of the strategic plan are set out by the relevant committee or subcommittee in Attachment A.

The faculty is committed to providing access to tertiary study, and indirectly to the profession, to students from a diversity of backgrounds. Each year, the faculty admits 10-12 students through the Broadway scheme for applicants from disadvantaged backgrounds. The faculty participates in the University's scholarships schemes and provides its own scholarships. In recent years, an increasing number of students have been admitted on a fee-paying basis (with all students in the graduate-entry Master of Pharmacy being fee-paying students). The introduction of the Bachelor of Pharmacy (Rural) in 2003 was a significant step towards attracting students to rural and remote pharmacy practice and related pharmaceutical research. The faculty is equally committed to equity and diversity in relation to academic and general staff.

2.2 Policies, processes and practices

Chapter 4 of the NAPSAC submission sets out the faculty's policies, processes, and practices in relation to student admissions and student support. For example, the faculty has a requirement that applicants undertake the STAT test. This helps to identify applicants with poor English language skills and to ensure that only applicants specifically interested in pharmacy (as evidenced by them having taken the additional test) are considered.

Chapter 3 of the NAPSAC submission discusses academic staff. It is of note that the faculty now has staff based at the Orange campus as well as having many Sydney-based staff, including the dean and associate deans, regularly liaising with staff and students at Orange both in person and by videoconference. The University is currently involved in extensive consultation, about the programs at the Orange campus. The innovative and much needed BPharm (Rural) will remain an integral part of the faculty's teaching, but may not be offered from the Orange campus. In any event, the BPharm (Rural) will be offered from the Camperdown campus from 2006, and the students will continue to gain their interdisciplinary clinical experience in UDRH and clinical schools, at Lismore and Broken Hill, and the Dubbo Clinical School.

2.3 Outcomes

In March 2003, Associate Professor Gerald Holder produced a detailed report for the faculty: *Applicants for Pharmacy at the University of Sydney 1997–2002*. Most of its findings remain valid. Some key findings relating to 2002, with 2004 figures in brackets, are:

- ❖ the ratio of school-leavers to others receiving an offer of a place in the BPharm is 60:40 (75:25)
- ❖ women accounted for 65 per cent of acceptances (70 per cent)
- ❖ about 75 per cent of applicants come from metropolitan areas; 25 per cent come from regional centres including Newcastle and Wollongong, and
- ❖ few applications were received from local government areas with a high proportion of Aboriginal or Torres Strait Islander people.

The faculty has tried to recruit Indigenous Australian students by attending Koori camps, working with staff in the Koori Centre, Yooroang Garang (in the School of Indigenous Health, Faculty of Health Sciences), and the Faculty of Science, and by producing a targeted pamphlet. Unfortunately, these efforts have not been successful in attracting Indigenous Australian students to the faculty. Recognising that a more in-depth approach is needed, the faculty is working closely with the college through its Indigenous Committee.

The faculty has, however, incorporated into every new unit of study in the BPharm (Rural) degree a segment on indigenous health issues (summarised below). This has been done to increase the awareness of students of the needs of the Indigenous population of Australia and equip them to provide appropriate services in the future. A strong partnership with Jamie Newman, the Aboriginal Health Coordinator in Mid Western Area Health, and his team has been formed.

Year 1

Pharmacy in Rural Society - Lectures on ATSI health statistics, Bush Medicine and incorporation of this material into two student assignments.

Roles of Rural Health Care Practitioners - Presentation from Aboriginal Health Care Worker, Lecture on health beliefs and Cultural Differences

Year 2

Health and Cultural Issues in Rural Australia - Cultural Awareness Training, a series of presentations from Aboriginal Health Care Workers, an excursion to an Aboriginal Medical Service in Condobolin and an Aboriginal Settlement in Murrin Bridge, videoconferences with pharmacists working with Aboriginal communities in northern Western Australia and Alice Springs. Students' assignments focus on creating educational and communication material and answering questions based on a WebCT module created within Yooroang Garang.

Year 3

Pharmaceutical Science in Rural Practice - students will be given case studies involving Indigenous health issues.

Rural Placements - some students may be sent if they wish to remote places for experience

Year 4

Integrated Rural and Remote Pharmacy - units yet to be developed but will incorporate Indigenous health issues.

Clinical Practice - students will have the option of extended placements at remote sites with preceptors experienced in dealing with Indigenous health issues.

Research by students and staff is also conducted in the area of Indigenous health. For example, this year an Advanced student (in fourth year), for her research project, has interviewed more than 10 Aboriginal Health Workers in the Mid Western Area Health service about medication issues for local Indigenous people. She has explored the problems and possible solutions and will present this to the faculty in early November. Her work has been used as the basis of an application for funding to implement some of the solutions suggested.

The highlighted areas in the table below show that the faculty has an increasing number of international enrolments and has excellent progress rates. The progress rates for students from a low socio-economic background are particularly good (and better than the University average for 2003 of 89%).

	2000	2001	2002	2003	
Undergraduate students					
	Total enrolment load (EFTSU)¹	652.6	683.1	700.4	777.0
	Progress rates (% of students passing)	94	95	95	96
	Student Gender Mix M/F as %	35.4 / 64.6	34.0 / 66.0	34.9 / 65.1	33.5 / 66.5
	Total enrolments	742	788	813	834
	Students with a disability: load	2.7	4.5	13.9	18.7
	Progress rates (% of students passing) students with a disability	100	97	94	93
	Students from a non-English speaking background: load	56.3	58.3	57.9	65.2
	Progress rates (% of students passing) NESB	93	94	94	97
	Students from a low socio-economic background: load	75.1	85.6	78.5	79.1
	Progress rates (% of students passing) low socio-economic background	90	94	95	98

With recent staff appointments, the gender balance amongst staff is on the way to becoming similar to that for students, but with a higher proportion of males currently at senior academic levels. Staff come from a great variety of backgrounds including non-English speaking backgrounds, and the faculty could be described as truly multi-cultural.

2.4 Stakeholder feedback

No feedback specifically dealing with the diversity amongst students and graduates is available. However, it is hoped that the BPharm (Rural) will attract students committed to working in rural and remote areas. While no formal survey has been undertaken of the reception of the BPharm (Rural), informal feedback has been very positive.

2.5 Quality assurance processes

A number of undergraduate students in the faculty are registered with the University's Welfare and Disabilities Services, and considerable effort is made to provide the necessary support for these students, with guidance from Welfare and Disabilities Services. The First Year Coordinator and the Associate Dean (Undergraduate) work very closely with Welfare and Disabilities Services and are also available to help with individual problems. In addition, the faculty's First Year Coordinator makes individual contact with all students in first year, and is available for consultation by students for the duration of their undergraduate degree. In 2004, the first Third Year Coordinator was appointed and the faculty intends to introduce Second and Fourth Year Coordinators in the near future. Section 7.9 of the NAPSAC submission describes the use of surveys to elicit feedback from students on a range of issues and services.

2.6 Evaluation

The faculty will evaluate the success of its strategies using the measurable outcomes set out in the strategic plan (Attachment A). The NAPSAC review process is expected to be thorough and constructive and may lead to recommendations in this and other areas.

¹ **Students enrolled** in degrees in the Faculty (ie Pharmacy is their Faculty of registration).

Section 3 Goal 3: Excellence in research

Goal 3: Excellence in research

The University of Sydney will develop its reputation as an institution where pure and applied research and research training are conducted at nationally and internationally recognised standards, including research relevant to the economic, social and cultural well-being of Australia and the region

3.1 Objectives

The aspirations of the faculty, set out in its strategic plan, are to:

- ❖ retain its premier position in pharmacy research in Australia
- ❖ establish international pre-eminence in areas of research strength in the faculty
- ❖ enhance its standing in health research in Australia, and
- ❖ provide superior training in pharmacy research.

To fulfil these aspirations, the faculty has set the following outcomes to be achieved within five years:

- ❖ a clear focus on a limited number of research strengths, consistent with, but not confined to, the research themes of the college
- ❖ greater research recognition in health research nationally, and in pharmacy research nationally and internationally, through quality research output and collaboration with other disciplines
- ❖ greater success in attracting peer-reviewed research grants
- ❖ greater student satisfaction with the experience of research training
- ❖ greater staff satisfaction with the opportunities for professional development in research, and
- ❖ success in attracting and retaining creative and productive researchers.

Action to be taken in achieving these outcomes is grouped under four headings:

- ❖ identifying and committing to a limited number of research strengths
- ❖ improving research students' experience
- ❖ strengthening research capacity, and
- ❖ pursuing new sources of research funding.

3.2 Policies, processes and practices

Chapter 8 of the NAPSAC submission sets out in detail the faculty's policies, processes, and practices in relation to research. Benchmarking, internal and external, is discussed in section 8.4: *Productivity in research*, and collaborations are set out in Appendix N. The range and scope of research activity are detailed in sections 8.3: *A faculty with a diverse research program* and 8.7: *Areas of strength*. Research funding is discussed in section 8.6: *Characteristics of the faculty's research funding*. Other relevant sections are 8.5: *Research management and direction*, 8.8: *Strategic initiatives*, and 8.9: *Research training and supervision*.

One example of the faculty's policies and practices to foster research is its arrangements for PhD students. Each PhD student has an annual review and confidential interview. Students have opportunities to present their research, for example at the faculty's annual student research conference, and are supported financially to attend and speak at conferences. Postgraduate students in the faculty benefit from college research infrastructure support (\$20,000 for computers and other facilities recently came from this source).

3.3 Outcomes

The research performance of the faculty is substantially better than the average of the pharmacy schools in the Go6. For example, the weighted research performance for the Sydney faculty for 2001–02 was 166 per cent higher than the average weighted performance of the Go6 pharmacy schools. The weighted research degree completion rate for the Sydney faculty was more than four times the average of the Go6 pharmacy schools and publications were 44% higher. The only performance indicator that was lower than the Go6 for the faculty was research income per staff member (32% lower in 2001-02, but improving since then). Graphs in Chapter 8 of the NAPSAC submission show the faculty's performance benchmarked internally and externally. Appendix N provides details of all funded research projects and publications from 2000 to 2003. The faculty has 71% of staff research-active (as defined by the University), compared with the University average of 64%.

The SREQ results for 2002 and 2003 in relation to research supervision show that while there is still concern about the quality of supervision (the faculty's agreement score of 67% in 2003 is lower than the college at 73% and the University at 72%), research students rated the faculty significantly higher on the quality of infrastructure scale - 71% (college 64%, University 59%) - as well as on the research climate and generic skills scales². The faculty also has excellent research degree completion rates (see Chapter 8 of the NAPSAC submission).

3.4 Stakeholder feedback

The faculty's continuing success in attracting significant funding for research, described in Chapter 8 of the NAPSAC submission, is a key indicator of satisfaction on the part of funding bodies. Further, the faculty was chosen to coordinate the Community Pharmacy Research Support Centre, a national consortium of nine academic pharmacy units in Australia with a focus on research in pharmacy practice.

