

**Education Council (EC) Meeting Minutes**  
**February 18, 2014**

<b>EC members present:</b>	M Rosenberg	J Metzger
L Anderson	L Schimmenti	R Michaels
J Andrews	G Trachte	J Miller
T Baultrippe	S van den Hoogenhof	M Nelson
J Beattie	K Watson	J Nixon
J Chipman	M Woods	J Pacala
J Clinton	Y Shimizu	D Power
C Hegarty		C Sauter
A Johns	<b>EC members not attending:</b>	E Scanlon
S Katz	K Brooks	A Severson
M Kim	L Carson	T Stillman
B Marsh	R Cormier	G Vercellotti
W Miller	Z Crise-Patil	A Weiers
S Morean	K Crossley	A Wojciechowski
D Patel	G Jacobs	B Yueh

**Minutes**

Minutes for the January 21, 2014 were approved with no changes or additions.

**Information**

Medical Education Retreat

The Retreat, held on February 14<sup>th</sup>, was outstanding and was well attended with 109 participants. The program format was designed to generate as many ideas as possible from a diverse group. Feedback and information gathered from the sessions by the facilitators, is still being collated and will come to MED ED for distribution and will help to identify areas for future change and improvement. The goal is to turn the ideas over to work-groups that will move them forward. An important theme from the evaluations is that concrete ideas, actions and results are needed from the event to achieve buy-in from participants for future endeavors. Generally that has been the goal, to gather ideas and information for guidance in the effort to establish action plans.

Data being evaluated includes:

- pre-retreat survey completed by approximately 100 participants
- evaluations gathered at the end
- written notes of all of the table conversations

All of the information will be used to develop a more formal presentation to EC members. Feedback from participants was positive, especially noted was the value in bringing together medical students, residents, faculty and community representatives for exchange ideas. Dr. Miller received feedback from a student participant thanking administration for the opportunity to engage with faculty, physicians and other students and to explore ideas in an interactive and open conversation. Dr. Rosenberg recommends continuing to develop new ideas for change from the bottom up; he feels top-down processes don't generate broad based discussions. Dr. Miller added that Course Director, Dr. Peter Southern served as the facilitator for their table and talked about a specific collaboration. He reported recently including Dr. Jamie Green in his course sessions on ID and the excitement it generated from medical students. Dr. Southern reported students were excited by experiencing the clinical correlation in real time; he strongly recommends these interactions to move integration of clinical and basic science forward in the curriculum. A small group leader also reported hearing the same enthusiastic discussion about correlations from students who had attend these same lectures.

## **Discussion**

### Medical Student Research

Dr. Rosenberg has lead a number of discussions related to medical student research and has established it as a priority focus for advancing our curriculum. Dr. Yoji Schimizu will also provide background and information about the “external review” of the MSTP program, as background for what the review results indicate why research should be included in preparing physician scientists.

It’s important for Education Council and the Medical School to understand the impact of research as part of medical education. Medical students requested better access to participating in research opportunities at the same time that faculty asked why research isn’t more valued at UMMS. Also prospective students during a visit asked about possibilities for research and a UMMS student replied research isn’t important at this School. Dr. Rosenberg reiterated that the value of research experience and the scholarship and discovery experienced by medical students is very important. Many medical schools require a research segment for completion of their MD degree, as noted by the MSTP site visitors during the external review. He continues to be concerned that there isn’t a T35 at UMMS. This is a training grant through multiple institutes at NIH to support short term research experiences by medical students between 1<sup>st</sup> and 2<sup>nd</sup> year. This as a marker of excellence and a review of schools in the Midwest, most have 1 and some have 2 or more. Student council members presented a proposal to the MS Research Task Force requesting that the School do more to make research a component of their education.

The Strategic Planning Committee lists research as number 5, as a method to promote life-long learning. This Committee also charges Medical Education to provide better matches between student interests and research opportunities. In working to establish a T35 the research must be targeted to one of the NIH Institutes and require a theme to be competitive in the grant process. Possible themes may be kidney disease or diabetics.

Possible times in the curriculum when students are available for research include:

- between years one and two on the TC campus - a block of 10 weeks and 6-8 weeks in Duluth
- after successful completion of the Step I Exam MS eligible for the Flex MD Program -- can take 1-2 years for research (15 per year with only approx. 1/3 in research)
- years three and four, 76 weeks required (56 weeks- required clerkships)
- 20 weeks remain for 8-week hands-on clinical elective
- remaining 12 weeks could include research
- also 20 weeks of free time in the third and fourth year

The above information establishes there are opportunities for research; students are encouraged to organize the time in a way that a research project can be completed. As faculty are asked to support research it is important to be clear that this is an opportunity to work with medical students to help them experience what research is like. Typically it doesn’t involve time to do bench research to complete a research project in 6 to 8 weeks. Faculty may feel it’s not worth their effort for someone to come in and as soon as they trained they leave. Dr. Rosenberg feels that even a little bit of research adds to the educational experience of discovery and scholarship. Hopefully these opportunities will engage students so they will want to spend more time later on doing research. This may lead some students into the MD/MSTP program.

