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Symposium on:

International Collaboration in Curriculum Design and Delivery:

the University of Sydney –
King Saud bin Abdulaziz University for Health Sciences
experience

6th March 2008 – 4:30 – 6:00 PM

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Forward

The Kingdom of Saudi Arabia is committed to the goal of providing the most advanced health care to its citizens, and to improving the medical skills and knowledge of the health care community throughout Saudi Arabia, the Gulf States and the Middle East.

In keeping with this goal, the King Saud bin Abdulaziz University for Health Sciences (KSAU-HS), was founded in 2005, as a complement to the King Abdulaziz Medical City in Riyadh; the largest and most sophisticated of the medical cities that fall under the Saudi Arabian National Guard Health Affairs (NGHA). The National Guard Health Affairs is the Kingdom's leading medical system, and has long been a pioneering institute for providing quality health care and advanced medical education throughout the region. Its prominence as a leading health care provider has paved the way for the emergence of NGHA as a foremost institute for higher education.

King Saud bin Abdulaziz University for Health Sciences provides opportunities in the field of medical education at the undergraduate, graduate and post-graduate levels. The medical program under the College of Medicine features an innovative curriculum that has been thoughtfully designed to impart the knowledge, skills and attitudes students need to become competent doctors. Important features of the College's medical program include a problem-based approach to learning where fundamental medical concepts are mastered through group investigation and analysis of real patient cases. Another distinguishing feature is the entirely web-based curriculum which allows a superior delivery of medical education when compared to the traditional paper-based curriculum.

The future of any academic institution rests upon its ability to remain relevant with the passage of time, and a demonstrable capacity to adapt ideals, visions and teaching methods to meet societal development. It is in this spirit that we pursue collaboration with scholars and visionaries world-wide. We are very proud of the partnership that we have forged with the University of Sydney, which has provided the basis for our medical curriculum, and we look forward to future collaborative ventures with other leading academic institutions.

This booklet will provide you with a greater understanding of our College of Medicine and some insight into the Kingdom of Saudi Arabia's role as a leader in medical education.

Professor Youssef Al Eissa
Dean, College of Medicine &
Vice President, Educational Affairs
King Saud bin Abdulaziz University for Health Sciences

Introducing King Saud bin Abdulaziz University for Health Sciences College of Medicine.

The King Saud bin Abdulaziz University College of Medicine, initially envisioned as a high quality, innovative institution pledged to address the nation's shortage of Saudi physicians, has successfully matriculated four years of batches, with a double track this academic year (both high school and college grad batches; the College is the first graduate-admissions medical college in the region). Historically laboring with a very short timetable, united with the prestigious NGHHA and its 15-residency military hospital, the College has adopted many unique strategies and programs, particularly the innovative Problem-Based Learning system (PBL) combined, in hybrid fashion, with regularly scheduled parallel lectures and demonstrations. Its web-based curriculum, like the PBLs themselves based on the Sydney University model, is the first of its kind in the Middle East, and further marks the College as a pioneering institution, one committed to establishing an advanced technological infrastructure and the most modern of teaching methods. In addition, programs in community-based medicine, ethics, professionalism, and patient-doctor themes support the innovation claim. Even more singularly, the College has now admitted its second batch of students in its Masters in Medical Education, a rigorous 2-year, thesis masters focused on educational leadership. It uses mostly internally developed, but also Maastricht-based curricular materials. The College's Assessment Unit is a member with the International Database for Enhanced Assessment and Learning (IDEAL) in Hong Kong) and the College boasts one of the most active and experienced Faculty and Program Evaluation Units in the world.

The KSAU College of Medicine is also very active in educational faculty development. Numerous week-long workshops, mini workshops, and seminar series, in topics including clinical teaching, PBL, assessment, evaluation, etc, have been held locally under both College and top international consultants' direction. Also faculty have participated in PBL and assessment workshops at several regional and international sites.

In fact, international collaboration and dissemination activity is an important part of the College's activity. Besides relationships with Sydney and Maastricht Universities and the IDEAL Consortium described above, faculty have served as consultants to other institutions in North Africa, the Middle East, and Southeast Asia, and have taught in the prestigious leadership masters (MHPE) at the University of Illinois College of Medicine in Chicago. And, most recently, collaboration is being forged with Erasmus University in Rotterdam, Holland.

