

FOR IMMEDIATE RELEASE

Clinical Microbiology Laboratories, Cornerstone of Infection Control, Face Significant Challenges

Washington, DC –May 23, 2008 – Clinical microbiology laboratories provide services that are essential to the well-being of our population—analyzing specimens collected from sick patients and gathering data that enable the correct diagnosis to be made for victims of infectious diseases. They are the sentinels for bioterrorism events and natural outbreaks of infection which threaten the public health of the communities they serve. These laboratories provide crucial information that guides the selection of the optimum antimicrobial therapy for patients with treatable infections. They are the first to recognize the emergence of resistance to frequently used antimicrobial agents.

Despite the pivotal role of clinical microbiology laboratories in our healthcare system, these laboratories are facing many challenges, both scientific and administrative. Chief among these is the difficulty in translating promising research achievements into commercially available or tangible improvements in the practice of clinical microbiology. As an example, the polymerase chain reaction (PCR) has been widely used in research for over 20 years, yet many laboratories at smaller hospitals have yet to offer any PCR-based diagnostic tests. Other problems concern deficiencies in communication among laboratories, continuing shortages of qualified personnel, and regulatory and reimbursement issues.

To address the challenges faced by these laboratories, a colloquium was convened of experts in clinical microbiology, infectious diseases, pathology, diagnostic test development, basic microbiological research, or healthcare administration. They met in September 2006 to discuss the current concerns of clinical microbiologists, future directions in which the field is headed, and solutions for the anxieties of today as well as the problems likely to be encountered in the future.

The findings of the colloquium have been released in an American College of Microbiology report entitled “*Clinical Microbiology in the 21st Century.*” “Clinical microbiology laboratories are

confronted with a myriad of obstacles that must be overcome before we reach a crisis situation. This report provides a description of these barriers and proposes steps that should be taken to ensure that the health of the public is not deleteriously affected,” said Dr. Joseph M. Campos of Children’s National Medical Center, who chaired the colloquium.

In addition to the lag in implementing technological advances, communication of information from clinical microbiology laboratories to local, state, and national public health authorities is less effective than it should be which can place the population at unnecessary risk. “Efficient and error-free communication between clinical microbiology laboratories and public health agencies is paramount to ensuring the public’s well-being. It is critical that a standardized approach to inter-laboratory communication be developed,” commented Dr. J. Michael Miller of the Centers for Disease Control and Prevention and Dean of the American College of Microbiology.

The present shortage of qualified clinical microbiology laboratory workers will worsen in the coming years due to the aging of the existing workforce and the alarming shortfall of replacement workers currently enrolled in college training programs and technical schools. Incentives for young people to choose a laboratory profession as a career path are largely absent. Salary scales have fallen well behind those for workers in other healthcare-related specialties and those in the business and legal professions. Because laboratory workers are usually behind the scenes in health care, their achievements in diagnostic medicine are not often appreciated by the public and they do not receive the recognition and respect they deserve as key members of the healthcare team. The challenge and excitement of clinical microbiology must be better marketed so that a career in this field becomes the first choice of highly achieving students instead of a consolation prize for those unsuccessful in entering other fields of endeavor.

A full copy of the report and further recommendations can be found on the College website at www.asm.org/ext.

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The American College of Microbiology is a component of the American Society of Microbiology. The mission of the College is to provide leadership to promote the high quality and ethical practice of the microbiology and immunology professions for the benefit of humans, animals, and the environment. For more information about the American Society for Microbiology, contact Barbara Hyde at 202-942-9206 or visit www.asm.org.