

Curriculum *Connections*

A newsletter of the Education Council
and the Office of Medical Education

April 2005

From the Education Council

Pam Shaw, M.D.

The Education Council continues to work on the curriculum review that began in the summer of 2003 with the steering committee work led by Dr. Josh Freeman. The Faculty Retreat in September of 2004 was centered on the areas that the steering committee had suggested as focus areas. A committee led by Dr. Jim Fishback has put together a framework for the revision of years 1 and 2 otherwise known as Phase I. It includes integration of the material for the preclinical years as well as a block structure to present the curriculum. The Year 1-2 Curriculum Oversight Committee has approved this change as has the Education Council. Phases II and III of the curriculum are being discussed in the Year 3-4 Curriculum Oversight Committee with an expected vote this month on the changes for the clinical years. These changes include a longitudinal experience and a learner's portfolio which will measure the student's competencies throughout the four years of medical school. The full proposal for the curriculum will go to a vote of the faculty after Education Council approves the changes. We are planning to have faculty vote electronically.

We have also had work done by LCME committees regarding the content of the clerkships. Dr. Anne Walling presented an educational objectives document that addresses what is being taught in the courses and clerkships to the Education Council for review and it was approved.

The Nutrition and Genetics subcommittees provided a review of what is currently being taught in the curriculum and recommendations for updating it. This review will need to be updated as the curriculum revision begins. As part of the national trend toward improvement of clinical skills training in medical education, KUSOM has continued development of a Clinical Skills Assessment (CSA) and standardized patient program. The CSA is a competency exam given at the end of the third year. The most recent school wide CSA (Kansas City and Wichita campuses) was completed in August 2004. Standardized patients are used in the CSA and have been used to augment skills training in the Year 1 and 2 Introduction to Clinical Medicine(ICM):Clinical Skills courses. A report of the results of the 2004 CSA exam has been given to the Year 3-4 Curriculum Oversight Committee. The CSA leaders plan to make changes to improve the evaluation and the clinical patients that are presented to the students. One of the proposals for changes in Phase II of the revised curriculum is to have a formative CSA before the end of the third year clerkships in order to provide feedback and improve performance. We hope that these efforts will ensure success of KU students on the USMLE Step 2 Clinical Skills (CS) exam, given for the first time in 2004-2005.

The work of the Education Council in reviewing courses has continued with regularly scheduled reviews. The course evaluations and the responses are very valuable ways to improve the education that the medical students are receiving.

In April the Education Council will sponsor the 3rd Annual Clerkship Director's conference. This year's theme will be competencies and the Phase II and III revisions. After this retreat, the final recommendations for Phase II and III revisions will be sent to the Education Council. The final proposal for curriculum revision should be completed before the LCME visit in October. The work involved in implementing the proposals is just beginning.

Overview of Current Curriculum Reform Efforts

Jim Fishback, M.D.

Immediately upon her appointment as Executive Dean in 2002, Dr. Barbara Atkinson called for a comprehensive re-evaluation of our undergraduate medical curriculum, which had been modified to an “integrated” curriculum in 1997. While it can be said that the current KUMC curriculum was intended as an integrated, collaborative curriculum presented by faculty from both basic and clinical sciences, many faculty and students feel that it is not all it could be, despite AAMC Graduation Questionnaire (GQ) data that suggests that most KUMC students feel the curriculum offers them a good undergraduate medical education.

It was the Flexner Report, done for the Carnegie Foundation in 1910 that established the guidelines for most modern medical school curricula:

The curriculum of a medical school, requiring for admission at least a competent knowledge of physics, chemistry, and biology, offers in the first two years systematic instruction in the following subjects:
First year: anatomy, including histology and embryology; physiology, including biochemistry
Second year: pharmacology, pathology, bacteriology, and physical diagnosis.

