Attended: _K. Diebel, J. Boulger, R. Christensen, A. Johns, K. Haas (TC), G. Trachte, M. Conlon, A. Greminger, G. Simmons, P. Fernandez-Funez, J. Pearson, E. Onello, A. Shaw, R. Westra, N. Jauss, R. Heuer, B. Holbrook._
Absent: _K. Nordgren, R. Harden, M. Statz_

Welcome:
Dr. Trachte entertained a motion to approve the meeting minutes of September 12th. Dr. Christensen seconded the motion: All in favor of approval: none-opposed.

Student Updates:
- Megan Conlon, MS II, Rachel Heuer and Blake Holbrook, MSI Student CUMED Representatives, were Welcomed.
- CUMED student alternative reps: Blake Holbrook, MSI and Gabriel Amon, MSII
- Megan Conlon indicated the second-year class is doing fine at this time.
- Rachel Heuer indicated the first-year class is glad to be done with FOM.

Exam Review Protocol continued**:**
- Dr. Diebel presented to members the recommended Exam Review Protocol regarding secured exam administration. The language used was extracted from the ExamSoft template which refers to the Duluth Honor Code.
- The reason for the proposal was due to a breach in Neuro course in 2016 where a student copied the first three exams and later posted them on social media.

1. All scheduled exam reviews involving the entire class will be held in the lecture halls or in the active learning classroom in the School of Medicine building.
2. The Course Director or an appointee of the Course Director must be present at the exam review session.
3. The exam review access code cannot be shared with anyone outside of the room in which the exam review is taking place.
4. Remote access to the exam review is prohibited.
5. All faculty with questions on the exam being reviewed will be invited and encouraged to attend the exam review session.
6. The Duluth Honor Code will be reviewed and/or displayed at beginning of each exam review session (see next page).
7. Only one electronic device (the computer that the students took their exam on) is allowed in the exam review session.
8. Students may not leave the exam review session with any notes of any kind.
9. Index cards will be available in room so that students can communicate questions/comments on specific exam questions to faculty. Cards will ask for:
   a. Exam question number
   b. Student question or concern in relation to exam question
   c. Course staff will help compile and communicate questions to respective faculty
   d. A Google Doc will be created with faculty responses to student questions and sent to the entire class
      i. Only rationale related to the concept tested in the question is allowed in the Google Doc.
      ii. No information that can be used to identify the question and/or question answer can be shared in the Google Doc.
10. Individual exam reviews for students unable to attend the scheduled exam review can be conducted at the discretion of the course director and under the direct supervision of the course director, or an appointee of the course director.
    a. Individual exam reviews must adhere to the above guidelines where applicable (guidelines 3, 6, 7, 8, and 9).
11. Further access to secured exam material is prohibited after the student has completed their secure exam review.

- Dr. Trachte presented a few suggestions to:
  - #7 - The electronic device is the device used to take an exam.
  - #9 - Course Directors should make it clear students will not receive question and answer specific information. The

response will be clarified in the rationale behind the question.

- Dr. Diebel added #11 in response to the leak of exam material in the 2016 Neuro course last year and to provide students unsecured questions for practice. The Neuro incident exposed a vulnerability of how exams are reviewed. The majority of students are trustworthy but we need to have a system to remove this vulnerability.

Discussions:

- Dr. Diebel indicated if a student cannot attend the scheduled one-time exam review, they still have the "one" review access on their computer via ExamSoft. Students could set up a 1:1 meeting with the Course Director if they are willing to do the one-time review. All of the "one-time" reviews must be proctored, no notes and the review must be on the computer the exam was taken on. Once the student has gone through the first exam review, the file is *deleted* off the student's computer. What has been taking place is the paper version of additional exam reviews. *Note, ExamSoft functionality does not allow more than the one computer review.*
  - ○ #10 is saying if a Course Director is willing, you can review the exam.
  - ○ #11 is saying no more paper copies for exam reviews. This means no accumulative exam reviews.
  - ○ #10 also addresses if a student must take an exam at another time. i.e. a student with extended time accommodations would be able to have the opportunity to review their exam.
- Dr. Shaw stated students should have access to some questions to review to help them better understand what they should be studying. During the FOM course, about 2/3rds of the class were looking at paper copies before the final exam. This process was proctored by the Course Director. If an accumulative paper review is not allowed, Course Directors will need to come up with another resource for students. This could be similar questions that was on specific exams.
- Megan Conlon indicated it is and has been very useful to have accumulative reviews before a final exam.
- Dr. Diebel provided multiple means of practice questions. Students have access to those questions as long as they need.
  - ○ In IHO (Sum 2017), two take-home exams were given to the students.
  - ○ In CRRAB I, a practice exam was given; i.e. 26 practice questions were provided to students.
  - ○ CRRAB II, students were provided with a Google Form containing practice questions with rationales. 17 Practice questions will be released and more will be provided.
- As faculty go through their ExamSoft questions, they could separate out select exam questions that could be used as student practice questions. This allows for secure exams. The student practice questions should be of similar quality to what is on the exam.
- Dr. Boulger indicated it is beneficial to the students to review previous exams with year-long courses. The proposal prohibits this and it would be a disadvantage. There is no solution without more work on someone's part.
- Dr. Diebel indicated ExamSoft only allows "one" review opportunity to an exam.
- Dr. Fernandez-Funez acknowledges this is a difficult decision among members, however, we are faced with larger class sizes.
- Dr. Greminger indicated it is a good idea to have practice questions as well as secure questions, however, this will take time to develop. She recommends phasing in the proposal. This would gain more buy in from faculty. Dr. Diebel agreed.
- Dr. Diebel would like to have one practice question for every secure question. It is important students learn the materials.
- The TC campus provides one secure debrief of exams to students. Students do not get to keep the paper exams. Students may contact a Course Director but it is not known if students are given additional opportunities to review a second time. Dr. Haas will follow up with Dr. Diebel regarding this.
- Dr. Diebel indicated students have the ability to go into the Student Portal of ExamSoft. Students have access to a Strength and Improvement Opportunity report. The report could be more robust and provide more clarity for students by changing how faculty tag questions within ExamSoft. This report is not as high def. as a paper exam review but can be useful.
- Dr. Onello states to solve needed security and keep the integrity of exams secure, paper reviews need to be eliminated. The proposal is not about a student learning issue. Faculty will need to optimize student learning with similar assessment style.
- Dr. Shaw indicated faculty need to insure students have an opportunity to review topics. This is more work for faculty but it is faculty's responsibility to insure security of exam questions.
  - ○ Dr. Fernandez-Funez likes the small room/reviews to insure security.
  - ○ Dr. Pearson indicate using the small room reviews would eliminate the need for #11.
- Megan Conlon mentioned most students don't take notes during exam reviews. The review of exams was enough to spur and remembered the areas she needed to study more. Blake Holbrook indicated the review is more about identifying weaknesses. As advocates for the class, they should not be punished for the actions of others. If the protocol goes through, students should be

given the same opportunities to accomplish the same idea using practice questions.

- Dr. Christensen took his Board Exam this year. No exam questions were seen and the results of the Board exam gave strength and weaknesses and no question formats. Students need to become accustom to these types of exams.
- The proposal will also put more work on Course Directors in regards to clinical faculty instruction.
- Dr. Diebel pointed out exam reviews are optional. Exam Reviews are not required in courses. A practice questions bank is not mandated.
- Dr. Greminger adds, the purpose of the proposal is to have a secured exam. With exams being a learning opportunity, practice exams are needed as an alternative for student learning. If we have quizzes, give them the quizzes for student review. Midterm and final exams are secured.
- Dr. Johns will review the education literature on the value of exam review sessions and provide members with them. We assume reviews are of value. Would it be better use of student's time to study vs. reviewing an exam? Students do feel the review of exams is beneficial.
- As a Course Director of three courses last year, Dr. Diebel reviewed how students rated courses and their comments. Students indicated they would like non-secured exam opportunities.
- Dr. Pearson's hesitation is Course Directors are asked to write questions that are not their own. What is the validity? Are we giving the students the best learning opportunity?

Dr. Diebel indicated again exam, reviews are optional. For courses that hold exam reviews there are two issues being discussed:
1. Adopt the proposal as is starting with the incoming class of 2022.
2. Adopt switching #11 for a tightly secured no note taking proctored paper review.

