January 7, 2010

MEMORANDUM

TO: Kim A. Wilcox  
   Provost & Vice President Academic Affairs

FROM: Marsha D. Rappley MD  
      Dean, College of Human Medicine

SUBJECT: Proposal for Establishment of New Academic Departments in the College of Human Medicine — Grand Rapids

With this memorandum, I am requesting approval for formation of three new academic departments within the College of Human Medicine, with the primary department office for each located in Grand Rapids. The new departments will allow for curricular expansion of the College of Human Medicine and create additional academic homes for the expanding CHM faculty.

The growth of the program and the faculty brings several opportunities for strengthening and enriching educational and research activities for CHM, including:

- The opportunity to develop new areas of curriculum and offer highly desirable student experiences in disciplines not currently represented in other CHM campuses (e.g., anesthesia).
- The ability to establish additional required experiences and competencies (e.g., emergency medicine) that would not be possible without the addition of qualified faculty.
- The enhancement of graduate medical education (i.e., residency training) throughout our system by the addition of programs in Grand Rapids that we cannot currently offer (e.g., ophthalmology).
- Strengthened subspecialty research, educational and clinical programs that will provide the necessary platform for translational and population-based research, as well as support the supply of well-trained physicians to meet future recruitment needs in all of our communities.
- The opportunity to develop the medical school curriculum for the future based on an integrated four-year basic science, molecular, clinical and research education and experience and a competency model of mastery.

The expansion of the College to include a four-year campus in Grand Rapids builds on our fundamental model of a community-based medical school. The community campuses in Flint, Kalamazoo, Lansing, Saginaw, Traverse City and the Upper...
Peninsula will continue to be critical components for training students in their third and fourth clinical years. Our model in each of these communities depends on a cadre of dedicated individuals who serve as teaching faculty, most holding clinical (or "prefix") appointments in the College. In Grand Rapids, this cadre consists of over 800 physicians who have been teaching CHM students during their clinical years for more than 40 years. The expansion to a four-year program now presents both the need and the opportunity for expansion of the faculty. Some of these community physicians, as well as community scientists and researchers from our partner institutions (Spectrum Health, Saint Mary's Health Care, Van Andel Research Institute) will also help to deliver the curriculum to our students in the preclinical years. The majority of the current faculty members in Grand Rapids are appointed in the "best-fit" departments in East Lansing (e.g., Medicine, Family Medicine, Surgery, etc). The growth of the faculty in Grand Rapids to meet the needs of the new four-year program, and the introduction of faculty representing disciplines new to CHM, challenges us to consider a different organization of this group of community-based faculty. With consideration of all of the above, the College proposes the establishment of three new academic departments as part of the College expansion to Grand Rapids.

1. Anesthesia
2. Emergency Medicine
3. Translational Science and Molecular Medicine (TSMM)

Each proposed department will be led by a department chair. The chair may come from one of the groups that comprise the department or may be recruited from outside.

Description of Departments

1. Anesthesia

Anesthesiology focuses on the body of knowledge uniquely relevant to the patient who requires perioperative care, management of the airway, is unconscious, undergoing invasive procedures, in pain, or critically ill. Elements of this include circulatory and respiratory physiology, the physics and physiology of mechanical ventilation, invasive monitoring techniques, regional anesthesia and pharmacologic agents. The areas of research include molecular medicine (e.g., genetic vulnerability to adverse outcomes of anesthesia agents), subcellular mechanisms of anesthesia (e.g., mitochondria), organ level mechanisms (e.g., liver), pharmacology and engineering (e.g., nanotechnology), clinical and device skills and operations, and population-based health.

Departments of anesthesia typically are responsible for assessment of skills required to manage acute emergencies in the operative setting, the principles of which generalize to emergency resuscitation. Many are also responsible for the development and implementation of highly evolved simulator and standardized patient models of teaching and learning.
2. Emergency Medicine