Although KU was cited as a “first tier” institution in the Flexner report, because they followed this model curriculum in 1910, if you look at the current academic calendar, casual inspection would indicate that the curriculum has not evolved much since 1910. Some innovative new modules have been added over the years, but many students complain in the AAMC GQ that the relevance to clinical sciences is not made clear in the pre-clinical basic science courses. Over the last two years, curriculum revision has been sought at KUMC, with the intention of 1) reducing lecture hours; 2) integrating abnormal processes and pharmacotherapy into the year 1 curriculum; 3) integrating all aspects of the basic sciences into each unit of study; and 4) improving students’ analytical, written and verbal communication skills, and critical-thinking skills. This effort resulted in an all-faculty retreat in June 2004, in which an integrated curriculum plan (Plan A) was announced. Unfortunately, this plan was not felt to be viable by many on the Education Council, and an ad hoc committee was then formed by the Council in August 2004, which began work on a compromise plan. The compromise, Plan A++, was debated and passed by the Education Council in January 2005, with implementation of the year 1 plan in August, 2006. An overall view of the new curriculum may be seen in Figure 1.

Key elements of the new plan: discipline-based courses, taught by departments, will be eliminated. The curriculum will be delivered in discrete 4-8 week blocks, organized mainly by organ system, and taught by interdisciplinary teams. All textbooks will be available online, and will be easily accessible via Tablet PCs (required for academic year 2006), utilizing wireless networking, which has recently been installed. Lecture time in the new curriculum will be limited to a maximum of three hours per day. Each block will utilize problem-based learning principles, where students interview and evaluate a standardized patient in our Neis Clinical Skills Laboratory, then meet twice in future weeks to discuss the case, and devise a treatment plan. Students will also write brief, weekly essays, either to contrast and compare concepts learned in lecture, or commenting on cultural or ethical problems that come to their attention during their course of study that week. Each block will build upon principles learned in the previous block, culminating in a block entitled “Medicine Across the Lifespan”, where diseases and preventive medicine interventions will be discussed in the context of the age and gender of the patient, rather than by organ system.

The curriculum in years 3 and 4 will also be revised. Discussions include enabling better scheduling of students into clerkships by adjusting all clerkships to the same length (eight weeks). An advantage of rearranging the clinical clerkships would be to allow for periodic basic science updates of clerkship students, so that they don’t miss out on the latest scientific events that could affect their future practice of medicine. Didactic material delivered in years 3 and 4 will also be available on the Blackboard curriculum delivery system, which is currently used mainly in years 1 and 2.

In summary, big changes are ahead for the KUMC curriculum, and much remains to be done, prior to implementation in 2006. Construction of new small group rooms, a computer testing center, and rewiring of auditoriums is currently underway, in order to be ready for incoming medical students by 2006. The 21st

century Jayhawk physician will be wired to the university, which should enable easier continuing medical education and collaboration between the school of medicine and its graduates for many years to come. The electronic curriculum should evolve much faster than the old curriculum, so that by 2010, Flexner would simply be amazed!

**Pre-Clinical Phase
Year 1**

month week	August				September				October				November				December				January					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Orientation			Foundations								summative exams & fall break	Inflammation & Immunity				Genetics & Neoplasia				summative exams	winter break	Cardiopulmonary			

month week	February				March				April				May				June				July					
	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
	Cardiopulmonary	summative exams	Gastrointestinal Tract & Nutrition						summative exams & spring break	Renal & Endocrine Systems				Sexuality & Reproduction				summative exams	summer break							

**Pre-Clinical Phase
Year 2**

month week	August				September				October				November				December				January						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
	summer break				Brain, Mind & Behavior								summative exams & fall break	Musculoskeletal and Soft Tissue				Blood & Lymphoid				summative exams	winter break	Infectious and Parasitic Diseases			

month week	February				March				April				May				June				July				
	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51
	Infectious and Parasitic Diseases	summative exams	Medicine Across the Lifespan						spring break	Medicine Across the Lifespan				summative exams	USMLE step 1 preparation & examination				Clinical Phase Transition	Clinical Clerkships					

LCME Site Visit and Preparation Update

Karl Becker, M.D., M.B.A.

Over the last year we have been preparing for the next Liaison Committee on Medical Education (LCME) full accreditation survey and site visit of the University of Kansas School of Medicine in October, 2005.

LCME mandates the development of a comprehensive database and the creation of a Self-Study Task Force and multiple subcommittees to analyze the data. We have done so; our Self-Study Task Force and subcommittees conducted an institutional **self-study** to critically examine ourselves. This self-study provided us an opportunity to reflect on and evaluate every component of our education process, to assess whether we are achieving the excellence for which we strive, and to identify areas for potential concern and improvement.

