

**TOPIC: PROPOSAL TO OFFER A MASTER OF SCIENCE
 DEGREE IN EPIDEMIOLOGY AT THE UNIVERSITY OF
 COLORADO DENVER**

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I. SUMMARY

The Board of Regents of the University of Colorado has submitted a proposal for a Master of Science Degree in Epidemiology at the University of Colorado Denver. The M.S. in Epidemiology, a new degree program in the Colorado School of Public Health, is designed to train students in the scientific foundation of epidemiology and prepare them to address complex health issues and discover new knowledge to improve the health and well-being of the citizens of Colorado and the Rocky Mountain region.¹

Department of Higher Education staff supports the proposed M.S. in Epidemiology.

II. BACKGROUND

The following is summarized from the University of Colorado Denver's proposal for the Master of Science degree in Epidemiology:

The Colorado School of Public Health at the University of Colorado Denver proposes offering a Master of Science in Epidemiology degree beginning in academic year 2010-2011. The Colorado School of Public Health (CSPH) opened in July 2008 and is the only School of Public Health in the Rocky Mountain region. The school offers both professional, practice-based degrees (M.P.H., Dr. P.H.) and academic degrees (M.S., Ph.D.), and is dedicated to training the public health workers in Colorado and the surrounding states. The vision of the school is to inspire academicians, practitioners and students to work collaboratively to assure that all people and communities are healthy and their environments sustainable. The M.S. in Epidemiology degree is an integral part of the CSPH plan to achieve this vision and to become accredited in 2010.

ROLE AND MISSION SUPPORT:

The M.S. in Epidemiology degree is congruent with the statutory mission statement for the University of Colorado Health Sciences Center campus

¹ New Degree Proposal: Master of Science in Epidemiology, p2.

(now AMC) to “offer specialized baccalaureate, first-professional, masters, and doctoral degree programs in health-related disciplines and professions.”

EVIDENCE OF STUDENT DEMAND

The target market for the M.S. in Epidemiology degree is students with a bachelor-level education in biology, public health, analytical sciences or other health-related field, and an interest in a research career in epidemiology. Additionally, prospective students may include professionals with degrees in medicine, veterinary medicine, nursing, and other fields. The program will recruit students who seek to develop in-depth knowledge of epidemiology and expand their skills in research, data analysis and study evaluation.

The national shortage of public health professionals is well documented in reports from the Institute of Medicine², and the Association of Schools of Public Health (ASPH)³. It is important that Colorado train scientists to work in public health in order to retain them for the state’s public health workforce. Students who leave the state for their education often do not return after completing the degree, contributing to the shortage of trained professionals in Colorado and the Rocky Mountain region⁴.

The Colorado School of Public Health Initiative conducted a survey of Colorado’s public health workforce in the spring of 2007 to gather information on student interest in public health programs and their perspectives on the new school. Five percent of total respondents and 22% of respondents interested in an M.S. degree indicated an interest in personally pursuing an M.S. in Epidemiology.

Enrollment in the Master of Science in Epidemiology program is projected to be 3-5 new students per year for the first five years. Enrollment projections are provided in Appendix A.

The annual national pool of potential applicants is approximately 678 for the M.S. in Epidemiology degree, based on an estimate derived from 2007 application and enrollment data collected by the ASPH⁵. Epidemiology was the program area receiving the most applications for public health degrees (6784; 21.4% of all

² Institute of Medicine. 2003. *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century*. K Gebbie, L Rosenstock, and LM Hernandez, Eds. National Academies Press, Washington, DC, 290 pp.

³ Association of Schools of Public Health. *The American Public Health Workforce Shortage: Left Unchecked, Will We Be Protected?* Issue Brief, September 2006, APHA Washington, DC. 12 pp.

⁴ Colorado Department of Public Health and the Environment. *Colorado Turning Point Initiative*. 2001. J. Berman, ed. 18 pp.

⁵ Association of Schools of Public Health. *2007 Annual Data Report*. Fall 2007. ASPH Washington, D.C. 73 pp.

applications) in 2007. Approximately 10% of these applications were for a master's degree. In addition to this national applicant pool, there were a number of local respondents to the Colorado workforce survey who indicated an interest in pursuing this M.S. degree now.

While the M.S. program will attract primarily traditional students, the program will allow working students flexibility in completing the program. The CSPH currently has three of the required courses online (Introduction to Epidemiology, Applied Biostatistics and Foundations of Public Health) and is planning to have several more available in academic year 2009-10. In addition, classes delivered in a condensed timeframe during the summer allow students to commit a shorter block of time to complete a course. The school as a whole is moving its professional programs to a distance format to accommodate students in the region who do not live along the Front Range. This will give working students in the M.S. in Epidemiology program more options for completing the didactic requirements off-site.

DUPLICATION/SIMILAR PROGRAMS IN THE STATE

This degree is not currently offered in Colorado or the surrounding states and potential students in the workforce would now have the opportunity to pursue a masters-level graduate degree in epidemiology to enhance their public health credentials and skills. There is an increasing demand for individuals with this training locally, nationally, and internationally. Locally, we anticipate this program to fill a critical need for qualified staff scientists at the UC Denver Anschutz Medical Campus and within the expanding biosciences industry along the Front Range. The 2007 Colorado public health workforce survey mentioned above demonstrated a local demand for the proposed degree program and we anticipate receiving applications from the public health workforce in neighboring states that also do not have access to this degree within their universities.

III. STAFF ANALYSIS

The Department staff have reviewed this proposed program to ensure that it meets the State's performance measures outlined in C.R.S. 23-1-107. The program meets all performance measures.

IV. STAFF RECOMMENDATION

Staff recommends that the Commission approve the Master of Science degree in Epidemiology to be offered by the Colorado School of Public Health at the University of Colorado Denver.

V. STATUTORY AUTHORITY

C.R.S. 23-1-107

VI. ACCOMPANYING MATERIALS

The program proposal materials are attached.