3.5 Quality assurance processes

The faculty's Research Committee monitors research performance on an ongoing basis and oversees research mentoring. In a further move, in February 2004, the dean commissioned Adjunct Professor Michael Frommer to undertake a review of the faculty's research performance. The resulting paper, *Towards a Research Strategy for the Faculty of Pharmacy*, identifies strengths and weaknesses and proposes strategies for strengthening the faculty's performance.

3.6 Evaluation

The observations made in Professor Frommer's review are summarised below. They identify strengths and weaknesses.

- ❖ Pharmacy is a relatively small faculty that has existed in its present form for only five years. It has a vigorous and productive academic program with a strong emphasis on research outputs, a committed and enthusiastic research-active staff, and a relatively large enrolment of PhD and research master's degree students.
- ❖ Research income has grown impressively since 2000. However, the faculty has been quite dependent on grants and commissions from one source – the Pharmacy Guild of Australia – and would be susceptible to any adverse changes in the Guild's policies, or the government's policies, for the funding of research.

² The SREQ Research Climate Scale for the Faculty in 2003 was 69%, which was higher than the CHS average of 56% and the University average of 54%. The SREQ Generic Skills Scale (percentage agreement) for the faculty was 77 in 2002 and 81 in 2003. The 2003 figure was higher than the CHS average of 80 and the University average of 76.

- ❖ The faculty's performance in attracting NHMRC and ARC grants has improved steadily, but NHMRC and ARC grants have accounted for a maximum of only one third of the research income and there is scope for increasing the faculty's income from these sources. The faculty has performed strongly in attracting new NHMRC grants in 2004 in pharmacogenomics and pharmacogenetics.
- ❖ Research-active staff express a strong desire to consolidate and build on existing areas of research strength in the faculty, and to avoid further proliferation of research fields (a faculty goal in the strategic plan).
- ❖ In general, researchers in the faculty tend to confine their thinking to pharmacy research, and research performance is benchmarked against that of other schools of pharmacy. Most elements of the research program are not conceived in the broader context of health research. A shift towards this broader context would be likely to enhance the competitiveness and status of the faculty as a research entity.
- ❖ Research-active staff are concerned that rapid growth in the faculty's teaching programs will impinge on the time and energy that they can devote to research.
- ❖ The faculty's Research Committee does not appear to have clear terms of reference.
- ❖ The faculty does not have a critical mass of multi-disciplinary expertise in some of its research fields. It relies on collaboration to obtain the necessary expertise. There is scope to expand collaborations with other faculties in fields such as epidemiology, statistics, psychology, economics, biomolecular sciences, and engineering.
- ❖ The faculty continues to carry out a large amount of research in overcrowded conditions. There is a need to find additional workspace (including laboratory space) if the research program is to be sustained, let alone expanded.

Administrative procedures and laboratory organisation, which have been problematic, have been reviewed. Some of the problems of excessive devolution of administration and deficiencies in laboratory organisation are expected to be rectified in the new structures currently being implemented through change management proposals, described in Chapter 10 of the NAPSAC submission.

Section 4 Goal 4: Internationalisation

Goal 4: Internationalisation

The University of Sydney will enhance its position as a university of high standing in the international community of scholars

4.1 Objectives

The aspirations of the faculty, set out in its strategic plan, are to:

- ❖ support University internationalisation, and
- ❖ seek international accreditation for the faculty and/or its main educational programs.

It aims to do this by:

- ❖ building capacity in pharmacy teaching and research that reflects the opportunities and health challenges resulting from increasing globalisation
- ❖ contributing to college initiatives to form strategic alliances with a small number of resource-poor countries for the development of capacity in health services teaching and research
- ❖ developing linkages with schools of pharmacy in the European Union, with particular reference to the exchange of experience in translational research and educational materials
- ❖ participating in college initiatives to form strategic alliances with universities, governments and non-government organisations that support growth in overseas students attending Sydney-based educational programs, and
- ❖ creating opportunities for, and supporting, staff and student placements and exchanges in other universities and institutions.

As part of the University of Sydney, one of the leading universities in Australia and an institution firmly committed to an international future, it is imperative that the faculty now move more fully onto the international stage in all areas of its endeavours: by introducing specific degrees such as the **Bachelor of Pharmacy (International)**, fostering greater international research collaboration, and entering into formal student exchange agreements. Appendix N (see Appendices) lists current international research collaborations; Table 9.2 in the NAPSAC submission lists the current and recent international activity of academic staff in the faculty. To take just one staff member as an example: Dr Mary Collins is a reviewer for the international journals *British Journal of Pharmacology*, *Bioorganic and Medicinal Chemistry Letters*, *Neuropharmacology*, *Journal of Pharmacy and Pharmacology* and the national contact person for the International Union of Pure and Applied Chemistry (IUPAC) Committee (Chemistry and Human Health Division).

4.2 Policies, processes and practices

Moves to internationalise the curriculum are described in Chapter 5 of the NAPSAC submission. Section 4.4: *International dimension: students* describes the current situation with regard to international students at undergraduate and postgraduate levels and the faculty's plans to increase opportunities for student exchanges. For example, discussions about exchange programs are in progress with the Pharmacy Education Consortium of Thailand (PECT). In addition to these initiatives the faculty has an established program of visits from European undergraduate pharmacy students as part of the training and internship requirements for their degrees. Some 15-20 students have come on this basis from the Netherlands, Germany, Italy, France and the UK in the past two years. Postgraduate students have also come from countries such as Denmark and Finland.

The table in section 4.3 below shows that the progression rates for international students are better than the University average and equivalent to those for local students. The proportion of international undergraduate and postgraduate coursework students is lower than the University average, relating in part to the applicability and recognition of the professional qualification in other parts of the world. The faculty regards the current balance as about right. The proportion of international research students, on the other hand, is higher than the University 2003 average of 10.84 per cent.

The faculty aims to achieve **international accreditation** for its programs as soon as possible, but this must always be compatible with its key role in ensuring that its graduates meet Australian competency standards. The faculty is in the process of researching the European Union and American recognition frameworks and preparing the required documentation.

4.3 Outcomes

	2000	2001	2002	2003
Undergraduate students				
Total enrolment load (EFTSU)³	652.6	683.1	700.4	777.0
Progress rates (% of students passing)	94	95	95	96
Total enrolments	742	788	813	834
International enrolments	56	68	71	80
(as a proportion of total UG students)	7.6%	8.6%	8.7%	9.6%
Progress rates (% of students passing) international	93	95	94	96
Progress rates (% of students passing) non-international	94	95	96	96
Postgraduate students				
Total coursework students⁴	54	63	45	58
International coursework students	1	1	7	8
(as a proportion of total PG CW students)	1.85%	1.59%	15.56%	11.76%
Total research students	48	50	49	51
Research International students	13	10	9	10
(as a proportion of total research students)	27.08%	20.00%	18.37%	19.61%

4.4 Stakeholder feedback

No feedback specifically dealing with the international dimension of the faculty's activities is available at present. International marketing and recruitment is coordinated by the college and some feedback may be forthcoming from the college about this in the future.

4.5 Quality assurance processes

The disciplines are considering which universities they should benchmark against, perhaps one American university, one European, and one Australian pharmacy school. The moves to increase the number of international exchange opportunities, described above, will also involve quality assurance considerations.

4.6 Evaluation

The faculty is strongly committed to becoming recognised as outstanding internationally. The faculty's measurable outcomes in relation to its goals in this area are set out in the strategic plan (Attachment A). The NAPSAC review may lead to recommendations in this and other areas.

³ **Students enrolled** in degrees in the Faculty (ie Pharmacy is their Faculty of registration).

⁴ Does not include students in the graduate entry MPharm program, which commenced in 2004.

Section 5 Goal 5: Engagement with industry and the professions

Goal 5: Engagement with industry and the professions

The University of Sydney will continue to make a significant contribution to the well-being and enhancement of the wide range of professions with which it engages

5.1 Objectives

The faculty's key objectives are to:

- ❖ ensure that pharmacy graduates have the skills and competencies required by the profession
- ❖ contribute to the profession through leadership of professional associations and support for their continuing education programs
- ❖ continue to engage members of the profession to provide teaching and placement opportunities in a variety of settings
- ❖ work with alumni and the Pharmacy Practice Foundation (which provides significant funding to the faculty) for the benefit of the profession and the faculty (see section 1.8 of the NAPSAC submission)
- ❖ work with industry to develop and commercialise research through joint government industry grants and consultancies, and
- ❖ develop lifelong professional education through collaborative courses and professional articles.

Specifically, in the faculty's Strategic Plan, Goal 3 includes the following commitment:

As a priority we will contribute to public debate and action on current and emerging health issues that are relevant to pharmacy in Australia and internationally by:

- ❖ contributing to community and professional debate on important health and medical issues relevant to pharmacy through public forums, position papers and independent analysis and commentary
- ❖ continuing to encourage staff to participate in major national, state and professional committees on pharmacy and health policy issues
- ❖ representation on key committees in order to promote pharmacy.
- ❖ working with health service planners and peak professional bodies to identify and respond to future workforce needs
- ❖ encouraging research-based projects involving pharmacy that have the potential to reduce health inequalities, and improve the quality and safety of health care, and
- ❖ continuing to contribute to government policy committee and enquiries into drug and herbal medicines evaluation and utilisation in the community.

5.2 Policies, processes and practices

The faculty works closely with members of the pharmacy profession from hospitals, community pharmacies, and industry. For example, the dean (Professor Benrimoj) and Associate Professor Chan are currently investigating joint appointments with industry. Coordinators of units of study that involve clinical placement experience liaise with preceptors in the field, providing initial training and seeking feedback about the students and the curriculum. These units of study are evaluated regularly to obtain students' input. More detail about obtaining feedback and working with practitioners in the area of placements can be found in sections 7.5 and 9.2 of the NAPSAC submission.

Joint research activities are encouraged by the discipline heads and through the faculty's Research Committee. Current collaborations can be found at Appendix N (Appendices). For example, Dr Sue Taylor has research grant collaborators as varied as the Senior Education Services Manager for the Arthritis Foundation of NSW, a community pharmacist in Singleton, and the Director of the Centre for Rural and Remote Mental Health at Orange.

5.3 Outcomes

Students report very favourably on the teaching done by the twelve practitioner teachers (including two hospital based specialist practitioner teachers) - see section 6.3 of the NAPSAC submission. In fact satisfaction with the practical aspects of the curriculum, including externships, has consistently rated highly in the 'best aspects of the degree' comments section of the SCEQ for undergraduate students. The faculty aims to increase the number of practitioner teachers and engage more specialist practitioners. A position for a Drug and Alcohol Teacher Practitioner is currently under advertisement. The faculty is also committed to working more closely with preceptors in hospital settings in particular (see section 6.4 in the NAPSAC submission). A number of postgraduate research students have received supplementary funding from industry.

