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MESSAGE FROM THE HEAD OF SCHOOL

The academic leaders in the School of Medicine recognise the need for students studying medicine to have a clear curriculum. This document is the UQ MD Program Curriculum. It serves to provide a clear report on the structure and significant detail of the Program to students and to staff.

Determining that which is important to learn and that which is important to teach can be difficult in a field as large and diverse as Medicine. This document has been produced recognising the need for guidance in these matters. This is particularly relevant in the School of Medicine where we rely on a large number of staff in hospital settings, private practices and other health facilities to deliver our medical program. These colleagues, who are the bedrock of teaching in the Program need an understanding of how the Program is structured, so that their valuable teaching can be directed appropriately.

There are other important audiences for a Curriculum, such as the Australian Medical Council (our accreditation agency), international partners and accreditation agencies (we are a global medical school), the University (in terms of aspects such as graduate outcomes) and the broader medical profession.

A key challenge with any Curriculum is how much detail to provide. Different audiences need different information. This document provides, necessarily, a high level view of the UQ MD Program Curriculum: we provide here the key Outcomes of the Program, the Framework that we use to structure the learning that students need to undertake, detail on the structure of the Program, and additional opportunities.

Our Program is now structured, like most University Programs, in terms of Courses taken over a 4 year period. These Courses vary from 1 to 3 Units, and the Courses themselves are an important way to provide structure and shape to the Curriculum. MD Programs comprise clinically contextualised basic sciences, clinical sciences, clinical skills, population health, ethics, research training and a range of experiences in clinical practice.

Further detail is provided, for each Course, in terms of an Electronic Course Profile (ECP). Really, all that students need is contained in this document and the ECPs. Most staff will also get all they need from this document and the relevant ECP.

I hope that you find this document helps with the teaching and learning experience. We look forward to your feedback, so that we can refine it over time using the advice provided to us by our student body and dedicated teachers.

Professor Darrell Crawford
MBBS, FRACP, MD
Head, School of Medicine
The University of Queensland School of Medicine offers a variety of clinical training opportunities within Australia and internationally. We have a yearly intake of approximately 530 students into our 4-year Doctor of Medicine (MD) degree program, comprising 310 Australians, 100 onshore international students and up to 120 students in the Ochsner cohort.

Our school is ranked highly both nationally and internationally, recognised as one of four world class Medical Schools in Australia. In the 2013 Shanghai Jiao Tong rankings, UQ was placed in the 51 – 75 band for Clinical Medicine and Pharmacy. UQ was also ranked 34th in the subject of Clinical, Pre-clinical and Health according to the Times Higher Education World University Rankings 2013-2014, and 42nd in the subject of Medicine according to the 2014 QS World University Rankings.

Working in partnership with a dedicated community of scholars, clinicians and stakeholder groups both domestically and internationally, we promote excellence in medical education by providing integrated case-based training for student doctors. Designed to produce doctors who are able to meet today’s medical challenges, our curriculum has been planned to capture the enthusiasm of our entrants and help them develop into highly-skilled medical graduates capable of entering the wide variety of career options open to them.

Our aim is to provide a medical program which will develop in its graduates, a life-long commitment to continuing education with enhanced critical reasoning and communication skills, a highly developed awareness of their ethical and professional responsibilities to individual patients and to the community, skills to cope with the challenges of medicine, both technical and humanistic, and an ability to contribute to the continuing evolution of medical knowledge.

Case-based learning (CBL) is a key component of Phase 1 of our MD Program. Students work co-operatively in small groups with a tutor. Each group examines a carefully planned series of cases, each designed to highlight principles and issues in health and disease. Early patient contact and clinical reasoning are incorporated to develop high levels of clinical skills and medical knowledge.

Our four year medical program should be viewed as a curriculum spiral in which students repeat the study of a subject, each time at a higher level of difficulty and in greater depth. Years 1 and 2 constitute Phase 1 of the program and are designed to provide students with a strong foundation of knowledge and skills in preparation for clinical practice. Years 3 and 4 make up Phase 2 of the program – the clinical practice phase. Phase 2 consists of discipline-based rotations. The core clinical rotations introduce students to, and define the scope of each discipline, as well as provide a foundation on which to progress to postgraduate training. During Phase 2, students develop the practical skills necessary for their role as doctors in either a metropolitan or regional hospital.
Our students come to us with prior knowledge acquired through previous tertiary study. There are several entry points into our MD Program.

Provisional Entry for School Leavers
This pathway requires school leavers who meet the entry requirements to study an undergraduate degree at UQ before starting the MD graduate program.

Direct Entry for Graduates
The Direct Entry for Graduates pathway is for all applicants who are no longer current Year 12 students and who have completed a key degree, which could be an undergraduate, honours, Masters or PhD degree.

