

## Scientific Foundations Committee

March 6, 2015

7:30 – 9:00 am

Mayo B-620

### Minutes

2014-2015 Scientific Foundations Committee Members		
MEMBER	COURSE/ROLE	ATTENDANCE
Steve Katz	Chair (INMD 6814 Physiology)	x
Sharon Allen	INMD 6803/6804/6805 ECM 1, ECM 2, ECM 3A	
Richard Amado	INMD 6815 Human Behavior	
H. Brent Clark	INMD 6819 HHD – N & P	
Eli Coleman	INMD 6816 Human Sexuality	x
Greg Filice	MS 2 ID Thread	x
Glenn Giesler	INMD 6813 Neuroscience	
Bob Kempainen	INMD 6808 HHD – C & R	x
Anne Minenko	INMD 6809 HHD – R, D & O <sup>3</sup>	x
Kaz Nelson	INMD 6819 HHD – N & P	
Catherine Niewoehner	INMD 6810 HHD – R & E-R	
James Nixon	INMD 6803/6805/6806/6807 ECM 1, ECM 3A/B/C	
Jan Norrander	INMD 6801 Human Structure and Function	x
Deborah Powell	INMD 6817 Principles of Pathology, MS2 Pathology Thread	x
Michel Sanders	INMD 6802 Science of Medical Practice	
David Satin	INMD 6803/6804/6805/6806/6807 ECM 1, ECM 2, ECM 3	
Lisa Schimmenti	INMD 6802 Science of Medical Practice	
Peter Southern	INMD 6812 Microbiology	x
Heather Thompson Buom	INMD 6811 HHD – GI & Heme	
Doug Wangenstein	INMD 6814 Physiology	
Tony Weinhaus	INMD 6801 Human Structure and Function	
Kevin Wickman	INMD 6818 Principles of Pharmacology	x
Mary Ramey	MS2 Lab Med/Path Coordinator	
Kevin Kay	MS2 Student Representative	
Nicole Cairns	MS1 Student Representative	
<i>Mark Rosenberg</i>	<i>Vice Dean for Medical Education</i>	
<i>Kathy Watson</i>	<i>Senior Associate Dean for UME</i>	
<i>Jeffrey Chipman</i>	<i>Assistant Dean for Scientific Foundations</i>	
<i>Majka Woods</i>	<i>Assistant Dean for ACE</i>	
<i>Anne Pereira</i>	<i>Assistant Dean for Clinical Education</i>	
<i>Michael Kim</i>	<i>Assistant Dean for Student Affairs</i>	x
<i>Brad Clarke</i>	<i>ACE Curriculum Specialist</i>	
<i>Leslie Anderson</i>	<i>Chief of Staff, Medical Education</i>	
<i>Scott Slattery</i>	<i>Director of Learner Development</i>	
<i>Heather Peterson</i>	<i>Medical School Registrar</i>	
<i>Brian Woods</i>	<i>Lead Course Manager</i>	x

Guests: Suzanne van den Hoogenhof, Mark Hilliard, Chelsey Jernberg

The meeting was called to order at 7:32am.

## Minutes

Draft minutes from the February 6 meeting were approved as submitted.

## Updates/Announcements

### FERPA for future discussion

Dr Watson is concerned that a strict reading of FERPA would impede Course Directors/Instructors/Staff from sharing academic information about students, without knowing what students have suppressed in their University record. Please review the University's FERPA tutorial in ULearn at

[http://onestop.umn.edu/external/ferpa\\_tutorial](http://onestop.umn.edu/external/ferpa_tutorial) or  
<http://www1.umn.edu/ohr/training/lms/index.html>

### LCME-draft status report

The draft response to LCME was presented to SFC for review and comment. It addresses discrepancies sited during LCME accreditation, and is due April 1.

### *Comments:*

#### Midterm feedback

- After this year's HHD4 midterm failures, the Course Directors sent emails to those students who failed. Most students responded in one way or another, but were not interested in meeting with faculty. How do you get at least a response from students? Answer: Treat them as junior colleagues, with an expectation that a response is necessary. Which leads to.....

