

## Scientific Foundations Committee

February 10, 2017

7:30 – 9:00 am

Mayo B-646

### Minutes

<b>2016-2017 Scientific Foundations Committee Members and Attendance</b>												
<b>Member &amp; Course</b>	8/12	9/9	10/7	11/11	12/9	1/13	2/10	3/10	4/7	5/12	6/9	7/7
<b>Steve Katz:</b> Chair (INMD 6814 Physiology)	x	x	x	x	x	x	x					
<b>David Baldes:</b> INMD 6815 Human Behavior												
<b>Matthew Chafee:</b> INMD 6813 Neuroscience	x		x		x	x	x					
<b>H. Brent Clark:</b> INMD 6819 HHD – N & P	x	x	x	x	x	x	x					
<b>Greg Filice:</b> MS 2 ID Thread	x	x		x		x	x					
<b>Bob Kempainen:</b> INMD 6808 HHD – C & R	x				x	x						
<b>Alicia Harrison:</b> INMD 6809 HHD – R, D, & O <sup>3</sup>	-	-	-	-	-	x						
<b>Betsy Hirsch:</b> INMD 6802 Science of Medical Practice	-	-	-	-	-	-	x					
<b>Brian Muthyala:</b> INMD 6803/6804/6805 ECM 1, ECM 2, ECM 3A				x								
<b>Kaz Nelson:</b> INMD 6819 HHD – N & P			x	x	x	x						
<b>Catherine Niewoehner:</b> INMD 6810 HHD – R & E-R	x	x	x		x	x	x					
<b>James Nixon:</b> INMD 6803/6805/6806/6807 ECM 1, ECM 3A/B/C		x										
<b>Jan Norrander:</b> INMD 6821 Human Histology	x	x										
<b>Deborah Powell:</b> INMD 6817 Principles of Pathology, MS2 Pathology Thread		x		x	x		x					
<b>Michael Ross:</b> INMD 6816 Human Sexuality												
<b>Michel Sanders:</b> INMD 6802 Science of Medical Practice			x			x	x					
<b>David Satin:</b> INMD 6803/6804/6805/6806/6807 ECM 1, ECM 2, ECM 3												
<b>Peter Southern:</b> INMD 6812 Microbiology & Immunology	x	x	x	x	x	x	x					
<b>Heather Thompson Buum:</b> INMD 6811 HHD – GI & Heme	x	x	x		x		x					
<b>Tony Weinhaus:</b> INMD 6820 Medical Gross Anatomy & Embryology	x	x	x			x						
<b>Kevin Wickman:</b> INMD 6818 Principles of Pharmacology	x	x	x	x	x	x	x					
<b>Blake Stagg:</b> MS2 Student Representative		x		x	x	x	x					
<b>Mehdi Mulla:</b> MS1 Student Representative	-	-	-		x	x						
<b>OTHER REGULAR ATTENDEES</b>												
<b>Mark Rosenberg:</b> Vice Dean for Medical Education		x	x		x	x						
<b>Bob Englander:</b> Associate Dean for UME	x		x		x	x						
<b>Anne Pereira:</b> Assistant Dean for Curriculum	<i>x-via phone</i>	x	x		x	x	x					
<b>Michael Kim:</b> Assistant Dean for Student Affairs		x	x	x	x	x	x					
<b>Suzanne van den Hoogenhof:</b> Interim Assistant Dean for Assessment & Evaluation	x	x	x				x					
<b>Brad Clarke:</b> Director of Integrated Curriculum-Foundational Sciences		x		x	x		x					
<b>Kelaine Haas:</b> Director of Integrated Curriculum-Foundational Sciences	-	-	-	-	-	-	x					
<b>Jim Beattie:</b> Director of MEDS/FCT Course Director	x	x	x									
<b>Austin Calhoun:</b> Chief of Staff, Medical Education	x	x				x						
<b>Scott Slattery:</b> Director of Learner Development		x	x	x		x						
<b>Heather Peterson:</b> Medical School Registrar		x			x	x	x					
<b>Mary Ramey:</b> MS2 Lab Med/Path Coordinator	x	x	x	x		x	x					
<b>Brian Woods:</b> Lead Course Manager	x	x	x	x	x	x	x					

**Guests:** Chelsey Jernberg, Sara Roberts, Serena Sherrell, Jeff Wallner, Brooke Nesbitt, Julie Ansell, Mark Hilliard

The meeting was called to order at 7:31am.

## Minutes

Draft minutes from the December 9, 2016, & January 13, 2017, meetings were approved as submitted.

## Discussion

Re-alignment/re-distribution of HHD3 & HHD5 – Anne Pereira

*See attached documents for details.*

Dr Pereira confirmed that, for this proposal, Course Directors & discipline directors in both HHD3 & HHD5 have been consulted. Education Steering Committee met this week to discuss and approve the proposal. The Education Council is the final stop for approval after the SFC.

