



## **Building, Developing, and Maintaining the Biomedical and Health Informatics Workforce**

### **Introduction**

The health sector is engaged in a wide-scale implementation of interoperable health and communications technology and information systems to support clinical care and health information exchange. There is a critical need to increase and broaden the pool of workers who can help organizations maximize the effectiveness of their investment in technology and accelerate the investments' impact on safety, quality, effectiveness, and efficiency of care delivery. Strengthening the breadth and depth of the biomedical and health informatics workforce is a key component in the transformation of the American health care system through the deployment and use of health information (HIT). AMIA is committed to the education and training of practicing health professionals and a new generation of informaticians to lead this transformation.

### **Challenge**

The goal of informaticians is to integrate multidisciplinary knowledge into systems that can assure safe, timely, efficient, equitable, patient-centered, and effective care for individuals and populations. Biomedical and health informaticians include experts in the use of information that is derived from basic biomedical research (biomedical informatics). Others apply their skills to the clinical care of patients (clinical informatics) and help protect the public through a wide range of public health activities (population and public health informatics). Informaticians' knowledge base spans a wide range of disciplines including the health sciences, organizational behavior, and cognitive science, as well as computer and communications technology, implementation research, and evaluation. They practice in a wide variety of clinical, academic, government, corporate, and other settings.

Formal training helps prepare individuals for careers in areas that emphasize the application of information technology to health care, and basic biological and clinical research, as well as research and scholarly careers that focus on the application of information technology to health systems. Biomedical and health informaticians may be health professionals with training in informational and computational methods, or others whose work involves biomedical applications of information technology. Demand is high and growing for individuals with training and skills in biomedical and health informatics who can become independent investigators working on faculties in informatics, health services management, medicine, nursing, and other health professions, or in commercial and public research institutions.

### **About AMIA**

**AMIA** is the center of action for more than 4,000 health care professionals, informatics researchers and thought leaders in biomedicine, health care and science. AMIA is an unbiased, authoritative source within the informatics community and the health care industry. AMIA and its members are transforming health care through trusted science, education and practice in biomedical and health informatics.

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