Special Admissions Categories
• Aboriginal and Torres Strait Islander Students
We reaffirm our commitment to assist people of Aboriginal and Torres Strait Islander descent to pursue a medical career. All indigenous applicants committed to a career in medicine are encouraged to apply for our MD Program.
• Rural Background Student
Maldistribution of medical practitioners throughout Australia leaves many rural areas of Australia without medical services. We recognise the need for rural services. In all, 25% of the places available in the MD Program are designated to Rural Background Students.

For further information regarding these entry pathways please refer to this link:
www.som.uq.edu.au/FutureStudents/
The School of Medicine has adopted the Australian Medical Council's Graduate Outcome Statements, which are organised around four domains, to establish the MD Program. The domains have been used as the basis for the themes of the MD Program:

1. Science and Scholarship - the medical graduate as scientist and scholar
2. Clinical Practice - the medical graduate as practitioner
3. Health & Society - the medical graduate as a health advocate
4. Professionalism and Leadership - the medical graduate as a professional and leader

The course content has been developed from curriculum and course blueprints based on the AMC Graduate Outcome Statements, the Australian Government Threshold Learning Outcomes for Health, Medicine and Veterinary Science (Medicine), the Medical Deans of Australia and New Zealand's Competencies, the 2010 Australian Qualifications Framework requirements and The University of Queensland’s Graduate Attributes for Postgraduate Programs.

The School has also incorporated other national and international trends and developments in medical education, as well as the rich global linkages the School has developed over recent years, world class research opportunities across UQ, and its expanding global footprint, to enhance the curriculum.
Australian Medical Council (AMC) Graduate Outcome Statements

The AMC assesses and accredits basic medical education courses, that is, courses that lead to a qualification that permits the holder to seek general registration as a medical practitioner. According to the AMC, the goal of medical education is to develop junior doctors who are competent to practise safely and effectively under supervision as interns in Australia or New Zealand, and who have an appropriate foundation for lifelong learning and for further training in any branch of medicine. The AMC Graduate Outcome Statements, form the foundation upon which we have built our learning objectives and curriculum. These can be viewed at:


Australian Curriculum Framework for Junior Doctors

The prevocational phase of postgraduate medical training encompasses the period between graduation and vocational training. The Australian Curriculum Framework for Junior Doctors is an educational template outlining the learning outcomes required of prevocational doctors, to be achieved through their clinical rotations, education programs and individual learning, in order to promote safe, quality health care. Our curriculum is informed by this framework and seeks to articulate with it. Further information regarding this framework can be found here:


The University of Queensland Graduate Attributes

The University of Queensland aims to produce graduates who have in-depth knowledge in their field of study and who will display effective communication skills, independence and creativity, critical judgement and ethical and social understanding. The core attributes reflect and build upon the culture of inquiry and innovation that are part of a research university, as well as embedding the need to exhibit effective interpersonal skills and a broad understanding of social and ethical responsibilities. Further information regarding The University of Queensland Statement of Graduate Attributes can be found via the University’s website:

www.uq.edu.au

Medical Deans’ Australia and New Zealand (MDANZ) Competencies

Over the last 3 – 5 years, MDANZ has led an increasing level of activity in medical education projects regarding the benchmarking of academic standards and examining the role of competencies and outcomes based education in clinical training. Our school has contributed to these projects and will continue to be involved in ongoing developments. Further information on the projects can be found here:

AMC Graduate Outcome Statements

Domain 1. Science and Scholarship - the medical graduate as scientist and scholar

1.1 Demonstrate an understanding of established and evolving biological, clinical, epidemiological, social, and behavioural sciences.
1.2 Apply core medical and scientific knowledge to individual patients, populations and health systems.
1.3 Describe the aetiology, pathology, clinical features, natural history and prognosis of common and important presentations at all stages of life.
1.4 Access, critically appraise, interpret and apply evidence from the medical and scientific literature.
1.5 Apply knowledge of common scientific methods to formulate relevant research questions and select applicable study designs.
1.6 Demonstrate a commitment to excellence, evidence based practice and the generation of new scientific knowledge.

