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February 7, 2002

Mr. Arthur K. Wu  
Staff Director, Subcommittee on Oversight and Investigations  
Room 337A, Cannon House Office Building  
Washington, D.C. 20515

Reference: U.S. House of Representatives Letter from Representative Steve Buyer, dated January 10, 2002, Subject: Subcommittee on Oversight and Investigations' Hearing on "Terror on the Home Front: Are We Medically Prepared"

Dear Mr. Wu:

Thank you for the opportunity to testify before the subcommittee on November 14, 2001. I am pleased to provide further information and recommendations from the Uniformed Services University of the Health Sciences (USUHS). USUHS is the only federally owned academic health center to include a school of medicine. As such, your questions about education and training regarding "terror on the home front" and medical preparedness are important to us. The referenced letter dated January 10, 2002, poses two serious questions. In concert with my colleagues and fellow faculty members we prepared the following answers:

**1. What recommendations would you make to ensure that in the future our nation's medical community is prepared to diagnose and treat victims when weapons of mass destruction (WMD) have been used?**

Our answer to this important question mirrors the testimony I provided for the subcommittee on November 14, 2001. As you know, American medical communities have developed independent national oversight organizations to establish training and accreditation standards for medical training and education. The Liaison Committee for Medical Education accredits training for the M.D. degree. The Accreditation Council for Graduate Medical Education sets standards for knowledge, attitudes, and skills for graduate medical education programs. The attendant Residency Review Committees and certification boards (such as the American Board of Internal Medicine, the American Board of Surgery, etc.) ensure entrance levels and maintenance levels of competency for fully trained physicians. The Joint Commission on Accreditation of Healthcare Organizations establishes standards for the operation of hospitals and clinics, as well as standards for credentialing health care practitioners. Sensitive to recent events,

each of these organizations has begun discussing and planning for the inclusion of requirements for medical responses to the use of WMD in their standards for training, graduation, and certification. We believe that each organization named above would welcome encouragement, guidance, and perhaps access to funding to ensure that medical students, graduate physicians in specialty training, and practicing physicians are properly prepared. Their accreditation/certification/credentialing processes would ensure that students and practitioners are prepared to serve their communities with requisite diagnostic and therapeutic skills regarding WMD. Congressional involvement would ensure that students and practitioners were properly prepared to serve their communities with proper diagnostic and therapeutic skills regarding WMD. Congressional interest and support would hasten the timely implementation of these training modifications.

**2. Specifically, which segments of your training program do you feel are transferable to medical education programs across the country?**

USUHS has a required course in contingency medicine including WMD which is taught by our Department of Military and Emergency Medicine (the only such department in an American medical school). Our first-year medical students utilize an extensive syllabus, prepared by our faculty, on biological, chemical, and nuclear threats. At the conclusion of the first year of medical school, each USUHS medical student must utilize his/her classroom and laboratory training in a week-long field exercise, Operation Kerkesner, at the Marine Corps Base in Quantico, Virginia. Our fourth-year students, during their required course in military contingency medicine, must also utilize their WMD training, including gas mask, protective clothing, and decontamination in a week-long field exercise, Operation Bushmaster, at Camp Bullis, Texas. Most of the curriculum for these courses could readily be shared with other interested medical schools. Expert consultation is also available from faculty members to assist other schools in planning and implementing such a curriculum.

Our Department of Pathology offers courses in WMD which, in addition to the courses noted above, target graduate physicians, other healthcare providers, and first responders. These courses exceed the level of training required by medical students. They include information on biological, chemical, and nuclear weapons and high energy explosives. Instruction includes the medical features and medical countermeasures for live biologic agents, organic and inorganic products, radiation, and other devices of potential use in warfare, terrorism, or criminal activities. These courses review the diplomatic, political, defense and intelligence implications of WMD for humans, plants, and animals. Reading materials and course lectures detail mechanisms for the spread of microbes, toxins, routes of host entry, the pathophysiology of host reactions, and the specific cellular, biochemical and molecular pathology for target organs. A critical

component of these courses is instruction in laboratory diagnosis (including anatomic and clinical aspects of detection), epidemiologic, and forensic investigation of a biowarfare or bioterrorism event. CDR Aileen Marty, MC, USN, the course director, reports that these materials are easily adapted for use by undergraduates in medical schools.

Another important focus for our medical students, resident physicians, and military physicians in medical practice are courses prepared and taught by our Department of Psychiatry's Center for the Study of Traumatic Stress. The Center is recognized nationally and internationally for its leadership in understanding the psychological, behavioral and social consequences of the use of WMD. Faculty members have conducted much original research and are well published and widely respected as teachers and consultants. Their expertise is commonly sought for programs on WMD for medical students, resident physicians in training, military and civilian medical communities, and the media. The Center recently convened two consensus conferences on WMD, including a July 2000 conference titled: *"Planning for bioterrorism: behavioral and mental health responses to Weapons of Mass Destruction"* and an October 2001 conference titled: *"Planning for biological events: responding to terrorism and infectious disease outbreaks"*. Both conferences were attended by nationally and internationally recognized experts. Published conference proceedings will assist research and will be shared with medical communities in their WMD planning. Additionally resourced, the Center could develop more training materials to be incorporated into the education and training of many medical disciplines and allied health professionals.

USUHS has developed an innovative education center for military, medical, and surgical simulations (National Capital Consortium Simulation Center). The Center creatively uses simulated and standardized patients, computerized manikins, endoscopy, and surgical simulation devices, and a variety of computers to instruct and validate training of medical students, resident physicians, and staff trainers. Scenarios to train students and young physicians in the response to WMD have also been prepared and can be shared. Indeed, on May 2, 2002, the University's Division of Military Internal Medicine, Department of Medicine, will be presenting a skills workshop on WMD at the national meeting of the American Association for Internal Medicine.

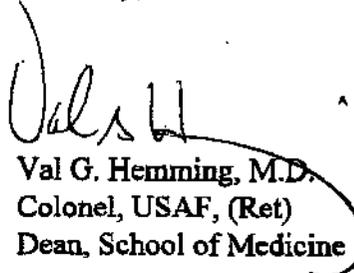
Recently, USUHS and its expert faculty partnered with eGlobal Medicine, Henry M. Jackson Foundation for the Advancement of Military Medicine, and Lippincott, Williams and Wilkins to develop an online course on nuclear, biological, and chemical warfare and terrorism for healthcare providers. Ten modules developed for the course titled **Medical Response to Weapons of Mass**

**Destruction include:** anthrax, nerve agents, smallpox, combined radiation injury, mustard, plague, cyanide, incapacitating agents, botulism and Venezuelan equine encephalitis. The web-based course is formatted for anytime/anywhere access for healthcare providers. The course provides an outstanding background for students, resident physicians and practicing physicians seeking to be knowledgeable and competent in this complex area.

In summary, the F. Edward Hébert School of Medicine has many teaching materials prepared for our military medical students and for military resident physicians being trained through the National Capital Consortium, that could be expeditiously exported to other medical schools or other programs training allied health professionals. Furthermore, there is broad expertise throughout our faculty for consultation to external programs or to accreditation groups seeking to incorporate these WMD-related topics and practice skills into their training programs.

Thank you for permitting us to share an overview of our programs. We stand ready to assist however and wherever we can to ensure the nation's health professionals are ready should another WMD event occur.

Sincerely,



Val G. Hemming, M.D.  
Colonel, USAF, (Ret)  
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cc:

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