Have more students been interested in the past or has been an issue of lack of opportunity? Yes, there have been changes in the last ten years in the level of interest in doing research. Does the UME research provide just an opportunity to build a resume or is there genuine interest in doing research? Ben Marsh, MS-4 reported it is some of both; because it isn’t possible to get a surgical sub-specialty residency if there isn’t a year of research as part of an MS resume. The percent of applicants matriculating into medical school with research experience is 90 percent and there is a large percentage of those students who want to do research once they begin medical school.

Current funding for research is somewhat sparse, with the Clinical and Translational Science Institute (CTSI) having \$10,000 for all health professional students (eight to twelve weeks -- approximately \$550/week). UMF sponsors about ten to thirteen grants at \$3000 each.

Dr. Rosenberg and Dr. Tucker LeBien chaired a Medical Student Research Task Force. The members have all been actively supporting medical student research. They met during last summer, with the purpose to increase research experiences for medical students and improve access to research opportunities. Dr. Rosenberg provided details the results of a research survey given to medical students, which has provided background to establish a set of action items. Goals include:

- increase the number of research opportunities and improve the operational aspects of applying for research funds
- increase the number of students doing longitudinal research
- develop a plan for increasing funding including a pathway to a T35
- place more emphasis on “medical student research day “

How does the percentage of those showing interest correlate with the level of those who participate in research? Dr. Rosenberg feels there is a good deal of interest, which has prompted the Task Force to move to develop action steps. UMF provides the most funding for medical students and they have \$40,000 dedicated to research. Last year they funded 9 first year students and 3 third or fourth year students. For Duluth students there was a barrier to getting support, because it requires 12 weeks and they only have 6-8 weeks available. This criterion was changed to now allow students to begin in the summer after year-1 and continue to work on it through the end of year-2. In the past it had been basic or clinical research, which now has changed to include community research. These awards do require data collection and now also include presentation of data at the end of the research period. There is also a recommendation to increase UMF funding from \$40,000 to \$60,000, but in the past year UMF dropped the total funding to \$30,000.

Is there any tracking of what students are currently doing research? Tracking is also an action item, but at this time there isn't any data being collected. Adding something in research in the area of “curricular design” to fit with the scholarship of teaching would fit with work already being done. Some funding is a stipend to the students and doesn't include any funds for a statistician or for travel if the student is able to get a paper accepted. Medical Education does have \$20,000 to assist students with travel expenses to present at a national meeting, which supports a few but isn't enough to cover very many students. There is also the possibility for students to turn down the stipend and do the research to get credit. It's then possible for a PI to elect to pay for student travel for presentation to a professional conference. There is no data being consistently collected for any tally of how many students are doing research for this arrangement or for other research scenarios. Flex MD numbers have been tracked over time and the numbers are fairly constant.

Some new monies were made available for five summer research positions through the Lillehei Heart Institute, an RFP generated 15 applicants and 5 students were awarded \$3500 each student. The area that is being targeted as a pathway to a T35 is immunity, through the Center for Immunology and it can involve infectious disease, transplant or any area related to immunity. The announcement went out to students on February 17<sup>th</sup>, these funds will cover 5 stipends at \$3500 each, plus \$1500 for the lab. Dr. Dan Miller has agreed to run this program and there is salary dollars to support his involvement. There is a strong graduate program in Immunity and a great deal of clinical basic science community research opportunity. This is the preliminary data for the grant and his target is September for the grant. It will be with the NIH through the Institute NIAID, National Institute of Allergy and Infectious Disease. A survey of medical students was done to get a sense of student interest level in doing a Summer Research Project. This is an action item that came out of the Research Task Force.

There was a strong message that medical student involvement and access to research needs to improve. There has been a static web-based research list, which has been high maintenance and very often inaccurate. To overcome this issue for medical students a “Craig's list” style access point is available, which makes it very

easy for a PI to post a research opportunity. It's a public list, each posting has an end date and once that occurs the posting is removed. It is basically unscreened and when it's been checked it will generally have approximately 30 to 60 research opportunities listed. These are active postings, with contact information and a URL for easy referrals and very user friendly. It's simple and the effectiveness will be evaluated to keep it current and active for medical students. The residency programs are also enthusiastic and it is now filtered by medical student and resident research opportunities to provide access for these two different levels of research projects. There is also a goal to make longitudinal experiences more available and easily accessed for students and to engage more of the affiliate sites and evaluate the effectiveness. The database will allow monitoring and tracking the outcomes.

In addressing the cultural aspect of MS research, Dimple Patel has had conversations with the Admissions Committee to work to determine the best way to assess research experience. This past year at Orientation a panel discussion was held to make the point that research is important and to encourage medical students to consider options early in their medical education. Research Day, is run through the Vice Dean of Research Office, and will be reorganized to provide a more vibrant event. There is a suggestion to have a journal club for interested year-1 and year-2 students; facilitated by MSTP students.