Emergency medicine focuses on the assessment of urgent and life threatening conditions in the undifferentiated patient. The body of knowledge uniquely relevant to the patient in acute distress includes the relationships of organ systems to one another, the cultural diversity of illness and its expression and presentation, and the integration of systems in the rapid assessment and disposition of the patient and family. Emergency medicine provides a unique opportunity for students to encounter patients who are undiagnosed, a rare occurrence in the modern hospital and clinic setting. It also provides a unique opportunity for research in both the pathophysiology of acute illness and the social and human behavior factors that mediate the process of disease and its treatment. For these reasons, the College of Human Medicine Curriculum Committee approved a required experience in emergency medicine for medical students approximately four years ago. It could not be implemented for lack of faculty and resources. The recently established Division of Emergency Medicine developed from the Program in Emergency Medicine that was started several years ago with a goal of providing input into the education of medical students and residents in training across the College of Human Medicine’s four affiliated emergency medicine graduate education programs. Members of the Program in Emergency Medicine developed the curriculum described above. The Department of Emergency Medicine will incorporate the membership of the Division of Emergency Medicine and provide leadership in creating true networks of education and research across all seven campuses of CHM.

3. Translational Science and Molecular Medicine

The National Institutes of Health (NIH) has implemented the Roadmap Initiative to highlight the need for greater investment in translational research. This doctrine states: "...that to improve human health, scientific discoveries must be translated into practical applications. Such discoveries typically begin at 'the bench' with basic research — in which scientists study disease at a molecular or cellular level — then progress to the clinical level, or the patient's 'bedside'." Scientists are increasingly aware that this bench-to-bedside approach to translational research is a bidirectional process. Basic scientists provide clinicians with new tools for use in patients and for the assessment of their interventions, and clinical researchers make novel observations about the nature and progression of disease that often stimulate additional basic investigations. Translational research has proven to be a powerful process that drives this clinical research engine. However, the NIH also states that "a stronger research infrastructure could strengthen and accelerate this critical part of the clinical research enterprise."

The Department of Translational Science and Molecular Medicine (TSMM) in the College of Human Medicine will, by design, act as a catalyst for enhancing bidirectional opportunities for clinical, basic and translational research. TSMM will provide the infrastructure to conduct preclinical and translational research in collaboration with clinical and basic science faculty throughout MSU and CHM, and will provide educational opportunities to basic and physician scientists committed to patient-oriented research. TSMM will be a broad-based department divided into team-oriented sections based upon medical discipline. Both basic and physician
scientists will comprise the faculty rolls of TSMM. Basic science faculty members recruited specifically to TSMM will have a strong primary focus on projects of medical significance. Likewise, physician-scientist faculty will be expected to investigate the basic mechanisms underlying their clinical observations of disease or dysfunctional states. Bringing together these two often divergent groups of scientists under the auspices of a single department dedicated to the philosophy of "bench-to-bedside" research and training will aid MSU in focusing its resources on improving patient care, educating the next generation of translational scientists, and providing new opportunities for all interested faculty to engage in translational research. The TSMM educational mission will concentrate on specialized coursework and doctoral level mentorship. Course offerings highlighting specific topics centered around TSMM section disciplines will survey basic science, preclinical and translational studies to provide comprehensive instruction highlighting disease/disorder based therapeutic strategies. TSMM plans to create a federally funded, doctoral/postdoctoral level training program (via the NRSA mechanism) to provide fellowship support. This program will supplement graduate and postgraduate translational science training, highlighting specialized coursework and mentored training for PhD and MD/PhD candidates and fellows. As NIH continues to focus on the translational potential of the research it funds in a progressively more competitive fiscal environment, the MSU CHM can concentrate its resources garnering research and training funding supportive of the "roadmap philosophy" by creating the TSMM department as a locus for such research and training activities. This will provide new avenues of collaborative research and prepare students to become the next generation of bench-to-bedside researchers and educators.

**Departmental Organization and Membership**

As described earlier, the majority of the faculty in Grand Rapids will continue to come from the Grand Rapids physician community (excepting the basic science faculty in TSMM). All potential new faculty are encouraged to carefully consider the criteria that differentiate prefix (clinical/adjunct) and non-prefix faculty prior to application for appointment. Meetings and written materials define the criteria, allowing potential new faculty to make an informed decision prior to application. Appointments of title and rank will remain consistent throughout the College. Requests for non-prefix appointments will be evaluated and recommended according to university policy and criteria, and those awarded a non-prefix appointment will be expected to work toward promotion. Reappointment and promotion criteria also remain consistent across the College, regardless of employment status. Criteria unique or specialized to the Grand Rapids faculty will not be created. Joint appointment across two departments is anticipated and will be accommodated (as it currently is in East Lansing).