We are in much better shape than we were in 1997. Our strengths have multiplied and our weaknesses diminished. However, we still have some areas of concern which we are actively addressing or have already addressed. These areas of concern include:

- No formal unifying statement regarding the student-teacher relationship
- Lack of standardized instruments and methods of evaluating students and providing feedback.
- The patient base for teaching in Kansas City has improved but remains weak in Obstetrics and Gynecology
- Ambulatory medicine clerkship is problematic in KC
- Our local fail rate on the NBME Clinical Skills Assessment is around 8%, higher than the national average of 3-5%

We will have tackled all of the areas of concern by the time of our site visit.

At this time we continue to refine the database, the self-study reports and the self-study summary. On April 20 and 21 and again on June 10 at the time of the educational retreat, we will have visits from our educational consultants who will critically review our reports and our progress. In late July we send in the completed database, the summary self-study report and supporting material to the LCME. In October, we have our site visit.

Over 150 faculty, staff, and students have worked hard to prepare for the LCME. We know that this team effort will produce a successful LCME site visit and subsequent accreditation. With the support of all, we will be better than we are.

Contact: Karl E. Becker: kbecker@kumc.edu
Kelly Magaha: kmagaha@kumc.edu

Office of Medical Education Update

Giulia Bonaminio, Ph.D.

The Office of Medical Education (OME) staff has moved to new offices on the 3rd floor of Murphy. Mr. Mike Karr has joined the OME as Senior Coordinator for Technology. Mike's main responsibilities center on assisting faculty and students with Blackboard, PDAs and computer-based testing. Ms. Amal Latif, MS is the new Research Associate in Assessment and Evaluation. Amal's responsibilities include evaluation of the curriculum and student assessment. Ms. Megan McAtee, MS is the Introduction to Clinical Medicine: Clinical Skills Coordinator. Megan's main responsibilities are coordination of the first and second year Clinical Skills courses.

Ms. Candace Smith has joined the office of the Vice Dean for Educational and Academic Affairs as Dr. Glendon Cox's assistant.

Mark your Calendar

The Office of Professional Development and Faculty Affairs

Learning Styles

IAMSE Webcast Audioseminar Series
Lynn Curry, PhD
CurryCorp, Inc.

Tuesday, April 5th
11:00 a.m. - 12:00 p.m.
WHW Auditorium

Issues and Strategies for Student Academic Support and Counseling

IAMSE Webcast Audio Series
Sheila Chauvin, PhD
Louisiana State University Health Sciences Center

Tuesday, May 17th
11:00 a.m. - 12:00 p.m.
1050 SoN

Curriculum Integration – A Buckeye’s View

Charles Hitchcock, MD, PhD
Associate Professor of Pathology - Clinical
Ohio State University – College of Medicine
and Public Health

Thursday, April 15th
12:00 p.m. – 1:00 p.m.
4016 Varnes - School of Nursing

Learning From and Sharing Our Diagnostic Errors: Disclosure Without Blame

Keynote Presentation – 2nd Annual Sunflower Clinical Scholars Program Symposium

Georges Bordage, MD, PhD
Professor and Head, Educational Programs and Director
of Graduate Studies, Department of Medical Education,
College of Medicine, University of Illinois at Chicago

Monday, May 23rd
12:00 p.m. – 1:00 p.m.
G013 - School of Nursing

RSVP to mquearry@kumc.edu

Assessing Learning Environments: Context Matters

IAMSE Webcast Audio Series
Lynne Robbins, PhD
University of Washington School of Medicine

Thursday, April 21st
11:00 a.m. - 12:00 p.m.
4016 Varnes – School of Nursing

Sunflower Clinical Scholars Program Symposium

Monday, May 23rd
7:45 a.m. - 11:30 a.m.
G013 - School of Nursing

Presenters include:

Carla Aamodt, MD, Assistant Professor,
Department of Internal Medicine
Lisa Gilmer, MD, Clinical Assistant Professor,
Department of Pediatrics
Michael Kennedy, MD, Assistant Professor,
Department of Family Medicine
Eleanor Lisbon, MD, Clinical Assistant Professor,
Department of Family Medicine
Kevin Maben, MD, Clinical Assistant Professor,
Department of Pediatrics
Mary McDonald, MD, Assistant Professor,
Department of Family Medicine
Emran Rouf, MD, Assistant Professor,
Department of Internal Medicine