#### Professionalism:

- Can Course Directors "fail" a student on lack of professionalism? Faculty should document a lack thereof. Clerkships can fail a student on professionalism. Can this lack of consequence for lack of professionalism be addressed for MS 1 & 2 students? Currently there is no option. Perhaps letters detailing a lapse of professionalism need to be placed in students' files.
- What is the role of the advisor? How much influence do they have over getting students to be professional?
- What is professionalism? Start professionalism seminars during the first year to teach students through case studies from the start.
- Course Directors, Faculty Advisors, admissions, student affairs, student council need to all work in conjunction to really get students supported and successfully through the system.
- The perception that once a student is admitted, they will get through, no matter what, needs to be changed.
- Michael Kim: he offers to talk to any students with professionalism issues and is working with Anne Pereira to develop a through-line of professionalism from MS1 – MS4. Goal is for residency/match letters to mention that a student has been assessed on personal & development issues.

## Student Issues/Concerns/Questions

N/A

## Annual Course Review

Principles of Pharmacology

See attached ACR for detail.

This course is part of the MS1 summer term. The 1<sup>st</sup> half covers pharmacology principles; the 2<sup>nd</sup> half covers autonomic pharmacology

### *Working well:*

Dr Pentel retired after last year; Dr Cole replaced him for toxicology lectures, which were very well rated. He lectured a little high, knowledge-wise, but will step it back for 2015.

There is a written assignment each year. For 2014, students submitted 'practice questions' for a possible question bank. There was a wide range of questions submitted, and much time was spent by Dr Wickman evaluating, throwing out, or re-working questions. The questions that are left will be used as weekly quizzes for practice. Students gave mixed responses as feedback.

In-class review sessions were well received. All lecturers were present at these sessions

### *Areas of concern:*

- Ongoing concern of too small a number of practice questions. (New lectures/topics negate use of old practice exams, due to topic changes.)
- Heavy memorization in the 2<sup>nd</sup> half of the course. Suggestion to restructure the course to present drugs before principles to allow for more time to learn all the drugs.
- Two lecturers do not get good reviews. This is possibly due to their placement in the course.
- Honors: 22% earned Honors, but a high threshold keeps students from really trying.
- Problem—this is a short course, with no small groups, and no opportunity for much interaction.

### *Comments:*

- Is it possible to just earn Honors for consistent exemplary behavior throughout Med School? Gold Humanism is one path to this, but that is student-generated. There needs to be a Med School generated "reward" system.
- What about an "Honors Assessment" consisting of 2 points to lose? Points would be subtracted for not responding to requests, for sending inappropriate feedback, etc? But how would this be implemented and made transparent to the students?
- Define participation; showing up just for points is not professionalism. Coercion is not effective. Create a curriculum that rewards professionalism and excellence.
- Short answer questions give a better understanding of integration and the success of teaching. Multiple testing modes can assess understanding.
- In HHD5 there is an emphasis on pan-competency excellence. Assessments are structured in that way. Honors = not just medical knowledge, but integration. Suggestion for 3 tiers of Honors: 1) Med School, 2) Curricular, 3) course level.

Dr Wickman would like to explore a possible integration/readdressing of pharmacology principles in Years 3 & 4 after students have had experience seeing drugs in action.

*Planned changes for next year:*

- Colin Campbell is taking over pharmacokinetics for Paul Pentel, who retired. There is a vision for minimal lecturers; aiming for only 3 in the future.
- Mix up lecture structure and topic order
- Generate a practice question database.

*Comments:*

- Course ratings are very high! Improvements are happening.

## **Discussion**

### New Medical School Competencies and Objectives

Currently there are 7 Med School competencies which are mapped to curricular, course, and lecture objectives. The Med School is ahead on competencies, per the LCME accreditation. These originally came from ACGME, and the Med School worked backwards from those to develop our seven.

Ed Steering Committee is in favor of a tweak to the competencies, using the national Physician Competency Reference Set (PCRS), and wants approval from SFC & CEC before sending this on to Ed Council.

The Med School's competencies satisfy AAMC's Standard #8. Robert Englander came up with other list of competencies (PCRS) which the AAMC is already using to categorize resources in MedEdPORTAL. Do we need to map our curriculum to this new competency list? Otherwise, the Med School is double-mapping: 1<sup>st</sup> to our 7 competencies, and 2<sup>nd</sup>, to the PCRS for reporting purposes. Do our 7 Med School competencies line up with the 8 PCRS competencies?

