Dear Colleagues:

At the Dean’s request in the fall of 2012, we began a comprehensive review of our curriculum, a process that was initiated for two reasons. First, the LCME requires a ‘periodic review’ of our ‘curriculum as a whole’. Second, we continually try to improve our educational program. The process over these past two years is summarized below; and we are now on the verge of some exciting curriculum changes.

We initiated the process with a needs assessment. We invited all faculty and students to comment on what we do well, and what we can improve in both the pre-clerkship curriculum and in the clerkships. We organized all of the comments into themes, after which we held a series of focus group discussions with all interested faculty and students. It was clear that our dedicated teachers provide an excellent education. However, both faculty and students agreed that certain aspects of our curriculum could be improved including: more integrated learning in the pre-clerkship curriculum; reduction of time spent in lecture, and increased time spent in active application exercises; increased time devoted to specific content areas (e.g. cultural competence, health systems, critical evaluation of the medical literature, interprofessional education, and others); extension of these interdisciplinary curriculum themes into the clerkships; increased emphasis on clinical skills teaching and evaluation; more opportunities for career exploration and clinical experiences in the pre-clerkship curriculum; and greater flexibility for career exploration in the clerkship curriculum.

After much discussion with the faculty and school leadership, we incorporated these suggested areas for improvement into our overall curriculum goals. The revised curriculum goals were adopted by the general faculty in November 2013, and they have served as our roadmap for curriculum design. The Curriculum Renewal Committee and several work groups of basic science and clinical faculty have developed a curriculum model that will allow us to achieve those goals. We think this model will positively change the context in which students learn, and it will make our good educational program even stronger.

After hearing the concerns and input from various groups of faculty members, we have proposed a second phase of development that will provide further detail with respect to individual courses and sessions and examine feasibility for a timeline for the new curriculum. Earlier this month, the Administrative Council and Faculty Assembly unanimously approved a motion to proceed with the proposed model into Phase 2, and we plan to seek similar approval from the general faculty in December so that development may continue.

We are grateful for the time and expertise of the numerous faculty members that are contributing to this project. We look forward to continued work and discussion. We would also like to hear your thoughts and questions. All questions, concerns, and ideas may be directed to either of us or by talking with any of the Curriculum Renewal Committee members (see list below).

Respectfully,
Robin English, M.D. and Richard DiCarlo, M.D.

Curriculum Renewal Committee
Robin English, MD (Co-chair) – Pediatrics
George Karam, MD (Co-chair) – Internal Medicine, Baton Rouge
Wayne Cestia, MD – Family Medicine, Lafayette
Mary Coleman, MD – Family Medicine
Taniya DeSilva, MD – Internal Medicine
Richard DiCarlo, MD – Internal Medicine
Angie Johnson, MD – Internal Medicine, Baton Rouge
Mike Levitzky, PhD – Physiology
Anthony Johnson, MD – Psychiatry
Jennifer Mooney, MD – Surgery
Jay Mussell, PhD – Cell Biology and Anatomy
Milran Naljayan, MD – Internal Medicine
Joy Sturtevant, PhD – Microbiology
Suresh Alahari, PhD – Biochemistry
Rachna Jetly-Shridhar MD – Pathology
Donna Neumann, PhD – Pharmacology
Andrew Hollenbach, PhD – Genetics
Anasheh Halabi – L4
Samantha Baker – L4
Amol Sura – L4
Jacob Veith – L2
The Reasons Behind the Change

**WHAT:**
- The proposed curriculum shifts from a predominantly discipline-based/departmental model to a hybrid model.
- This shift will include some revision of existing courses, the creation of some new basic science courses, development of new interdisciplinary courses, and creation of a series of organ system blocks in the second year.
- The proposed curriculum also provides increased time for exploration of clinical or research experience and more time for electives in the clerkship years.

**WHEN:**
- Work on year 1 and year 2 changes is ongoing.
- The proposed date of implementation is August 2015 (year 1 changes) and July 2016 (year 2 changes), dependent on the progression of Phase 2.