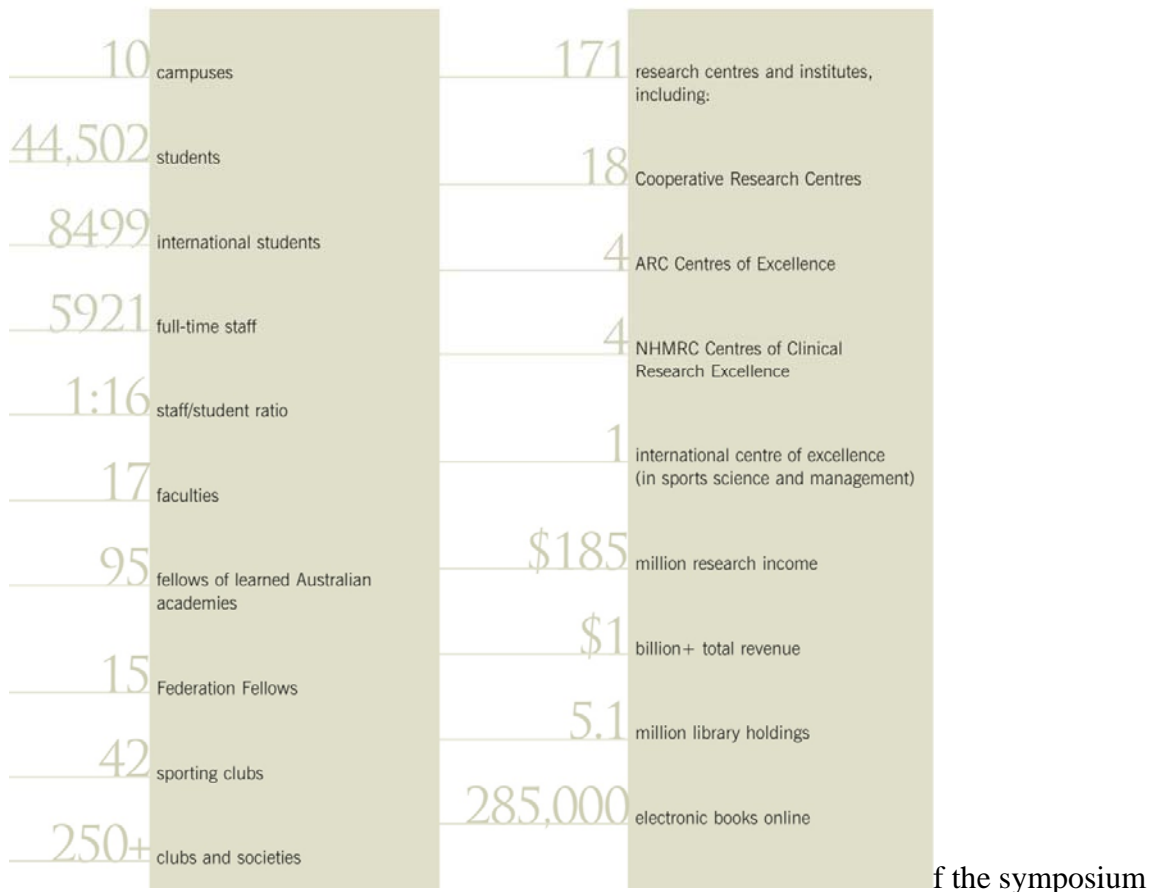
Internal faculty scholarship is also very active. Publications include the quarterly COM Newsletter, books and booklets on PBL, Clinical Skills Laboratory, Technology in Medical Education, the masters program, block books for every course taught, both undergrad and masters, and student guide. Externally, faculty have presented and been invited to present keynotes, papers, workshops, and posters at many international and regional education conferences, including the Ottawa Conference, AMEE, the Greater Gulf Conference, and other International conferences in Belgium, Australia, India and other nations.

In summary, the College of Medicine continues to expand on its young history. Proud of its accomplishments, it looks forward to continuing challenges. These entail both quality assurance with established components and insightful vision and successful implementation of new pioneering undertakings.

Introducing Sydney University, College of Medicine.

