**Draft Mission Statement: Institute for Biomedical Informatics**

This document outlines formation of the Institute for Biomedical Informatics (IBI), heralding a new effort to foster research, education, and service.

The goal of the IBI is to become a national leader in biomedical informatics, spanning the disciplines of bioinformatics at the molecular level, to medical informatics for patients and populations. The institute will support interdisciplinary research and education in biomedical informatics at the University of Pennsylvania. Interdisciplinary studies are impeded not by any single barrier, but rather an array of tiny hurdles. The IBI will aid faculty, trainees, and staff in clearing these hurdles, thus elevating biomedical informatics research throughout the greater Penn community.

**Catalyzing research**

The primary role of IBI is to provide an academic home for basic science faculty in biomedical informatics, as well as mechanisms to connect genetic and phenotypic data and knowledge to provide personalized medicine to Penn Medicine patients. These research communities will be encouraged to collaborate through partnerships with clinical and basic science departments and centers, IBI pilot grant programs, co-mentoring trainees, seminars and colloquia, and through yearly retreats.

More than ever, bio- and medical informatics researchers are using similar analytical techniques and infrastructure. Providing a common academic home will facilitate cross fertilization of ideas and allow for more efficient use of precious institutional resources. Moreover, to support the mission of Penn Medicine to realize personalized medicine, interaction between these disciplines is required. Combining genetics and clinical records management with innovative analysis and clinical decision support will require tight collaboration of Penn’s multidisciplinary faculty. IBI will facilitate these collaborations by drawing together this community of researchers.

**Facilitating education**

Simply put, there is a shortage of scientists to conduct this interdisciplinary research and fully realize personalized medicine. IBI will close this gap with educational programs that span these disciplines. As the primary home for the PhD granting Genomics and Computational Biology (GCB) and Masters in Biomedical Informatics (MBMI) graduate programs, IBI will draw together faculty from the Penn community to offer innovative and tailored courses and programs. As IBI engages and recruits more faculty, these educational programs will grow and train a new group of 21st century researchers to conduct and lead this research.

Providing a joint academic home for PhD and Masters’ education in biomedical informatics will also benefit existing trainees. For example, traditionally, few Penn Medicine MDs get computational training in computational biology or bioinformatics. This is unfortunate given the burgeoning potential of translational computational biology. The IBI will reach out to clinicians and work towards developing both formal (MBMI) and informal educational programs for clinical researchers. Likewise, many students pursuing PhDs in computational biology or bioinformatics have relatively little exposure to medical informatics. By facilitating medical informatics training, IBI will focus a new pool of talent on translational informatics.

There are also many trainees, research associates, and even faculty that are interested in learning and applying these approaches. While some of this can be met by traditional coursework, IBI will enable these trainees and faculty through short, practical courses aimed at enhancing their capabilities into the computational domain.

**Campus leadership**

Within the School of Medicine, IBI will play a leadership role in advising Departments, Centers, and Institutes in hiring, purchasing and maintaining resources (including core facilities), and other strategic assessments involving biomedical informatics. This will avoid undesired overlap in expenditures, and facilitate coordination of efforts.