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

In Attendance: S Allen, A Belzowski, A Blaes, J Chipman, B Clarke, E Coleman, J Eck, A Edvenson, G Filice, S Katz, R Kempainen, A Minenko, B Nesbit, C Niewoechner, J Norrander, D Powell, M Ramey, L Schimmenti, P Southern, D Thompson, T Thompson, D Wangensteen, T Weinhaus, M Woods

Absent: M Becker, G Giesler, D Satin, K Watson (CEC), K Wickman

Minutes
Approved January 4, 2013 Minutes for Scientific Foundations Committee

Information
Integration Update
Dr. Jeff Chipman provided a briefing on what the IWG has accomplished, with details about next steps in working with Education Steering Committee, Education Council and members of Scientific Foundations Committee. He acknowledged some of the work that has already taken place this year. Science of Medical Practice has included several 10 minute clinical correlations which include practitioners (with very tight parameters) to illustrate for students why basic science matters when applied to medical practice. Clinical correlations worked very well and provided a perspective for its importance in day-to-day practice. Dr. Sanders spoke about the success she and Dr. Schimmenti have had in working together as co-directors for SMP and the experience students have when provided with more than one perspective. SMP uses the opportunity to combine both science and clinical to give them more insight. Dr. Chipman noted he can assist in identifying clinicians for anyone who is considering using clinical correlations in their courses. He reported that the Neuroscience labs have arrange to have Neurology interns and residents facilitate in their labs.

The IWG is multidisciplinary group made up of physicians and basic scientists, students and Duluth faculty. At the beginning of their process the charge was overwhelming, the Group spent a number of sessions to establish what integration means to different individuals and at different levels. For medical student integration means the course flows and the information is sequential. Most faculty had a vision with a broader scope. The work done by the IWG has been taken back to the ESC and the EC where it has been discussed in several sessions. A major question is where to start, along with more detailed discussion at the level of specific course material and how to bring the clinical and basic science knowledge together.

Dr. Sanders described a format used in SMP during 4-hour sessions that were structured as focused workshop topics. One session included 4 segments structured as follows:

• 1st hour was taught by a biochemist on obesity and diabetes
• 2nd an hour dedicated to food intake,
• 3rd an hour on the genetics of obesity with a 10-minute clinical correlation taught by a bariatric surgeon who spoke about the surgical technique and then focused on “signaling” (relating back to the basic science portion about food-intake)
• 4th the last segment was taught by a physician and their patient who had had the bariatric procedure to tie together the science and the clinical application

Dr. Sanders and Dr. Schimmenti have developed three such 4-hour workshop sessions for their course and the combination of their expertise in co-directing includes Dr. Schimmenti’s ability to involve a wide range of clinicians she works with in her medical practice. In her specialty as a geneticist she works with pediatric patients and uses her biochemistry background every day. These segments are highly rated by students who see clear and direct linkage between basic science knowledge and clinical application, this has improved the course a great deal. Dr. Blaes talked about Year-2 courses and frequent opportunities for overlap between the basic science and medical
practice that happen in specialties such as Hematology. In her experience it’s not possible to talk about the medical practice of treating blood diseases without applying basic science knowledge to aspects of treatment. She also noted that reiterating the basic science when students on the wards should be done much more often to integrate the two. She suggested developing clear and accurate data for how this is currently happening across the curriculum. Dr. Chipman suggested adding this specific type of activity to the ACR structure would bring light to how and where integration is happening and where there are gaps. He suggested this focus on use of the science in medical practice could be seen as a major underpinning of the UMMS program.

Discussion with SFC members identified the following concerns and also ideas for actions to move forward:

- how to address barriers to change in the current culture
- examples of barriers in medical practice organizational structure i.e., conflict between clinical practice duties and prime opportunities to engage with medical students
- In focusing on IWG work it’s important to link “structural” with” students” by addressing the need to map objectives and learning activities to assessments across the curriculum. Integration of assessments is an important element of necessary change.
- An important step will be for Milestone 2 to be a function for assessing integration of knowledge application to clinical practice
- As individuals and as a step toward integrating exams, course directors can take steps to use content from previous courses as part of their exams to help determine students’ knowledge base and across disciplines.
- faculty development for individual course directors
- Enhance the role of FCT cases in the process to integrate with detailed information to all course directors (and faculty) for what and when is the focus of each case.
- ECM 3 could provide opportunity to bring diabetic cases (seen during Yr-1 clinical experiences) back to small group sessions for discussion and correlation.
- Current trends are using this model with students responsible to bring the cases back to small group discussions (M. Woods will circulate a recent article with details).
- Portions of the Integration Update will also apply to the Duluth campus, earlier reference to assessments is one area where measurement on both campuses will assess learner competence with the same tool. Duluth is participating in the IWG and ESC meeting sessions. Both will include the same core principles.
- Making it happen this time is critical to get students, residents and teaching faculty to represent basic science in the clinical year and clinical practices earlier in Yr-1 & 2.

Dr. Majka Woods spoke about the underlying principle to identify how we are making the tie in basic sciences, not just a requirement for basic science to do more clinical correlations, most importantly the question is how is basic science being brought up through the clinical education curriculum. Interviews with the core program directors identified two main questions. One is, “how are discussions of basic science structured in everyday communications with interns and residents”; in the redesign this is one of the guiding principles that will have an effect on the new design. Basic science is very strong at UMMS and that needs to be communicated and highlighted along with the clinical education. Another point of consideration is to balance the focus on basic sciences in out-patient settings as much as it is discussed in the hospital setting.

Announcements
An email with the following information is forthcoming, Dr. Woods asked everyone to watch for it and to follow-up with her if you have input.

Dr. Woods reported that budgets are being developed for next academic year and if there are specific items you have requested funding for please contact her by email so it can be considered.

A new course director is being sought for the Human Behavior. Directors for summer courses should be aware there is an individual who Medical Education would like to hire, details are still in the works.
With regard to Black Bag, Matt Coleman and Dr. Alan Johns are coming to the TC campus and course and clerkship directors will be give information regarding Black Bag forum sessions, so you will have an opportunity to attend and/or provide other written input. Also for Black Bag, Dr. Woods will be gathering data from course directors for the December, 2013 response to LCME; regarding your use, successes and areas for improvement.

The Deans Journal Club is on Monday, February 11th at 7:30, all are invited to attend. Dr. Mark Rosenberg will be leading the discussion.

Marci Rosenbaum will be here working with Medicine and for faculty development the MEDS program is offering a session with her on Wednesday, February 20th from 7:30-9:00. The title of her presentation is “Interactive Presentation on Interactive Presentations”.

The Herz Grant proposal applications are now being reviewed on a rolling basis, Dr. Woods invites anyone with ideas for innovations to contact her by email to indicate your interest in submitting a proposal.

Discussion
Remediation – the Work with COSSS - SSL - ACE
Jill Eck, Director of Student Affairs addressed 2 flow charts (see meeting materials for 2/1/13) that pertain to processes for medical student course failures. First Failure and second failure are separate processes and the flow charts provide insight into the importance of the course directors’ role in the working with students and Medical Education staff to facilitate success in completing their MD degree.