Domain 2. Clinical Practice - the medical graduate as practitioner

2.1 Demonstrate by listening, sharing and responding, the ability to communicate clearly, sensitively and effectively with patients, their family/carers, doctors and other health professionals.
2.2 Elicit an accurate, organised and problem-focussed medical history, including family and social occupational and lifestyle features, from the patient, and other sources.
2.3 Perform a full and accurate physical examination, including a mental state examination, or a problem-focused examination as indicated.
2.4 Integrate and interpret findings from the history and examination, to arrive at an initial assessment including a relevant differential diagnosis. Discriminate between possible differential diagnoses, justify the decisions taken and describe the processes for evaluating these.
2.5 Select and justify common investigations, with regard to the pathological basis of disease, utility, safety and cost effectiveness, and interpret their results.
2.6 Select and perform safely a range of common procedural skills.
2.7 Make clinical judgements and decisions based on the available evidence. Identify and justify relevant management options alone or in conjunction with colleagues, according to level of training and experience.
2.8 Elicit patients’ questions and their views, concerns and preferences, promote rapport, and ensure patients’ full understanding of their problem(s). Involve patients in decision-making and planning their treatment, including communicating risk and benefits of management options.
2.9 Provide information to patients, and family/carers where relevant, to enable them to make a fully informed choice among various diagnostic, therapeutic and management options.
2.10 Integrate prevention, early detection, health maintenance and chronic condition management where relevant into clinical practice.
2.11 Prescribe medications safely, effectively and economically using objective evidence. Safely administer other therapeutic agents including fluid, electrolytes, blood products and selected inhalational agents.
2.12 Recognise and assess deteriorating and critically unwell patients who require immediate care. Perform common emergency and life support procedures, including caring for the unconscious patient and performing CPR.
2.13 Describe the principles of care for patients at the end of their lives, avoiding unnecessary investigations or treatment, and ensuring physical comfort including pain relief, psychosocial support and other components of palliative care.
2.14 Place the needs and safety of patients at the centre of the care process. Demonstrate safety skills including infection control, graded assertiveness, adverse event reporting and effective clinical handover.
2.15 Retrieve, interpret and record information effectively in clinical data systems (both paper and electronic).
Domain 3. Health & Society - the medical graduate as a health advocate

3.1 Accept responsibility to protect and advance the health and wellbeing of individuals, communities and populations.

3.2 Explain factors that contribute to the health, illness, disease and success of treatment of populations, including issues relating to health inequities and inequalities, diversity of cultural, spiritual and community values, and socio-economic and physical environment factors.

3.3 Communicate effectively in wider roles including health advocacy, teaching, assessing and appraising.

3.4 Understand and describe the factors that contribute to the health and wellbeing of Aboriginal and Torres Strait Islander peoples and/or Maori, including history, spirituality and relationship to land, diversity of cultures and communities, epidemiology, social and political determinants of health and health experiences. Demonstrate effective and culturally competent communication and care for Aboriginal and Torres Strait Islander peoples and/or Maori.

3.5 Explain and evaluate common population health screening and prevention approaches, including the use of technology for surveillance and monitoring of the health status of populations. Explain environmental and lifestyle health risks and advocate for healthy lifestyle choices.

3.6 Describe a systems approach to improving the quality and safety of health care.

3.7 Understand and describe the roles and relationships between health agencies and services, and explain the principles of efficient and equitable allocation of finite resources, to meet individual, community and national health needs.

3.8 Describe the attributes of the national systems of health care including those that pertain to the health care of Aboriginal and Torres Strait Islander peoples and/or Maori.

3.9 Demonstrate an understanding of global health issues and determinants of health and disease including their relevance to health care delivery in Australia and New Zealand and the broader Western Pacific region.

Domain 4. Professionalism and leadership - the medical graduate as a professional and leader

4.1 Provide care to all patients according to “Good Medical Practice: A Code of Conduct for Doctors in Australia” and “Good Medical Practice: A Guide for Doctors” in New Zealand.

4.2 Demonstrate professional values including commitment to high quality clinical standards, compassion, empathy and respect for all patients. Demonstrate the qualities of integrity, honesty, leadership and partnership to patients, the profession and society.

4.3 Describe the principles and practice of professionalism and leadership in health care.

4.4 Explain the main principles of ethical practice and apply these to learning scenarios in clinical practice. Communicate effectively about ethical issues with patients, family and other health care professionals.

4.5 Demonstrate awareness of factors that affect doctors’ health and wellbeing, including fatigue, stress management and infection control, to mitigate health risks of professional practice. Recognise their own health needs, when to consult and follow advice of a health professional and identify risks posed to patients by their own health.

4.6 Identify the boundaries that define professional and therapeutic relationships and demonstrate respect for these in clinical practice.

4.7 Demonstrate awareness of and explain the options available when personal values or beliefs may influence patient care, including the obligation to refer to another practitioner.

4.8 Describe and respect the roles and expertise of other health care professionals, and demonstrate ability to learn and work effectively as a member of an inter-professional team or other professional group.

4.9 Self-evaluate their own professional practice; demonstrate lifelong learning behaviours and fundamental skills in educating colleagues. Recognise the limits of their own expertise and involve other professionals as needed to contribute to patient care.

4.10 Describe and apply the fundamental legal responsibilities of health professionals especially those relating to ability to complete relevant certificates and documents, informed consent, duty of care to patients and colleagues, privacy, confidentiality, mandatory reporting and notification. Demonstrate awareness of financial and other conflicts of interest.
PROGRAM STRUCTURE

Phase 1

Year 1

Semester 1

Clinical Science 1
Clinical Practice 1
Ethics & Professional Practice 1
Health, Society and Research 1

Semester 2

Clinical Science 2
Clinical Practice 2
Ethics & Professional Practice 2
Health, Society and Research 2

Summer Semester

Elective

Year 2

Semester 1

Clinical Science 3
Clinical Practice 3
Ethics & Professional Practice 3
Health, Society and Research 3

Semester 2

Clinical Science 4
Clinical Practice 4
Ethics & Professional Practice 4
Health, Society and Research 4

