



**QUILLEN**  
**COLLEGE of MEDICINE**

**EAST TENNESSEE STATE UNIVERSITY**

**The Medical Student Education Committee of the Quillen College of Medicine met on Tuesday, April 21, 2020, via Zoom meeting.**

**Attendance**

**Faculty Members**

**Ivy Click, EdD, Chair**  
**Caroline Abercrombie, MD**  
**Martha Bird, MD**  
**Thomas Ecay, PhD**  
**Russell Hayman, MD**  
**Jon Jones, MD**  
**Paul Monaco, PhD**  
**Jason Moore, MD**  
**Mark Ransom, MD**  
**Mitch Robinson, PhD**  
**Antonio Rusinol, PhD**  
**Robert Schoborg, PhD**

**Student Members**

**Hunter Bratton, M4**  
**Sarah Allen Ray, M2**  
**R J Black, M1**

**Subcommittee Chairs**

**Robert Acuff, PhD**  
**John B. Schweitzer, MD**

**Ex Officio Voting Members**

**Joe Florence, MD**  
**Theresa Lura, MD**  
**Rachel Walden, MLIS**

**Ex Officio Non-Voting Member**

**Ken Olive, MD, EAD**

**Guests**

**Leon Dumas, MD**  
**James Denham, MD**  
**Jared Millard, M1**  
**Diego Gil-Rodriguez, PhD**  
**David Taylor, M3**

**Academic Affairs Staff**

**Lorena Burton, CAP**  
**Skylar Moore, BSPH**  
**Mariela McCandless, MPH**  
**Cathy Peeples, MPH**  
**Aneida Skeens, BSIS, CAP-OM**

**Meeting Minutes**

- 1. Approve: Minutes from March 17, 2020 Meeting and special called meeting on April 6, 2020.**

Dr. Click opened the meeting at 3:30 p.m. and asked for comments/updates to the March 17, 2020 meeting minutes and the April 6, 2020 special called meeting, which were distributed with the MSEC meeting reminder. An updated version of the April 6, 2020 minutes was distributed to MSEC members earlier today to clarify the motions regarding the grading for the clinical

clerkship weeks of the recently completed 6-week period rotations (Periods 6 – 7) and the final clerkship period rotations (Periods 6-8 and 8-6). Motions were made and approved for the rotations to be graded as pass/fail with no numeric grade issued and the NBME and/or Aquifer subject exams to be waived. The previous 8-week clerkship period rotations (Periods 8-5) ended on March 13, 2020 and those students had already taken the NBME exam so that clerkship period will be graded as normal.

**Dr. Rusinol made a motion to approve the MSEC minutes as presented for both dates, March 17, 2020 and April 6, 2020. Dr. Moore seconded the motion. MSEC discussed and approved the motion. There was one (1) abstention vote.**

*The MSEC minutes for March 17, 2020 and April 6, 2020 were shared with MSEC Members via OneDrive document storage.*

### **Announcements:**

- Graduation Status – Virtual graduation to be held on May 8<sup>th</sup> at 2:30 p.m. No further details are available at this time.
- MSEC Retreat Meeting May 19<sup>th</sup> - start time has been changed to 12:30 p.m. and will run to 5:00 p.m. as a Zoom meeting. Meeting invite will come prior to meeting, which will include a detailed agenda with built-in breaks due to the length of the meeting.
- MSEC meeting June 16<sup>th</sup> - start time is 1:30 p.m. Both the MSEC Meeting and the Annual Meeting currently scheduled to start following the MSEC meeting are being discussed if we are not physically back in the office. Please block your calendar from 1:30 – 5:00 p.m.
- Faculty Book Club - Summer book club session requested in addition to a fall one. Dr. Amy Johnson has created a form for folks to complete with their address where the book is to be delivered if interested in participating. The dates and books are:
  - Black Man in a White Coat by Damon Tweedy, Discussion on June 17<sup>th</sup> @ 3:00 pm (via Zoom)
  - Make It Stick by Peter Brown, Henry Roediger, and Mark McDaniel, Discussion on September 9<sup>th</sup> @ 3:00 pm

## **2. Report/Accept: Administrative Reviews: 2019 – 2020 M1/M2 Courses**

- Dr. Acuff presented an administrative review for Cellular and Molecular Medicine (CMM). Dr Rusinol is the course director and Dr. Schoborg did the review. Instructional and assessment methods were deemed appropriate and the course objectives were mapped to the Institutional Educational Objectives (IEOs). Course faculty are in the process of updating the mapping of session level objectives to the course objectives. Student evaluations suggested combining with Genetics as some material is redundant between the two courses. This has been discussed as a possibility for next year; however, this has not been addressed in the course director report for either CMM or Genetics. Redundancy will be eliminated from CMM and Genetics courses until they can be merged into one course. The course director and faculty continue to make improvements to the course. Student comments are very high, course rated 4.75/5 in student satisfaction. There were 73

students who passed the course and 1 student who failed the course. There were 52% of students who scored at or above the national mean on the NBME in the Fall of 2019.

**Dr. Abercrombie made a motion to accept the Cellular and Molecular Medicine Administrative Review for 2019 – 2020 as presented. MSEC discussed and approved the motion.**

- Dr. Acuff presented an administrative review for Genetics. Dr. Monaco is the course director and Dr. Kruppa and M1 student, Stephen “Alex” Crockett did the review. Instructional and assessment methods were deemed appropriate and the course objectives were mapped to the Institutional Educational Objectives (IEOs). Individual lectures, labs and other class activities have also been mapped to the course objectives. The course director continues to push forward to make sure material is well presented. As stated above in the CMM review, student evaluations suggested combining Genetics with CMM as a lot of the course material overlapped. This was noted as a general weakness. Students would also like to have clinicians in the room for team-based learning (TBL) sessions to discuss how information discussed is used in the clinical setting. This may be incorporated into the fall semester. All students passed the course, and there is no NBME associated with the course. There was a slight drop in the course rating but nothing significant. The course director continues to receive high marks in ratings.

**Dr. Abercrombie made a motion to accept the Genetics Administrative Review for 2019 – 2020 as presented. MSEC discussed and approved the motion.**

- Dr. Acuff presented an administrative review for Clinical Neuroscience. Dr. Rodriguez-Gil is the course director and Dr. Acuff and M2 student, Sarah King did the review. Instructional and assessment methods were deemed appropriate and the course objectives were mapped to the Institutional Educational Objectives (IEOs). Course faculty are in the process of updating the mapping of session level objectives to the course objectives. There have been improvements in the Neuroscience course; however, problems are still present as evidenced by student evaluations and the NBME scores. The overall course evaluation threshold of 3.5/5 (current evaluation: 2.60/5) and the NBME threshold of 50% of the class scoring at or above the national mean (current % at or above national mean for NBME: 39.39%) were not met. We do not meet that criteria. The course director is very responsive in trying to address student concerns. Some of the requested changes have already been implemented. Students are requesting more imaging, (i.e. MRI, CT scan, etc.) sessions. The course director stated he is working with the Pathology course director and the Pharmacology course director to better align and integrate content. Students also requested exam content be more evenly distributed in terms of difficulty and this is being addressed by increasing the number of exams from three to four. Students would also like more time to review anatomy of peripheral nerves, which was heavily tested on in the shelf exam this year. Sarah Allen Ray, M2 student representative, wanted to point out that the course reviews were not reflective of faculty, it was more organizational and the students appreciate the flexibility and adaptability Dr. Rodriguez-Gil has put forth. The M1/M2 administrative review and the Outcomes Committee both recommended that the course have a comprehensive evaluation next year. MSEC discussion included solicitation by Dr.

Olive regarding input for the “You Said – We Did” document tracking communication with students for course changes requested/suggested by students. Recommendations to MSEC include the need for the course to address student dissatisfaction with organization, including uneven distribution of material across exams, and improve integration, e.g., anatomy (peripheral nerves) and neuropharmacology.

**Dr. Rusinol made a motion to accept the Clinical Neuroscience Administrative Review for 2019 – 2020 as presented. MSEC discussed and approved the motion.**

*The presented Administrative reviews are shared with MSEC Members via OneDrive document storage.*

### **3. Report/Accept: Working Group Final Reports**

- Ms. Rachel Walden presented the Working Group 1 Final Content Summary Report. Working Group 1’s charge was to develop a response and recommendations related to question 1 in the Policy for Periodic and Comprehensive Review of the Curriculum:
  1. Does the curriculum include all required content? What evidence supports this conclusion? In addition, the group may consider if there is curriculum content that we should include that is not directly tied to external requirements. For example, is there content that is not necessarily required, but would enhance our educational program?

