Module Review

Reproduction

Course Director: Lea Novak  
Clinical Co-director: Alice Goepfert (replacing Todd Jenkins)

Course Date: Spring 2009  
Review Date: September 25th, 2009

Present: Marjorie Lee White MD MEC member  
         Jordan Weinberg MEC member  
         Lea Novak Course Director  
         Alice Goepfert (New) Course Clinical Co-Director  
         Shannon M. Calcatera Student Course Representative  
         Cecily A. Lawrence Student Course Representative  
         James Jackson UME

Review Process:

The module review process consists of three parts; the self-study conducted by the course directors with the aid of UME, the review, i.e., the face-to-face meeting between representatives of the pre-clinical sub-committee of the MEC, the student representatives and the course directors (the review committee) and the final part, the report to the Pre-clinical sub-committee and thence to the MEC. The review committee received the self-study material approximately 3 weeks in advance of the meeting. Below is a summary of the face-to-face meeting, highlighting strengths and weaknesses of the course and outlining areas for improvement. This is followed by the detailed report, which provides the rationale for the recommendations and overall evaluation.

Executive Summary:

Reproduction was a successful module, due in no small part to the commitment of the module directors and a strong and supportive faculty. Some areas that were problematic during the course were circumstance driven and/or policies enacted by the Module Directors Committee and thus outside the immediate control of the Repro course directors. Other areas are already being addressed as the course directors plan for the 2010 course offering. Others form the basis for recommendations for improvement as listed below. In general, Repro achieved its overall goal of providing an integrated approach to male and female reproductive pathology.

Strengths:

The two directors are seen as a major contributing factor to the success of this module

Strong and accessible lecturers and preceptors

Module-director led review sessions.
**Weaknesses:**

Students stressed that normal anatomy and physiology were not addressed in a thorough manner.

Students would like to have specific feedback regarding exam questions.

Students would like to see continued improvements in the use of ARS technology.

**Recommendations for Improvement:**

Continue to revise module-level objectives towards more active learning objectives as current objectives remain at the lowest level of Bloom’s Taxonomy. Add one objective addressing an evidence-based medicine concept.

Consider increasing representation of physiology at the start of the course and integrate with endocrinology.

Continue plans to increase anatomy exposure, particularly that of surgical anatomy.

Consider working towards improvement of the reliability of the Anatomy/Histology test.

Move towards increasing use of small group sessions and decreasing the percentage of lectures (Current lectures are 79.2% and benchmark goal is 50%).

Look towards implementation of formative assessment, perhaps through use of NBME-like questions during lecture/small-group sessions using ARS technology.

Move towards evaluation of problem solving, clinical reasoning and communication skills with some sort of student evaluation in small group settings.

**Recommendation:**

Repro is a strong module that more than adequately fulfills the requirements for an introduction to the pathology of the female and male reproductive systems. The current module directors have already moved to make significant changes which the committee believes will improve the course and meet many of the concerns raised during this review. It is the opinion of the committee that in order to move towards meeting the overall curriculum goals of the SOM particularly in the area of decreasing the percentage of lectures to 50% and in the development of formative assessment pieces that the course directors may need additional institutional resources. It is recommended that this module be subject to expedited review in one year and repeat full review in three years.

All six of the self-study areas were reviewed in order.

Module Objectives and Content

The Repro module objectives are congruent with the goals and objectives of the SOM and the ACGME except that the course did not address “system-based practice.” All of the objectives are at the lowest level of Bloom’s Taxonomy and there is no evidence-based medicine objective. All five SOM themes are covered by at least one specific content area.

Methods of Instruction and Assessment

All module objectives are covered by lecture, three were covered by lab and three were covered by the case study. Students spent 79.2% of their time in lectures. Contact hours exceed 20 (21.3) during one week only. There was no formative assessment of students. The reliability of the Knowledge Assessment for the final exam was moderate but the Anatomy/Histology was low. There were no assessments of the small group sessions. The final exam was remarkably complete in covering Step 1 content areas. 36% of the questions were in NBME format which is approximately twice as many as any other module to date.

Student Outcomes

The required attendance for Reproduction was set at 70%. There was much confusion regarding the actual awarding of credit and/or partial-credit and this was later changed to 60%. Only 4 students did not receive full credit for attendance. Attendance is still a major bone of contention with the students, with many students feeling that they are being unfairly discriminated against and strongly suggesting a reduction in the required attendance. In general, the reasons why attendance is required needs to be further clarified and explained to the students.

Module raw score means was 90.2 which is higher than all other Class of 2011 modules.

Student Evaluation of Module

The student evaluations of the Repro modules met or exceeded the core items on the evaluations except in the following areas:

- Planned opportunities to use outside resources (3.4 slightly lower than overall mean)
- Texts/printed materials (3.4 slightly lower than overall mean 3.6)
- ARS

Student evaluations rated the overall quality as Outstanding/Good 78% when compared to 59% for the overall mean. In addition the overall quality of the faculty was rated as Excellent/Satisfactory by 94% of students when compared to 59% for all modules combined.
Several items were of concern to the students:

Implementation of ARS also continues to be a problem. It was suggested that all lecturers receive training in the technical aspects of ARS and that module directors in general need to be present during the lecture and need to be familiar enough with ARS to rescue a lecturer if needs be. It was also suggested that help be given to lecturers and module directors in developing ARS questions which might make the system’s use more meaningful.

5. Evaluation of Lecturers and Preceptors

The overall quality of the faculty is slightly higher than the means for all other organ modules. Only two lecturers fall below the overall mean rating of 3.0 and no lecturer has >50% of their ratings less than 3. Some lecturers in Repro were described as difficult to understand/follow in class either because of presentation style (mumbling, accent), or because audio-visual aids were difficult to follow. Several students suggested that continued attention be paid to teaching lecturers how to use PowerPoint effectively.

6. Impact of Changes from Last Year

N/A since 2008-2009 was the first year for the Reproductive Organ Module to be taught.