### conferenceseries.com

# **2<sup>nd</sup> International Conference on Flu**

October 31-November 02, 2016 San Francisco, USA



## Marek Malecki

Phoenix Biomolecular Engineering Foundation, USA

### Universal therapeutic vaccine against influenza

The CDC reports 3697 deaths due to influenza in 2013. First line therapeutics recommended for the patients who are already suffering from influenza are systemic therapeutics: Oseltamivir (oral), Zanamivir (inhaled), Peramivir (intravenous) for patients who present within first 48 hours from the initial symptoms and for people who are at the high risk of exposure, alternatively, Amantadine and Rimantadine. Meanwhile, the preventive vaccination of patients 6 months-17 years of age reached 49.9%. These measures promoted by the CDC are not meant for the general populations. The main problem with these medications is that efficacy of prophylactic vaccination is hindered by the quickly changing genotype with the new strains of viruses. This leads to resistance of new strains. The main problem with prophylactic vaccines is that with the changing genotype, surface displayed molecular profiles change too. The changed phenotypes lead to misguided immune response. Moreover, the development of the immune response takes time. It takes approximately 5-7 days for the 1st round of antibody generation and if the booster shot is needed, the response may take 45-55 days. The sick patients cannot wait that long. Last but not least, the aforementioned therapeutics inflicts very serious iatrogenic side effects. To address these problems, by computer modeling and statistical analysis, followed by biomolecular engineering, we have created de novo the universal therapeutic vaccine for influenza as the solution. It is capable of mounting an immediate and reliable response, while avoiding all side effects reported by the currently recommended therapeutics.

#### **Biography**

Marek Malecki has earned MD degree at the Medical Academy, Poznan followed by Residency/Fellowships in Molecular Medicine in Rigshospitalet, Copenhagen, Cancer Center, Vienna, Cancer Center, Amsterdam and Cancer Center, Warsaw. He has completed his PhD degree at the Polish Academy of Sciences, Warsaw followed by the Postdoctoral Fellowships in Molecular Biology at the Austrian Academy of Sciences, Salzburg, ETH, Zurich, Utrecht University, Utrecht, Cancer Center, Amsterdam, Biozentrum, Basel. Over the last 20 years, he has held Faculty positions in Oncology, Molecular Medicine and Pharmacology, at the top teaching hospitals and medical universities in the USA. He is the inventor of the gene therapies, therapeutic vaccines and regeneration of tissues, which are published at the USPTO and WIPO with the sequences available through the NCBI. He was elected to serve as the Editor in Chief in peer-reviewed, open-access journals in Science, Technology and Medicine, as well as Editorial Board Member and Reviewer at many others.

mm@pbmef.org

Notes: