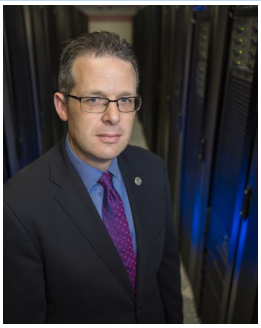
Stony Brook University

Biomedical Informatics Grand Rounds



Philip Payne, PhD, FACMI

Professor, Department of Medicine, Division of General Medical Sciences,

Washington University in St. Louis School of Medicine

Precision Health and the Role of Biomedical Informatics: Faster Research, More Cures, Healthier Communities

Wednesday, October 3, 2018 3pm—4pm

BMI FACULTY & STUDENT SUITE HSC-L3 045

ABSTRACT:

The healthcare and life science research, education, and practice domains are undergoing tremendous change, driven by a combination of economic, policy, and technology factors. At the core of these changes are: 1) an increased focus on the use of patient-derived data, contextualized by the best available scientific evidence, in order to deliver highly tailored and individualized wellness and clinical care interventions; and 2) a simultaneous demand to transform healthcare at a population-level through the pursuit of a triple aim concerned with increasing quality and safety while also decreasing costs. While these two areas of endeavor are often approached as distinct from each other, they in fact share a common set of data, information, and knowledge based needs that can be satisfied using a systems-level approach to biomedical informatics and data science.

BIO:

Philip R.O. Payne, PhD: Dr. Payne is the Robert J. Terry Professor and founding Director of the Institute for Informatics (I2) at Washington University in St. Louis. He holds additional appointments as a Professor in the Division of General Medical Science in the Department of Medicine within the School of Medicine and as a Professor of Computer Science and Engineering within the School of Engineering and Applied Science. Dr. Payne is an internationally recognized leader in the field of translational bioinformatics (TBI) and clinical research informatics (CRI) and. He received his Ph.D. with distinction in Biomedical Informatics from Columbia University, where his research focused on the use of knowledge engineering and human-computer interaction design principles in order to improve the efficiency of multi-site clinical and translational research programs. Dr. Payne's leadership in the informatics community has been recognized through his appointment to numerous national steering, scientific, editorial, and advisory committees, including efforts associated with the American Medical Informatics Association (AMIA), AcademyHealth, the Association for Computing Machinery (ACM), the National Cancer Institute (NCI), the National Library of Medicine (NLM), and the CTSA consortium, as well as his engagement as a consultant to academic health centers throughout the United States. Dr. Payne is the author of over 200 publications focusing on the intersection of biomedical informatics and the clinical and translational science domains, including several seminal reports that have served to define a new sub-domain of biomedical informatics theory and practice specifically focusing upon clinical and translational research applications. Dr. Payne research group current focused on efforts in the following areas: 1) knowledge-based approaches to the discovery and analysis of bio-molecular and clinical phenotypes and the ensuing identification of precision diagnostic and therapeutic strategies in cancer; 2) interventional approaches to the use of electronic health records in order to address modifiable risk factors for disease and enable patient-centered decision making; 3) the study of human factors and workflow issues surrounding the optimal use of healthcare information technology; and 4) the design and evaluation of open-science platforms that enable collaborative and cumulative approaches to biomedical data analytics.

****CME CREDIT AVAILABLE****

Questions? Please call the Biomedical Informatics Department at 631-638-2590.