**HOW:**
- Basic science and clinical faculty have been involved in this planning from the outset. As more detailed planning is undertaken, additional faculty will be incorporated into the process. Feedback on the process, as well as the curriculum content, is welcome at all times.
- System block outlines for year 2 will be completed by the summer of 2015 to allow over a year for identification of clinical and basic science block directors, and for detailed planning.
- We are developing specific outcome measures to evaluate the effectiveness of these changes.

**WHY:**
- Our institutional needs assessment identified and highlighted educational aspects that would benefit from curricular change.
- Although we already provide an excellent education, we can make it even better.
- The LCME requires that medical schools conduct periodic reviews of their curriculum as a whole, thereby ensuring accordance with national educational initiatives and advancements.
Curriculum Renewal Timeline

Fall 2012:
Charge by Dean and LCME

Fall 2012 – Spring 2013
Needs Assessment

Curriculum Renewal Committee (and ongoing discussion with basic science departments)

Spring – Fall 2013
Overall Curricular Goals Revised

Approval by Faculty Assembly, Administrative Council, and General Faculty (November 2013)

Fall 2013 – Spring 2014
Review Curricular Models; Develop Overall Structure

Course Directors, Lecturers, Departmental Input

Spring 2014 – Fall 2014
Detailed Development and Content for Individual Courses

Spring 2014
Approval to Move to Phase 2

Approval by Faculty Assembly and Administrative Council

Fall 2014 – Early Spring 2015
Ongoing Course Development; Fine Tune Revision of Structure as Required

Course Directors, Lecturers, Departmental Input

Faculty and Student Input

Detailed Development and Content for Individual Courses

Curriculum Renewal Committee (and ongoing discussion with basic science departments)
WHERE DO WE GO FROM HERE: PHASE II DEVELOPMENT

**PHASE I**
- Y1/Y2 Overall Structure

**PHASE II**
- Detailed course content
- Start date feasibility

**December 2014**
Faculty approval to move to Phase II

**Dec. 2014 – March 2015**
Identify and meet with course/block directors

- Simultaneous Work
- Finalize detailed Y1 schedule and course content
- Finalize a few Y2 Systems Blocks
- Integrate longitudinal cultural competency, Quality Improvement and Ethics

**April 2015**
Present Phase II to faculty

- Not Feasible/ No Approval
- Feasible/ Approval

**Implement**
Y1 August 2016/Y2 July 2017

**Implement**
Y1 August 2015/Y2 July 2016
Our students did very well on Step 1 this year, so why is it necessary to review and revise our curriculum? The class of 2016 did an outstanding job on Step 1 and we are very proud of them. The national average has also increased, and we will continue to watch the trends over time. However, improvement in Step 1 scores does not ensure we are producing doctors who are able to provide top quality care nor does it drive curriculum revision. LCME requirements, along with our institutional needs assessment highlighted areas in which our present curriculum can be further improved. We hope to improve the curriculum and our students’ clinical abilities while helping them prepare for and do well on high stakes examinations.

What are the primary goals of our curriculum revision? Our primary goals are to increase the integration of basic science information and clinical content thereby enhancing both; increase the students’ opportunities to engage in self-directed learning and clinical application; improve our teaching in several content areas, and offer students more career exploration activities.

How was the proposed new curriculum structure developed? Members of the Curriculum Renewal Committee reviewed the revised curricular goals and determined some potential opportunities to meet those goals. They reviewed numerous curricular models from medical schools around the country and identified desirable features that could help meet our goals. The proposed structure emerged from an iterative process and represents a hybrid model that includes both discipline-based courses and organ system blocks.

What does an organ system block look like? These blocks integrate organ system content from several basic science disciplines. The structure builds on the foundational knowledge learned in the first year and teaches an organ system from a molecular level through the physiological level. This process allows students to learn the normal functioning of the system to better understand the molecular and clinical aspects of diseases related to this organ system. Class sessions are organized by topics related to learning objectives rather than by discipline, and frequent and relevant clinical problem solving exercises are strategically situated in order to optimize understanding and retention.

What is the administrative structure of an organ system block? Two course directors, one from the basic sciences and one from the clinical field, will oversee a systems block. Working within their direction will be several basic sciences content directors (e.g., pathology, microbiology, pharmacology – see below).