*Background:* HHD3 – Neuro & Psyche is squeezed into 2 ½ weeks at the end of the Fall term. There is lots of content, important content, with short time for students to assimilate it. The main student concern is long-term retention of the material, past the final exam. Data from the LCME shows that the UMN Med School is at the high end of schools nationally for the total number of student contact hours in our total curriculum.

*Proposal:* Re-distribute the disciplines in HHD3 & HHD5 to better align the content, allow more longitudinal time to process complex information, and present the Neuro & Psyche material closer to the time when students take the USMLE Step 1 exam. The total time allotted for each course, and it's placement in the academic year, will not change.

<b>HHD 3 Current disciplines</b>	<b>HHD 5 Current disciplines</b>	<b>HHD 3 Proposed disciplines</b>	<b>HHD 5 Proposed disciplines</b>
Neurology Psychiatry Pathology Thread Pharmacology Thread Infectious Disease Thread	Rheumatology Dermatology Ophthalmology Otolaryngology Orthopedics Pathology Thread Pharmacology Thread Infectious Disease Thread	Rheumatology Dermatology Orthopedics Pathology Thread Pharmacology Thread Infectious Disease Thread	Neurology Psychiatry Ophthalmology Otolaryngology Pathology Thread Pharmacology Thread Infectious Disease Thread

One of the challenges, per Alicia Harrison, HHD5 Course Director, is that patients schedule many elective orthopedic procedures in November and December, which could put a little strain on getting surgeon-lecturers. However, this can be addressed with careful advance planning.

There has also been student input on this proposal, and the Student Council is collecting survey responses to the proposed changes. Additionally, student representatives on the SFC & the Education Steering Committee contributed to prior discussions. Blake Stagg prepared a detailed spreadsheet of weekly contact hours for all of the HHD courses, and included the current and proposed HHD3 & HHD5 configurations, as well as FCT & ECM time.

Additional Committee Comments:

- The time allotment for the HHD3 placement (2 ½ weeks) is still the same. There will just be new content in the same period. However, there are 13 fewer contact hours.
- This realignment of disciplines is similar to the way these disciplines were taught prior to 2010. This proposed configuration makes sense.

- Perhaps the course in the HHD3 space could add more weight to the midterm so that the final isn't so heavy in the grade computation.
- Dr Chafee wonders if some of the neuro/psyche content course (diseases) can be transferred from the MS2 course to the MS1 neuroscience courses so that there is more clinical relevance in the MS1 neuroscience. (Not additional content; it is just shifted by a year.)
- Powell-careful about sequencing if content is moved to MS1. Some of the background needs to come in HHD1 & HHD2. Perhaps congenital or anatomical diseases.
- Reminder that students mentally check out of HHD5 to prepare for the Step 1 exam.
- *Question:* Is there a target we are shooting for regarding contact hours in a course can that can be applied to all MS1 & MS2 courses? *Answer:* Yes, this is a short-term fix for a long-term problem that will need to be fully addressed later. Course Directors would like at least one year to prepare for any major course changes.
- For MS2 courses, isn't there a guide of 20 hours per/week of contact time? This is not set in policy. However, there has been curriculum creep and addition of material, with no removal of content.
- Would Bob Englander's suggestion to eliminate those 10% of lectures in a course that consistency score lower help to resolve some of the issue of having too many contact hours?
- Blake Stagg suggested that if lecturers would just lower the number of slides in lectures in the MS2 courses, it would relieve some of the anxiety that students feel. This is a big difference between MS1 & MS2 courses; MS1 course PowerPoint slide decks have fewer slides per lecture.

*At the end of the discussion, all members in attendance voted unanimously to approve this proposal and send it on to the Education Council for their final decision.*

### **Updates/Announcements**

Dr Alicia Harrison, MD, Assistant Professor in the Department of Orthopaedic Surgery, has accepted the position of Course Director for HHD – Rheum, Derm, Ophth, Ortho, Otol (HHD5) beginning with the Spring 2017 term. She was unable to be at the meeting today.

Dr Kelaine Haas, PhD, has accepted the position of Director of Integrated Curriculum-Foundational Sciences. She is succeeding Brad Clarke, who will retire in March 2017. Kelaine comes to the Medical School from the College of Biological Sciences, where she held the position of Undergraduate Research Coordinator and also taught courses. Dr Pereira views her as a good reference for alternative ways to present content.

Dr Betsy Hirsch was in attendance. She is in the Genetics department, and is the co-course director for SMP, along with Michel Sanders.

Beginning with this meeting, there is a new attendance table in place showing SFC attendance over the course of the full academic year. Dr Pereira noted that this will help with transparency, and to recognize those committee members who attend these meetings regularly.