Phase 2

Surgery Rotation
Mental Health Rotation
General Practice Rotation
Medicine Rotation
Medicine in Society Rotation
Obstetrics and Gynaecology Rotation
Paediatrics & Child Health Rotation
Critical Care Rotation
Medical Specialties Rotation
Surgical Specialties
PHASE 1 – THE CLINICAL PREPARATION PHASE

Year 1

Clinical Science 1 & 2
Clinical Science 1 & 2 begins the exploration of the structure, function and development of the human body, as well as the pathologies that alter them. Following a brief orientation period, the course is organised into systems-based modules so that related areas of study occur in adjacent weeks. The modules and their duration are as follows:

**Clinical Science 1:**
- Foundations (3 weeks)
- Cardiovascular (5 weeks)
- Respiratory (4 weeks) and
- Renal (4 weeks)

**Clinical Science 2:**
- Gastrointestinal (4 weeks)
- Nutrition and Metabolism (2 weeks)
- Musculoskeletal (4 weeks) and
- Nervous System (6 weeks)

Each of these modules will include elements of the core biomedical and clinical sciences:
- anatomy (including surface, gross and histology),
- physiology,
- biochemistry,
- immunology,
- microbiology,
- therapeutics,
- radiology and
- pathology.

An essential component of the Clinical Science courses is Case Based Learning (CBL). In CBL, knowledge and skills are acquired in the context of clinical cases presented in a small group setting under the guidance of a CBL facilitator. The cases which form the basis for each week's learning activities are structured to expose students to a variety of key learning issues. In CBL, the focus shifts from a model in which teachers give a didactic exposition, to one of independent learners learning in context, supported by a range of resources including lectures (live and electronic), laboratory classes, tutorials and symposia.

Clinical Practice 1 & 2
Clinical Practice 1 & 2, introduces students to basic clinical skills and students cover the five major body systems over the year. This course consists of four main components:
- Clinical Coaching
- Clinical Communication Skills
- Procedural Skills
- Professional Behaviour

Clinical Coaching (CC) is conducted in weekly small group tutorials led by a clinical coach. Students are encouraged to develop and demonstrate the basic clinical skills that are integral to medical consultations. They are taught and then encouraged to practise both history taking and examination skills using their peers as “patients”. The course is supported by the Clinical Practice Handbook which has been developed to accompany this program and which provides both students and tutors with a clearly structured outline of the progression of the course throughout the semester. Students learn how to take a history in relation to each body system. Following this, examination skills are outlined and explained and then demonstrated and practised. Students cover a number of body systems throughout the semester.

The Clinical Communication Skills (CCS) program concentrates on the skills involved in the process of communicating with patients using history taking as the context. A biopsychosocial model underpins the theory that students learn and then demonstrate. Its clinical relevance is emphasised by its integration into the weekly clinical coaching program. Role plays are used to practise and enhance clinical communication skills. Students are required to take a history from a peer and deconstruct this with peers and tutor. This evokes the reality of having to take the history in a timely and professional manner, while also being aware of communicating empathetically.

Procedural Skills Workshops (PSW) provide the opportunity for students to learn and then practise a range of basic procedures. Students must demonstrate professional attitudes and behaviour appropriate to the profession of medicine. Honesty, integrity, responsibility, reliability, compassion, respect, self appraisal and participation are key behaviours and will be modelled and expected through out the course.

A Nutrition Master Class is an included workshop that will introduce principles of nutrition in practice and further develop history taking skills.
Ethics and Professional Practice 1 & 2

Ethics and Professional Practice 1 & 2 introduce students to the fundamental concepts necessary for an understanding of the ethical basis of medical practice, medical professionalism, and the legal and social frameworks in which medicine is practiced. This understanding develops in an integrated way as students begin to develop their basic clinical and communication skills. Students begin to learn that some aspects of medical practice are the subject of a strong ethical consensus, while others are matters of considerable debate or even deep social division. Students' learning experiences will challenge them to begin to critically appraise the goals of medical practice and their own values. They will also be introduced to the idea that medicine is both an academic enterprise and a social practice, such that success requires the demonstration of basic and applied scientific and clinical knowledge, clinical competence, and satisfactory professional conduct. During Ethics & Professional Practice 2, students have the opportunity to choose an area of interest within medical ethics and/or law from a range of options, explore the area in depth, and produce a short piece of rigorous academic writing. The courses will be delivered using a combination of the tutorials, lectures and symposia (often involving outside experts), web-based resources and readings.

Health, Society and Research 1

This course aims to give students a solid foundation in research methods and the principles of Evidence-Based Practice (EBP), including formulation of answerable clinical questions (PICO), searching for evidence, critical appraisal, and judging applicability of evidence. The course provides an introduction to levels of evidence in clinical practice and the most common research designs used in clinical research, both quantitative and qualitative. For each study design the advantages and disadvantages, the potential sources of bias, and most appropriate methods of analysis is explained. At the conclusion of the course students will be able to formulate a question, search appropriate databases, assess the risk of bias of both observational and experimental study designs, understand how the results are analysed, and assess the applicability of the findings in a clinical setting. The course will also introduce the research process from the perspective of a clinical researcher. This includes formulation of a research question or hypothesis, selecting an appropriate study design, describing the research method and drafting a protocol or research proposal.

