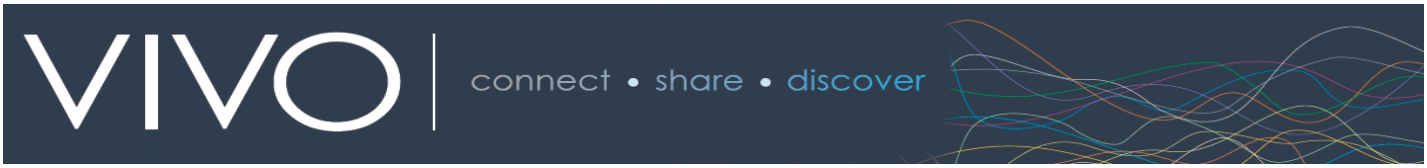

Research Networking in a Precision Medicine Era: How Research Networking Systems Will Become Central to the Changing Nature of Biomedical Research

The “big data tsunami” is impacting all areas of biomedical research and changing the way we approach research and clinical care in amazing ways. Precision Medicine is a good example of this new approach and has been described as “Personalized Medicine meets Big Data.” A single research study may require analysis of terabytes of data from tens of thousands of patients. This big data revolution is changing not only the process of scientific discovery, but also the size and composition of research teams. Big Data science requires large, heterogeneous research teams. Papers with over 1000 authors are no longer shocking. This talk will discuss the impact of big data on biomedical research, and how Research Networking System (RNS) will be critical to conducting research in a Big Data, Big Team future. It will argue that we need to think of RNS not as a single software application, but as an approach to science, supported by a suite of applications that each address specific aspects of research networking. These concepts will be illustrated by specific examples from our experience at Northwestern University.