Scientific Foundations Committee  
March 1, 2013  
7:30 – 9:00 am, B-646 Mayo

In Attendance:  L Anderson, A Belzowski, A Blaes, J Chipman, B Clarke, E Coleman, A Edvenson, G Filice,  
S Katz,  A Minenko, B Nesbit, C Niewoehner, J Norrander, D Powell, M Ramey, M Rosenberg, D Satin,  
L Schimmenti, P Southern, D Thompson, D Wangensteen, M Woods  
Guest: M Coleman, A. Johns

Absent: S Allen, M Becker, G Giesler, R Kempainen, K Watson (CEC), T Weinhaus, K Wickman

Joint SFC/CEC Meeting  
7:30-8:15  
Black Bag Update  
Dr. Alan Johns (Assistant Dean for Curriculum-Duluth) and Matt Coleman (Black Bag developer-Duluth) were on-site to provide an overview of Black Bag for all Course and Clerkship Directors in a joint session. This was an opportunity to view different aspects of the software’s capabilities with Mr. Coleman present and to provide feedback to him and Dr. Johns to discuss was is working well and where improvements are needed. Their visit to the TC campus also included separate meetings with the Clinical Education Committee; and an open forum with faculty, students and Undergraduate Medical Education Staff.

Minutes  
Minutes for Scientific Foundations Committee for the February 1, 2013 meeting were approved.

Discussion  
Healthcare Disparities  
Dr. Satin has met with a group of 1st and 2nd-year medical students to discuss their concerns regarding the lack of healthcare disparities topics in their courses. The discussions have identified nine specific categories, i.e. integrating religion in medicine, healthcare disparities, and others. A number of the areas they recommend covering exist in Dr. Satin’s portion of ECM; a greater concern for students is where is it covered overall in the curriculum. He has offered to make this a specific point in the ACR for ECM3 for the SFC and to ask other members where the topics are covered in their courses. Dr. Powell added that the Center for Health Equity has been involved in the course that is offered to entering first year medical students, held before they begin medical school. She recommended getting the clerkship directors into the discussion regarding the importance of including coverage of healthcare disparities across all of the curriculum. Student awareness of problems in healthcare delivery is very important, the pilot MetroPAP was developed to help advance student awareness of the issues of urban underserved populations. Students will recommend that it become part of the curriculum so all entering first years have the opportunity to learn about the disparities. A revamp of Service Learning was done and it now has didactic content related to healthcare disparities. Dr. Satin reported that the student group will bring their recommendation to the SFC asking for broader coverage of the nine topics they have identified as important to their medical education.

Dr. Filice raised concerns with regard to the public health components that are spread around in small pieces among courses. He would like to see Black Bag as a way for faculty and students to know where the topics are covered and to get an overview for where in the curriculum they occur. Students would like the cases to reflect different racial disparities, Dr. Niewoehner reported in the past various population groups were included in cases, but trying to satisfy all of the special ways students want those issues represented was difficult to accomplish, leading to more generic representation of the issues. Dr. Satin would like to see more specific disparity issues appearing in all courses across the curriculum. Controversial topics do raise discussion and questions about why that specific group gets identified with stereotypical scenarios, he recommends the curriculum address those controversies as part of all courses.

• it’s important to clearly address other circumstances and situations that lead to lack of healthcare availability in Minnesota for population groups.
• Across all medical education in the U.S. more than half of the students come from upper middleclass families who then care for patients whose lives are affected by very different socioeconomic disparities
• It’s important for students to learn about the diversity they will encounter in medical practice and to take opportunities to expand the Schools diversity as part of the move toward integration.
• Possibly implement a process of assigning a small portion of each SFC meeting to learning how each course might cover healthcare disparity content.
• Change the format for ACRs to discuss more the content than the processes used to teach.
• Expanded session to delve into more content covered in the different courses.
• Determine whether this becomes one of the core principles of our program or as an important a topic in the curriculum that is more balanced with other important topics in the curriculum.