Health, Society and Research 2

In this course students will examine Australian Indigenous Health in a cultural and historic setting. The key aim is to provide students with an understanding of the practice of healthcare within diverse Indigenous Australian communities, and how issues such as culture, history, education, location, employment, family structure, and adverse life events impact upon health and doctor-patient relationships. The research component of this course will build on the introduction to the foundations of research covered in Semester 1 by engaging students with the skills of the research process within the context of Indigenous Health and the health amongst vulnerable populations. Students will gain a broad understanding of how ethical and legal considerations are vital to the integrity of any research project. Students will learn to identify the various forms of risk that may be associated with research projects and how mitigation of these risks will inform project design. At the end of this course students will write an application suitable for submission to a human research ethics committee.

Elective

The Year 1 Clinical Elective is an opportunity to study certain areas in depth, to experience the practice of medicine in other environments, to gain an insight into ‘the life of a doctor’, and to enhance self-directed learning (SDL) skills. It is undertaken in an apprentice-style format, in contrast to the more structured study program in the first two semesters. Students are expected to consider and develop awareness of the broader social, economic and cultural context that affect patients’ health in the community where the Elective is undertaken.
Clinical Science 3 & 4
Clinical science 3 is a continuation of the learning of the application of biomedical sciences (including anatomy, physiology, pharmacology, biochemistry, immunology and microbiology) and clinical sciences (such as radiology and pathology) to medical practice.

This course uses the case based learning model established in the previous clinical science courses. With the CSL sessions supported by a combination of lectures, practical classes, expert tutorials and symposia.

Clinical science 3 includes the following modules:
- Skin and eyes
- Endocrinology
- Reproduction
- Haematology
- Mental Health

Clinical science 4 is the capstone course for the clinical science program and while utilising the same style of learning activities as the prior courses, cases will be presented in as multi system patient cases which will require the application and synthesis of knowledge acquired during the previous 3 courses in combination with developing clinical reasoning skills in preparation for the clinical rotations in years 3 and 4.

Clinical Practice 3 & 4
Clinical Practice 3 & 4 build on the skills learned in the first year Clinical Practice courses (Clinical Practice 1 & 2). Evolution of clinical skills from the previous courses is facilitated by early clinical exposure of students to real patients. The courses both include Clinical Coaching tutorials, Clinical Communication Skills tutorials, Procedural Skills Workshops and surgical and medical Master Classes.

Clinical Coaching sessions progress from the peer physical examination model of Clinical Practice 1 & 2, to traditional small group bedside teaching, utilizing real patients’ histories and examination findings as the basis for learning. In this way, students’ clinical skills are refined to enable them to take focused medical histories, perform comprehensive and focused physical examinations and develop clinical reasoning skills to establish provisional and differential diagnoses. Students’ learning activities and assessment tasks include written portfolios of clinical experiences, including long and short cases, and oral case presentation.

The Clinical Communication Skills curriculum in Clinical Practice 3 & 4 extends the skills taught in Clinical Practice 1 & 2. Small group tutorials and role plays are used to explore and practise more difficult and challenging patient encounters and covers topics such as breaking bad news and motivational interviewing techniques. The tutorials are supported by a lecture series and online resources.

Procedural Skills Workshops continue to provide the opportunity for students to learn and practise a range of common procedural skills necessary for practice as an intern, in a simulation environment.

Master classes consist of a variety of medical and surgical workshops designed to enhance clinical skills across a range of specialties and include the Clinical Ophthalmological Workshop, Women’s and Men’s Health Training Associates Workshop, Advanced Life Support Workshop, Suturing Workshop and Endocrine Examination Workshop.

Ethics & Professional Practice 3 & 4
Consistent with the second year of the MD program, during which students study the pathological basis of disease and its diagnosis and principles of treatment, the second year ethics courses provide further and deeper engagement with the ethical, professional and legal tensions and obligations related to the doctor-patient relationship and professional regulation, with specific attention to patient safety, reproductive and mental health, end-of-life issues and the health system. Problem-solving skills in the context of the clinical consultation necessarily include ethical and legal considerations, and these develop in conjunction with students’ increasing communication and management knowledge and skills. Students continue to demonstrate their fitness to practise in terms of scientific and clinical knowledge, clinical competence and satisfactory professional conduct. The core curriculum in ethics, law and professional practice is completed by the end of year 2. There is a particular emphasis in the final semester on practical ethical and legal aspects of practice in preparation for entry into the clinical rotations. By this time, students will have developed a sound knowledge of core areas in ethics, law and professionalism, and be able to deal effectively, at an appropriate level of responsibility, with clinical ethical issues.
Health, Society and Research 3

In this course students will be introduced to health, health care and health service delivery in the community. Students will also learn about key aspects of public health medicine practice from a community perspective. Major topics include: the application of public health principles and perspectives; public health assessment and understanding risk; social determinants of health; community interventions; health services; and the social organisation of health care.

