Creating a Research Commons Around Behavioral Markers of Disease

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Abstract

Although the “-omics” revolution has firmly established the importance of biomarkers of disease, the field of behavioral markers of disease is still emerging. In order to accelerate and scale research around behavioral disease markers, Intel’s Digital Health group and the Oregon Health and Science University (OHSU) have created a research commons – a shared pool of tools and technology. The research commons allows participating universities to share tools including hardware, software, documentation, data, and even subject pools, thereby reducing redundant technology development while still protecting intellectual property. This model provides an exceptional opportunity to accelerate evidence-based research into the efficacy of home-based tools for assessing behavioral change. Early results suggest that sensor networks and back-end algorithms for monitoring behavioral markers may provide better understanding of relevant clinical changes than is afforded by typical episodic patient-clinician encounters. This research commons model may hold promise for accelerating progress in other areas of overlapping academic-industrial interest.

Description and Outline

This presentation will describe how Intel’s Digital Health group and OHSU worked together to create a research commons – a shared pool of tools, technology and documentation – around the domain of behavioral markers of disease. Specific content will include:

1. Overview of Intel’s portfolio of university research collaborations and research in behavioral markers.

2. Overview of OHSU’s ongoing stream of research in the area of behavioral markers of disease, with particular emphasis on Alzheimer’s and other neurocognitive problems.

3. Description of the process of creating the BAIC (Behavioral Assessment and Intervention Commons), including negotiations around issues related to intellectual property, governance and research operations.

Educational Goals

After this session, attendees should:

1. Understand the potential importance of behavioral markers of disease and the use of sensor networks to monitor them.

2. Be able to describe one model of a research commons and how it can help accelerate clinical outcomes research.

3. Have a better understanding of how intellectual property issues might be resolved in a university-industrial collaboration.

Who Should Attend

Academic and industrial researchers interested in collaboration, researchers in the areas of behavioral markers of disease and sensor networks, and technology transfer and licensing managers.