Chapter 9 of the NAPSAC submission, and in particular Table 9.1, sets out the extensive involvement of staff in professional organisations. To take just two examples: the dean is the president of the Pharmaceutical Society of Australia (PSA) NSW, and Professor Brien is the vice-chair of the Society of Hospital Pharmacists (NSW) and the chair of the St Vincent's Hospital Human Research Ethics Committee. The faculty has also had some success in commercialising its intellectual property. Some spin-off companies, for example UCOM2 and ZingoTX, have been established.

The majority of graduates apply to register as pharmacists with the NSW Pharmacy Board after meeting registration requirements. There is as yet no formal feedback on the quality of graduates, but the faculty has discussed the issue with the board and hopes that it will provide information in the future on the extent to which graduates succeed in obtaining registration at their first attempt. A number of graduates find positions in government and the pharmaceutical and biotechnology industries.

5.4 Stakeholder feedback

The NAPSAC accreditation review will take place from 27 to 29 October 2004 and the report may contain recommendations in this and other areas. This feedback and the feedback from the Phase 2 review will be important to the faculty. Recent feedback from students in units of study involving placements can be provided by the faculty office if required.

5.5 Quality assurance processes

Chapter 7 of the NAPSAC submission discusses the faculty's quality assurance processes in detail. There have been several presentations at both research and teaching conferences of the results of the University-funded (through the Teaching Improvement Fund) quality assurance project on the Clinical Practice Placement Program in the fourth year of the BPharm. The results will also be disseminated in the form of publications for international peer reviewed research in teaching journals. A journal article and poster about the project can be found at Appendix L (Appendices).

5.6 Evaluation

It is evident from the continuing and growing strong support of the Pharmacy Practice Foundation and the significant funding from the pharmaceutical industry for a wide range of research projects that the faculty is generally highly regarded by the profession and industry. As discussed in the NAPSAC submission, there is room for improvement in relationships with hospitals and this is being addressed by the creation of the Experiential Learning Advisory Group (ELAG).

Section 6 Goal 6: Effective management

Goal 6: Effective management

The University of Sydney will improve its position as an efficient, effective and responsible institution, striving to meet the needs of students and staff, and committed to quality in all aspects of its operations

6.1 Objectives

The Faculty of Pharmacy has grown rapidly since its inception as a faculty in 2000 and is projected to continue to grow. It has transformed its operations from those of a department to those of a faculty with considerable success. It has embraced information technology, in particular WebCT and videoconferencing, and this has required openness to quite different approaches. However, the complexities arising from rapid development (and important initiatives such as the Bachelor of Pharmacy (Rural) and the graduate entry Master of Pharmacy) have challenged the faculty's administrative, technical, and management structures.

The faculty's key objectives in regard to efficient and effective management are set out in detail in Goals 4 and 5 of the faculty's strategic plan 2004-2008. The aim is to ensure:

❖ **efficient and effective structures and processes that enable the faculty to achieve and sustain excellence in teaching, research and service.** These structures and processes will rely on improvements in:

- governance
- decision-making
- management
- financial systems, and
- operations.

In summary, the faculty aims to:

- ❖ create governance and management structures and systems that enhance the faculty's teaching, research, and service roles
- ❖ design improved processes for decision-making and communication within the faculty
- ❖ create more efficient administrative systems
- ❖ secure more resources
- ❖ improve the physical infrastructure that supports teaching, research and administration
- ❖ improve the organisation and management of laboratory facilities
- ❖ enhance administrative services to support the faculty's main functions, and
- ❖ improve IT services to support teaching, research and student management.

Specific strategies for achieving these goals within the next five years are set out in the strategic plan (Attachment A)

6.2 Policies, processes and practices

The faculty has a rigorous approach to planning, described in section 11.1 of the NAPSAC submission. As part of its commitment to quality and quality assurance processes, it conducts regular reviews of its curriculum as well as commissioning reviews of aspects of its operations from time to time. These are described in the Introduction (above) and in section 1.6 *Quality assurance processes and reviews*, and chapters 7 and 10 of the NAPSAC submission.

6.3 Outcomes

The restructuring of committees and clarification of their terms of reference is expected to lead to greater efficiency and effectiveness. Similarly, the new structures being implemented in the administrative and technical area are expected to provide better support and be more efficient. The faculty is also moving to using standardised templates (for example, the Unit of Study template for WebCT). The faculty also buys services where this is more cost-effective. For example, it buys IT services, and some postgraduate administration is handled by the college. Nevertheless, the faculty is concerned about the issue of trying to ensure balanced workloads for members of the academic staff. The faculty notes increasing demand on staff in all areas of their responsibilities, including administration.

6.4 Stakeholder feedback

Undergraduate students in the Faculty of Pharmacy rate the quality of student support and administration highly (70% in 2003, compared with the University average of 66% and the College of Health Sciences average of 68%). For postgraduate students, the picture is more complicated because their administration is carried out by the College of Health Sciences.

Feedback through the SCEQ on the faculty's computer facilities has been improving in recent years (for undergraduates from 51% to 71% approval between 2001 and 2003. The faculty's recent survey of all undergraduate units of study using the USE method reveals growing satisfaction with web-based teaching and related support.

6.5 Quality assurance processes

With regard to effective management in particular, the faculty works closely with the College of Health Sciences, which includes amongst its goals 'effective management and transparency in governance'. The college and its constituent faculties aim to:

- ❖ make operational, financial and management processes more efficient, effective and equitable,
- ❖ make governance and decision-making more transparent, and
- ❖ increase operating margins to support growth and continuous improvement.

The faculty's quality assurance processes are set out in Chapter 7 of the NAPSAC submission.

6.6 Evaluation

Following reviews in 2003 and 2004, the faculty is currently implementing change management plans in its administration and technical staffing. The new structures are expected to lead to improvement in the support available to the dean, associate deans, and discipline heads to assist them in meeting the challenges of expansion and further technological development. The faculty expects to see more favourable responses and comments from students to a more streamlined approach in administration and in technical support areas (wet and dry laboratories, and web-based and videoconferencing services).

The new support structures will be pivotal to achieving the aims set out in 6.1 Objectives above, underpinning the management of research, teaching, and service to the community. The faculty is also anticipating a major challenge in providing appropriate space for the growing student population and for the leading health researchers it is aiming to attract. The faculty will continue to negotiate for the provision of appropriate space and facilities. The NAPSAC accreditation review represents a major milestone for the faculty. The review process is expected to be thorough and constructive.

Section 7 Goal 7: Service to the community

Goal 7: Service to the community

By providing knowledge, opportunity and encouragement, the University of Sydney will maintain and enhance its position as a leading contributor to the opinions and idea, cultures and lifestyles of the many communities it serves locally, nationally and internationally

7.1 Objectives

The faculty serves the community primarily by preparing graduates committed to life-long learning who will work as pharmacists or pursue scientific research. The faculty and its graduates provide leadership in the profession and the community, and the faculty also conducts extensive research in areas impinging directly on the health of the community. It works closely with the pharmacy profession (and increasingly with related health professions), industry, and government, by contributing to committees, publications, and conferences. In this respect, the discussion of Goal 5, Engagement with industry and the professions, also relates closely to Goal 7; the objectives and strategies listed in 5.1 are also applicable here.

7.2 Policies, processes and practices

As Chapter 9 of the NAPSAC submission shows, the faculty contributes significantly to local, national, and international debate in its areas of expertise. The dean, associate deans, and professors take leadership roles in the profession and related government and community organisations.

7.3 Outcomes

Table 9.1 of the NAPSAC submission shows the extent of the contribution of members of the faculty to the community. They serve on the NSW Poisons Advisory Committee, for example, the Royal Australian Chemical Institute Biomolecular Chemistry Division, the NSW Therapeutics Advisory Group (NSWTAG) Management Committee, and the Australian Sports Drug Agency. Faculty staff also regularly write continuing education articles for Australian pharmaceutical journals.

7.4 Stakeholder feedback and quality assurance processes

Members of faculty are regularly invited to be members of community groups such as those described above. This is testimony to the high regard in which the faculty's expertise is held generally in the community. The faculty, however, seeks to ensure that it is represented in all appropriate community and professional areas and would be concerned if there were to be any sign of this changing.

7.5 Evaluation

The NAPSAC review report may provide some comment in this area. The faculty believes it provides knowledge, opportunity, encouragement, and community service of a high standard and seeks to enhance its position as a leading contributor to the communities it serves locally, nationally and internationally.

Section 8 Evaluative summary of the faculty's effectiveness in contributing to the University's seven goals

The Faculty of Pharmacy has made an outstanding contribution to the realisation of the University's seven goals since its inception as a faculty in 2000, and, before that, as a department. It is the pre-eminent Faculty of Pharmacy in Australia and in fact the only pharmacy school to have full faculty status. It has the largest postgraduate student body and significantly higher outcomes for research in all areas other than research income per FTE. The challenge is to continue to grow in size, complexity, and quality. The faculty is concerned, however, that it may be vulnerable in regard to maintaining its current high standards because of the need to grow rapidly and because of the increasing demands placed on academic staff.

The faculty's key strengths are its research profile, contributing to University Goal 3, and its strong engagement with, and recognition by, industry and professional groups, contributing to University Goal 5. By focussing more closely on a limited number of research strengths and developing collaborative projects with other areas of health and pharmaceutical sciences research, both nationally and internationally, the faculty aims to make an even greater contribution in the next five years.

In some areas, the faculty is strong, but recognises that it could nonetheless improve and develop. Internationalisation (University Goal 4) is such an area. The faculty is placing a major emphasis in its strategic plan on initiatives such as the introduction of a Bachelor of Pharmacy (International), entering into formal exchange arrangements for staff (in terms of research) and students (at both undergraduate and postgraduate levels), and obtaining international accreditation for its degrees. In fact the aim is to achieve recognition as one of the top ten pharmacy schools in the world.

As outlined in relation to Goal 6 above, the faculty recognises the need to become more effective and efficient in its management over the next five years. The new staffing structures should contribute to this aim. The establishment of the Pharmacy Education Unit would also help in this and other respects. Measures to provide sufficient appropriate space and facilities for staff and students will also assist the faculty in achieving many goals, including that of efficiency and effectiveness, particularly in the retention of staff.

In relation to University Goal 7, Service to the community, the faculty aims to engage in debate and research in a more cross-disciplinary way with other health professionals. It also aims to assist in addressing the current shortage of community pharmacists in Australia by increasing enrolments. It has already responded to the shortage of pharmacists in rural Australia by introducing the Bachelor of Pharmacy (Rural) at the Orange campus. The faculty continues to assist the community by providing a skilled workforce for industry and government.