Dr. Shaw proposed to adopt the Exam Review Protocol with the incoming class of 2022. This will allow time for faculty to put together practice questions and identify secure exam questions. Dr. Onello indicated this give time to share with the faculty assembly.
  ➢ *First proposal to adopt the Exam Review Protocol as is starting with the incoming class in Fall 2018: 8 Yea 5 Nay*
  ➢ *Second proposal change to allow for a tightly secured, no note taking, proctored paper review:*
Dr. Diebel indicated there at 12,000+ exam questions, can we release some of these in ExamSoft? This will be a campus wide project.
- Dr. Boulger asked if there were test question banks for purchase? The TC is looking into this.
- Dr. Diebel agrees the work is just beginning based on securing exams. *This brings us into the next topic*:

ExamSoft Question Tagging Procedure:

Drs. Diebel, Shaw, Nordgren and Natasha Jauss met to discuss changing how exam questions are tagged in ExamSoft. The goal is to tag a question once and done. Currently, questions are tagged with the academic year and session ID number that correlates back to Blackbag session used in.
When curriculum is rolled into a new academic year in Blackbag, session ID numbers changes.

The Current standard:
- All questions are required to have the following tags:
  - Academic Year
  - Course
  - Question Author
  - Discipline
  - System
  - Corresponding BlackBag Session ID Number

Problems with the current system:
- Academic Year and Session ID Number change every year
  - Every question on every exam will need to be retagged every year
  - Tags, in theory, will continue to grow to infinity as time goes on
  - Course and Academic Year tags are uninterpretable if the same question is used in more than one course. They can only be decoded using the Session ID Number tag.

Example Question with current tagging system (including Assessment History)

- Any change to an existing exam question requires tagging review and possible updates, i.e. change in a name, there must be a substantial change to the content associated with the related session in Blackbag.

> **Proposed standard:**
> - *All questions are required to have the following tags*:
>   - Question Author
>   - Discipline
>   - System
>   - Corresponding BlackBag Session **Name**
> - All exam titles are required to have the following information:
>   - "Year"-"Course"-"Exam Name"
>
> The use of each question is linked to the title of the exam in which it was used. This eliminates confusion found in our current tagging system when a question is used in multiple courses.

- Natasha Jauss is/has been working with Dr. Diebel to manually convert his exam question titles to session names. *The advantage* of using this process, 90+% of sessions in Blackbag do not change when rolled into future academic years. Once the session names are added into ExamSoft, there may be adjustments to a few questions, however, the proposed standard eliminates putting in new session ID numbers to every session.
- The exam title proposal by default will help when looking at the history of where a question was used before. This eliminates an additional tag (session ID#) for each exam question.
- Exam question using multiple sessions (i.e. FOM and in HRM), a Course Director would put the session name in each instance). Natasha can help and be a resource to faculty when using multiple sessions for the same question (i.e. one question may cover 3 sessions in Blackbag).
- *A benefit* for the students: The *ExamSoft Strength, Improvement and Opportunities Report* available to students will provide Session names in Blackbag. This will help students to go back to that session for review on missed questions.
- The question authors have many opportunities and flexibility in organizing their questions in ExamSoft.
- The ExamSoft Question Tagging Standardization Proposal can be reviewed for additional information.
- Dr. Diebel will plan a future training session for all faculty on revising exam question tagging in ExamSoft. Until this training is done, Course Directors would work with Natasha Jauss to update questions to session names etc.

Dr. Diebel proposed to committee members to adopt the ExamSoft Question Tagging Standardization:
   All in favor; none opposed.

Other:
- Dr. Diebel will releasing the Google Doc link to CUMED members on the impact on increased class size and current resources in the medical school. The purpose of the group was to determine a statement of hurdles as well as recommendations for the impact on the Duluth Medical School campus. Dr. Johns indicated an outside architectural firm recently toured the medical school to do a space analysis of our building. The firm's preliminary data showed we are short on space. Further information will be communicated when available. Members are asked to review and provide comments by the November CUMED meeting. A proposed final draft will be organized and passed onto the TC. Dr. Onello encouraged the student reps to comment on the proposed draft.
- Gaps & Redundancies and the 2017 USMLE Step 1 Results will move to November's meeting.

Meeting adjourned at 9:01 am. Next CUMED meeting**: Thursday,** *Nov. 16th @ 8am (165 Med)*.
Minutes transcribed by Brenda Doup and reviewed by Dr. Diebel (Chair) & Dr. Johns (ex-Officio)