5<sup>th</sup> International Conference on

## HUMAN GENETICS AND GENETIC DISEASES

11th International Conference on

&

## GENOMICS AND PHARMACOGENOMICS

September 21-22, 2018 | Philadelphia, USA



John Powers

Murrieta Genomics, USA

## Genomics the cellular evolution of Medicine

Statement of the problem: The current trajectory of health care costs is unsustainable without major changes. The lack of uniformity, true competition and focus on reimbursement as opposed to cost has greatly contributed to the out of control cost in current health systems. In addition, the number of doctors and medical professionals cannot keep pace with the growing demand. There are a number of other areas contributing as well, and the trajectory has to change. Healthcare "digitization" has been happening at all levels of the healthcare continuum and will provide the tools and understanding to move the medical industry to the health industry and allow the patient to take a more active part in determining their correct path.

**Enabling technology:** Next Generation Technology (NGS) is an incredible enabling technology. It has the potential to impact medical the same was Code Division Multiple Access (CDMA) impacted the cellular market. Leading to unlimited calling plans and an explosion of data applications. NGS will help drive new cost milestones due to the volume and quality of information that can be derived from a single NGS test. DNA, RNA, Microbiome, epigenetics, and other comics. NGS driven testing is already having positive impacts on diagnosis, pain management, nutrition, imaging, treatment planning, radiation therapy, chemotherapy, surgery, and surveillance. This is not a comprehensive list but provides an idea of the vast amount of data NGS can produce.

**Conclusion:** Just like in the cellular communications market, the applications, software, and applications will evolve over the next decade to fully utilize the power of NGS. The medical market is looking at neural networks, deep learning, and artificial evolution programming. These two industries are going to continue to converge as part of medical evolution.

## **Biography**

John Powers has spent his entire professional career in high tech, first in the wireless industry and for the past 10 years, John has worked in the medical industry specifically focused on halting cancer. As CEO of IntraOp Medical, John worked with multidisciplinary teams including physicists, surgeons, radiation and medical oncologists in the top cancer centers around the world. Working with the Centers for Medicare & Medicaid Services (CMS) John was able to secure a new reimbursement code and reimbursement for Intra-Operative Radiation Therapy (IORT). John's work with IntraOp led him to an interest in gene-based technologies available to foil cancer before a tumor can grow or metastasize. John has spent the past 3 years working with cancer and surgical centers promoting and expanding genetic and genomic testing. He is committed to the expansion and incorporation of gene sequencing in conventional medicine.

jpowers@murrietagenomics.com

T	_	4	_	~	
IN	U	u	t	S	