The faculty also recognises that it needs to do more to improve student's learning experience, particularly in regard to workload and assessment (University Goal 1). It is also committed to continuing to work on ways of attracting and retaining Aboriginal and Torres Strait Islander students at all levels (contributing to University Goal 2). The current benchmarking work undertaken with ITL (the survey, using the USE instrument, of all current units of study) and with the Faculty of Veterinary Science, together with the implementation of revisions to the curriculum recommended by reviews, should see significant changes in student feedback in these relatively negative areas for the faculty in the next few years.

The faculty sees the next five years as a critical period in which it aims to develop further its strengths and to address its weaknesses. It welcomes the scrutiny of reviews, internal and external, and is committed to acting on constructive advice and demonstrating its commitment to quality in all aspects of its operations.

Faculty of Pharmacy Strategic Plan 2004–2008

September 2004

Introduction

The Faculty of Pharmacy is one of the five Faculties that make up the College of Health Sciences in The University of Sydney. The College is the leading provider of education and research in the health sciences in Australia. In addition to Pharmacy, the College consists of the Faculties of Dentistry, Health Sciences, Medicine, and Nursing. It offers some 10,000 students a vast range of basic and advanced education in numerous health-care disciplines, and its Faculties are renowned for their teaching innovations and research excellence.

The University of Sydney has had a pioneering role in pharmacy education and research in Australia. It has been involved in the education of pharmacists since 1899, and has had an active research program in pharmaceutical sciences since 1950. The University's Bachelor of Pharmacy degree, introduced in 1960, was the first undergraduate Pharmacy degree to be offered in Australia.

Pharmacy education and research developed within the Department of Pharmacy, which was part of the Faculty of Science until 2000. In that year, the Department became a Faculty in its own right within the College of Health Sciences – the first Faculty of Pharmacy to be established in Australia.

The Faculty has rapidly become the pre-eminent Australian centre of education and research training in pharmacy, and offers a wide range of undergraduate and postgraduate programs, from bachelor's degrees and graduate diplomas to doctorates. Places in the Faculty's degree programs are highly sought after. For example, in 2004, there were 1,400 applicants for 122 places (under the Higher Education Contribution Scheme [HECS]) in the Bachelor of Pharmacy degree program. The Faculty has moved rapidly to incorporate the initiatives undertaken by the University in response to the Australian Government's higher-education reforms introduced in 2003, set out in the paper, *Our Universities: Backing Australia's Future* (the 'Nelson Report'). For example, the Faculty now accommodates additional full-fee-paying students, and has strengthened its systems of accountability to accord with the new requirements.

The Faculty has also been highly successful in research and service to the pharmacy profession and the Australian community more broadly, with a strong research agenda in pharmacy practice, pharmaceuticals and pharmacogenomics, pharmaceutical chemistry, and herbal medicines. In 1997 the Herbal Medicines Research and Education Centre was established as a focal point for scholarship and research on the quality, safety and efficacy of herbal and complementary medicines, and to promote cooperation and linkages between the pharmaceutical and herbal and complementary medicines industries, user groups, and the University. The Centre has a vigorous research program, offers a Master's degree in herbal medicines, and provides opportunities for postgraduate research training in the field. In 2003 the Australian Government, through the Pharmacy Guild of Australia, awarded a contract to the Faculty to establish the coordinating unit for a national Community Pharmacy Research Support Centre (CPRSC). The Centre is a collaborative venture in pharmacy-practice research among schools and faculties of pharmacy throughout Australia.

In building on its success, the Faculty is both expanding and enhancing the quality of its teaching, research and service activities. It regularly disseminates information to the university community, the pharmacy profession and the public on its achievements and on opportunities for potential students according to a vigorous communication strategy. A Bachelor of Pharmacy (Rural) was developed in 2002 and introduced in 2003. This degree is delivered out of the University's campus at Orange. A review of options for new degree programs was also completed in 2003. This led to the introduction of a master's degree program in pharmacy in 2004 and a plan to introduce a Doctor of Pharmacy degree alongside the current, more research-oriented PhD program. Plans are also in place to expand the Bachelor of Pharmacy degree options to include a Bachelor of Pharmacy (international), and to introduce some opportunities for specialisation in all of the Bachelor degree programs. Since the beginning of 2004, the Faculty has undertaken reviews of its internal technical support capacity, leading to a new management structure for better coordination of laboratory and computing facilities. The Faculty has also commissioned a review of its administrative structure, functions, and operational arrangements. A strategic review of research is in progress.

The Faculty is growing in every aspect of its activities, benchmarking its performance in research and teaching against that of other Group of 8 universities. Some key facts are as follows.

- The Faculty offers a Bachelor of Pharmacy and a Bachelor of Pharmacy Rural degree, as well as a range of graduate entry programs in pharmacy, pharmaceutical sciences and herbal medicines.
- In 2004, 899 undergraduate and 160 postgraduate students were enrolled, making 639.2 equivalent full-time student units.
- The Faculty consistently attracts students with high Universities Admission Index (UAI) scores. In 2004, all students who gained a HECS place in the BPharm program had UAI scores of 97 or more. In most years students must attain a UAI of more than 94 to gain a HECS place.
- Postgraduate enrolments included 48 PhD students and 6 Research Masters degree students.
- The Faculty's total research income has increased greatly since 2000. The value of national competitive grants held by Faculty staff grew from \$367,472 in 2000 to \$1,497,727 in 2003, and total research income grew from \$1,502,971 to \$3,526,693 over the same period.
- Research activities are grouped in three major fields: pharmaceutical chemistry; pharmaceuticals (including pharmacogenomics); and pharmacy practice.
- The Faculty has strong affiliations with the Pharmacy profession through the Pharmacy Guild of Australia, the Pharmaceutical Society of Australia, the Society of Hospital Pharmacists, the Pharmacy Board of NSW, and the Pharmacy Practice Foundation.

The wider context

This strategic plan takes account of:

- the changing role of pharmacists in the Australian health system and internationally;
- current and foreseeable directions for pharmacy research, and its place in health and medical research more broadly;
- the existing and projected educational needs of the pharmacy workforce; and
- changes in national tertiary education policy consequent upon the reforms outlined in the report, *Our Universities: Backing Australia's Future* (Nelson, 2003).

The response of the Faculty of Pharmacy to these developments must be considered in the light of evolving Australian policies on higher education and research and international trends. Underlying these policies is a philosophical shift in which the funding of higher education and research is increasingly viewed as an investment rather than a cost. On the one hand, this philosophical shift creates new opportunities and the potential for more resources. On the other hand, it creates an expectation of return on the investment, with a capacity to measure the return and to account for performance.

Following from the publication of the Nelson Report, the Faculty is focusing more clearly on its strengths, and devising strategies to build on these strengths and define areas of specialisation. It is also implementing strategies to meet the needs of increasing numbers of full-fee-paying students. A commitment to continuous quality improvement underpins the approach to quality teaching and learning, placing a high value on the provision of a strongly positive experience for undergraduate and postgraduate students who pass through the Faculty.

The changing role of pharmacists in the Australian health system

Pharmacists are uniquely placed to contribute to the multi-disciplinary prevention and management of many chronic, complex conditions, such as asthma, diabetes, and chronic heart failure. Consequently, new roles for pharmacists in disease management are developing alongside their more established roles in providing 'first-contact' advice on health matters, dispensing, patient education about medications, and the co-ordination of complex regimens of medication, such as chemotherapy. Pharmacists also have an increasingly important place in promoting and monitoring the quality and safety of health services in Australia, for example through implementation of policies and processes identified under the Australian Government's Quality Use of Medicines initiatives. Demographic trends, the increasing prominence of chronic disease, increasing community interest in alternative-health products such as herbal medicines, and broad changes in the Australian health system (notably the structure of the Pharmaceutical Benefits Scheme and arrangements for the delivery of primary care) are likely to place new demands and additional pressures on the profession of pharmacy.

Current and foreseeable directions in pharmacy research

Pharmacy research is increasingly becoming a multi-disciplinary enterprise. Linkages with the basic sciences, clinicians, applied fields such as engineering, and fields such as public health,

health–system organisation, health economics and behavioural sciences are proliferating. New fields such as pharmacogenomics and research on herbal medicines, which have emerged in the last decade, are likely to dominate the research agenda in the coming years.

The existing and projected educational needs for pharmacy

Available estimates suggest that there is a shortage of pharmacists in Australia at present, especially in community pharmacy. This workforce shortfall is expected to become more marked in the coming decade, exacerbated by the additional demands outlined above and by a trend towards part–time participation in the workforce. The Faculty is helping to address this shortage by increasing enrolments. It is anticipated that, in 2005, a total of 252–262 new undergraduate students will be enrolled, of whom 192 will take places funded under the HECS, 30–40 will be full–fee–paying Australian students, and 30 will be overseas students. Considerable growth has also occurred in the Faculty’s postgraduate programs, with 160 students enrolled in postgraduate courses, and close to 50 students enrolled in PhD programs. Furthermore, the Faculty has responded to the shortage of pharmacists in rural Australia with the introduction of the Bachelor of Pharmacy (Rural), a program specifically developed with the aim of allowing students to graduate with specialised knowledge which will assist them in practicing as a pharmacist after registration in rural or remote areas of the country.

New roles to be filled by pharmacists in community practice, hospital practice, industry and research create a need for new skills and knowledge which in turn lead to changed requirements in education and training. Many of these new skills and new areas of knowledge may rely on inter–professional education. The Faculty is also cognisant of the trend towards the internationalisation of education and is, therefore, developing a Bachelor of Pharmacy (International).

Goals

The College of Health Sciences has adopted five strategic goals for 2004–08. These reflect the overall directions set by the University's seven goals (which are currently under review). The five College goals are summarised under the following headings:

Continuous improvement

- Leadership in research
- Excellence in teaching and learning
- Outstanding service

Organisational efficiency

- High quality facilities and services
- Effective management and transparency in governance

The five goals define the areas of concentration for the College and its constituent Faculties. They cover the period up to 31 December 2008.

The Faculty of Pharmacy makes a major contribution to the College's directions under the five goals. In addition, the Faculty has defined its own directions in accordance with these goals.

In the following sections, the Faculty's intent for each goal is described in relation to the following two questions:

- What will we have achieved in five years' time?
- How will we achieve it?

Goal 1 Leadership in research

For the College of Health Sciences:

- Retain our position as the premier health sciences research institution in Australia, and improve our position internationally.
- Provide superior research training.

For the Faculty of Pharmacy:

- Retain our premier position in pharmacy research in Australia.
- Establish international pre-eminence in areas of research strength in the Faculty.
- Enhance our standing in health research more broadly in Australia.
- Provide superior training in pharmacy research.

What will we have achieved in 5 years' time?