The University of Sydney is one of truly global University and aims to be seen in the top 40 Universities around the globe (see Fig 1). The Faculty of Medicine has been a leader in internationalising its problem based graduate medical course. The Governance of the University and some fast facts Its Medical Degrees is a 4-year graduate entry program, with early clinical experience. The program is characterised by strong horizontal and vertical integration, and a focus on developing skills in clinical reasoning and assessments that emphasise feedback and self-evaluation.¹ Four themes extend throughout the four years of the programme; BCS, Patient and Doctor/Dentist, Community and Doctor/Dentist, and Personal and Professional Development.^{2,3}

FAST FACTS 2006



TIME TABLE OF THE SYMPOSIUM

Time	Activity	Presenter
4.30-4.35	Objectives of the symposium	Prof Mohi Eldin Magzoub
4.35-4.45	Introduction to Sydney Collaboration	Dr Vera terry
4.45-4.55	Outline of Sydney Curriculum	A/Prof Chris Roberts
4.55-5.05	Introduction to KSAU-HS Curriculum	Dr. Ibrahim Al Alwan
5.05-5.15	External View	Prof John Hamilton
5.15-5.25	A conceptual framework of model in international collaboration in curriculum design	Dr. Mohammed Al Moamary
5.25-5.30	Conclusion and take home messages	Prof Mohi Eldin Magzoub
5:30-6:00	Discussion	

Introduction to the Symposium

Prof Mohi Eldin Magzoub

The USyd initiated a four-year graduate entry medical program which is problem-based, integrated and community-oriented, using a clinical reasoning model and integral e-Learning resources. Several Universities from around the world including the Middle East, South Africa, Australia and Europe have adopted this program for either a new curriculum or extensive revision. The USyd curriculum has been adapted to fit the local situation and realities in each particular context. KSAU-HS is among these universities. The idea of exporting a curriculum which is mainly designed to work in a particular environment to be implemented in another environment is considered as one of the model of curriculum design. This is an area in which there is little published research. The aim of this symposium is to present this experience of the delivery, implementation and evaluation in a systematic manner and share it with larger audience of the symposium participants.

Methods

Presentations summarizing the experiences of the participating institutions in the collaboration will be delivered along with a conceptual framework for this approach of curriculum design. Followed by discussion and lesson learned.

Conclusion

Adapting a curriculum as starting point or following reform is found to be a successful experience.

Adaptation and implementation of the curriculum framework

Dr Vera Terry

What follows are four cases studies, including some evaluation data where the University of Sydney has licensed its curriculum. The University has been privileged by the warm and collegial nature of the relationships it has developed and maintained with its partner medical schools.

1. South Africa (6 year undergraduate and a 4 year Graduate entry)

Curriculum adaptation

A learning grid was constructed to deliver background basic sciences utilizing PBL process. Though review process for checking for completeness and for factual overloads Heartened by the degree to which the cases met the departments' needs. The three other themes other themes have full curriculum where the content is often not related to the PBL cases. Anatomy remains a problem in the eyes of the students. This is being dealt with by identifying basic textbooks (very basic) in Anatomy and Physiology,

The PBL Process

All cases are "South Africanised." More directive by setting objectives and providing materials. emphasis is on integrating learning around a clinical case and confirming the relevance of what has to be learnt. students focus on mastering BCS content, and are not as good at explaining clinical phenomena by referring to BCS content. Process modified by introduction of clinical vignettes to suit local PBL process

Community and rural visits

Initially took the form of 'health tourism' and developed into a programme of service learning: for each group a series of 12 visits to one site, where they systematically design and apply a health promotion programme.

Assessment

Developed a clear pattern of assessment integrating international insights into good practice, Integrated 'block exams'; MCQs MEQs/ SAQs, OSCEs

2. The United Kingdom University of Nottingham – Derby Medical School (Graduate entry program)

Consideration

The University of Sydney curriculum materials are delivered via an integrated virtual learning environment (VLE) . The VLE was purchased as it stood at the time and a license to use the curricular materials for a fixed term.

Curriculum adaptation

Reduce the number of practical classes substantially, retaining only core anatomy, pathology and physiology workshops. Patient-Doctor and Personal and Professional Development themes in Sydney were abandoned and substituted by the existing Nottingham themes used in an established 5-year school-leaver, undergraduate medicine course.