What is the role of a system block co-director? The clinical and basic scientist co-director will ensure the integration of both aspects into the block, thereby building on the foundations learned in year 1. They will work closely to develop learning objectives and ensure that course content is determined by those objectives. They will work with basic science content directors to establish the block schedule and plan teaching sessions and clinical application activities. They will also share the responsibility for block administration and examinations.

What is the role of a basic science content director? The content director for each basic science discipline (e.g., pathology, microbiology, pharmacology) will function similarly to the current course directors for these disciplines. The content director will work closely with block co-directors to ensure logical and adequate coverage of each discipline is present within the organ system block and may contribute examination questions if internally derived exams are used.

How will block co-directors be identified? Block co-directors may be identified in a number of ways. Faculty may express interest in directing a block based on their area of expertise or may be approached by their department heads based on their expertise or their teaching excellence. The process of identification will be open and inclusive, but regardless of the means, the ultimate group of faculty will possess strong skills in collaboration and communication in order to produce the best and most cohesive curriculum.
Frequently Asked Questions About Curriculum Renewal

In addition to systems blocks, what new courses and curriculum content are being proposed?
Genetics, Human Behavior and Development, Immunology, Population Health, and Fundamentals of Disease are content areas that were identified throughout the process as needing and warranting status as individual courses. In addition, a brief introductory course on the fundamentals of professionalism, clinical reasoning, and learning strategies is included before any other courses begin. Increased teaching of cultural competency, health disparities, quality improvement and patient safety, and literature evaluation will be included as longitudinal threads to help students appreciate the importance of these areas in all aspects of clinical care.

How will clinicians be involved in the proposed curriculum?
As previously mentioned, a clinician block co-director will share oversight of each system block to optimize clinical application, develop clinically-oriented exercises and assessments, and ensure clinical relevance of block content. Additional clinicians will be consulted with ongoing curriculum development to review the curriculum as a whole and ensure that content is adequate and relevant.

How will clinicians be compensated for time away from the clinic, which affects their perceived productivity?
The dean supports this proposal and will support departments for teaching throughout this process. He has asked us to explore alternative models by which to allocate funds for teaching and curriculum development. We are investigating allocation models that may provide more clarity than the existing system.

What pedagogical methods might be used to increase our students’ self-directed learning?
There are a number of methodologies that teachers might employ to engage students in self-directed learning, many of which are already utilized here at LSU including team-based learning, small group discussions, and interactive lecture techniques. Faculty development initiatives to further familiarize our faculty with various pedagogical methods are forthcoming and will include both internal and external expertise. We have the capacity to utilize a number of methods – they don’t all involve small groups – and faculty will be encouraged to be creative as they consider the best ways to teach their content.

How will clinical skills be taught in the proposed curriculum?
Clinical skills such as history taking, physical examination, communication, cultural competence, and procedural skills will be taught longitudinally throughout the first 2 years in a logical sequence. Optimal integration with other concurrent course material will drive the sequencing and the activities, and there will be emphasis on clerkship preparation toward the end of the first 2 years.

How will the students be assessed in the proposed curriculum?
Once the curriculum structure is approved, the Curriculum Renewal and Curriculum Steering Committees will consult with current course directors to investigate assessment methods. Exam formats for discipline-based courses will likely not change substantially. Exams for new courses and systems blocks may be internally derived or may be custom generated by the National Board of Medical Examiners. The Academic Standards Committee will ultimately determine promotions criteria.

How will the success of the curriculum itself be measured?
We plan on a broad-based system of assessment that measures both process outcomes and student learning outcomes. Process outcome measures include the solicitation of perspectives from faculty and students throughout the curriculum and frequent, targeted curriculum database queries. Student learning outcomes include objective measures like examination scores as well as perceived effectiveness on the behalf of both faculty and students.

How will the faculty be supported for their efforts in curriculum development and implementation?
It is anticipated that faculty who participate in curriculum development and course administration will require some freedom from other responsibilities, especially during the development phase and the time periods for specific courses or blocks. A model to compensate faculty members for their involvement in these areas, as well as actual teaching, is currently being investigated as requested by the dean. It is the strong desire of the UME Office that, regardless of the details, the model will be transparent and equitable.