- A clear focus on a limited number of research strengths, consistent with but not confined to the research themes of the College.
- Greater research recognition in health research nationally, and in pharmacy research nationally and internationally, through quality research output and collaboration with other disciplines.
- Greater success in attracting peer-reviewed research grants.
- Greater student satisfaction with the experience of research training.
- Greater staff satisfaction with the opportunities for professional development in research.
- Success in attracting and retaining creative and productive researchers.

How will we achieve it?

As a priority, we will:

Identify and commit to a limited number of research strengths

- Identify a limited number of research strengths, taking account of the College's research themes, the Faculty's current areas of strength, national and State priorities (both in pharmacy and in health more broadly), emerging fields of inquiry, and present or new opportunities for significant inter-disciplinary collaboration.

Develop and implement policies that support these research strengths. These could include:

- The allocation of funds to assist with research development (e.g. the preparation of peer-reviewed grant applications) in the areas of strength.
- An incentive funding program that increases resources for research in the areas of strength.
- New staff appointments that enhance research capacity in the areas of strength.

Improve research students' experience

- Manage and support postgraduate research students' candidature better, providing earlier identification of resource and other needs, closer monitoring of progress, and active improvement of research supervision and mentoring.
- Manage the numbers of postgraduate students supervised or mentored by individual research-active academics in accordance with University policies, to ensure that students are well supported to achieve their goals.
- Contribute to the development and implementation of a College-wide, "core skills" program for postgraduate research students covering areas such as research proposal development, research ethics, common research methods, data management, statistical methods, scientific writing, and application for research grants.
- Provide a collegial environment for postgraduate students, including common-room areas, workspace, equipment, and seminar programs that foster interactions among students and between students and staff.
- Continue to improve processes for identifying, selecting and attracting a diverse range of outstanding research students locally, nationally and internationally.
- Review the findings from research-student satisfaction surveys, and make use of the findings to improve both research students' experience and the Faculty's performance in research training.

Strengthen research capacity

- Attract outstanding researchers to the Faculty to work in the areas of research strength.
- Encourage joint research projects between the Faculty of Pharmacy and the other Faculties in the College of Health Science, particularly in Pharmacy areas of research strength.
- Develop strategic collaborations with Faculties in other Colleges of the University of Sydney, and other academic institutions in Australia and internationally, and strengthen existing successful collaborations.
- Continue and expand the Faculty's scheme of formal research mentoring for junior academics and research fellows

Pursue new sources of research funding

- Increase the number and success of applications for national peer-reviewed research grants (such as NHMRC grants) through initiatives such as:
 - providing seed funding for the development of grant applications;
 - providing administrative assistance for the preparation of applications;
 - encouraging research staff and students to make full use of College initiatives to improve the quality of peer-reviewed grant applications; and

- encouraging research staff to collaborate with other researchers (within and outside the Faculty) who have a successful track record in obtaining peer-reviewed grants.
- Explore international peer-reviewed grant opportunities relevant to the Faculty's areas of strength, and support efforts by research staff to apply for such grants, using the initiatives listed above.

Promote awareness of research in the undergraduate students

- involves research-led teaching and lectures (examinable), possible lab and research day visits.

Goal 2 Excellence in teaching and learning

For the College of Health Sciences:

- Be Australia's leading provider of undergraduate, postgraduate and advanced education in the health sciences.
- Provide a high level of inter-professional teaching and learning across the health sciences.

For the Faculty of Pharmacy:

- Consolidate our position as Australia's leading provider of undergraduate and postgraduate education in pharmacy, and obtain international accreditation.
- Develop and implement programs of inter-professional education, linking pharmacy with other professional disciplines represented in the College of Health Sciences.
- Develop and sustain specialist options within pharmacy degree programs, such as international issues in pharmacy, rural pharmacy practice, disease management, herbal medicines, pharmacogenomics, and advanced drug delivery.

What will we have achieved in 5 years' time?

- Efficient delivery of a range of innovative undergraduate and postgraduate programs with general and specialist content that meets the contemporary professional needs of pharmacists in all forms of practice.
- Benchmarking of all of the Faculty's major education programs to show that they are the best in Australia, and compare favourably with those conducted in the top 10 pharmacy schools in the world.
- International accreditation of the Faculty and/or its main educational programs.
- More flexibility for students, with more choices as to how, what and where they can study.
- Excellent staff performance in teaching and mentorship.
- Greater student satisfaction with the experience of teaching and learning.
- Improved and extended inter-professional teaching and learning, linking pharmacy with other professional disciplines represented in the College of Health Sciences and across the University.
- Improved access to courses for Indigenous students, and students from socially disadvantaged backgrounds.

How will we achieve it?

As a priority, we will:

Strengthen undergraduate programs

- Review the existing undergraduate programs and ensure that all courses exceed relevant University of Sydney standards.
- Review the content of undergraduate courses and make any necessary upgrades to ensure that the content meets the needs of contemporary pharmacy practice, having regard to the requirements of potential employers of graduates.
- Enhance the teaching skills of staff involved in delivering undergraduate programs, through participation in professional-development activities, mentorship of junior teaching staff, and the introduction of mechanisms for monitoring and improving the quality of teaching.
- Improve the experience and satisfaction of students taking undergraduate programs by means of a range of initiatives that include:
 - the introduction of a scheme whereby students can identify individual staff members for advice and guidance on personal course-related matters;
 - enhancing communication between the Faculty and students on course-related matters;
 - improving physical facilities for students; and
 - improving the quality of teaching.
- Structure teaching programs and administrative procedures to give students more choices including: specialised units of instruction, flexibility in timetabling; more entry and exit options; access to units in different Faculties; and availability of diverse modes of delivery including web-based and other forms of distance learning.
- Develop and implement marketing activities to encourage enrolment of the best students in undergraduate programs.
- Support increased enrolment in undergraduate programs by meritorious students from disadvantaged backgrounds, especially Indigenous students, and those from rural Australia.

Strengthen graduate-entry programs

- Consolidate newly-introduced graduate-entry coursework programs in the Faculty of Pharmacy by:
 - monitoring the quality of programs in relation to University of Sydney standards;
 - monitoring and enhancing student satisfaction; and
 - assessing and strengthening staff capacity to deliver the programs to a high standard.
- Develop and implement a Doctor of Pharmacy degree program, containing vocational practice and research elements.
- Improve the experience and satisfaction of students undertaking graduate-entry programs by means of a range of initiatives that include:
 - the introduction of a mentoring scheme;
 - providing good physical facilities;
 - encouraging interaction between students, and between students and staff; and
 - improving the quality of teaching.
- Reassess the content of graduate-entry coursework programs on a regular basis, to ensure that they meet health and health workforce priorities and community needs, having regard to the requirements of potential employers of graduates.
- Ensure that the content and level of the graduate-entry programs are clearly differentiated from undergraduate programs by providing a diverse range of educational experiences for graduate-entry students, such as opportunities for involvement in inter-professional

learning, rural placements, research electives, management and business training, and overseas electives.

- Develop and implement processes for identifying, selecting and attracting a diverse range of outstanding graduate–entry students locally, nationally and internationally.

Improve staff performance, efficiency and satisfaction with regard to teaching

- Systematically identify and address staff development needs, particularly in teaching and in management, cultural competency, and use of information and communication technology.
- Systematically assess the academic and strategic value and financial viability of all courses, as a basis for their continuing delivery.
- Enhance administrative support for teaching staff, especially academics who also have research and service roles.
- Enhance the staff mentoring scheme, having particular regard for the needs of junior staff and new staff.
- Enhance the existing scheme of awards for excellence in teaching, and ensure that those who receive awards are duly recognised throughout the Faculty.
- Establish a Pharmacy Education Unit that leads and supports the Faculty–wide developments in teaching, including curriculum development, the enhancement of web–based teaching materials, and (where appropriate) the preparation of distance–learning systems.

Goal 3 Outstanding service

For the College of Health Sciences:

- Contribute to improving health, health policy and health services.
- Contribute to increasing capacity in health care and health and medical research in disadvantaged communities and countries.

For the Faculty of Pharmacy:

- Contribute to the improvement of pharmacy practice and its role in Australian health services.
- Contribute to the development of health policy in Australia, with particular reference to medicines policy and other aspects of policy relating to pharmacy.
- Contribute to the development of capacity for the delivery of professional pharmacy services in disadvantaged communities and countries.

What will we have achieved in 5 years' time?

- Improved responsiveness of the Faculty's educational programs to identified health workforce needs, especially in meeting the needs of Indigenous and rural Australians.
- Greater contribution to public and professional debate about major health policy issues relevant to pharmacy.
- A contribution to improving quality and safety of health services through education and the application of pharmacy research.
- A clear contribution to University internationalisation through stronger and more effective strategic alliances with universities and other government and non-government organisations.

How will we achieve it?

As a priority, we will:

Improve opportunities for Indigenous Australians to engage in pharmacy education and research

- Contribute to College-wide teaching, research and service initiatives that are accessible and useful to Indigenous Australians. These include improvements in coordination of support services for Indigenous students and encouragement of research programs that are relevant to Indigenous communities.

Improve opportunities for rural Australians to engage in pharmacy education and research

- Contribute to College-wide teaching, research and service initiatives that are accessible and useful to rural Australians. These include improvements in coordination of support services for students living in rural areas, and encouragement of research programs that are relevant to rural communities.

Contribute to public debate and action on current and emerging health issues that are relevant to pharmacy in Australia and internationally

- Contribute to community and professional debate on important health and medical issues relevant to pharmacy through public forums, position papers and independent analysis and commentary.
- Continue to encourage staff to participate in major national, state and professional committees on pharmacy and health policy issues.
- Representation on key committees in order to promote pharmacy.
- Work with health service planners and peak professional bodies to identify and respond to future workforce needs.
- Encourage research-based projects involving pharmacy that have the potential to reduce health inequalities, and improve the quality and safety of health care.

Support University internationalisation

- Build capacity in pharmacy teaching and research that reflects the opportunities and health challenges resulting from increasing globalisation.
- Contribute to College initiatives to form strategic alliances with a small number of resource-poor countries for the development of capacity in health services teaching and research.
- Develop linkages with schools of pharmacy in the European Union, with particular reference to the exchange of experience in translational research and educational materials.
- Participate in College initiatives to form strategic alliances with universities, governments and non-government organisations that support growth in overseas students attending Sydney-based educational programs, and create opportunities for and support staff and student placements and exchanges in other universities and institutions.

Goal 4 High quality facilities and services

For the College of Health Sciences:

- Ensure our physical and technical resources, and support services are fit for purpose.

For the Faculty of Pharmacy:

- Ensure that our physical facilities and technical resources for teaching, learning, and research meet the highest Australian standards for safety, efficiency, and comfort and convenience.
- Ensure that we have administrative resources that are fit for purpose.

What will we have achieved in 5 years' time?