The PBL Process

Rationalization of PBL cases (and related weeks of learning and teaching) that run over 24 months in Sydney to the number required for an 18 month period in Nottingham. The guiding principle used was to maintain alignment with the systems-based course followed for 30 months by Nottingham medicine undergraduates. A general approach of removing specific references to Australia, or contextual information that was not relevant to UK medicine, was also implemented.

Assessment

Divergence of self-assessment multiple choice questions - the focus, breadth and depth of many of these MCQs was divergent from those written and used in formative and summative exams on the Nottingham GEM course. That lack of alignment (in format as well as content) caused some confusion and anxiety on the part of the GEM students until corrected.

Technical Issues

Setting up the servers with their systems and application software, and then installing the Sydney VLE was a major piece of work. Subsequent technical issues have involved four areas: further patching and update of the relevant applications software (e.g. java, apache, linux, postgresql), adapting the VLE to allow for Nottingham-specific functionality, fault fixing (e.g. tracking down and correcting an array overflow) and reliability of the hardware.

Evaluation (quoting the words of Dr Paul Garrud, Associate Dean)

The value of using an established PBL curriculum has been immense. Not only did it allow the rapid setting up and start of the Nottingham course, it guaranteed the absence of a large number of potential mistakes and omissions in the initial programme. Even on the 4th run through of a case, colleagues have identified, for the first time, features that help prompt, direct and integrate student learning – a testimony to how well the cases were written and refined in Sydney.

3. Australia Bond University (Undergraduate entry program)

The Bond MBBS is an integrated case-based course, built around four themes: Scientific Basis of Medicine; Clinical Skills; Health and Society; and Personal and Professional Development. A variety of teaching and learning methods is employed including case-based small group tutorials, problem-based tutorials, practical classes, clinical skills

laboratory training, self-directed learning, web-based/e-learning, interactive seminars and lectures.

Curriculum Adaptation

1. the VLE platform - found user friendly, well developed for staff/student interaction
2. the curriculum
 - utilised some PBL topics, modified cases and written more extensive tutor notes (for the type of tutors that we have)
 - used some additional readings and formative questions that were very useful
 - the use of key words was less helpful and we have developed learning outcomes for each block and each week

Bond undertook a project to develop learning outcomes in all the problems delivered as part of the program. Learning outcomes were determined from within each problem and across all four themes to ensure that all the outcomes were mapped across the blocks. This mapping allowed for the segregation of the curriculum while still maintaining overall curriculum coverage.

The process of mapping enhanced the process of expanding the curriculum into an undergraduate program.

Medical curriculum framework for international adaptation - The University of Sydney Medical Program

Associate Professor Chris Roberts

The University of Sydney Medical Program is based on more than 100 years of strong traditional medical training, uses leading edge web based presentation of learning material based on proven educational best practice to enhance student experiences and learning outcomes. The Program is designed to enable students to learn in a way that matches the practice of medicine. Problem-based learning and early clinical experience both ensure that the context and relevance of the program are clear.

Some of the features of the program include: early clinical experience, integration of subjects within and across years, the use of new information technologies, a focus on clinical reasoning and assessments which emphasises feedback and self-evaluation. The medical program is a four year, graduate entry curriculum that is organised into four themes: Basic and Clinical Science Theme, Patient and Doctor Theme, Community and Doctor Theme, Personal and Professional Development Theme. Information technologies support learning through the delivery of simulated medical cases and related educational materials and assist students to become familiar with the tools needed for evidence based practice. Problem Based Learning (PBL) is a central feature of the program. The program is served via an internet interface using a Course Management System (CMS) and Course Delivery System (CDS). Assessment is constructively aligned and criterion referenced to ensure our graduates meet the program learning goals

Accreditation and international recognition

All aspects of the program are assessed and evaluated according to the requirements of the Australian Medical Council, best practice guidelines and University policy to ensure that our

The program has been in progress at the University of Sydney since 1997 with an established record for reliability and highly evaluated outcomes. A measure of the overall success of the Medical program can be evidenced by the awarding of the maximum period of accreditation by the Australian Medical Council, and the adoption of the Medical Program by universities in the UK, Saudi Arabia, South Africa, and several other Australian universities

International Collaboration in Curriculum Design: King Saud bin Abdulaziz University for Health Sciences Experience

Dr. Ibrahim Al Alwan

The College of Medicine King Saud bin Abdulaziz University for Health Sciences is a graduate entry, problem-based and community-oriented Medical School. The College was established in 2004 and the first batch of 25 students will graduate in July 2008. The College opted for the University of Sydney Curriculum as starting point and adapt it to local situation and realities. Many adjustments through the curriculum committee has been performed to make it fitting Saudi priority health problems and culture-sensitive as well as matching the local Ministry of Higher Education rules and regulations. These modifications include the followings.

