HEALTH
UNIVERSITY OF UTAH

Office of Medical Education
Curriculum

March 13, 2018

Dear colleagues:

I am writing to strongly support the proposed Master's of Science in Medical Science (MSMS) degree program.

Currently, at the University of Utah School of Medicine, if a medical student successfully completes part of our rigorous curriculum, but doesn't finish all four years, s/he receives no degree. Successful completion of even just one year of our medical school program indicates that a student has completed 45 course credits and developed significant knowledge and skills in human biology, medical terminology, physical examination and medical humanities. The first year ends with both a clinical exam and a comprehensive knowledge exam. Therefore, any student who successfully completes the entire first year curriculum has demonstrated achievement of a large number of learning objectives (detailed in the proposal) that surpass the minimal expectations for a Master's degree.

Additionally, many universities in our region and across the country offer a similar terminal Master's degree for completion of at least one year of medical school course work. Comparable programs can be found at Stanford, University of Colorado, University of Michigan, Harvard, University of Southern California, and others.

Finally, this proposed new MSMS degree program requires no significant new monies to offer. No new faculty, staff or resources are required. A small number of students each year will likely benefit by receiving the proposed MSMS degree.

In conclusion, I would like to offer my full support for this proposal because it officially recognizes accomplishments of students who are either unable or choose not to complete medical school.

Sincerely,

Sara Lamb, MD
Associate Dean of Curriculum

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School of Medicine
30 North 1900 East
Salt Lake City, Utah 84132-2101
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HEALTH
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June 13, 2018

Thomas G. Richmond, Ph.D.
President of Executive Committee Academic Senate
315 South 1400 East Room 2020
Salt Lake City, UT 84112

Dear Dr. Richmond,

The School of Medicine is requesting a Master's of Science in Medical Science (MSMS) degree program.

Currently, at the University of Utah School of Medicine, if a medical student successfully completes part of the curriculum, but does not finish all four years, they do not receive a degree. This proposal will allow a student who does not complete all four years of medicals school to have a MSMS degree. Many universities across the country offer a similar terminal Master's degree for completion of at least one year of medical school course work. With this proposal, no new faculty, staff or resources are required. A small number of students each year will likely benefit by receiving the proposed MSMS degree.

The School of Medicine Executive Committee and College Council reviewed and voted on this proposal. The vote results were as follows:

- Master's of Science in Medical Science degree – 23 approvals/0 disapprovals/0 abstentions

I am supportive of creating this degree program.

Sincerely,

A. Lorris Betz, M.D., Ph.D.
Interim
CEO, University of Utah Health
Executive Dean, University of Utah School of Medicine
Senior Vice President for Health Sciences

ALB/png

HEALTH
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Spencer S. Eccles Health Sciences Library
10 North 1900 East, Bldg 589
Salt Lake City, Utah 84112
http://library.med.utah.edu

Janet E. Lindsley, PhD
Professor of Biochemistry
Assistant Dean of Curriculum
Adjunct Professor of Nutrition and Integrative Physiology
Department Biochemistry, School of Medicine

June 29, 2018

Dear Janet,

The Spencer S. Eccles Health Sciences Library stands firmly in support of the proposal for the new Masters of Science in Medical Science degree program. This option for medical students who are unable to complete the MD will be a testament to the amount of learning in which these students engaged.

No additional library resources will be needed for this degree. The students participating in this degree option will have the resources available to all medical students, including thousands of electronic books, journals, and databases available through library subscriptions, including medical science-specific resources such as ClinicalKey, UpToDate, and MICROMEDEX. Our faculty are available to teach within the medical school curriculum, and we offer customized consultations to students for point-of-need learning.

We are happy to support this innovative endeavor to recognize the efforts of our students.

Sincerely,

Melissa Rethlefsen

Melissa L. Rethlefsen, MSLS, AHIP
Interim Executive Director & Librarian, Spencer S. Eccles Health Sciences Library
Director, MidContinental Region & National Training Office, National Network of Libraries of Medicine
Section Director, Systematic Review Core, Center for Clinical and Translational Science

MASTER'S OF MEDICAL SCIENCE DEGREE PROGRAM PROPOSAL

JANET LINDSLEY, PHD

CURRENT SITUATION

- Approx. 1-3 students each year leave medical school having successfully completed at least one year, but not all 4.
- They typically leave with:
  - Having gained significant knowledge and skills
  - Significant debt
  - No degree

PROPOSAL:

- Create an “off-ramp” Master’s Degree in Medical Science
  - Terminal degree only
- Requirements:
  - Successful completion of MS1 curriculum (including comprehensive exam)
  - Adherence to the medical student code of ethics

MS1 CURRICULUM OVERVIEW

- 45 credits
  - 34 in Foundational sciences (Foundations of Medicine; Molecules, Cells & Cancer; Host & Defense)
  - 8 in Clinical skills & Medical Decision Making
  - 2 in medical humanities (Layers of Medicine)
  - 1 Comprehensive MS1 assessment

MS1 CURRICULUM OVERVIEW- COMPETENCIES

1. Apply concepts and knowledge of anatomy, biochemistry, embryology, evidence based medicine, genetics, histology, nutrition, pharmacology and physiology to clinical problem solving.
2. Effectively communicate using correct medical terminology about anatomical features and patho-physiological processes.
3. Demonstrate a commitment to carrying out professional responsibilities by being a respectful and reliable team member who can give effective peer feedback.
4. Obtain a complete patient history and perform a focused physical examination in an organized and systematic manner, and effectively document each.
5. Develop a basic differential diagnosis using information obtained in the History and Physical Examination.
6. Demonstrate effective diagnostic and therapeutic reasoning skills relating to hematologic and cancer pathologies.
7. Describe the basic biology of medically important pathogenic micro-organisms and identify clinical signs and symptoms of common infections, and the immunologic response to these infections and therapies.
8. Perform a differential diagnosis for common infections and immune system disorders.
9. Identify, explain and interpret laboratory and radiographic diagnostic tests used for common hematologic, oncologic, infectious, inflammatory and immune systems disorders.
10. Describe the principles of anti-thrombolytic, anti-cancer, anti-inflammatory, anti-pyretic, anti-bacterial, anti-viral, anti-parasitic and anti-fungal pharmacotherapy, indicate mechanisms of action and appropriate usage, and identify potential toxicities.
11. Critically reflect on the experience of medicine, as a patient, as a learner, as a provider, and as a teacher using different approaches and practices
12. Take responsibility for how one's personal and professional development affects knowledge acquisition and practice of medicine.
13. Integrate multiple viewpoints of medicine including cultural, gender specific, socioeconomic, religious and ethical.

MASTER'S DEGREE COMMITTEE

- Associate Dean of Student Affairs, or designee
- Associate Dean of Curriculum, or designee
- Assistant Dean of Curriculum-Foundational Sciences, or designee

NEW COSTS & RESOURCES REQUIRED

- None

MSMS PROPOSAL SUMMARY

- Ideally no student would get this degree
- However, there are typically ~1-3 students/year who cannot or choose to not complete the MD degree
- The MSMS degree has essentially no costs and could benefit a small number of students