**MSEC discussed and voted to accept the Working Group 1 Final Content Summary Report as**

- Dr. Moore presented the Working Group 2 Final Curriculum Integration, Sequencing and Integration Summary Report. Working Group 2’s charge was to develop a response and recommendations related to questions 2, 3, and 4 in the Policy for Periodic and Comprehensive Review of the curriculum:
  2. To what extent is the curriculum logical in its sequencing? What factors need to be considered regarding sequencing and what modifications should be considered?
  3. To what extent is the curriculum content integrated, coherent and coordinated?
  4. In what way is curricular content integrated within and across academic periods (horizontally and vertically integrated)? Is this adequate? Where could additional integration occur?

Identify curriculum models that could facilitate logical sequencing, integration and cohesiveness.

Identify the resources or developments needed to accomplish your recommendations.

**MSEC discussed and voted to accept the Working Group 2 Final Curriculum Integration, Sequencing and Integration Summary Report as presented.**

- Dr. Acuff presented the Working Group 3 Final Instruction and Assessment Summary Report. Working Group 3’s charge was to develop a response to and recommendations related to questions 5 and 6 in the Policy for Periodic and Comprehensive Review of the

curriculum and to identify the resources or developments needed to accomplish their recommendations.

5. In each segment of the curriculum, are the methods if pedagogy appropriate? Clinically relevant? Student-centered? Effective? What are the practices in place that accomplish this? How does the pedagogy in each curriculum segment relate to the adequacy of our curriculum as a whole?
6. To what extent are assessments linked to objectives and competency based? Providing adequate formative and summative feedback? Measuring cognitive and non-cognitive achievement? What needs to occur to improve assessments throughout the curriculum?

Also, the group was to consider instructional or assessment methods and issues MSEC should consider that are not directly tied to existing approaches (for example, should MSEC consider adopting instructional or assessment methods not currently employed or increasing some approaches that are under-utilized?).

Recommendations from each group are attached as appendices to the minutes. A compiled summary of recommendations from all three working groups will be provided to the Curriculum Transformation Task Force for further action.

**MSEC discussed and voted to accept the Working Group 3 Final Instruction and Assessment Summary Report as presented.**

*The presented Working Group Reports are shared with MSEC Members via OneDrive document storage.*

#### **4. Presentation/Approve: 3<sup>rd</sup> year plan for 2020-2021**

Dr. Olive presented the 3<sup>rd</sup> year plan for 2020-2021 to move the curriculum forward in order to minimize disruptions until the students can return to the clinical learning environment. This proposal is designed to begin the year on June 22 with the Transition Week, potentially online, followed by starting clerkships on June 29. On June 29, students would begin clerkships with the 2-week online didactic blocks already defined by each clerkship. At the end of that period, if students are allowed back in clinics, students would complete that clerkship then continue the year with either 5- or 7-week clerkships.

If at the end of that 2-week didactic period students were not allowed to return to the clinical learning environment, they would move on to the 2-week didactic block for whatever their next clerkship would be. If students were allowed back in clinics after the second 2-week didactic block, they would come back and do the clinical time, either 3 weeks or 5 weeks for both of the clerkships they missed before moving into regular clerkships conducted sequentially.

Clerkship directors determined that the NBME exam should be given but weighted at only 20% so students were not disadvantaged.

Recommendations for the 3<sup>rd</sup> year plan for 2020-2021 are:

- Support reducing the clerkship time for this year only by one week, wherein 6-week clerkships become 5-week clerkships and 8-week clerkships become 7-week clerkships to finish on time.
- Split clerkships up into a didactic piece and a clinical piece if necessary until students are allowed back into the clinical setting.
- Reduce the weighted grade for NBME to 20% instead of 35%.

