

## **Executive Summary of AMC Submission – December 2002**

This submission describes an entirely new and innovative six year, three - phase undergraduate Medicine program developed by the Faculty of Medicine at the University of New South Wales (UNSW). The program will lead to the awards of Bachelor of Medicine and Bachelor of Surgery (MB BS) degrees and will to replace the current BSc(Med) MB BS.

### **Timing of Launch & Selection of Matriculants**

The new program commences in 2004. New admission procedures, designed to select applicants with a broader range of abilities began for the 2003 entry cohort, and these students will study the existing program until the end of year 3, after which they will transition into the new program in 2006. The decision to implement the new program in a temporally staggered fashion was taken to obviate the need for running the new and old programs in parallel for up to six years.

### **Conceptual Design & Philosophy of the Program**

The proposed UNSW program is outcome-based and is designed around the phased achievement of eight desired capabilities by graduation that include generic attributes, such as self-direction, critical analysis, teamwork and reflective practice, in addition to traditional medicine-related capabilities. Each capability has an average of 5-6 elements to be achieved in each of the three phases of the program, and these structure the assessment system that measures achievement of these elements. The learning process encourages student autonomy, learning from experience, collaborative learning, and the development of adult teacher-learner relationships.

Learning in the proposed program is 'contextual' using constructed health scenarios (phase 1), defined actual experiences (phase 2), or independent (yet supervised) experiences (phase 3) as the learning contexts. Content is horizontally integrated around broad themes. The program has a modular structure, comprising 27 eight-week blocks that represent iterative cycles through four domains that organize the program vertically. Three of these domains are stages of the human life cycle, whilst the fourth, deals with the environment in which life occurs, health is maintained and care is delivered.

Phase 1 (Scenario-based learning – SBL), an integrated program covering the first 2¼ years, exposes students to fundamental biological, behavioural and social sciences that form the basis of understanding health and disease and the systems used to provide care. Students explore "scenarios" via a mix of traditional pedagogic delivery modalities as well as innovative vertically integrated group activities (i.e. students from years 1 and 2 in the same small group).

Phase 1 commences with an introductory 8-week block (the Foundations Block), which aims to provide a sound experiential grounding in the pedagogic methodology that pervades the remainder of the course. The

Foundations Block focuses upon the process of learning rather than the content, although, as with all elements of the new program, relevant contextual settings are used.

The central design element of Phase 2 (Practice-based learning) involves students in reflection upon actual clinical and practical experiences in order to purposefully reshape and deepen their knowledge from Phase 1. Targeted clinical attachments will be supplemented by relevant small group tutorials, integrated science structured practical experiences as well as an extended case methodology.

The third phase of the proposed program involves "independent reflective learning" (Phase 3) over 10 x 8-week modules, which will be primarily delivered in clinical and community settings. Organising dimensions of this Phase will take into account a) clinical disciplines b) locations & settings of care e.g. rural, and c) primary and niche specialty nature of clinical care.

There is substantial flexibility built into the program with <70% of the courses being prescribed. Student choices for the remainder include electives, selectives, courses to be studied in faculties at UNSW other than Medicine, and an independent learning project (ILP) of 24 weeks duration. The latter can be organized by students in a customized manner and emphasizes in-depth study, self-direction, critical analysis and discovery, and utilizes the considerable research strengths of the Faculty and its affiliated institutes of medical research.

## **Assessment**

Assessment in the new Medicine program will be capability based, requiring students to demonstrate their ongoing development with respect to the eight Graduate Capabilities.

The methods by which students are able to show evidence of achievement of the desired graduate capabilities will vary for different capabilities. Overall, the assessment process will involve three components:

- integrated formal assessments
- an innovative learning portfolio assessment system
- performance assessments that require qualitative, rather than quantitative approaches.

## **Planning & Implementation of the Program**

Design and implementation of the new program is being managed by the Office of Medical Education, which coordinates the activities of a number of design, advisory and working groups. Particular focus is currently occurring in development of learning materials and training of facilitators for the nine Phase 1 modules, and more detailed design of phases 2 and 3. In concert with the latter, innovations are being introduced into the existing year 4-6 program, so that it becomes increasingly similar to the new phase 2 and 3 programs, allowing students in the existing program to transition into the new one by 2006.