The research component of this course will build on the research skills learned in Year 1 and focus on all the aspects involved in writing a research proposal. The main purpose of a research proposal is to show that the problem you propose to investigate (the research question) warrants investigation, i.e. that the design and methods are appropriate and feasible, and will make an original and worthwhile contribution to the area of research.

Considering the various components of a proposal provides the researcher with a structured and comprehensive approach to defining and planning the research project and ensures that all the necessary components are addressed. These components include the background to the research problem, the research question, the project’s rationale, a preliminary literature review, the proposed methodology, the project plan and timeline, and the proposed outcomes of the research.

Health, Society and Research 4

This course will address key global issues that affect the health, access to and delivery models of health services for citizens of the world, in developed and developing countries; rural and urban settings; indigenous, refugee and migrant communities; as part of routine as well as disaster responses. The United Nations Millennium Development Goals (UNMDG) will be used as one of the primary organising themes for the course content. Student exploration of contemporary global health issues is emanated in the Global Health Conference, where students will also learn about presenting and sharing their work with peers in a professional environment.

The research component of this course will focus on how medical students, as future practitioners, can incorporate an evidence-based approach into their clinical practice. The ability to critically appraise the literature on the development and evaluation of clinical treatments, health interventions and the wider policy issues in health care is an essential skill for clinicians. This course consolidates the previous three semesters of research preparation by requiring students to employ the skills they have learned in critical appraisal, research ethics, and integrity, writing literature reviews, research design and research planning. For future career progression, it is increasingly vital for medical graduates to be able to provide evidence of effective communication through peer reviewed publications and oral presentation of research findings. The focus will be to further develop skills in the dissemination of knowledge through scholarly work - which is the cornerstone of the research process.
PHASE 2 – THE CLINICAL PRACTICE PHASE

Surgery Core Clinical Rotation

The year 3 Surgery rotation is devoted to General Surgery (Breast / Endocrine, Upper Gastrointestinal, Hepatopancreatoibiliary, Colorectal, Trauma & Acute surgery) and some subspecialties including Burns & Plastics, Urology, Vascular, Neurosurgery and Cardiothoracic Surgery. The aim of the Year 3 Surgery rotation is to familiarise students with common, serious and life threatening surgical diseases and for the student to develop an understanding of how they present clinically; how to systematically evaluate these conditions; how they are investigated; principles of management; how to assess priorities for treatment; and when and how to initiate referral. The term is not intended to train students as technical surgeons but to develop students that are ‘intern ready’ who can function as part of a surgical team. Students will be allocated to surgical units, to participate in the daily activities of those units, and to participate in all that happens during their patients’ episode of care. In addition, students should attend outpatients, ward rounds, operating theatre, and other unit meetings.

Mental Health Core Clinical Rotation

The Mental Health rotation is conducted in mainstream mental health services, such as community, public and private hospitals or fully integrated services. The clinical attachment sites provide a variety of experiences and access to the private sector and community-outreach services occurs in some sites. Learning in the clinical setting is central to the rotation, additional learning being through Clinical Case Review Discussions (similar to CBLs) and interactive workshops. Interactive workshops are used to assist students in learning about important issues which may not be covered in ward work or in Clinical Case Review Discussions. These workshops consider clinical problems in the broadest possible context, highlighting the importance of an integrated approach which incorporates an understanding of Basic and Clinical Sciences, Ethics, and Public Health. During the course, students develop skills in fundamental clinical techniques, such as the establishment of rapport and the formation of a therapeutic alliance, history-taking and mental status examination.

General Practice Core Clinical Rotation

In the General Practice rotation students are based in general practices in the community and participate in a primary care team with an experienced GP as their supervisor. This offers students the opportunity to experience and participate in the delivery of health care to patients with a large range of biopsychosocial diseases and presentations. The primary care setting allows students to learn about the patient’s perspective and negotiating care plans with patients. Through exploring the community context of health and illness students learn about the day to day management of acute and chronic conditions as well as some of the ways in which different community groups and organisations contribute to maintaining and promoting health in the community. The rotation offers students opportunities to practice core clinical skills as well as effectively communicating and participating as a member of the primary care team. Students are expected to apply evidence based practice skills to answer clinical questions as they arise. Students will work up illustrative cases to contribute at weekly small group, case based tutorials aimed at enhancing learning in the clinical context.

Medicine Core Clinical Rotation

The Medicine rotation provides an introduction to clinical medicine and therapeutics. Students are exposed to General Internal Medicine and a variety of Medical specialty Areas and the main focus is on patient contact. The rotation is based mainly upon placements in General Medicine units located in each Clinical School as a framework for clinical learning in medicine, coupled with clinical discussion sessions for each of the eight weeks of the rotation. Students continue to use their self-directed learning techniques and knowledge acquired during Years 1 and 2 of the MD to focus their learning within a hospital ward environment.