**Dr. Abercrombie made a motion to approve all three recommendations for the 3<sup>rd</sup> year plan for 2020 - 2021 as presented. Dr. Monaco seconded the motion. MSEC discussed and approved the motion.**

*The 3<sup>rd</sup> year plan for 2020 - 2021 is shared with MSEC members via OneDrive document storage.*

**MSEC discussion/questions included:**

- Neuroscience content material was discussed to assure that areas are covering NBME topics. It was pointed out that what NBME and Step 1 says they want covered and what is potentially covered on the shelf exam are not necessarily equivalent, and that we should be careful to not modify the course too much in preparing for the shelf exam versus teaching what students need to know for other things.
- Students have suggested more instruction in practice management. Their idea of practice management needs to be defined before further action can be taken.
- It was noted that this is Hunter Bratton's last MSEC meeting as he will be graduating in May. Everyone sends congratulations to Hunter on his achievement.

The MSEC meeting adjourned at 6:30 p.m.

**MSEC Meeting Documents**

MSEC Members have access to the meeting documents identified above through the shared OneDrive document storage option made available with their ETSU Email account and login.

**If you are unable to access the One Drive link or have not set up your OneDrive contact: Matthew Carroll, Instructional Design and Technology Manager at: [carrollmo@etsu.edu](mailto:carrollmo@etsu.edu). Telephone contact is: 423-439-2407.**

**MSEC Meeting Dates 2019-2020: \* NOT the 3<sup>rd</sup> Tuesday of the month**

May 19, 2020 **Retreat** - 12:30 pm – 5:00 pm – Zoom meeting  
 June 16, 2020 – 1:30 - 3:00 pm – TBD (Zoom meeting or C003)  
 June 16, 2020 – **Annual Meeting** 3:30-5:00 pm – TBD (Zoom meeting or Lg. Auditorium)

**MSEC Meeting Dates 2020-2021: \* NOT the 3<sup>rd</sup> Tuesday of the month**

July 21, 2020 – 3:30-6:00 pm - TBD  
 August 18 – 3:30-6:00 pm - TBD  
 September 15 – 3:30-6:00 pm - TBD  
 October 20 – **Retreat** – 11:30 am-5:00 pm - TBD  
 November 10 – 3:30-6:00 pm\* - TBD  
 December 15 – 3:30-6:00 pm - TBD

January 19, 2021 **Retreat** – 11:30 am-5:00 pm - TBD  
February 16 – 3:30-6:00 pm - TBD  
March 16 – 3:30-6:00 pm - TBD  
April 20 – 3:30-6:00 pm - TBD  
May 18 – 3:30-6:00 pm - TBD  
June 15 – **Retreat** 11:30 am-3:00 pm – TBD  
June 15 - **Annual Meeting** - 3:30-5:00 pm – Lg. Auditorium

## **MSEC Minutes April 21, 2020 Appendix – Working Groups Recommendations**

### **Working group 1 Recommendations:**

#### **Specific Content Suggestions:**

- Continue to monitor for opportunities for students to gain meaningful practice using typical EHR software.
- Explore opportunities for exposing students to content and experiences related to methods of, reasons for, and best practices in telemedicine.
- Carry forward Long-Term Recommendation from prior cycle to consider developing a thread on practice management; also consider this issue when developing future curriculum.
- Develop a content report to further assess the presence of content on disabilities and chronic illness. Consider incorporating more content on disabilities and chronic illness in the curriculum, potentially as a thread.
- Develop a content report to further assess the presence of content on systems-based practice. Consider incorporating more content on systems-based practice when planning the future curriculum, with consideration for related content on patient safety and quality improvement. This topic may have potential for incorporation into interprofessional education activities among the health sciences colleges.
- Explore ways to integrate more exposure to imaging modalities (e.g., x-ray, CT, MRI, ultrasound) in the curriculum, including information about indications for imaging (and overuse/when not to order), which imaging modality to order, use of contrast, and interpretation of imaging results. There is some imaging content already in the curriculum, so additional discussion with students may be warranted to better pinpoint timing, nature, and context of their need for this experience as identified in the student focus groups.
- Explore ways to incorporate more in-depth exposure to and interpretation of EKGs in the curriculum.
- Consider additional opportunities for incorporating pain management content in the curriculum, including pain management related to long-term/chronic conditions (in addition to short-term pain management such as post-operative pain). This could be included alongside recommended content on disability, chronic disease, and rehabilitation as well.
- Topics including practice management, law and ethics, health policy, global health, and system-based practice likely warrant additional content in the current and/or future curriculum.
- Carry forward Long-Term Recommendation from prior cycle content report, “Explore opportunities for formal application or discussion of end-of-life care decisions and organ donation in the Surgery Clerkship.”
- Carry forward Long-Term Recommendation from prior cycle content report, to consider developing a journal club aligned with the curriculum across all four years addressing medical and research ethics. We note however that journal clubs may be unlikely to gain widespread engagement if no