## **Evaluation of the Proposed Program**

As part of the introduction of a new program, an integrated Teaching Development Program is proposed that will combine course and teacher evaluation strategies with staff development and visible rewards for quality teaching.

The curriculum will be intermittently evaluated using a variety of methodologies in partnership between the academic staff and the student body. The evaluation outcomes will be linked to ongoing and iterative staff development needs. This will be aided by a UNSW-wide initiative of the Pro Vice Chancellor (Education) which supports sustained development of quality in teaching at UNSW.

## **Faculty Development for the New Program**

A significant element of the design process for the new education program has been engagement of staff in cross-disciplinary working groups. Emphasis in the planning methodology has been to embed experiences for staff in developing skills for the new style of teaching. In addition, several pilots have been conducted to explore both logistical deployment as well as to practically test implementation aspects of the philosophies of the new program. These have also provided key staff with early opportunities to work in new teaching modalities.

## **The Faculty Organisation and Facilities to deliver the Program**

The Faculty's current organisational structure (nine schools including recently merged schools) is well suited to deliver an integrated program. Design of the new program has been conducted through a major process of change for the Faculty. With the effluxion of time during the planning process, 'working parties' designed to encourage tolerance of ambiguity, permit creativity and germinate innovative ideas in early stages have become more formalized 'learning activity design groups'. These are emerging as formalized structures for managing the oversight of phases, assessment etc.

Independent evaluations of the Faculty conducted recently for academic planning purposes suggest that recent amalgamations of some Schools have promoted a greater sense of ability within new units to achieve real cross-disciplinary outcomes.

The Faculty is currently considering the implementation of a novel system of 'Colleges' through which the program would be managed at the student level. Explicit recognition of the power of the informal curriculum significantly underpins this proposal.

The University will embark upon completely rebuilding the physical precinct of the medical school. This will provide for contemporary spaces suited for deployment of the new program including typologies of space

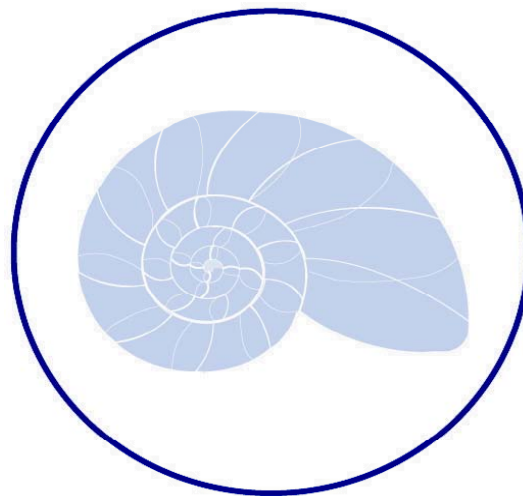
designed to emphasize flexible learning and multiple life-cycle re-use of space as learning (including technology changes) continues to evolve.

### **Communication Strategies**

A website devoted to the New Medicine Program has been established to assist in communicating developments to the teaching staff, current and prospective students, and the community. The URL address is:

<http://newprogram.med.unsw.edu.au/>

The journey of change within the Faculty of Medicine at UNSW has been large in scale but evolutionary in nature. Through extraordinary commitment of time and creative energies of many staff, one tangible product on the pathway to creating a sustainable community of learning and discovery is the proposed new medical education program. The complexity, and yet simplicity, of the proposed program is embodied in the metaphor of a nautilus shell. It communicates a number of aspects of the new program, including the spiral or iterative aspects, the modular nature, and the central core of graduate capabilities that represent a blueprint to align design of learning activities, assessment approaches, and evaluation of educational outcomes.



In the following pages, the nautilus shell is used as an icon in the right hand margin to highlight sections where key concepts or novel terms are described.

The submission is divided into two volumes. Volume 1 represents the completed AMC questionnaire. Volume 2 contains more specific details of the teaching program and various appendices. As additional details of the program are developed over the next few months, Volume 2 will be updated and re-submitted to the AMC Team in April 2003, along with any additional material requested by the Team.