CME and CNE credit available
RSVP to mquearry@kumc.edu

Concept Mapping: A Tool for Teaching Integrative Thinking

IAMSE Webcast Audio Series
John Pelley, PhD
Texas Tech University Medical Center

Tuesday, May 3rd
11:00 a.m. - 12:00 p.m.
4016 Varnes – School of Nursing

Curriculum Evaluation Results

Year 1, Fall 2004, Class of 2008

- The response rate was excellent at 92% (160/173).
- The majority of students (> 60%) agreed that the information presented across the courses within the semester was well integrated.
- More than half of the respondents (> 55%) agreed that the overall quality of the course was good in all classes except Health Promotion Disease Prevention (HPDP). Less than half (42%) agreed that the overall quality of the course was good in (HPDP).
- The majority of respondents (> 65%) agreed that the lectures had sufficient illustrations of clinical relevance in all classes.
- The majority of respondents (> 59%) agreed that the lecture time was used effectively in Medical Biochemistry (BIOC), Cell and Tissue Biology (CTB), Human Anatomy and Embryology (ATMY), Medical Physiology (PHYS) and Clinical Skills (CSI). Half of the students (50%) agreed that lecture time was used effectively in HPDP.
- The majority of respondents (> 76%) agreed that the lab sessions correlated with the lecture material in ATMY, CTB, PHYS and CSI.
- Most respondents (> 63%) agreed that the lab sessions facilitated learning of course objectives in CTB, ATMY, PHYS and CSI.
- Most respondents (> 63%) agreed that lab time was used effectively in CTB, ATMY, PHYS and CSI.
- The majority of respondents (> 80%) agreed that the small group sessions had sufficient illustrations of clinical relevance in BIOC and PHYS.
- The majority of respondents (> 75%) agreed that small group time was used effectively in BIOC and PHYS.
- Most respondents (> 71%) reported that the amount of scheduled contact time was about right for BIOC, CTB, ATMY, PHYS and CSI. A little more than half of the students (54%) indicated that the amount of scheduled contact time was about right for HPDP.
- The majority of respondents (> 57%) agreed that the length of the blocks was about right. It should be noted that 28% indicated that the length of the Cellular & Molecular Biology block was too long while about a third reported that the length of the Respiratory (30%) and Musculo-Skeletal System (37%) blocks was too short.
- Most respondents (68%) reported that the number of exams was about right with 23% indicating there were too many. Slightly less than half (47%) of the students disagreed that the clustering of the exams was helpful while 31% agreed with the latter statement.

Year 2, Fall 2004, Class of 2007

- The response rate was excellent at 94% (159/169).
- The majority of students (>79%) agreed that the information presented across the courses within the semester was well integrated.

- More than half of the respondents (> 67%) agreed that the overall quality of the course was good in Microbiology (MBIO) and General Pathology (PAON). Less than half (< 45%) agreed that the overall quality of the course was good in Clinical Skills (CSII) and Clinical Epidemiology and Prevention (CEP).
- The majority of respondents (> 69%) agreed that the lectures had sufficient illustrations of clinical relevance in MBIO, PAON, and CSII. Less than half (35%) of the students agreed that the lectures had sufficient illustrations of clinical relevance in CEP.
- The majority of respondents (> 62%) agreed that the lecture time was used effectively in MBIO and PAON. Less than half (< 44%) agreed that lecture time was used effectively in CSII and CEP.
- The majority of respondents (> 84%) agreed that the small groups had sufficient illustrations of clinical relevance in MBIO and Integrated PBL.
- Most respondents (> 68%) agreed that small group time was used effectively in MBIO and Integrated PBL.
- The majority of respondents (> 68%) reported that the amount of scheduled contact time was about right for MBIO, PAON, and CSII. A little more than half of the students (55%) indicated that the amount of scheduled contact time was about right for CEP.
- The majority of respondents (86%) agreed that the number of examinations during the semester was about right.