grade is tied to the activity. This poses a challenge for topical journal clubs outside the regular course topics. Longitudinal topic-based journal clubs could potentially be tied to Doctoring.

### **Broader Content Suggestions:**

- Continue to explore opportunities to provide exposure to clinical skills to students in the pre-clerkship years. See for example the AAMC's "Recommendations for Clinical Skills Curricula for Undergraduate Medical Education" report, and review curriculum as compared to these recommendations.
- Carry forward (previously Short-Term) Recommendation from prior cycle to encourage continued integration of clinical procedures during relevant pre-clerkship courses; also consider this issue when developing future curriculum.
- Incorporate other faculty and student focus group comments on curriculum and student abilities into planning the future curriculum. Some suggested student outcomes goals are not discrete content item/experience but should be considered as part of an overall curriculum strategy for developing needed skills in Quillen graduates and would need to be addressed broadly throughout the curriculum via a variety of experiences.
- Further investigate student concerns about the Community Medicine clerkship and consider revising to foster student engagement and relevant community experiences.
- Consider additional content on critical judgement and problem-solving skills, such as implementation of journal club suggested in prior cycle report or other approaches. Consider ways to implement content in this area that addresses the need to "think on their feet" discussed in faculty focus groups. It may also be possible to combine this concept with the need for additional imaging modality exposure by developing content that requires students to think critically about overuse and appropriate use and interpretation of imaging.
- Carry forward (previously Short-Term) Recommendation from prior cycle to encourage continued integration of clinical procedures during relevant pre-clerkship courses; also consider this issue when developing future curriculum.
- If a future curriculum exposes students to more clinical environments and experiences in the first two years (prior to clerkships), IEOs 1.10, 3.4, 3.5, 6.6, 8.3, and 8.7 which are largely practice/professionalism/patient care may need to be more frequently reflected in the curriculum for the M1 and M2 years.
- When working toward a revised curriculum, it may also be useful to further analyze the curriculum according to EPAs to ensure adequate coverage of these activities, including foundational knowledge related to EPAs.
- Although it did not fit neatly with our charge as a content matter, we became aware that we are one of a low number of medical schools that does not have learning communities. The possibility of implementing learning communities should be considered in the process of developing our new approach to curriculum and educational experience. Faculty development may be needed to support implementation.

### **Process or Monitoring:**

- Examine how content suggestions generated by CIS thread reports are followed up or implemented by course directors; consider whether any process changes are needed to ensure important topic threads are carried out throughout the curriculum.

- Because content analysis is hindered by a lack of session-level course content mapping, we recommend mapping efforts proceed in the future. However, this process should likely pause until a new curriculum is developed in order to not waste time mapping content and courses that may change. We recommend a leadership review of Academic Affairs staffing levels to support mapping and ensure appropriate staffing levels. The college may also wish to explore whether investing in systems other than New Innovations would facilitate more efficient mapping.
- If more comprehensive mapping identifies a true gap in the third or fourth year for IEO 1.8 Patient Care (Provide appropriate referral of patients including ensuring continuity of care throughout transitions between providers or settings and following up on patient progress and outcomes), work with clerkship directors to ensure appropriate coverage.
- Consider whether IEO 8.2 “demonstrate healthy coping mechanisms to respond to stress” should be present more frequently throughout the curriculum, including all or most clerkships and selectives. (This may be a mapping gap rather than a content gap, and it may be worth investigating how/whether clerkship directors encourage healthy coping mechanisms.)
- Consider performance gaps on Step scores related to the gastrointestinal and renal/urinary systems for potential content enhancement. Monitor Physiology and Evidence-Based Medicine scores for improvement. Continue to review three-year averages per broad topic area compared to national means for ongoing targeting of topics needing enhanced content to reduce performance gaps.