4

Dr Powell doubts there are LCME-required groups of competencies. They require one set to be used, but not a specific one. Schools can change it, but don't have to.

There was a gap analysis done by Ed Steering Committee to determine the differences between the lists. Ed Steering Committee did not see any "real" difference between the two groups. Personal & Professional Development integrates through the other domains, but is not separated. Interprofessional Collaboration is AAMC and not part of ACGME domains. The Ed Steering Committee determined that the two sets of competencies match and are basically the same lists, but they use different words.

Our Scientific & Clinical Inquiry competency is not included in the new domains. *Questions:* Is it really included in the new domains? Does the Med School create a new 9<sup>th</sup> category, or do we delete the category? Dr Katz believes it's in there, and integrated into the new competency numbers 2 & 3.

### Why are there competencies?

- It started in the 1970s, but went nowhere.
- During the 1990s, the ACGME began to look at outcomes of training programs.
- There were 6 competency domains originally, and bounded ACGME residency training & the specialty boards.
- LCME then came in with a new standard to say there should be a framework of competencies, which gradually spread. Milestones and European EPAs started up.
- The licensure people grabbed it, then osteopaths and nursing.
- Medical Education was dragging behind, but AAMC cannot enforce.
- The purpose is to tie medical school to the residency domains & milestones, and the residency domains & milestones back to medical school.

- This is not an AAMC mandate. It's for a framework of medical education.

It's important to tie these back to professionalism. The competencies structure education that is not time-based. They put professionalism on the same level as scientific knowledge; on the level of development each year.

*Comments:*

- Can these PCRS competencies be tweaked to reflect our regional standing, mission, and brand?
- Interprofessional education is explicitly stated in the new set. It's appropriate to the UMN Medical School.
- This is not education, but a set of guiding principles. What do they mean for our Medical School?
- As a Medical School, how do we keep the most important things in front of us?
- Use the ACGME competencies as a framework, but modify them to be UMN's own. AAMC has no enforcement power; only the LCME.
- Changing to the PCRS domains will also save time in the yearly required mapping to MedEdPORTAL.
- Advantages: we can compare ourselves better to other schools; we will be using a common framework.

*Straw Poll (2 votes):*

1. The SFC is generally in favor of replacing the Medical School's original 7 competencies with the new PCRS 8 competencies, *but they should be tweaked to reflect and model Minnesota values, goals & priorities, and not used verbatim.* Vote was 6-1
2. The Medical School should keep its separate Scientific Inquiry domain, and keep it separate from the PCRS competencies. Vote was 6-1.

BlackBag Resource tab

*Tabled until a later meeting*

5

**FUTURE AGENDA ITEMS**

Suggestions from Course Directors for future SFC meeting topics:

- Professionalism: definition, enforcement, longitudinal integration
- Student disability services and accommodations
- ExamSoft & BlackBag assessments
- ILT feedback
- Copyrights & resources (focused on what we *can* do)
- Course administrator co-directors (not the dyad)
- Future joint meeting of CEC and SFC on longitudinal integration of basic science and clinical medicine
- Perhaps have Jan Norrande present in her capacity as a Blackbag committee member
- More Blackbag search examples
- BlackBag Resource page and how to use it effectively
- SFC web site for action item storage
- Survey students about type of practice questions/formative
- Heat/AC variability in classrooms may be a reason for poor student attendance
- Human Behavior course

The meeting was adjourned at 9:01am.

The next meeting is April 3, 2015, from 7:30-9:00am in room Mayo B-620.

Respectfully submitted,  
Brian Woods

## Annual Course Review: Academic Year 2013-2014

Course: INMD6818 – Principles of Pharmacology  
Course Director (s): Kevin Wickman  
Course Manager: Aliyu Ojarigi

Date of Course: May-June 2014

Overall Evaluation of the Course: <see attached>

Course Grading Rubric: <see attached>

Number of Failures for academic yr: 1 student failed final, and then passed upon re-exam

---

### What worked well in 2013-2014:

Student numerical feedback was particularly favorable for overall course clarity (4.7/5), resources (4.5/5), alignment between stated course objectives and information taught (4.6/5), integration of course objectives (4.5/5), clinical relevance (4.6/5), and lecturers (average rating of 4.24/5 across the 5 course lecturers). Other noteworthy elements of the course that were well-received include:

1. The addition of Dr. Jon Cole (Toxicology) to the lecture roster
2. The new content provided by Dr. Colin Campbell (Personalized Medicine)
3. The written assignment (submission of multiple choice questions by students)
4. The in-class review sessions, which were attended by all course lecturers this year

### Areas of concern in 2013-2014:

1. The students indicated that they would have liked more sample exam questions. While this is a perennial request, it was more broadly-expressed this year compared to previous years. This is likely due to the fact that there were new lecturers and some new content added to the course this year, necessitating a new final exam.
2. As in previous years, several comments referred to the “heavy memorization” feel of the course. Several students suggested that the course be restructured to put some lecturers earlier in the course. Moreover, they recommended that lectures in Pharmacology and Pathology be given scheduling priority over the other 2 courses in the early part of the summer term (allowing for more time to master content and prepare for the final exam).
3. The Eicosanoids lectures received notably lower evaluations than other course topics. To some extent, this is probably attributable to their position in the course (last 2 lectures), but an effort to improve these lectures is needed.

4. Some students expressed concern that it is difficult to obtain “Honors” in this course. While 22% of students earned “Honors” in the course this year (on its face a reasonable percentage), the point is well-taken that setting such a high threshold may dis-incentivize some students from expending full effort in this course.
5. Some students expressed concern about the somewhat arbitrary/subjective nature of the written assignment.

#### Changes for 2014-2015:

1. Paul Pentel will no longer teach in this course; Dr. Colin Campbell will assume responsibility for Dr. Pentel’s Pharmacokinetics lectures.
2. Re-working of the Eicosanoids lectures, potentially involving replacement of the current lecturer
3. Restructuring the order of content delivery, to put the most “memorization heavy” course content earlier in the course
4. Generation of a practice exam question database, built on the questions generated by the students this year (written assignment)

#### Best Practices:

1. Communicate clearly and often with the students
2. Be immediately responsive to questions and concerns
3. Make ALL course resources/materials available prior to the beginning of the course

## INMD 6818: Principles of Pharmacology Grading & exam policies

**1. Assessments.** There will be 3 independent assessments worth a cumulative point total of 120:

Written assignment (25 points)

- Student will submit a written assignment via the course website by 5:00 PM on Friday, June 13th, 2014. The goals and guidelines for this assignment are described in a separate file.

Mid-term quiz (25 points)

- There will be an in-class quiz on Monday, June 2nd (11:15-12:05) covering content in the first 10 lectures.
- The quiz will consist of 2-3 questions per lecture.
- Questions will be multiple-choice and will cover material presented in lectures and/or handouts.
- Strict adherence to the procedures detailed in the **Secure Exam Policy** is expected. No formulas, study

materials, notes, papers, or electronic devices may be brought to the quiz.

Final exam (70 points)

- There will be a cumulative exam on Monday, June 23rd (8:00-11:00AM) consisting of 3-4 questions per lecture.
- Questions will be multiple-choice and will cover material presented in lectures and/or handouts.
- Students must arrive within 30 minutes of the exam start time or before any student has received an answer key.
- Strict adherence to the procedures detailed in the **Secure Exam Policy** is expected. No formulas, study materials, notes, papers, or electronic devices may be brought to the exam.

### 2. Grading

Students must earn a cumulative point total of 70% (84 points or higher out of 120) AND score 70% (49 points or higher) on the final exam to pass this course. Honors will be given to students earning  $\geq 116$  total points for the course.

### 3. Exam/quiz postponement policy

You are informed of exam times well in advance of the exam and it is your professional responsibility to sit for each exam at the scheduled time. Postponing an exam can only be done for religious holidays and restrictions, or because of illness, personal crisis, or family emergency. Please see the Medical School Education Policy on Attendance Requirements for Courses, Clerkships and Exams at:

[http://www.meded.umn.edu/policies/index\\_tc.php](http://www.meded.umn.edu/policies/index_tc.php)

In order to postpone an exam for the reasons cited above, you must email Brad Clarke ([clark772@umn.edu](mailto:clark772@umn.edu)) and **copy both your advisor and the course director** *in advance of the exam*. Postponing an exam for reasons other than the above could result in loss of some or all points on the exam. You will need to provide a statement from a health care provider in the event of illness or medical emergency.