Brian Woods, Lead Course Manager, has accepted a new position with the University Libraries. His last day in UME is February 14. Kelaine Haas noted that the position description has been submitted to AHC HR, and it is only awaiting approval before posting.

Dr Katz announced that he would like to "retire" as SFC chair, and asked the committee for volunteers or nominations of someone to replace him. He and Dr Pereira will consult on the process for appointing a new committee chair.

### **Student Issues/Concerns/Questions**

None for today's meeting.

## **Annual Course Review**

Human Health & Disease: GI & Heme (HHD2) – Heather Thompson Buum

*See attached ACR for details.*

Fall 2016 was the third year that HHD2 was in the fall semester; previously in the Spring semester as HD4. The response rate on the survey was 65% and the overall course rating was lower this year. Dr Thompson Buum contributes this to a combination of new, additional lecture modules; the introduction of a new course framework; and some troubles with the final exam itself. The final exam is high stakes and accounts for a large proportion of the final grade. Some of the trouble with the final exam was that new discipline directors rewrote questions which were then not properly vetted, or that were written poorly. The challenge is how you balance exam items with what is presented during the course?

There is a formative midterm, but it's weighted very low in the overall percentage of course grade. Perhaps it would be beneficial to add more weight to the midterm, or change it to a graded midterm? If so, more practice questions would need to be available to students before the midterm, as currently the midterm is in place of practice questions. HHD3 & HHD4 have a summative midterm; however some members on the committee are not convinced that it matters much whether it's formative or summative.

Kelaine Haas wondered if the extra practice questions are labeled as "non-graded self assessments", using the same wording as on the course evaluation? This may help students realize that those questions and help with the course evaluation. Dr Wickman noted that when practice questions are written at the level of the final exam questions, they leave a better impression with students.

Dr Thompson Buum would like to review Step 1 scores for Heme & GI portions of Step 1 exam to see how students are performing. She is glad to see high ratings for small groups & the transfusion medicine exercise, as these are the most labor-intensive components. One patient session was VERY highly rated, and she would like to have more patients throughout the course, perhaps one per week. The benefit is not only that students get a patient's experience, but also there is a "reunion" of the whole class during these required session. She believes that the lower rated lectures could easily be eliminated or modified. Dr Pereira noted that there is a correlation between curriculum & burnout/lack of empathy.

14-15 of the in-person lectures are now presented as online modules (i.e. recorded/narrated PowerPoint) with interspersed questions. Dr Thompson Buum is looking to improve those for next year. One criticism from students is that these are just like recorded lectures, so there is very little difference between missing a live lecture and then watching it on Mediasite, or just watching one of these modules. Adding interactive elements to the modules would be a key component for improvement in content delivery.

There is now a concept map (MindMup) for the entire course, which was well-received by students, but they now want more, including linking K-Coop documents directly in the concept map. She also wants to share this concept map with instructors so that they can see how their lecture fits into the overall course. Dr Thompson Buum sees this as a part of continuous Quality Improvement as a Course Director.

Most of the HHD2 online modules are now produced in the 1:Button Studio in the Bio-Medical Library. The final product from the studio is very flexible for instructors to work with. More information about the 1:Button Studio: <https://www.lib.umn.edu/1button>

Patient Sessions: Are the patient sessions structured or not? In HHD2, they aren't. In SMP, the patient sessions are structured, with more time for students to interact with the patient. The SMP sessions are also scheduled before an open hour, as the conversation often likes to carry on past the end of class. Patients also have good experiences sharing their story with students. Looking across all MS1 & MS2 course evaluations, students have an overwhelmingly positive response to patient presentations.

Changes for next year:

- Rework and revise the final written exam
- Revamp online modules
- Flesh out the concept maps

The main discussion item for the March meeting will be whether or not to eliminate the Honors grade from all MS1 & MS2 courses.

### **Future Agenda Items**

Suggestions from Course Directors for future SFC meeting topics:

- Pass/Fail discussion (eliminate Honors)
- Systems approach to improving MS1 & MS2 through course standardization
- Cutting lectures by 10%
- Future re-aligning of academic calendars (change semester start/end dates)
- ExamSoft & BlackBag assessments
- ILT feedback
- Copyrights & resources (focused on what we *can* do)
- More BlackBag search examples, Gradebook, downloading, calendar, checking feedback cards
- Survey students about type of practice questions/formative
- New promotion guidelines for teachers (non-tenure track)
- Ongoing Diversity & Inclusion training at joint SFC/CEC/CUMED
- How might Dr. Christina Petersen's work in the Center for Educational Innovation support the work of the years 1 and 2 course directors?
- Demonstration of MindMup
- One Button studio

The meeting was adjourned at 8:53am.

The next meeting is March 10, 2017, from 7:30 – 9:00am in room Mayo B-646.

Respectfully submitted,  
Brian Woods