

2nd International Conference on **Predictive, Preventive and Personalized Medicine & Molecular Diagnostics**

November 03-05, 2014 Embassy Suites Las Vegas, USA

Personalized medicine- Investigating both sides of the coin

Gayane Badalian-Very Harvard Medical School, USA

Personalized medicine (PM) is the cornerstone of medical practice. This approach tailors treatments for specific conditions of the affected individual. The limitations of personalized medicine are defined by available technology and our understanding of the biology, physiology, and pathology of various conditions. Recent advances in technology have provided physicians with the tools needed to investigate the molecular composition of disease. Specifically, breakthroughs in genomics (e.g., \$1,000 whole genome sequencing) and computational methods that enable decoding of genomic reads has led to broad screening of both patients and healthy volunteers. Defining actionable targets from genomic information has led to development of targeted small molecular inhibitors. Additionally, a detailed understanding of a patient's genetic makeup has led to development of prognostic markers, allowing for development of companion diagnostics. These markers separate populations that are most likely to benefit from a certain treatment. Finally, attempts to develop drug delivery systems offer the opportunity to limit the delivery of specific inhibitors to affected cells in order to reduce unwanted systemic side effects.

Scientists and physicians involved in PM intend to bring this individualized treatment to every corner of medical practice, but the applicability may be limited. Although recent achievements seem promising, we are still far away from applying PM to large populations. Limitations in science and technology, unsustainable cost of some approaches, and constrained budgets of health care providers have narrowed the distribution to a larger patient population. An integrated and revised approach in existing infrastructures is an absolute necessity to convert this potential to reality.

Biography

Gayane Badalian-Very is a leading Physician of the world and the CEO of a startup focusing on personalized medicine. She has attended Semmelweis University and Harvard Medical School. She is continuously speaking in international meetings and has been the chair on International drug discovery and science technology in Haiku China. She has won several grants and award from various societies (Histiocytosis (150,000), Claudia Adam Barr (250,000)) for breakthrough research on Langerhans cell histiocytosis. She has won several recognitions on leadership, and strategy development as well. She continues her attempt on bringing translational science to population base application.

info@gmdi.net