**Governance**

The College Advisory Council has established that each new department will have the same elected and appointed representation in the college's committee system as all current departments have, thus strengthening the premise of one college with one curriculum, governed by the same bylaws.
All curricular matters will be decided and governed by the college's curriculum committee.

Other issues of academic governance of the proposed departments in Grand Rapids will be consistent with longstanding governance of CHM. Faculty holding non-prefix appointments may vote and participate in department, college, and university activities as defined in the faculty, college, and department bylaws. Those with prefix (clinical/adjunct) appointments will vote on and participate in activities only as defined by the department chair and the department bylaws.

**Impact on Faculty**

Besides the benefits to Michigan State University that will result from the partnership to expand the College of Human Medicine to Grand Rapids, the model being proposed will have the following net effects on current faculty:

- More effective and meaningful organization of current Grand Rapids faculty into departments created around the way we deliver care to patients.
- Increase in critical mass of faculty overall, but with expectations that the relative percentages of prefix (clinical/adjunct) and non-prefix faculty throughout the college will not significantly change.
- New opportunities for research and other interdisciplinary activities with the addition of faculty in disciplines new to CHM and MSU.
- Moderate increase in the number of non-prefix faculty per newly adopted college criteria accompanied by enhanced academic rigor for the non-prefix faculty cadre with the commitment to work toward promotion.
- Increased representation on the College Advisory Council, both through election and appointment by the Dean, thus helping to facilitate appropriate balance (tenure vs. non-tenure, diversity, etc).
- Increased numbers of faculty available to serve on other college committees (consistent with established principles regarding elections).

**Financial Considerations**

The financial model for the Grand Rapids expansion provides for diverse sources of revenue, including a unique arrangement with West Michigan physician groups. As part of the agreements with our partner institutions that have made this expansion possible, MSU and CHM made a commitment to work collaboratively within West Michigan physician groups, thus foregoing the development of a competing clinical practice of our own in Grand Rapids. In return, CHM has secured commitment to financial support of the College (hereafter referred to as “college support”) from the physician groups in lieu of the financial support that is typically provided by the faculty group practice (e.g., the MSU HealthTeam). West Michigan physician groups have been invited to contract with CHM to the mutual benefit of both parties. The various physician groups who contract with MSU will come together to form the proposed clinical departments around either specific disciplines or service lines. Qualified and interested physicians from the groups that contract with MSU are then eligible to apply for appointment as CHM faculty (although many already have MSU appointments). Thus each clinical department will be populated by members of various groups from across the community rather than constituted solely by a
single group. Each group that contracts with CHM provides a college support fee based upon the number of FTE (full time equivalent) physicians it has. Paralleling the process in East Lansing, 60 percent of this fee will be returned to the departments to support department infrastructure and operations. To date, 21 physician groups representing over 900 physicians have signed contracts with CHM. Initial college support fee payments from the groups commenced in fall, 2008.

Consultation with College Advisory Council

On December 21, 2009, the Dean presented this proposal for the establishment of three new departments to facilitate the expansion of the College in Grand Rapids to the CHM College Advisory Council. The CAC unanimously approved the proposal.

Dean's Recommendation and Request for Approval

In consideration of the information provided in this document regarding the expansion of the College of Human Medicine to Grand Rapids, particularly the potential benefits to our students, faculty and communities, and with the endorsement of the faculty as represented by the College Advisory Council, I formally request the establishment of the following new departments within the MSU College of Human Medicine:

1. Anesthesia
2. Emergency Medicine
3. Translational Science and Molecular Medicine
College of Human Medicine
Request for Establishment of New Academic Departments
Supporting Documentation