Year 3, Fall 2004, Class of 2006

- The response rate for each clerkship was good and ranged from 75% to 100%.
- For the Kansas City campus, almost all the students (90% - 95%) agreed that the learning experience during the clerkship was good in Internal Medicine (IM), Pediatrics (PEDS) and Family Medicine (FM), while the majority (66% - 89%) agreed it was good for General Surgery (SURG), Neuropsychiatry (NPSY), Obstetrics/Gynecology (OB/GYN) and Geriatrics (GER). About half (54%) thought it was good for Ambulatory Medicine (AM). As for the Wichita campus, almost all (90% - 97%) thought it was good for Pediatrics (PEDS), Neuropsychiatry (NPSY), General Surgery (SURG) and Internal Medicine (IM), while the majority (71% - 83%) thought it was good for Obstetrics/Gynecology (OB/GYN), Family Medicine (FM), Ambulatory Medicine (AM) and Geriatrics (GER).
- For the Kansas City campus, almost all students (97%) agreed that the objectives of the clerkship were clearly specified in PEDS and the majority (70% - 90%) agreed that the objectives were clearly specified in IM, SURG, OB/GYN, FM and GER. About half (59%) agreed that the objectives were clearly specified in NPSY, while only 30% agreed in the AM clerkship. For the Wichita campus, the majority (69% - 90%) agreed that the objectives were clearly specified for all clerkships except for OB/GYN where about half (52%) agreed.
- For the Kansas City campus, the majority of the students (63% - 90%) agreed that patient contact was sufficient for training purposes in IM, SURG, NPSY, PEDS, OB/GYN and FM, while about half agreed it was sufficient in AM (48%) and GER (58%). For the Wichita campus, almost all students (90% or more) agreed that patient contact was sufficient for training purposes in IM, SURG and NPSY and the majority (83% - 90%) agreed in PEDS, OB/GYN and FM. About half (52%) thought that patient contact was sufficient in AM and GER.
- For the Kansas City campus, almost all (91%) the students agreed that the didactic components enhanced the learning experience in PEDS, while the majority of students (57% - 90%) noted that the didactics enhanced the learning experience in OB/GYN, FM, and SURG. About half of the students reported that the didactics enhanced the experience for AM (49%), GER (50%) and IM (48%). For the Wichita campus, almost all (93%) agreed that the didactic components enhanced the learning experience in OB/GYN and the

majority (67% - 90%) agreed in PEDS, FM, IM, SURG, and NPSY. About half (48%) of the Wichita students reported that the didactics enhanced the experience for AM and GER.

- For the Kansas City campus, the majority of the students (62% - 90%) agreed that they were able to complete the objectives of the clerkship within the allotted time in OB/GYN, NPSY, PEDS, FM, GER. About half noted that they were able to complete the objectives in AM (40%), SURG (48%) and IM (40%). As for the Wichita campus, the majority (62% - 90%) agreed for the IM, SURG, NPSY, OB/GYN, PEDS and FM clerkships, while about half (52%) agreed for the GER and AM clerkships.
- For the Kansas City campus, the majority of the students (74%) agreed that the methods used to evaluate their performance were clearly explained in PEDS. About half of the respondents (43% - 58%) noted that the evaluation methods were clearly explained in OB/GYN, FM, GER, IM, SURG, NPSY. Less than half (37%) of the students noted that the evaluation methods were clearly explained in AM. For the Wichita campus, the majority (63% - 76%) agreed that the evaluation methods were clearly explained in the NPSY, GER, FM, IM and AM, while about half agreed for SURG (48%) and PEDS (53%). Less than half (38%) agreed for the OB/GYN clerkship.
- For the Kansas City campus, the majority of the students (60% - 78%) agreed that feedback about their progress on the clerkship was timely and appropriate in the IM, FM and PEDS clerkships, about half (46% - 56%) agreed for the AM, GER and SURG clerkships while only 35% agreed in NPSY and 26% agreed for the OB/GYN clerkship. For the Wichita campus, the majority of respondents (61% - 72%) agreed that feedback about their progress was timely for the GER, PEDS, AM, FM and IM, and about half agreed for the NPSY (48%) and SURG (55%) clerkships. Only 28% agreed for the OB/GYN clerkship.
- For the Kansas City campus, almost all students (92%) in PEDS and the majority (64% - 88%) in OB/GYN, NPSY, SURG, GER, FM and IM agreed that the type and amount of faculty contact was adequate. About half of the students (52%) in the AM clerkship agreed. For the Wichita campus, almost all agreed that the type and amount of faculty contact was adequate in NPSY (96%) and the majority (66% - 87%) agreed for the remaining clerkships.