Workforce. A trained and competent workforce of health professionals and biomedical researchers is key to advancing the knowledge, discovery, and innovation needed to improve the quality and safety of health care, improve population health, and reduce costs. Many new clinical research methods such as quality improvement research and implementation research, and software usability testing, require specialized training in informatics and research methods. The broader scientific community faces several challenges accessing, organizing, analyzing, and integrating datasets that are increasingly larger, more complex, and more numerous (“big data”). Utilizing diverse data sets that include imaging, phenotypic, molecular, exposure, surveillance, health, and many other types of biomedical, behavioral and clinical data\(^1\) requires specialized training. In addition to the training programs supported by the National Library of Medicine (NLM)\(^2,3\), the National Institutes of Health (NIH)\(^4\), the Office of the National Coordinator for Health Information Technology (ONC)\(^5\), and the Health Resources and Services Administration (HRSA)\(^6\) support training in clinical and public health informatics. The Institute of Medicine (IOM)\(^7,8\) has issued recent reports on the need to ensure a supply of trained primary care professionals who are proficient in health IT, to increase training in team-based care, and to accelerate research related to health care in the computer/social sciences and in health/biomedical informatics.

AMIA’s 10 x 10 Program. AMIA believes that strengthening the breadth and depth of the biomedical and health informatics workforce is critical to the transformation of the American health care system. AMIA is committed to the education and training of a new generation of clinical, public health, research, and translational bioinformatics informaticians to lead this transformation through the use of advanced clinical computing systems. AMIA offers training in a wide range of settings across the US in partnership with key academic partners in the biomedical and health informatics education community.\(^9\)

Clinical Informatics as a Medical Subspecialty Certification. To help address the need for training physician informaticians, in 2007, with financial support from the Robert Wood Johnson Foundation, AMIA defined the core content of the subspecialty of clinical informatics and the training requirements for proposed clinical informatics fellowships. The first Clinical Informatics Subspecialty Exam will be offered by the American Board of Preventive Medicine (ABPM) in October 2013.\(^10\) AMIA expects to continue related work to help develop an Advanced Interdisciplinary Informatics Certification for other disciplines.

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4. [http://acd.od.nih.gov/Biomedical_research_wgreport.pdf](http://acd.od.nih.gov/Biomedical_research_wgreport.pdf)
7. [http://www.iom.edu/Activities/Global/InnovationHealthProfEducation.aspx](http://www.iom.edu/Activities/Global/InnovationHealthProfEducation.aspx)
9. [http://www.amia.org/education/10x10-courses](http://www.amia.org/education/10x10-courses)