- Physical and technical resources matched to the Faculty's research, teaching and service needs.
- A plan, with implementation in progress, to ensure that laboratory and other research facilities meet the requirements of 21st century science.
- Strategic investment in major plant and equipment, shared (where possible) with other Faculties and other agencies.
- Efficient and effective technical support services for IT, communications and research facilities.
- Efficient student services, including improved on-line services and better marketing of courses.
- Much greater staff and student satisfaction with work and study environments.

How will we achieve it?

As a priority, we will:

Improve the physical infrastructure that supports teaching, research and administration

- Assess short- and long-term needs for teaching, research and office accommodation, and prepare a plan to meet them, consistent with College and University capital works programs.
- Secure, furnish and equip additional accommodation for the Faculty, keeping pace with the growth in student enrolments and expanding research requirements.
- Identify any laboratory facilities that do not comply with occupational health and safety standards. Secure funding to upgrade them, and carry out the necessary improvements as a matter of urgency.

- Identify other physical facilities that are below recommended University standards, and secure funding to upgrade them.
- In collaboration with other Faculties in the College of Health Sciences. plan and progressively invest in the strategic acquisition of major plant and equipment, emerging technology and technical support staff.
- Ensure that all staff and postgraduate students are adequately equipped with up-to-date office and computer facilities.

Improve the organisation and management of laboratory facilities

- Define and document standard laboratory procedures for the Faculty, and issue a reference manual to staff and postgraduate students working in the Faculty's laboratories. Review and update the manual on a regular basis. Ensure that all staff and postgraduate students working in the Faculty's laboratories know the procedures. Review, document and rectify significant incidents or instances of non-compliance.
- Improve procedures relating to occupational health and safety in the Faculty's laboratories, and review them annually.
- Ensure that laboratory staff have a clear understanding of their responsibilities, receive appropriate training and professional development opportunities, and can carry out their duties without undue pressure.
- Streamline the allocation of teaching laboratories in the timetables of the Faculty's undergraduate and graduate degree programs.

Enhance administrative services to support the Faculty's main functions

- Increase the access to administrative support for academic staff and Faculty committees.
- Consolidate purchasing of goods and services to minimise duplication and facilitate bulk ordering of supplies where economies and gains in efficiency can be made.

Improve IT services to support teaching, research and student management

- Enhance and maintain up-to-date IT resources for staff and students, consistent with standards of access and quality to be implemented throughout the College of Health Sciences.
- Re-design and develop the content of the Faculty web-site to make it a more effective and informative means of communication and marketing, consistent with the College website.

Goal 5 Effective management and transparency in governance

For the College of Health Sciences:

- Make operational, financial and management processes more efficient, effective and equitable.
- Make governance and decision-making more transparent.
- Increase operating margin to support growth and continuous improvement.

For the Faculty of Pharmacy:

- Modify the Faculty's governance, management, financial and operational structures and processes so that they support excellence in teaching, research and service.
- Ensure that the Faculty's decision-making processes are clear and widely understood, and that they are directed toward achieving and sustaining excellence in teaching, research and service.
- Secure more resources for staff and for the provision of infrastructure.

What will we have achieved in 5 years' time?

- Efficient and effective structures and processes that enable the Faculty to achieve and sustain excellence in teaching, research and service. These structures and processes will rely on improvements in:
 - governance;
 - decision-making;
 - management;
 - financial systems; and
 - operations.

How will we achieve it?

As a priority we will:

Create governance and management structures and systems that enhance the Faculty's teaching, research and service roles

- Engage in a high-level review and planning process to assist the Dean and executive staff of the Faculty in determining the most efficient and effective structure for the Faculty. This will:

- examine options for executive support for the Dean in the areas of teaching, research, service and management;
- review the extent to which the Faculty's three major academic streams (pharmaceutical chemistry, pharmaceuticals and pharmacy practice) contribute to the Faculty's primary roles in teaching, research and service, and identify options for improving integration of the academic streams with the Faculty's commitment to excellence in teaching, research and service; and
- streamline the Faculty's committee structure to reduce the committee workload for individual academics.
- Implement the preferred options arising from the high-level review and planning process.
- Fully implement the University's system for performance management and development, and better connect it to staff promotions, discretionary rewards and other forms of acknowledgement for performance.

Design improved processes for decision-making and communication within the Faculty

- Ensure that individuals' and committees' responsibilities and delegations for decision-making are clearly defined and widely understood throughout the Faculty.
- Explicitly align budgeting decisions to strategic priorities.
- Improve access to information on College and Faculty budgeting decisions and policy development.
- Enhance communication at all levels within the Faculty, making optimal use of electronic communication systems and forums for staff (with appropriate student representation).

Create more efficient administrative systems:

- In accordance with the main recommendations of the review of administration in the Faculty, carried out in May-June 2004, establish a structure for administrative personnel in the Faculty, with effective management, clearly-defined responsibilities and reporting relationships, and opportunities for professional development.
- Guide management and administration practices towards a service-oriented culture.
- Improve integration of Faculty administrative and financial management systems with those of the College of Health Sciences and the University centrally.

Secure more resources

- Pursue new opportunities for shared funding arrangements with professional and community bodies, private business and the wider health sector.
- Strengthen relations with charitable foundations, alumni and other potential donors to secure additional support for the Faculty.

Increase the number of fee-paying enrolments for award and non-award courses, ensuring sufficient capacity to meet increased student numbers.

Faculty of Pharmacy Strategic Plan 2004–2008

Priorities and measurable outcomes

Research Committee

Goal 1 Leadership in research

For the College of Health Sciences:

- Retain our position as the premier health sciences research institution in Australia, and improve our position internationally.
- Provide superior research training.

For the Faculty of Pharmacy:

- Retain our premier position in pharmacy research in Australia.
- Establish international pre-eminence in areas of research strength in the Faculty.
- Enhance our standing in health research more broadly in Australia.
- Provide superior training in pharmacy research.

As a priority, we will:

Identify and commit to a limited number of research strengths

- Identify a limited number of research strengths, taking account of the College's research themes, the Faculty's current areas of strength, national and State priorities (both in pharmacy and in health more broadly), emerging fields of inquiry, and present or new opportunities for significant inter-disciplinary collaboration. **N⁵**

Develop and implement policies that support these research strengths. These could include:

- The allocation of funds to assist with research development (e.g. the preparation of peer-reviewed grant applications) in the areas of strength.
- An incentive funding program that increases resources for research in the areas of strength.
- New staff appointments that enhance research capacity in the areas of strength

Measurable outcomes

Collate and document Faculty research strengths in consultation with staff (new staff details will be included in this analysis)

As far as possible, quantify and ensure alignment of the Faculty's research priorities with those of the College

Devise, in consultation with Faculty staff, how to promulgate non-aligned quality research

Assemble a collaboration database - including funded and non-funded, and national and international collaborations

⁵ N=new; M=maintenance (of existing commitments).

Assist applicants in obtaining helpful feedback on funding applications. Success rates in relation to assistance will monitor outcomes

Strengthen research capacity

- Attract outstanding researchers to the Faculty to work in the areas of research strength.
- Encourage joint research projects between the Faculty of Pharmacy and the other Faculties in the College of Health Science, particularly in Pharmacy areas of research strength
- Develop strategic collaborations with Faculties in other Colleges of the University of Sydney, and other academic institutions in Australia and internationally, and strengthen existing successful collaborations.
- Continue and expand the Faculty's scheme of formal research mentoring for junior academics and research fellows with the new initiative of formally evaluating effectiveness for each mentored staff member.

Measurable outcomes

New funding submissions arising from new researchers and joint projects will be quantified and collated. Increases in these areas will be measured.

Quality and effectiveness of mentoring will be documented from both perspectives, looking particularly for improved awareness that new staff have for assistance (especially within Faculty, College and Research Office)

Pursue new sources of research funding

- Increase the number and success of applications for national peer-reviewed research grants (such as NHMRC grants) through initiatives such as:
 - providing seed funding for the development of grant applications;
 - providing administrative assistance for the preparation of applications;
 - encouraging research staff and students to make full use of College initiatives to improve the quality of peer-reviewed grant applications; and
 - encouraging research staff to collaborate with other researchers (within and outside the Faculty) who have a successful track record in obtaining peer-reviewed grants.
- Explore international peer-reviewed grant opportunities relevant to the Faculty's areas of strength, and support efforts by research staff to apply for such grants, using the initiatives listed above.

Measurable outcomes

New funding submissions arising from these initiatives will be quantified

Success of the program will be assessed after a three-year cycle

New collaborations, also arising from new initiatives in other areas, will be quantified

Promote awareness of research in the undergraduate students **N**

- Involves research-led teaching and lectures (examinable), possible lab and research day visits.

Measurable outcomes

Attendance of undergraduate students at Research Days; increased numbers indicative of success

Follow progress of undergraduates entering this program: proportion of these students going on to Advanced and postgraduate study

Goal 3 Outstanding service

For the College of Health Sciences:

- Contribute to improving health, health policy and health services.
- Contribute to increasing capacity in health care and health and medical research in disadvantaged communities and countries.

For the Faculty of Pharmacy:

- Contribute to the improvement of pharmacy practice and its role in Australian health services.
- Contribute to the development of health policy in Australia, with particular reference to medicines policy and other aspects of policy relating to pharmacy.
- Contribute to the development of capacity for the delivery of professional pharmacy services in disadvantaged communities and countries.

As a priority, we will:

Improve opportunities for Indigenous Australians to engage in pharmacy education and research

- Contribute to College-wide teaching, research and service initiatives that are accessible and useful to Indigenous Australians. These include improvements in coordination of support services for Indigenous students and encouragement of research programs that are relevant to Indigenous communities. *See PC (Programs Committee)*

Measurable outcomes

Utilise College and University programs and resources for indigenous students to support research opportunities

Encourage the participation of indigenous persons in research projects in the Faculty

Contribute to public debate and action on current and emerging health issues that are relevant to pharmacy in Australia and internationally

- Contribute to community and professional debate on important health and medical issues relevant to pharmacy through public forums, position papers and independent analysis and commentary.
- Continue to encourage staff to participate in major national, state and professional committees on pharmacy and health policy issues. Work with health service planners and peak professional bodies to identify and respond to future workforce needs.

Measurable outcomes

Monitor the impact of these initiatives through the research committee

Encourage research-based projects involving pharmacy that have the potential to reduce health inequalities, and improve the quality and safety of health care

Priorities for the Research Committee

Faculty of Pharmacy Strategic Plan
2004 – 2008

ACTION POINTS

Summary of quantifiable measures for Research Committee, 2005 :

- *Collate and document Faculty research strengths in consultation with staff*
- *Quantify alignment of the Faculty's research priorities with those of the College*
- *Devise how to promulgate non-aligned quality research*
- *Assemble a collaboration database*
- *Assist applicants in obtaining feedback on funding applications.*
- *The quality and effectiveness of mentoring will be documented.*
- *Begin to promote awareness of research in the undergraduate students: Monitoring of program to commence*

Faculty of Pharmacy Strategic Plan 2004–2008

Priorities and measurable outcomes

Postgraduate Research Subcommittee

Goal 1 Leadership in research

For the College of Health Sciences:

- Retain our position as the premier health sciences research institution in Australia, and improve our position internationally.
- Provide superior research training.