1. Designing a preparatory semester before enrolling into the Sydney Curriculum. This semester include five blocks, Intensive English Program (10 ch), Introduction to Problem-based Learning (2 ch), Introduction to Evidence-based Medicine and Research Methodology (2 ch) Islamic values and Medical Ethics (2 ch), Computers Sciences and Medical Informatics (3 ch).
2. Synchronize the four years curriculum to fit the local educational calendar.
3. Removing all problems and learning topics which are cultural sensitive or irrelevant to the Saudi traditions.
4. Modifying assessment system to include a comprehensive and summative exam at the end of each block which is completely different from Sydney.
5. Replacing the problems which are of less priority to the Saudi health system with more common problems, e.g., cystic fibrosis.
6. Major modifications of year three and four by splitting for instance, the integrated clinical attachment into medicine and surgery clerkships.

External Review of the King Saud bin Abdulaziz University for Health Sciences – College of Medicine

Professor John Hamilton

Overall, the College is to be congratulated. It has done very well, establishing the curriculum and a full range of support systems in a remarkably tight time frame. The large majority of its work is at an international standard, and some is a model that other schools internationally recognized would do well to emulate.

Educational Program

The College shows some of its best strengths in the way it has approached and implemented its curriculum.

Assessment of Students

The Assessment Committee with strong administrative support has responsibility for assessment of student performance.

Students

Discussions with students and with staff responsible for their welfare and support gave a positive impression of student appreciation of the curriculum, and understanding of the principles of PBL.

Academic Staff/Faculty

The College is to be congratulated on recruiting an excellent foundation staff. Many have extensive experience and insight into modern medical education, its methods and conceptual basis. The Department of Basic Sciences is composed of clinicians whose career has taken them into basic sciences. This facilitates their contribution to the integrated curriculum.

Educational resources

Information Technology to support the web-based curriculum is excellent and staff and students are generally capable in its use.

Programme evaluation

Programme Evaluation is well managed by the Programme and Faculty Evaluation Committee. Regular block reports are comprehensive with constructive and useful analysis. These reports are prepared in the second half of each block so they can be discussed formally at the Curriculum Committee

Continuous Renewal

The evidence is that the school is operating not only at internationally defined standards, but ahead of many in a substantial number of its key activities. The reviewer has found and described in this report ample evidence that the school is indeed demonstrating globally endorsed qualities and capacities, fulfilling the upper level of performance defined by WFME in most areas. WFME does not expect any school to achieve every standard across the board. The College of Medicine stands poised to take a role of international leadership.

Many recommendation was suggested in the comprehensive report of this evaluation

A Conceptual Framework Guiding a Model of International Collaboration in Curriculum Design

Mohamed S. Al Moamary, FRCP(Edin), FCCP

Associate Dean for Clinical Affairs, College of Medicine, KSAU-HS

As part of globalization, most universities today include some reference to internationalization in their mission and vision. This has led to the development of a culture that values the globalization of education and shared experiences. Our senior leaders have issued clear strategic decisions and initiatives for King Saud bin Abdul-Aziz University for Health Sciences (KSAU-HS) underpinned by a vision of achieving excellence in education, research and academia. Therefore, the process of selecting a curriculum commenced with a campaign to identify universities that implement innovative curricula. Once an agreement was signed with the University of Sydney, the transfer and implementation of curriculum was initiated. Through exemplary collaborative team work and effort, both parties managed to adopt and implement the curriculum. Additionally, information technology teams worked together to gradually transfer the online curriculum.

