Curiosity, Discovery and Application of Evidence Curriculum Reform Committee – June 2018

Executive Summary of Recommendations

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Curiosity Recommendations:

1. The curriculum should be decompressed, with schedules clearly depicting unscheduled time. The goal should be to have 3 half days per week of unscheduled (required) time in Phases I and II. Consideration of 1-2 week “spacer” blocks between Essential Core Blocks where less dense curriculum or leadership/professional development activities could be scheduled would give students time to reflect on their path, explore their questions, and contribute to overall student wellness.

2. Block and Clerkship Directors/Facilitators/Preceptor training/Faculty should include training in fostering curiosity in students, faculty modeling of curiosity, encouraging curiosity, helping students formulate good questions.

3. The modes of delivery of the curriculum should be modified to increase PBL/TBL time, decrease lectures, and to incorporate other active learning models that encourage curiosity and questioning (examples: pro/con debates, writing reflection of a case – what is the most important question and why).

4. Questions from students should be encouraged and valued in the clinical environment.

Discovery Recommendations

1. A required mentored scholarly project should be retained in the new curriculum. Our current system of allowing students to choose the way they meet that requirement should be retained (MSA, MSTP, or Research Track).

2. Students in the MSA and Research Track should have protected time for scholarly project work (students in MSTP program have protected time in the graduate school). A minimum of 12 weeks of protected time for research/scholarly project work is recommended in the new curriculum. We recommend this time be structured in a flexible nature to conform to the differing requirements for the structure of this time based on the nature of the project. Students could choose to do some of their research time the summer between 1st and 2nd year, in a month experience in the clerkship phase (achievable by inserting a one month selective block), or in phase IV. Additional Research electives should be allowed.

3. Consider development of a 1 month integrated block, “Research, Inquiry, and the Application of Evidence”, that would integrate foundational knowledge in research, study design, biostatistics, epidemiology, and evidence based medicine. Time during this block would also be allocated to meeting with potential mentors for MSA projects. The committee recommends considering placing this block early in the second semester of the 1st year. This would be optimal in that the foundational knowledge would be helpful in their scholarly project planning.

Application of Evidence Recommendations (includes Biostatistics/Epidemiology/EBM and Clinical Reasoning)

1. The topics of biostatistics and epidemiology need significantly more contact hours in the new curriculum.

2. Due to limited faculty with expertise in biostatistics/epidemiology, some schools have gone to 1 faculty facilitating for several small groups in the same room. This format is likely to be needed in the new curriculum for biostatistics epidemiology (and other curricular elements) if we expand small group time. To use this format, we need to ensure rooms of adequate size would be available.

3. Create a 1 month stand-alone foundational block “Research, Inquiry, and Application of Evidence” to provide students foundational knowledge in research, biostatistics, epidemiology, and evidence based medicine (see Recommendation 3 in Discovery section for more detail).

4. Reinforcement of basic biostatistics, epidemiology and EBM should be integrated into the clerkships as it relates to research, clinical, and public health questions.

5. There should be increased emphasis on the development of regular required experiences requiring students to develop differential diagnoses of common symptoms/signs and prioritization of those diagnoses based on likelihood. These experiences are foundational for developing clinical reasoning skills and should begin in the preclinical years to prepare for success in the clerkships.

6. Teaching of clinical reasoning skills should be enhanced in the preclinical curriculum, including some sessions on pretest probability, types of diagnostic errors (including cognitive processing and biases) and strategies to recognize and mitigate them.