Accelerating Scientific Discovery

## $2^{\text {nd }}$ International Conference on

Genomics \& Pharmacogenomics

## September 08-10, 2014 DoubleTree by Hilton Hotel Raleigh-Brownstone-University, USA

## Personalized medicine in practice

Donald Rule
Translational Software, USA

Adverse drug reactions are often caused by genetic polymorphisms which alter a patient's response to therapy. The FDA currently lists over 100 medications whose label contains information about either potential toxicity or lack of efficacy but to date this information has had little impact on treatment decisions. One barrier to adoption of pharmacogenetic testing is the clinician's ability to interpret genetic test results. To alleviate this, the Clinical Pharmacogenetics Implementation Consortium (CPIC) was formed to create peer-reviewed and published guidelines for using genetic data to guide prescribing decisions. The guidelines provide specific prescribing recommendations along with grading levels of evidence. While this information fills an essential need, doctors still find it difficult to incorporate personalized prescribing into a typical 10 to 15 minute encounter. Translational Software has developed a platform for incorporating guidelines into clinical workflows. We are integrating with Laboratory Information Management Systems (LIMS) in order to translate raw genetic information into actionable reports for physicians. For clinicians with Electronic Medical Records the platform provides formatted HL7 messages that contain reports and discrete genetic results. This data can then be used to provide guidance for new prescriptions through an access in the EMR. The goal of these products is to make both pharmacogenetic testing and test interpretation more accessible by efficiently delivering them within the clinical environment.