**HD-2 Annual Course Report**

Dr. Anne Minenko noted this course is a 10-wk, Yr-2 medical school course, integrating 10 pre-existing medical and surgical areas; rheumatology, ortho, psychology, neurology, otolaryngology, ophthalmology and dermatology. Also included are the related infectious diseases, pathology and pharmacology threads through all Yr-2 HD-2 Blocks. Goals for students are that at the end of HD-2 they gain, seek, apply and integrate the knowledge of epidemiology, clinical and lab features, patho physiology of the common conditions within the course subject areas of HD-2. This course is designed to prepare the student for the heavily clinical portion of their medical school training in year three. New in HD-2 this year, at the suggestion of the ESC, HD-2 states that the students will develop skills managing competing responsibilities. To meet course goals HD2 strategies include:

• Independent student study
• Integration (Subject with subject, basic science with clinical science, skills (exam, clinical reasoning, written communication) with knowledge, of competencies.
• Interactivity (Student with material, with self, with another student, with patient, with facult).

As an example of integration at the course level, HD2 is organized by ‘theme’ weeks

• tumor week
• infection week
• pain and peripheral nervous system week
• sleep, snoring and substance abuse week
• can’t see, can’t smell, can’t think, can’t walk week
• each week introduced with an orientation page
• anchored every 2 weeks with a 15 Q integrated quiz for points, representing question format on…
• NBME like integrated questions on the final exam

Using feedback and annual debriefing to iteratively improve, is one of HD2’s guiding principles.

• a more comprehensive syllabus was introduced in response to student request for information organized by subject area
• 19 faculty ‘departed’, 11 joined HD2 for a net loss of 7
• The number of integrated quizzes were reduced from weekly to every 2 weeks but with an increase from 71 to 90 questions in total.
• Content was integrated and sequenced with FCT (trauma week with trauma case)
• Course goals were updated to include developing increasing skill managing competing responsibilities
• 3 part final exam (written = subject specific + integrated; path lab) split into 2 days
• Session guidelines and sample session outlines distributed to faculty, encouraging required pre-reading, max 60 slides per lecture

Evidence that outcomes being met
HD2 delivers LCME requirements of:

• Content integration within and across periods of study
• Opportunities for active learning and independent study
• Assessment of students’ clinical reasoning skills.
Student assessments (final exam and non-final exam) show strong performance across the competencies.

Additional course strengths from course/faculty evaluations
Evaluations of faculty are highly favorable with almost receiving strong positives
• Several faculty highly rated evaluations
• Quick turn-around/ reporting of exam and course results
• Students like small groups
• Abundance of non-graded self-assessments (quizzes etc)
• Clinical relevance of the objectives clear to the students
• Ample think out loud case-based role modeling by instructors
• Required supplemental readings were 2nd year appropriate

Additional course strength
Integrated part of exam
• Mean student score higher compared to subject specific and path lab sections
• Distribution curve shifted to right with more students scoring 90%+ on integrated section of the exam, than on subject or path lab sections
• Fewer integrated questions challenged

Help students ‘manage messiness’ (manage the noise of variance)
• Fewer faculty with more consistent teaching approaches, especially active learning activities
• More faculty working together to coordinate delivery of reinforcing lessons
• Continue weekly orientations pages; increase faculty use of session outlines
• Add table of contents to syllabus
• Consistent use of ‘where is the integration’ slides
• Promote consistency across HDs
• Better scheduling of connected content
• Enforce slide # limit
• Communicate more clearly, timely and consistently what is expected as pre-class prep
• More annotated answers to quiz questions
• More single subject area ‘midterms’ and ‘almost finals’ assessments for points; final written exam more integrated

What facilitated improvement in faculty ratings? Dr. Minenko does see increased connectedness between faculty and students. Dr. Filice noted as a member of the HD-2 team the communications from Dr. Minenko are well thought out and guide faculty to better understand the flow of the course and how their contribution fits into the content and delivery of the course. Other areas of discussion a more manageable number of topics; Dr. Minenko is concerned that breaking it up would interfere with achieving the course goals and where it’s integrated elsewhere such as to the competencies. Student input is important to determine what other structure might improve the course; i.e. some of the pairings in the “theme weeks” are not well suited with each other. Should some content be moved to year-3 to move some volume out of this course. Some of the content has been present for at least 10 years from the previous curriculum, i.e. orthopedics and was inherited by HD-2. These questions are open for consideration.

Next Meeting, May 3, 2013