

Personalized and Precision Medicine (PPM) as a unique healthcare model to be set up via translational applications and upgraded business modeling to secure the human healthcare, wellness and biosafety

Sergey Suchkov



Sechenov University, Russia

Abstract

A new facile and scalable approach for utilizing basic ionic A new systems approach to diseased states and wellness result in a new branch in the healthcare services, namely, personalized and precision medicine (PPM). To achieve the implementation of PPM concept, it is necessary to create a fundamentally new strategy based upon the recognition of biomarkers and thus the targets to secure the grand future of drug design and drug discovery.

Every leader esteems the effect of their choice to utilize PPM on their own spending plan and prosperity, which may not really be ideal for society overall. It would be amazingly helpful to incorporate information gathering from various databanks for applications, for example, forecast and personalization of further treatment to consequently give more custom fitted measures to the patients bringing about improved patient results, decreased unfavorable occasions, and more practical utilization of the most recent medicinal services assets including analytic (partner ones), preventive and restorative (directed atomic and cell) and ext. PPM, genomics and AI are those of the most rapidly emerging areas of biomedical research and the most promising technologies for improving health care and health outcomes. Examples include the use of AI for improved DNA sequencing and SNP analysis to target specific cell and tissue types, biosensors for specific molecules in vivo, and point-of-care molecular diagnostic devices enabled by genomics- and AI tools. The enormous development of genomics research has raised great expectations concerning its impact on PPM aiming to customize medical practice with a focus on the individual, based on the use of genetic tests, identification of genomic biomarkers, and development of targeted drugs. Personal genomics is an area of genomics focusing specifically on the sequencing and analysis of one person's genome, and then giving them their genomic information. The emphasis on individuals and genomic knowledge needs to be counterbalanced with the subjects' understanding in their sociocultural, political, and economic contexts and with the equivalent investment in actions on the social determinants of health. The above-mentioned areas being an integral part of PPM is really an interdisciplinary research field that results from the application of the innovative genomic and AI tools to medicine and has the potential to significantly improve some canonical treatments, prevention, prophylaxis and rehabilitation. Specifically, in the field of PPM, it is expected to have a great impact in the near future due to its

multiple advantages, namely its versatility to adapt a drug to cohorts of patients and/or persons-at-risk. For instance, multimodal genomic and AI-driven approaches may indeed become a key driver in harmonizing the needs of the various stakeholders by allowing cost-effective delivery and monitoring of drug efficiency and safety, and close-meshed high-quality data collection.



Biography:

Sergey Suchkov was born in the City of Astrakhan, Russia, in a family of dynasty medical doctors. In 1980, graduated from Astrakhan State Medical University and was awarded with MD. In 1985, Suchkov maintained his PhD as a PhD student of the I.M. Sechenov Moscow Medical Academy and Institute of Medical Enzymology. In 2001, Suchkov maintained his Doctor Degree at the National Institute of Immunology, Russia. From 1989 through 1995, Dr Suchkov was being a Head of the Lab of Clinical Immunology, Helmholtz Eye Research Institute in Moscow. From 1995 through 2004 - a Chair of the Dept for Clinical Immunology, Moscow Clinical Research Institute (MONIKI). In 1993-1996, Dr Suchkov was a Secretary-in-Chief of the Editorial Board, Biomedical Science, an international journal published jointly by the USSR Academy of Sciences and the Royal Society of Chemistry, UK. .

Speaker Publications:

1. "Metabolic Immunity as a Factor in Assessing the Reactivity of the Body" July 2018 *Biology Bulletin Reviews* 8(4):319-327
DOI: 10.1134/S2079086418040096
2. "The Unexpected Role of Melanin as Bio-energetic Molecule and Prof. Szent-gyorgyis Energy Concepts: Hydrogen as Main Source of Energy of Muscle Cell" June 2018
DOI: 10.2174/9781681086538118010012
In book: *Melanin, the Master Molecule* (pp.186-228)
3. "Intrinsic Chemistry of Melanin: Potential Approaches for Translational Medicine" June 2018
DOI: 10.2174/9781681086538118010004
In book: *Melanin, the Master Molecule* (pp.1-50)

4. “Personalized medicine as an updated model of national health-care system. Part 1. Strategic aspects of infrastructure
January 2017 Rossiyskiy Vestnik Perinatologii i Pediatrii
(Russian Bulletin of Perinatology and Pediatrics) 62(3):7-14
DOI: 10.21508/1027-4065-2017-62-3-7-14

5. “Personalized medicine as an updated model of national health-care system. Part 2. Towards public and private partnerships”
January 2017 Rossiyskiy Vestnik Perinatologii i Pediatrii
(Russian Bulletin of Perinatology and Pediatrics) 62(4):12-18
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