

## Training Future Physicians as Public Health Leaders: Jefferson's MD/MPH Graduate Education Program

The Obama Administration and leaders of the 111th Congress have made health care reform a priority—specifically emphasizing prevention and population health as a way to improve Americans' health and reduce costs over the long term. A key component is to address the growing need for appropriately trained health care providers working in our public health system.

There are a number of health care challenges that require physicians who are trained to treat individual patients within a larger context of family, community and society.<sup>1,2</sup> These include infectious diseases; the significant increase in chronic disease due to the aging of our population; the potential detrimental health impact of climate change; and the continued racial, ethnic, and cultural disparities in health care access in our increasingly diverse society. A recent report by the Bureau of Labor Statistics estimated that the U.S. needs 20,000 physicians in public health, with an annual replacement need of 1,350.<sup>3</sup>

The appeal to improve public health education for physicians is not new, but instead has grown steadily over the years. Since 2000, several reports have been issued by national organizations such as the Institute of Medicine on the need and strategies to improve population health education in medical curricula.<sup>4,5</sup> The Association of American Medical Colleges (AAMC) has expressed continued interest in public health education for physicians and dedicated a recent issue of its journal, *Academic Medicine*, entirely to Population Health Education.<sup>6</sup> Together, these reports have called for medical students' education to include epidemiology, biostatistics, disease prevention/health promotion, health care

organization and management, environmental health, community-based participatory research and several other educational topics that are common to a masters degree in public health (MPH).

In fall 2008 the AAMC, in cooperation with the Centers for Disease Control and Prevention (CDC), developed cooperative agreements with medical schools to develop Regional Medicine-Public Health Education Centers (RMPHECs) with the goal of improving the integration of population health into medical education curricula. The development of an initial draft set of population health competencies for medical students is currently under review.<sup>7</sup> The competencies will be directly linked to long-standing public health competencies.

Thomas Jefferson University (TJU) recognizes the need to incorporate population health principles and education within its medical educational program to help meet the growing workforce development needs. Medical students receive basic education on population and public health, and many conduct clerkships and/or volunteer their time in community-based health settings as part of their educational experience.

TJU has provided a master's level public health program since 2002 and in the current academic year, initiated a joint five-year MD/MPH degree. The joint MD/MPH program augments medical education focused on quality and effective clinical practice with evidenced-based public health and prevention principles, theories, skills, and practice.

Medical students participating in this joint degree program will take a full year off from their medical education, typically after year two

or year three, for an intensive year in Jefferson's nationally-accredited MPH program. During that year they complete coursework and a community-based clerkship experience, returning to medical school the following year. The MPH capstone research project is usually completed during the subsequent year of medical school. Medical students can receive up to 9 transfer credits for the 45-credit MPH program based on their Introduction to Clinical Medicine two-year course, which includes much population health-related instruction, and their selection of population health elective experiences.

The academic goal of the Jefferson School of Population Health is to prepare leaders to develop, implement, and evaluate health policies and systems that improve the health of populations. Graduates of the program will be well-prepared to serve as leaders in a variety of settings including government, insurance, professional organizations, academic institutions, community-based organizations, as well as clinical practice both in the U.S. and globally. ■

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### REFERENCES

1. Institute of Medicine. *Unequal Treatment: Confronting Racial and Disparities in Health Care*. Washington, DC: National Academies Press; 2002.
2. Shortell, SM, Swartzberg, J. The Physician as public health professional in the 21st century. *JAMA* 2008; 300(24):2916-2918.
3. Bureau of Labor Statistics. *Physician Workforce Estimates*, Washington, DC: 2006
4. Institute of Medicine. *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21<sup>st</sup> Century*. Washington, DC: National Academies Press; 2003.
5. Institute of Medicine. *Training Physicians for Public Health Careers*. Washington, DC: National Academies Press; 2007.
6. Population Health Education. *Acad Med*. 2008; 83(4).
7. Association of American Medical Colleges. Regional Medicine-Public Health Education Centers draft population health competencies for medical students circulated for comment. [http://www.aamc.org/members/cdc/rmphec/rmphec\\_detail.htm](http://www.aamc.org/members/cdc/rmphec/rmphec_detail.htm). Accessed February 20, 2009.