For the Task Force the goal overall is to engage students, generate faculty involvement and move ahead with some action oriented steps.

**Q**

It is important for everyone to have the same expectation as they move forward. On the "Craig's list" is there some assessment by the faculty member who posts the opportunity, for how long a project will take, what their expectations are and what kind of commitment will be required for the student?. Lack of these details can often lead to a disconnect for the students.

**A**

The site is open to whatever information the faculty member will provide and the goal is to provide contact information so a conversation can take place between the researcher and student to determine how it moves forward.

**Suggestion:**

It would be nice if there could be a classification of the level of research, i.e. level 3, etc. to help a student determine where their previous experience will fit with the project.

**Q**

How easy is the posting process on the site?

**A**

Self-explanatory and easy to post to the site; X500 isn't necessary to access the site.

**Q**

Will faculty advisors be involved in assisting students who may need the open times for academic progress?

**A**

That is a good question to explore and should be considered.

A "Craig's list" has been effective and works well at the VA in a format for residents, the topics are broader.

Dr. Schimizu reported that for the Summer Research Program, faculty response has been very strong. There are approximately 20 faculty who have agreed to consider working with a student during the summer. He noted that he and Dr. Daniel Miller are working on how to integrate MSTP students into this Summer Program. Their plan is to have a weekly journal club as part of the summer program. Dr. Schimizu is encouraging Dr. Miller to include Ph.D. students and post-doctoral students. Dr. Wes Miller noted that Medicine has developed a "morbidity catalog" which includes the specific disease involved for each case. He recommends using these cases for discussion of the basic science aspect of each case as part of the MSTP program and the Summer Research Program journal club. The approach would be to provide the journal

article to inform the case and its application. Currently in the MSTP students who are in the Ph.D. phase give a case presentation to other students in the program.

The MSTP Program recently underwent an external advisor review and the reviewers considered the stronger focus on research opportunities for medical students and the MSTP students important. The strengthening of the Summer Research Program along with improved access to research projects and the strong response of the faculty, are all very important. Their comments included the “culture of curiosity” as an important asset of the Medical School for medical students and MSTP students. These reviewers saw the efforts to promote discovery and scholarship as very critical in promoting the physician scientist community here.

At the medical student orientation is there any discussion about what constitutes research, what role a student can play? The emphasis is on how important discovery is as students beginning their medical career. The technical and the expertise aspects were not stressed very much; it was more what has research discovery and scholarship meant in the lives of faculty. Duluth does a good job in promoting community research and community engagement in projects; they were instrumental in helping to get UMF rules changed. It is important for faculty to model the culture of discovery as a method to strengthen student interest and investment in research.

There is also a sense that research isn't as valued as part of the matriculation process at UMMS. The template of questions students are asked doesn't include strong detailed questions about their research experience. Associate Dean for Admissions, Dimple Patel reported that they are changing the message that clinical service isn't the only aspect of excellence that is valued at UMMS. Their message is the importance of the science and a balance between the clinical, the sciences and research. There have been conversations with the Admissions Committee members and in how questions and presentations for prospective students underscore the science. There is a question on the supplemental application that asks a student to speak to their experiences with discovery, beyond what they've written in their MCAT. The guide that Dr. Rosenberg and Dr. Schimizu have provided to the Committee will also add value in finding a better balance in how admission information is gathered and evaluated. Dimple Patel also reported that the data for how many students have experienced research before entering medical school can be provided but will need to be evaluated.

With regard to opportunities for research on quality improvement, Vanderbilt is focused on securing funding from what is available through the Affordable Care Act; would this be an avenue for UMMS to explore? Secondly, when the Admission criteria were adapted to add a demonstrated commitment to improving the human condition; the areas of focus were research, community service and other (possibly art). But consideration for research has not been a focus but needs to be raised. As a Medical School this will require strong commitment and on-going focus to maintain it in balance with service. With regard to how research fits in the four year curriculum, it's important to establish accountability and what is considered the measure of success. It's important to understand and determine what our capacity to measure success is. It's also important to identify changes needed across the Medical School in terms of how to move toward a stronger climate of excellence in research and broaden the scope of interest on the part of every faculty person. Our new Dean, Dr. Brooks Jackson sees grant application and focusing on funding research as the responsibility of every faculty member. It's important to understand if substantive research opportunities are accessible to applicants who attend smaller liberal arts schools and universities. To retain a focus on diversity it's important to define research as more than what takes place in a lab per se. Suggestions were made for common interest in service, which can, at times, lead to research in primary care which may apply to population treatment.

EC members expressed consensus in advancing a change in the School's culture to include emphasis on the importance of research, growth of research opportunities for medical students and the value of physician scientists. The Duluth campus is also working on a new research initiative.

**Next Meeting, April 15, 2014 -- 4-5:30 B646 Mayo**