At KSAU-HS, different committees were formed with a clear mandate to ensure the proper implementation, synchronization and adaptation of the curriculum. Initiatives were also undertaken to extensively review and customize the curriculum to support cross-cultural sensitivities. This was nevertheless, consistent with KSAU-HS commitment to internationalization of medical education and the need for graduates to be able to practice and pursue further training in different cultures. Through continuing work and support, the curriculum is now fully implemented. A program evaluation process has shown that stakeholders are generally satisfied with the process, product, and outcome.

In conclusion, a framework for international collaboration in curriculum design can be based on principles of searching, adoption, synchronization and adaptation. We believe that such a conceptual framework can be successfully translated into a practical, collaborative model for future international partnerships. Our experience has also shown that the active linkage and globalization of the curriculum has facilitated an effective adaptation from a different society with minor cross-cultural modifications.

Conclusion and take home messages

Prof Mohi Eldin Magzoub

Based on the experience of the two universities, King Saud bin Abdulaziz University for Health Sciences and University of Sydney we can conclude that international collaboration is one of the model of curriculum design which was not yet well studied and reported in the literature. This model may fit very well in new medical schools with short time available for designing a new curriculum. It may also match longstanding traditional schools which look for a model that is functioning successfully and carries minimal risk of implementation on failure.

We can conclude as well, this model needs strong collaboration initiatives and active two way communication to share experiences in proper implementation and program evaluation. It also provides opportunities to extend this collaboration not only in curriculum design but to include full partnership linkages. Many factors contributed to the success of this model including the fast growing initiatives of medical education innovation and reform in particular, the evolution of problem-based learning and community-oriented education, the rapid growth in information technology such as e-learning and web-based curriculum delivery in addition to the globalization movement worldwide which made our world a small village.

Short resume of contributors

Prof Mohi Eldin Magzoub MBBS, MFPHM, PhD

Currently professor Magzoub is the Chairman, Department of Medical Education, College of Medicine, King Saud bin Abdulaziz University for Health Sciences since 2004. Prof. Magzoub obtained his MBBS, from the Faculty of Medicine, Gezira University, Sudan and PhD in Medical Education for Maastricht University in the Netherlands in 1994 in addition to a membership of the Faculty of Public Health Medicine, Royal Colleges of Physicians London. Prof Magzoub developed extensive experience in medical education through his international consultations, publications and conference presentations.

Dr Chris Roberts MBCHB M.Med.Sci. MRCP. PhD is Associate Dean (Educational Development) at the Faculty of Medicine at the University of Sydney. He is Head of the Centre for Innovation in Professional Health Education and Research (CIPHER). This unit is a leading medical educational research unit, has an established Masters in Medical Education programme, runs a series of innovative continuing professional development programmes aimed at workforce development, is research active, and provides extensive educational consultancy to other Faculties including in the Middle East, SE Asia, South Africa and the UK. He is the current Chair of the Admissions Committee at the University of Sydney. Formerly he was Deputy Head of Department at the University of Sheffield in the UK. He trained clinically as a GP. His main research interests are in the measurement of clinical performance and selection procedures with a particular focus on professionalism.

Dr Vera Terry BSc LLB, LLM. PhD is Director, Research and Education Business Development at the Faculty of Medicine at the University of Sydney. She is a scientist by background and has fifteen years of research experience in the areas of female reproduction, cytoskeletal biology and ultrastructural imaging. She has been an active teacher both in a traditional course and within a problem based course. She has been extensively involved in the design and implementation of curricular innovations such as the online Pathology Museum. She has done extensive consultancy in curriculum design for clients in the Middle East, SE Asia, South Africa and the UK. She is currently undertaking an MBA, and has considerable experience in contract negotiation for both research and educational business.

Dr. Ibrahim Al Alwan, MBBS, MRCP(UK), FRCP(C)

Dr. Al Alwan is the Associate Dean of Academic and Student Affairs, College of Medicine, King Saud bin Abdulaziz University for Health Sciences (KSAU-HS). He is also a Pediatric Endocrinologist at the King Abdulaziz Medical City in Riyadh (KAMC-Riyadh). Dr. Al Alwan is the Chairman of the KSAU-HS Curriculum Committee. He is also the Head of the Scientific Committee for the Saudi Board for Pediatric Endocrinology Fellowship for the Saudi Commission for Health Specialties. He has made significant contributions in peer reviewed journals and published articles on pediatric endocrinology. Dr. Al Alwan is also a sought after lecturer both nationally and internationally. He received his MBBS from the College of Medicine, King Saud