Medicine in Society Core Clinical Rotation

Medicine in Society provides a unique opportunity for medical students to understand and experience the rewards, benefits and challenges of clinical practice amongst population groups and communities that face access and equity challenges associated with health service delivery. Such challenges can be attributed to contextual factors such as geographical isolation, ethnicity, disability, socioeconomic status and/or life circumstance. Clinical practice within such a contextual framework requires distinctive generalist knowledge, skills and attitudes. Whilst the context might be different, clinical practice is governed by a number of common parameters such as: isolation, professionally challenging holistic patient care and team based case management. At the core of each student’s learning experience is a structured clinical placement during which students work closely with a Preceptor who guides and supports them as they provide health care in context.

Students participate in one of three placement streams for Medicine in Society:

1. Stream A – Rural: Involves a clinical placement in an Australian rural or remote community health setting.
2. Stream B – International Rural: Involves a clinical placement in a rural or remote community health setting in an international location.
3. Stream C – Community: Involves urban community placements in clinical settings such as Rehabilitation Medicine, Palliative Care Medicine, Aged Care, and Aboriginal & Torres Strait Islander health care.
Obstetrics and Gynaecology Core Clinical Rotation
During this rotation, students build on their current knowledge, skills and personal attributes, and acquire further clinical skills in women’s health. Students are attached to an Obstetrics and Gynaecology unit in a hospital within a Clinical School, and during their time in this rotation they achieve a solid foundation in critically evaluating issues in women’s health and reproductive health care. On completion of the rotation, students understand the principles of a normal delivery of a baby and must have performed at least 4 normal deliveries under the supervision of a clinical tutor. Students also attend outpatient clinics where they are expected to be an active participant in the medical team and to discuss with their team the patient’s history, clinical examination, formulation of a problem list and a management plan using clinical reasoning. In addition, students attend lectures and participate in case-based discussions.

Paediatrics and Child Health Core Clinical Rotation
The fourth year core rotation in Paediatrics and Child Health is a clinical immersion. Students are integrated within the hospital, observe clinical work and participate in clinical work under supervision. The rotation begins with a half-day video-conferenced orientation program to introduce paediatrics, in particular the clinical approach to children, child development and newborn transition. In addition, students attend twice weekly didactic sessions (e.g. video-conferenced lectures) and access the paediatric online interactive education (POLIE) modules complemented by weekly tutorials (POLIE face-to-face tutorials) which consolidate learning. Students engage in clinical work in various settings, including the emergency department, consultant ward rounds, daily junior staff ward rounds, outpatient clinics, subspecialist clinics, community paediatric visits, newborn nursery and post-natal wards. Students gain clinical experience in neonatology, emergency medicine, general paediatrics, adolescent medicine, surgery, community paediatrics, child and adolescent psychiatry, radiology and the specialties of ENT and ophthalmology.

During the Paediatrics & Child Health rotation students will have opportunities to observe:
1. The interaction between the infant, child or adolescent’s illness and their age, developmental level, physiological and psychological maturity;
2. How an illness and its management are influenced by the child’s family and social context;
3. A range of diseases specific to childhood, and disorders of growth and development, learning and behaviour;
4. Recognition and management of the seriously ill child.
This will provide students with an overall view of the scope of Paediatrics and Child Health in general practice, hospitals and the community. Students will acquire skills necessary for their role as an intern in either a metropolitan or regional hospital; and will develop a foundation to progress to postgraduate training in Paediatrics and Child Health.

Medical Specialties Rotation
Medical Specialties Rotation is an 8 week clinical rotation organised by the Discipline of Medicine and will allow students the opportunity for experience in one or two Medical Specialty Areas (MSAs) based in a hospital within a Clinical School. In addition, this rotation provides students with experience and learning opportunities in tertiary medical practice and offers intensive attachment to medical practitioners in a medical specialty. Students are expected to obtain an overview of the common and important problems that a Medical Specialties Area (MSA) usually encounters. Students are expected to learn how to utilize the appropriate resources in the diagnosis, management, health maintenance and prevention of these problems. Students should be made aware of the strengths and weaknesses of various service delivery models and specialty services. The use of evidence based medicine in accomplishing these goals is essential. The primary aim of this rotation is to build on the knowledge and experience learnt during the Medicine Rotation in Year 3. It is essential that students use the Specialties 1 rotation as an opportunity to improve their skills in history taking, clinical examination and in synthesis of their findings. The setting to facilitate such learning will be different from Year 3, namely subspecialty medicine.
Surgical Specialties Rotation

The Year 4 Surgical Specialties rotation is conducted in the University of Queensland’s teaching hospitals in Queensland, Brunei and New Orleans. The 7 week rotation is devoted to Orthopaedic Surgery (4 weeks), Ophthalmology (2 weeks) and a Surgical Specialty Option (2 weeks) chosen from Ear, Nose & Throat Surgery, Cardiothoracic Surgery, Maxillofacial Surgery, Neurosurgery, Urology, Plastic and Reconstructive Surgery or any other surgical subspecialty (excepting General Surgery) approved by the Head of Surgery. Students will be allocated to surgical specialty units, to participate in the daily activities of those units, and to participate in all that happens during their patients’ episode of care. In addition, students should attend outpatients, ward rounds, operating theatre, and other unit meetings. Learning resources are provided in the form of a series of Core Lectures (available on the Year 4 Surgical Specialties Blackboard site). In the individual teaching hospitals a tutorial program is conducted. Students are provided recommended reading lists, lists of recommended operations and investigations to observe and a list of surgical skills for which they should develop competence and understanding.