1. MSU Board of Trustees (BOT) action April 13, 2006
   The BOT voted unanimously to authorize “the administration to implement the expansion of the MSU College of Human Medicine to Grand Rapids, Michigan, through the creation of the MSU West Michigan Medical School, and to take all necessary and appropriate related actions.” The Board’s action was based upon the ideology, principles and plans presented by the stakeholder’s group (MSU, Spectrum Health, St. Mary’s Health Care, Van Andel Institute, Grand Valley State University, Grand Action and The Right Place, Inc.) in the 2005 Proof of Concept document. Prior to the BOT approval, the Proof of Concept document was also endorsed by the MSU Faculty Oversight Assessment Committee created by a resolution of the Academic Senate and appointed by the President in June, 2004. The Faculty Oversight Committee was directly involved in all details of planning for the Grand Rapids expansion, as requested by academic governance. Further, the College Advisory Council and Executive Committee of the College of Human Medicine unanimously endorsed the concept in 2005. In late 2005, the Faculty Oversight Committee was disbanded and its function was transferred back to the College Advisory Committee. Having obtained approvals from the appropriate and significant approval bodies, the College has determinedly and successfully moved forward with the implementation plan for the College of Human Medicine – Grand Rapids, as directed by the BOT in 2006.

2. Special Considerations Regarding Community-Based Faculty
   The Proof of Concept endorsed by the BOT recognized the necessity for, and the College’s dependence upon, local community faculty with the following statement: “The MSU West Michigan Medical School cannot succeed without the support of the local physician community and will draw from the local community to meet the instructional needs.” We also remain mindful that inherent in our status as a community-based medical school of a land grant institution is the necessity that our teaching faculty be tied to their communities as well as to MSU. This becomes even more crucial in the current era where several other Michigan universities, emboldened by the success of MSU’s community-based model of medical education, have expressed interest in founding their own medical schools. This interest has heightened our awareness of the fragility of the community campuses if the faculty is not firmly embedded in the fabric of the community, while also being embedded in an MSU identity that recognizes them as a respected and valuable asset. In short, CHM needs the Grand Rapids physician/scientist community in order to help deliver the curriculum to our students. Further, the philanthropic contributions from our Grand Rapids partners that have made possible this expansion would not have been available had MSU and CHM not committed to embracing the community in full partnership. The establishment of new departments based in Grand Rapids furthers this partnership while benefitting the College and the University.
3. **Proof of Concept Statement Regarding Governance**

Issues of governance for the four-year college in Grand Rapids were defined in the Proof of Concept (part IV.D.) and approved by the BOT: "The Michigan State University Board of Trustees is the ultimate governing body of the MSU West Michigan medical school." President Simon's remarks to the BOT when the Proof of Concept was approved provide elaboration: "The West Michigan medical school is responsible to the Dean of the College of Human Medicine through the Provost to the Board of Trustees, in the normal manner of any academic program. The collaboration within the community makes it a special enterprise. The unique partnerships will mutually strengthen the research programs, the clinical programs of the community and the medical school. (But) the medical school, the education of physicians, is the responsibility of MSU." Additionally, discussion of the vision articulated in the Proof of Concept includes the following statement: "The Dean of the Michigan State University College of Human Medicine is responsible for the conduct and the quality of the educational program.... The (West Michigan) faculty will demonstrate excellence and achievements commensurate with academic rank. Faculty members must be committed to being effective teachers and have a commitment to continuing scholarly and research productivity."

4. **Benefits to MSU**

In addition to the benefits to current faculty that are described in the memorandum, benefits to Michigan State University that will result from the partnership to expand the College of Human Medicine to Grand Rapids have been extolled by the Board of Trustees, President Simon, and various other influential people and groups in numerous press releases and publications. These benefits will also extend by definition to the MSU faculty. To highlight just a few, the partnership that is enabling this expansion will allow us to:

- Advance MSU's goal of increasing NIH funding to $100 million.
- Build on the strength of basic science research in East Lansing by creating the translational arm to a significant population base in Grand Rapids (for example, cell signaling in cancer research, hypertension and women's reproductive health).
- More successfully recruit nationally-respected and NIH-funded faculty as already exemplified by the recruitment of Dr. Richard Leach as Chair of the Department of Obstetrics, Gynecology and Reproductive Biology; Dr. Marc Basson as Chair of the Department of Surgery; and Dr. Jack Lipton and the high profile group of nationally-prominent neuroscience researchers.
- Serve as an exemplary medical school for the state of Michigan, offering an integrated four-year basic science, clinical and research education.
- Build research and commercialization to enhance economic development throughout Michigan in line with our land-grant mission.
- Continue to sustain and build on our community-based model.
- Improve medical care across Michigan by expediting the translation of cutting-edge medical research to patients.