University, Riyadh and is a member of the Royal College of Physicians MRCP (UK) Pediatric, as well as the Royal College of Physicians of Canada in Pediatrics. Dr. Al Alwan is a Fellow of the American Academy of Pediatrics as well as a Diplomat in Pediatric Endocrinology (The American Board of Pediatrics) and holds a certificate in Pediatric Endocrinology and Metabolism (Royal College of Physicians of Canada)

Mohamed S. Al Moamary, FRCP(Edin), FCCP

Dr. Al Moamary is the Associate Dean for Clinical Affairs, College of Medicine, King Saud bin Abdulaziz University for Health Sciences (KSAU-HS). He was pivotal in the creation of the clinical phase of an adopted innovative curriculum. He is also a Consultant in Pulmonary Medicine at King Abdulaziz Medical City in Riyadh (KAMC-Riyadh). Dr. Al Moamary holds chairmanship of various committees in KSAU-HS and KAMC-Riyadh. He is also the chair of the Faculty Development Committee where he is actively organizing international workshops with the focus on Problem Based Learning. He is the Medical Director and Founder of the first national Pulmonary Rehabilitation Program. His other duties include the Editor-In-Chief and Founder of the Annals of Thoracic Medicine, a scientific peer review journal. He has been the Director of the Annual Asthma Meeting since 2002. Dr. Al Moamary is an active member of several international accredited medical organizations and gives regular lectures at international workshops and Symposia. He has made significant contributions in peer reviewed journals and published books in the field of patient education in the Arabic language, one of which is "Letters to Asthma Patients" where he received an award from the National Asthma Committee.

Professor John Hamilton

Professor Hamilton qualified in medicine in London in 1960. He worked in St Francis Hospital Katete, Zambia, and then trained as a gastroenterologist in London.

In 1969 he joined the founding faculty of McMaster University Medical School as Director of Gastroenterology and Chair of student admissions and Chair of the undergraduate curriculum committee. McMaster introduced PBL.

In 1978 he joined the new medical school of Ilorin, Nigeria as Professor of Medicine and Chair of the Curriculum committee. This established a community based programme of education and service COBES.

After two years with the World Bank he was appointed dean of medicine and Health Sciences at Newcastle medical School, the third founding school of the Network with which he has been associated. This introduced PBL to Australia and extended medical education to community settings, widened the criteria for student selection and established the first formal programme to train indigenous medical students. He was also the founding Chair of the new Australian Medical Council accreditation committee, of the Commonwealth Rural Undergraduate Steering committee, responding to the needs of rural health care, and the Australian Quality of Health Care Study.

In 1999 he commenced five years at Durham University, UK, establishing a community oriented curriculum in a disadvantaged industrial region.

He is now retired but continues assisting medical schools in a number of countries.



**KING SAUD BIN ABDULAZIZ
UNIVERSITY FOR HEALTH SCIENCES
COLLEGE OF MEDICINE
COLLEGE OF APPLIED MEDICAL SCIENCES
COLLEGE OF NURSING – RIYADH, JEDDAH & AL AHSA**



**NATIONAL GUARD HEALTH AFFAIRS
RIYADH, SAUDI ARABIA**

The National Guard Health Affairs (NGHA) is a leading medical system in the Kingdom of Saudi Arabia. It consists of sophisticated medical cities that are dispersed throughout the Kingdom. King Saud bin Abdulaziz University for Health Sciences (KSAU-HS) is a newly established academic institution under the umbrella of NGHA that includes campuses in Riyadh (Colleges of Medicine, Applied Medical Sciences & Nursing), Jeddah (Colleges of Medicine and Nursing) and Al Ahsa (College of Nursing). These colleges are closely affiliated with the King Abdulaziz Medical Cities in the three regions.

We are currently seeking to recruit Faculty in Medical Education, Psychology, Social Sciences, Basic Sciences, Basic Medical Sciences and the English Language.

This is an exciting opportunity to work in a progressive multinational environment that offers competitive salaries and benefits. If interested, please send your CV and copies of your certificates to COM@ngha.med.sa or COM@ksau-hs.edu.sa (Telephone Number: (966) 1-252-0088 ext. 41135, Fax: (966) 1-252-0088 ext. 41133).