Critical Care Rotation

The Critical Care Rotation aims to teach the student the skills, knowledge and attitudes involved in managing patients with critical illness. Students spend time in the three disciplines of Anaesthetics, Emergency Medicine and Intensive Care. Students will generally spend more time in Emergency Medicine than the other two specialties, to prepare for their mandatory Emergency Medicine intern rotation.

Clinical skills will be learned during the clinical attachment and during simulation based tutorials, where available. Background knowledge is provided by online learning modules and interactive case scenarios. Workplace tutorials should be attended, where they are provided.

A career in medicine can take many directions. We recognise the importance of providing medical students with the opportunity to prepare themselves for diverse potential careers. In addition to the 4 year MD degree, our students also have the opportunity to combine the following honours, research and leadership qualifications with their medical studies:
Leadership

In 2010, we partnered with the University of Queensland Business School and launched the Medical Leadership Program (MLP). This innovative, first of its kind program in Australia is designed to prepare the students who complete it to become future leaders in their chosen medical fields. The MLP is comprised of 3 primary components:

- 4 courses which cover leadership theory and practice
- a seminar series which allows students to interact directly with leaders from a variety of industries
- MLP discussions which are designed to bring concepts from the other 2 components of the MLP into a group learning environment.

Students who successfully complete the 4 courses obtain a Graduate Certificate in Executive Leadership to complement their MD degree. Places in the program are highly sought after by our students and each applicant goes through a rigorous selection process.

Research

Clinician Scientist Track

We are committed to enhancing the research training and experience for students in the MD Program. An understanding of the research process and acquisition of associated skills are increasingly vital to doctors in the evidence-based and ever-changing practice of medicine. The Clinician Scientist Track is an innovative research intensive pathway for students who wish to pursue an MPhil or a PhD as part of their MD Program. This “Clinician-Scientist” Track is unique in Australia and strengthens the philosophy of medical education in our school by developing and graduating successive cohorts of physician scholars to become the future leaders in medicine and scientific enquiry.

The clinician-scientist track provides students with the opportunity to work and learn alongside outstanding researchers in a wide variety of medical disciplines and is a huge career advantage to graduates by increasing their competitiveness in the workforce.

There are two main components to the Clinician Scientist Track:

The Concurrent MD-MPhil is an option for students interested in undertaking an MPhil alongside their MD. The MPhil is completed on a part time basis concurrently with the full time MD and does not require students to take time out of the MD Program.

The Intercalated MD-PhD and MD-MPhil is a mixture of full and part time research “Intercalated” with the MD Program i.e. requires taking time out of the MD for dedicated research. The intercalated option requires students to take one year, (for an MPhil), or two years (for a PhD) out of the MD Program to work full time on their research.
As Queensland’s oldest and largest medical school we fully understand and embrace our responsibility to graduate doctors who will mainly work within the Australian health system, and deliver care to Queenslanders. However, we seek to go beyond this.

We pride ourselves on being a global medical school, and aspire to produce graduates with a wealth of global medical knowledge. This knowledge has the capacity to transform the medical world as we know it today, and create global leaders of tomorrow. We encourage our students to embrace every opportunity that could potentially aid them in becoming a leading doctor.

Certainly, as a global medical school we have a deep interest in, and commitment to, international health and internationalisation. Hence we continue to establish high quality and sustainable partnerships around the world such as those we have in the USA, Europe and Southeast Asia. Internationalisation to us means having an international faculty, international students, large numbers of our students and staff active offshore, and staff and students of our partners coming here to teach, learn and research, as well as a genuinely international curriculum. Our students are offered a Global Health course which introduces them to health and health care in a global context and prepares them for a role as global doctors. We have a deep interest in and commitment to alleviating inequality in international health, and it means having a physical presence with our partners offshore. Our students have the opportunity to experience clinical placements all around the world.

Further information on our two international Clinical School partners can be found at these links:
- Brunei - Ministry of Health: www.moh.gov.bn
- USA - Ochsner Health System: http://academics.ochsner.org/queensland.aspx

Our partnership with Ochsner Health System in New Orleans has resulted in the UQ-Ochsner MD Program for up to 120 US citizens and permanent residents each year. Students from the Ochsner Clinical School complete Phase 1 in Brisbane and then undertake Phase 2 in New Orleans.