For the Faculty of Pharmacy:

- Retain our premier position in pharmacy research in Australia.
- Establish international pre-eminence in areas of research strength in the Faculty.
- Enhance our standing in health research more broadly in Australia.
- Provide superior training in pharmacy research.

As a priority, we will:

Improve research students' experience

- Manage and support postgraduate research students' candidature better, providing earlier identification of resource and other needs, closer monitoring of progress, and active improvement of research supervision and mentoring. **M**

Measurable outcomes

Provide new PG students with a generic "package guide" to PG life in Pharmacy

Monitor PG student progress through student reports and interviews

- *Have a pro forma which supervisors can chose to complete with a series of tick boxes which outlines key skills or milestones achieved by the PG students and this can act as an evaluation of the effectiveness of the orientation program or progress of the student.*
- *Have internal and external staff interview students.*
- *Encourage students to bring a "buddy" to the interview*

Identifying existing and new funding sources for scholarships from scholarships office or within the Faculty

- *Eg. ARC Linkage grants, CSIRO for top-up scholarships and travel awards, NHMRC scholarships (improve recipient rate by 100%), create a "prestigious" top-up award or prize and award to best APA holder*
- Manage the numbers of postgraduate students supervised or mentored by individual research-active academics in accordance with University policies, to ensure that students are well supported to achieve their goals. **N**

Measurable outcomes

Monitor supervisor/student ratios

Provide mentoring for “new” academic staff on PG supervision

Encourage Research only staff to be co-supervisors or associate supervisors of PG students

- Contribute to the development and implementation of a College-wide, “core skills” program for postgraduate research students covering areas such as research proposal development, research ethics, common research methods, data management, statistical methods, scientific writing, and application for research grants. **N**

Measurable outcomes

Identify and provide training opportunities for student

- *Encourage students to attend relevant courses and workshops on generic skills required to be a successful researcher such as grant writing, data management, ethics, common research methods, statistics*
- Provide a collegial environment for postgraduate students, including common-room areas, workspace, equipment, and seminar programs that foster interactions among students and between students and staff. **M**

Measurable outcomes

Provide avenues for PG to showcase their research within the Faculty through PG conference days and social gatherings

Showcase publications and conference abstracts by PG students

Showcase student prizes – best oral or poster at conferences

Maintain and provide common work areas and facilities

Encourage and support international conferences for students through PRSS

Develop surveys to monitor student satisfaction

- Continue to improve processes for identifying, selecting and attracting a diverse range of outstanding research students locally, nationally and internationally. **M**

Measurable outcomes

Monitor PG student numbers: enrolments and completions

Monitor from where students are applying to PG studies in the

Maintain and improve enrolment criteria

Market pharmacy research – with Programs committee

- Review the findings from research-student satisfaction surveys, and make use of the findings to improve both research students’ experience and the Faculty’s performance in research training. **N and M**

Measurable outcomes

Act on student survey to improve student satisfaction

Monitor where PhD graduates are going and their future success

Priorities for the Postgraduate Research Subcommittee (as extracted from the Faculty's Strategic Plan):

Faculty Of Pharmacy Strategic Plan 2004-2008

ACTION POINTS

Summary of quantifiable measures for Postgraduate Research Subcommittee, 2005:

- Provide new PG research students with a generic “package guide” to PG life in Pharmacy
- *Identify and provide training opportunities for PG research students*
- Monitor PG research student progress through student reports and interviews
- Provide mentoring for “new” supervisors on PG supervision
- Monitor supervisor/student ratios
- Aim to encourage Research Only Staff to be Associate supervisors or Co-supervisors
- Identify funding sources for research scholarships and aim for supervisors to apply to these where appropriate
- Monitor PG student numbers: enrolments and completions
- Showcase PG research student prizes and awards
- Provide avenues for PG research students to showcase their research
- Maintain and provide common work areas and facilities

DRAFT 17 August 2004

Faculty of Pharmacy Strategic Plan 2004–2008

Priorities and measurable outcomes

Programs Committee

Goal 2 Excellence in teaching and learning

For the Faculty of Pharmacy:

- Consolidate our position as Australia's leading provider of undergraduate and postgraduate education in pharmacy, and obtain international accreditation.
- Develop and sustain specialist options within pharmacy degree programs, such as international issues in pharmacy, rural pharmacy practice, disease management, herbal medicines, pharmacogenomics, and advanced drug delivery.

As a priority, we will:

Strengthen undergraduate programs

- Review the existing undergraduate programs and ensure that all courses exceed relevant University of Sydney standards. **N**

Measurable outcomes

Undertake audit of current units of study, regarding workloads, delivery and assessment, from both staff and student perspective

Review any new course/degree proposals

Monitor the Pharmacy education environment (collect UAC or equivalent data, review and audit of other course offering from other schools of pharmacy)

- Enhance the teaching skills of staff involved in delivering undergraduate programs, through participation in professional-development activities, mentorship of junior teaching staff, and the introduction of mechanisms for monitoring and improving the quality of teaching. **M (+ N for mentorship)**
- Improve the experience and satisfaction of students taking undergraduate programs by means of a range of initiatives that include: **M + N**
 - the introduction of a scheme whereby students can identify individual staff members for advice and guidance on personal course-related matters;
 - enhancing communication between the Faculty and students on course-related matters;
 - improving the quality of teaching.

Measurable outcomes

Monitor and make recommendations on logistics and resource needs for existing courses and new proposed courses

Streamline and review admission processes and admissions criteria for existing courses and new programs

Continue to liaise with students and respond to student issues

- Develop and implement marketing activities to encourage enrolment of the best students in undergraduate programs. **M + N**

Measurable outcomes

Identify our constituency (create a list of key constituents)

Undertake promotional activities e.g., articles, presentations

Formalise relationships with stakeholders e.g., annual/biannual meetings with principals of selective high schools, or those with high indigenous populations
Communicate with Alumni and the Profession to promote Faculty achievements
Actively promote and market existing and new course offerings

- Support increased enrolment in undergraduate programs by meritorious students from disadvantaged backgrounds, especially Indigenous students, and those from rural Australia. **M + N**

Measurable outcomes

Formalise relationships with stakeholders e.g., annual/biannual meetings with principals of selective high schools, or those with high indigenous populations

Improve staff performance, efficiency and satisfaction with regard to teaching

- Systematically identify and address staff development needs, particularly in teaching and in management, cultural competency, and use of information and communication technology. **M + N**

Measurable outcomes

Develop Staff Handbook

Develop Staff development and training programs e.g., tutor/demonstrator training

Promote existing Staff Development programs e.g., Grad Cert Higher Education

- Systematically assess the academic and strategic value and financial viability of all courses, as a basis for their continuing delivery. **M + N**

Measurable outcomes

Review resource implications, through questionnaires to staff

Review any new course/degree proposals

- Enhance administrative support for teaching staff, especially academics who also have research and service roles. **M + N**
- Enhance the staff mentoring scheme, having particular regard for the needs of junior staff and new staff. **N**

Measurable outcomes

Establish staff mentoring schemes

Implement system/schedule for peer review and feedback of staff teaching

- Enhance the existing scheme of awards for excellence in teaching, and ensure that those who receive awards are duly recognised throughout the Faculty. **M**

Measurable outcomes

Continue Excellence in Teaching awards for staff

Establish Excellence in Teaching award for Technical Staff

Goal 3 Outstanding service

For the Faculty of Pharmacy:

- Contribute to the development of capacity for the delivery of professional pharmacy services in disadvantaged communities and countries.

As a priority, we will:

Improve opportunities for Indigenous Australians to engage in pharmacy education and research

- Contribute to College-wide teaching, research and service initiatives that are accessible and useful to Indigenous Australians. These include improvements in coordination of support services for **Indigenous** students and encouragement of research programs that are relevant to Indigenous communities. **M + N**

Measurable outcomes

Identify opportunities, and make use of, College-led and University-led initiatives such as programs for indigenous students, marketing strategies for undergraduate students, fund and resources to support specific projects etc
Improve opportunities for indigenous persons to engage in pharmacy education

Improve opportunities for rural Australians to engage in pharmacy education and research

- Contribute to College-wide teaching, research and service initiatives that are accessible and useful to rural Australians. These include improvements in coordination of support services for students living in **rural** areas, and encouragement of research programs that are relevant to rural communities. **N**

Measurable outcomes

Identify opportunities, and make use of, College-led and University-led initiatives such as programs for indigenous students, marketing strategies for undergraduate students, fund and resources to support specific projects etc
Incorporation of indigenous and/or rural issues into curriculum
Improve opportunities for rural persons to engage in pharmacy education

Support University internationalisation

- Build capacity in pharmacy teaching and research that reflects the opportunities and health challenges resulting from increasing globalisation. **M + N**
- Contribute to College initiatives to form strategic alliances with a small number of resource-poor countries for the development of capacity in health services teaching and research. **N**
- Develop linkages with schools of pharmacy in the European Union, with particular reference to the exchange of experience in translational research and educational materials. **M + N**
- Participate in College initiatives to form strategic alliances with universities, governments and non-government organisations that support growth in overseas students attending

Sydney-based educational programs, and create opportunities for and support staff and student placements and exchanges in other universities and institutions. *M + N*

Measurable outcomes

Make better use of existing Study Abroad/Student Exchange Programs

Establish a resource for information on these exchange programs e.g., links on Faculty website

Establish, and increase the number of, Faculty-specific Study Abroad Schemes and International Student Exchange Programs

Priorities for the Programs Committee (as extracted from the Faculty's Strategic Plan):

Faculty Of Pharmacy Strategic Plan 2004-2008

ACTION POINTS

Summary of quantifiable measures for Programs Committee, 2005:

- ❑ Develop and undertake unit of study audit
- ❑ Develop and administer staff questionnaire
- ❑ Commence development of staff handbook
- ❑ Aim for 3 staff members (1 per discipline, annually) to complete staff development or other training programs (e.g., Grad Cert Higher Ed)
- ❑ Aim for 3 staff members (1 per discipline, annually) to participate in staff (teaching) mentoring scheme, including peer-review and feedback (priority given to new staff)
- ❑ Maintain *Faculty of Pharmacy* Excellence in Teaching Awards (up to 3 staff members awarded annually)
- ❑ Continue staff/student liaison meetings and provide feedback to key stakeholders (e.g., students, staff, Disciplines, Teaching and Learning Committee, External Departments etc)
- ❑ Secure college/university resources allocations to support specific projects in the future (e.g., indigenous student enrolments, rural programs etc)
- ❑ Aim for 2 students to participate in Study Abroad and/or Faculty-specific student exchange programs
- ❑ Explore the possibility of establishing a Faculty-specific Exchange program with a Pharmacy school in North America
- ❑ Fund 2 scholarships to support student Exchange programs (two scholarships annually, for the amount of the return airfare, up to a maximum of \$AU 2,500 per student)
- ❑ Develop and implement promotional/marketing strategies to attract indigenous students to Pharmacy programs in the future.