### **Working Group 2 Recommendations:**

#### **Sequencing:**

- spiral curriculum sequence with integrated organ system blocks in the first year and revisited in the second year from a pathology and therapeutics standpoint
- Visit regional peer schools who have done one of the above (ECU- Spiral; Marshall-organ system integrated blocks)
  - Special attention to Pro’s and Con’s of order they use
- Dean of Curriculum position fully devoted to development and monitoring redesign
- Visits to exemplar/peer institutions
- Faculty development on best practices in andragogy
- Invite outside representatives/experts

#### **Integration:**

- Establish clear goals for integration.
- Define a framework for integration (spiral, organ system, case based learning, etc.). We recommend thematic, integrated blocks
- Use of threads to promote Vertical Integration with inclusion of basic science concepts in clerkships. Use current thread reports as model to ensure integration.
- Intentional simulations and experiences in the clerkships that incorporate and illuminate key basic science elements (such as mechanisms of actions of drugs on particular receptors, anatomy, etc.) would be an engaging way of delivering vertical integration
- Map session level content and establish a clear process for ensuring intentional integration with regular assessment.
- Reduce the number of instructional hours utilizing passive learning strategies (lecture, didactic).

- Personnel- including Dean of Curriculum and Administrative position/Coordinator for Curricular Review/Change Process
- Emphasis on Threads and consideration of Thread Director positions
- CIS charged with evaluating design, content, integration and implementation for MSEC threads
- Content management system that is user-friendly and useful

### **Working Group 3 Recommendations:**

#### **M1/M2 Active Learning:**

- Incorporate more active learning.
- Major changes in pedagogical methods should be simultaneous with course content integration and/or sequencing.
- Consider an Assistant Dean for Faculty Affairs and an Instructional Design staffer to facilitate reforming teaching methodologies.
- Exam-Soft for all pre-clerkship courses which complements course mapping to IEOs, USMLE Step 1, PLUS List.
- Consider Custom Assessment Exams – NBME (MSEC Action).
- Curriculum Threads should be mapped including course and session objectives as well as quizzes and exams.
- Identified attention as a part of Phase Report to incorporate history-taking skills and physical exam instruction (include pain management).

#### **Ongoing Clinical Attainment:**

- Map all structured experiences to include outpatient clinic, hospital rotations, lecture, simulation, Aquifer, MedEd, or web-based programs in clerkships.
- ExamSoft used for all clinical courses and clerkships for quizzes/exams.
- Additional coverage of Human Sexuality across clerkships/courses (and mapped).
  - Transitions
  - Psychiatry
  - Internal Medicine
  - Community Medicine Clerkships
  - Keystone Course
- Verification that substance use disorder and pain management are addressed in the clerkships – focus on reducing stigma and bias, assuring respectful communication.
- Clinical clerkships and 4th year electives should utilize on-line interactive clinical case studies to cover specific learning objectives or to augment exposure to clinical content.
- Developed by faculty or from proprietary service (Aquifer, Online MedEd)
- Case selection should be coordinated across 3rd year clerkships
- Clinical clerkships and 4th year electives should transition as many didactic sessions as possible to a “flipped classroom” or interactive, case-based learning methodology.
- Five items in the program director and graduate surveys where the program director and resident differed in their evaluation of capabilities by residents.
- Generate a differential diagnosis.
- Recommend and interpret tests.
- Document clinical encounter appropriately.

- Recognize patient requiring urgent/emergent care.
- Initiate evaluation/management and perform general procedures.
- Additional OSCE to include these five skills be administered at the end of the M3 year with remediation being offered in the M4 year prior to graduation.
- Clerkships actively pursue the ability to have students enter and discuss orders/documenting clinical encounters in both an inpatient and outpatient EHR system.
- Establish policy across all clerkships that students receive training in and are expected to document in the outpatient medical record and have this documentation verified by the attending physician for at least two patient encounters.
- AAMC Recommendations for Clinical Skills Curricula for Undergraduate Medical Education be reviewed and expand this to be a review of the clinical skills curriculum beginning in the M1 year and through the M4 year.