Faculty of Pharmacy Strategic Plan 2004–2008

Priorities and measurable outcomes

Teaching and Learning Committee

Goal 2 Excellence in teaching and learning

For the College of Health Sciences:

- Be Australia's leading provider of undergraduate, postgraduate and advanced education in the health sciences.
- Provide a high level of inter-professional teaching and learning across the health sciences.

For the Faculty of Pharmacy:

- Consolidate our position as Australia's leading provider of undergraduate and postgraduate education in pharmacy, and obtain international accreditation.
- Develop and implement programs of inter-professional education, linking pharmacy with other professional disciplines represented in the College of Health Sciences.
- Develop and sustain specialist options within pharmacy degree programs, such as international issues in pharmacy, rural pharmacy practice, disease management, herbal medicines, pharmacogenomics, and advanced drug delivery.

As a priority, we will:

Strengthen undergraduate programs

- Review the existing undergraduate programs and ensure that all courses exceed relevant University of Sydney standards. *N*

Process and measurable outcomes

Identification of University of Sydney standards

Identification of standards used by the Accreditation Review Team of the Faculty of Pharmacy

Identification of relevant standards in the "Guideline for Good Practice in Teaching and Learning" Academic Board (2001) publication

A combination of the relevant standards from the above will be used as measures

- Review the content of undergraduate courses and make any necessary upgrades to ensure that the content meets the needs of contemporary pharmacy practice, having regard to the requirements of potential employers of graduates. *N*

Process and measurable outcomes

Identification of standards used by the Accreditation Review Team of the Faculty of Pharmacy

Identification of competency standards (current and those in development) of the Pharmacy Board of NSW

A combination of the above will be used as measures

- Enhance the teaching skills of staff involved in delivering undergraduate programs, through participation in professional–development activities, mentorship of junior teaching staff, and the introduction of mechanisms for monitoring and improving the quality of teaching
- Improve the experience and satisfaction of students taking undergraduate programs by means of a range of initiatives that include: *N*

Process and measurable outcomes

Qualitative

Responses to the open-ended questions in the USE (unit of study evaluation questionnaires)

Responses to the open-ended questions in the SCEQ

Targeted Focus Groups

Quantitative

USE

SCEQ

Degree Progression rates

Advanced Application numbers and quality

Fail rates / grading

Advanced Program Marks

Dropout Rates of courses

- the introduction of a scheme whereby students can identify individual staff members for advice and guidance on personal course–related matters;
 - enhancing communication between the Faculty and students on course–related matters;
 - improving physical facilities for students; and
 - improving the quality of teaching.
- Structure teaching programs and administrative procedures to give students more choices including: specialised units of instruction, flexibility in timetabling; more entry and exit options; access to units in different Faculties; and availability of diverse modes of delivery including web–based and other forms of distance learning.
 - Develop and implement marketing activities to encourage enrolment of the best students in undergraduate programs.
 - Support increased enrolment in undergraduate programs by meritorious students from disadvantaged backgrounds, especially Indigenous students, and those from rural Australia.

Strengthen graduate–entry programs

- Consolidate newly–introduced graduate–entry coursework programs in the Faculty of Pharmacy by:
 - monitoring the quality of programs in relation to University of Sydney standards;
 - monitoring and enhancing student satisfaction; and
 - assessing and strengthening staff capacity to deliver the programs to a high standard.
- Develop and implement a Doctor of Pharmacy degree program, containing vocational practice and research elements.
- Improve the experience and satisfaction of students undertaking graduate–entry programs by means of a range of initiatives that include: **N**

Process and measurable outcomes

Qualitative

Responses to the open-ended questions in the USE (unit of study evaluation questionnaires)

Responses to the open-ended questions in the SCEQ

Targeted Focus Groups

Quantitative

USE

SCEQ

Degree Progression rates

Advanced Application numbers and quality

Fail rates / grading

Advanced Program Marks

Dropout Rates of courses

- the introduction of a mentoring scheme;
 - providing good physical facilities;
 - encouraging interaction between students, and between students and staff; and
 - improving the quality of teaching.
- Reassess the content of graduate–entry coursework programs on a regular basis, to ensure that they meet health and health workforce priorities and community needs, having regard to the requirements of potential employers of graduates. **N**

Process and measurable outcomes

Identification of standards used by the Accreditation Review Team of the Faculty of Pharmacy

Identification of competency standards (current and those in development) of the Pharmacy Board of NSW

A combination of the above will be used as measures

- Ensure that the content and level of the graduate–entry programs are clearly differentiated from undergraduate programs by providing a diverse range of educational experiences for graduate–entry students, such as opportunities for involvement in inter–professional learning, rural placements, research electives, management and business training, and overseas electives. **N**

Process and measurable outcomes

Identification of standards used by the Accreditation Review Team of the Faculty of Pharmacy

Identification of competency standards (current and those in development) of the Pharmacy Board of NSW

A combination of the above will be used as measures

- Develop and implement processes for identifying, selecting and attracting a diverse range of outstanding graduate–entry students locally, nationally and internationally. **N**

Process and measurable outcomes

Identification of the processes currently used nationally and internationally in other universities (for Pharmacy, and related disciplines) for identifying and selecting students

Evaluating the student marks and progression rates for current and past cohorts, taking into account the processes used for identifying and selecting them

Select and implement processes for identifying and selecting students based on the above

Improve staff performance, efficiency and satisfaction with regard to teaching

- Systematically identify and address staff development needs, particularly in teaching and in management, cultural competency, and use of information and communication technology.
- Systematically assess the academic and strategic value and financial viability of all courses, as a basis for their continuing delivery.
- Enhance administrative support for teaching staff, especially academics who also have research and service roles.
- Enhance the staff mentoring scheme, having particular regard for the needs of junior staff and new staff.
- Enhance the existing scheme of awards for excellence in teaching, and ensure that those who receive awards are duly recognised throughout the Faculty.
- Establish a Pharmacy Education Unit that leads and supports the Faculty–wide developments in teaching, including curriculum development, the enhancement of web–based teaching materials, and (where appropriate) the preparation of distance–learning systems. **N**

Short Term Measures include

Establishment of the Unit

Employment of a Director at Senior Lecturer / Associate Professor level

Employment of two IT and one Administrative Assistant (level 5 / 6)

Reduction in Staff workload in terms of coordination of units of study

Priorities for the Teaching and Learning Committee

Faculty Of Pharmacy Strategic Plan 2004-2008

ACTION POINTS

Summary of quantifiable measures for Teaching and Learning Committee, 2005:

- Review of Bachelor of Pharmacy, Bachelor of Pharmacy (Rural), and Master of Pharmacy to ensure internal consistency and relevance and in order to comply with 6 credit point schedule required by the University
- Establish a quality assurance process for all units of study

Faculty of Pharmacy Strategic Plan 2004–2008

Priorities and measurable outcomes

Postgraduate Coursework Subcommittee

Goal 2 Excellence in teaching and learning

For the College of Health Sciences:

- Be Australia's leading provider of undergraduate, postgraduate and advanced education in the health sciences.
- Provide a high level of inter-professional teaching and learning across the health sciences.

For the Faculty of Pharmacy:

- Consolidate our position as Australia's leading provider of undergraduate and postgraduate education in pharmacy, and obtain international accreditation.
- Develop and implement programs of inter-professional education, linking pharmacy with other professional disciplines represented in the College of Health Sciences.
- Develop and sustain specialist options within pharmacy degree programs, such as international issues in pharmacy, rural pharmacy practice, disease management, herbal medicines, pharmacogenomics, and advanced drug delivery.

As a priority, we will:

Strengthen graduate-entry programs

- Consolidate newly-introduced graduate-entry coursework programs in the Faculty of Pharmacy by:
 - monitoring the quality of programs in relation to University of Sydney standards (**M**);

Measurable outcomes

Formal review after 1 year and then every 3 years

- monitoring and enhancing student satisfaction (**N and M**); and

Measurable outcomes

USE data

SCEQ results and our response

- assessing and strengthening staff capacity to deliver the programs to a high standard (**N**).

Measurable outcomes

Evaluated using elements of the Scholarship Index

- Develop and implement a Doctor of Pharmacy degree program, containing vocational practice and research elements. **N**

Measurable outcomes

DPharm established with professions support

- Improve the experience and satisfaction of students undertaking graduate–entry programs by means of a range of initiatives that include: *(with TLC)*
 - the introduction of a mentoring scheme (*M*);
 - providing good physical facilities (*N + M*);
 - encouraging interaction between students, and between students and staff; and
 - improving the quality of teaching (*M*).

Measurable outcomes

USE data

SCEQ results and our response

Graduate outcomes

- Reassess the content of graduate–entry coursework programs on a regular basis, to ensure that they meet health and health workforce priorities and community needs, having regard to the requirements of potential employers of graduates. *(with TLC) (N + M)*

Measurable outcomes

Formal review after 1 year and then every 3 years (including external advisory panel)

Outcome of Faculty accreditation

Graduate outcome data

- Ensure that the content and level of the graduate–entry programs are clearly differentiated from undergraduate programs by providing a diverse range of educational experiences for graduate–entry students, such as opportunities for involvement in inter-professional learning, rural placements, research electives, management and business training, and overseas electives. *(with TLC) (M)*

Measurable outcomes

Formal review after 1 year and then every 3 years (including external advisory panel)

- Develop and implement processes for identifying, selecting and attracting a diverse range of outstanding graduate–entry students locally, nationally and internationally. *(with TLC) (N and M)*

Measurable outcomes

USE and SCEQ results and our response

Student numbers and postgraduate course progression rates

Implementation and findings of major course reviews

Graduate destinations.

Calibre of applicants (academic ranking and institution)

Local to international ratio

Priorities for the Postgraduate Coursework Subcommittee (as extracted from the Faculty's Strategic Plan):

Faculty Of Pharmacy Strategic Plan 2004-2008

ACTION POINTS

Summary of quantifiable measures for Postgraduate Coursework Subcommittee, 2005:

- **Formal review after 1 year and then every 3 years (including external advisory panel)**
- **USE data**
- **SCEQ results and our response**
- **Evaluated using elements of the Scholarship Index**
- **DPharm established with professions support**
- **Postgraduate student outcomes**
- **Outcome of Faculty accreditation**
- **Student numbers and postgraduate course progression rates**
- **Implementation and findings of major course reviews**
- **Calibre of applicants (academic ranking and institution)**
- **Local to international ratio**