# DR. BORIS FARBER 225 Broadway, New York, NY 10007

## amerimedtech@yahoo.com

https://www.linkedin.com/in/dr-boris-farber-0309b6121/

## **Professional Positions and Employment:**

#### CEO, NOIGEL, LLC

2010-Present

R&D in Pharmacology based on TRIZ (Theory of Inventive Problems Solving) <a href="http://nanoigel.com/">http://nanoigel.com/</a>

## CEO, TRIZ BIOPHARMA INTERNATIONAL, LLC

2017-Present

R&D in Pharmacology based on TRIZ (Theory of Inventive Problems Solving) <a href="http://trizbiopharma.com/">http://trizbiopharma.com/</a>

#### CEO, FARBERS CENTER, INC

2001-Present

R&D in Bio Engineering, Pharmacology based on TRIZ (Theory of Inventive Problems Solving), Medical Diagnostics, Modern Methods in Education

## **Educational Background:**

**Peter the Great Polytechnic University** (St. Petersburg)

1987-1992

Dr.Sci., Biological and Medical Systems Control

Professor in Biomechanics, 1994.

University of Information Technologies, Radio Engineering and Electronics

## (Moscow)

1982-1987

#### Ph.D., Biomedical Engineering

Central Research Institute of Prosthetics and Orthotics (Moscow)

1979-1985

Ph.D. Medical technologies and Robotics.

#### **Major Products:**

Nano and Biotechnology, Pharmacology, Computational and Mathematical Modeling, TRIZ (Theory of Inventive Problem Solving):

- 1. Methodology of creating new groups of dynamic self-organizing drugs
- 2. Anticancer drug based on dynamic self-assembled oligo-RNA
- 3. Antiviral drug based on a dynamic self-organizing system of oligopeptides
- 4. Methodology for producing highly immunogenic dynamic vaccines
- 5. Method of treating cancer patients with use of antiviral drugs
- 6. Method of treating with cardiovascular system pathologies patients using antiviral drugs

- 7. Composition for skin and tissue rejuvenation based on dynamic peptides
- 8. Methodology of monitoring the effectiveness of cancer treatment based on the analysis of the percentage of cell infection with viruses
- 9. Methodology of monitoring the treatment effectiveness of patients with cardiovascular diseases based on the analysis of the percentage viral infected cells
- 10. Dynamic self-organizing drug for the treatment of acute pancreatitis
- 11. A method for rapid quantitative laboratory diagnosis of diseases, incl. infectious, based on dynamic self-organizing oligopeptides
- 12. Anticancer drug based on dynamic self-organizing oligopeptides
- 13. Wound healing, regenerating pharmaceutical composition based on a dynamic system of oligopeptides
- 14. Dynamic self-organizing chimeric insulin for the treatment of diabetes
- 15. Composition for suppressing virulence factors by microorganisms and restoring their sensitivity to antibiotics
- 16. Dynamic self-organizing tannids derivatives with anti-resistant and antimicrobial properties
- 17. Hemostatic agent for emergency stop of bleeding based on a dynamic self-organizing system of polysaccharides
- 18. Pharmaceutical composition for treating patients with atherosclerosis based on a dynamic selforganizing system of quercetin derivatives
- 19. Dynamic self-assembled antibiotic derivatives
- 20. Polymyxin with reduced nephrotoxicity
- 21. Food based on modified bacterial spores with immunomodulating properties

## **Honors & Awards**

Nominated, Scientist of the Year and Professor of the Year 2010-2018 (New York, NY).

#### **Affiliations**

American Society for Pharmacology and Experimental Therapeutics (ASPET), IEEE Computer Society, International Society for Prosthetics and Orthotics; International Society of Biomechanics; Rocket-Space Academy; Full Member, Academician of Academy of Medical Technical Sciences; New York Academy of Science; American, Australian, European, Singapore, Canadian, German, London and Edinburgh Mathematical Societies

#### Career Accomplishments

As a result, a new group of 21 medical drugs was discovered. These drugs are quasi-living, self-adjusted, self-organizing dynamic medicinal and diagnostic medicines, which represent the next stage from static medicines to dynamic drugs with variable structure and synergy. These drugs system have the ability to adjust to the body of each individual, and to adapt to its system of receptors. As a result, the effectiveness of such drugs increases and the action spectrum extends substantially.

#### Research & Publications:

4 books; 500+ articles; Lectures; Founder and Editor-in-Chief, "Biomechanics and Prosthetics"; Editor of "Prosthetics and Orthotics"; Editor, "Annals of Mechnikov Institute"; Gives presentations and publications at international congresses in the U.S., Australia, Belgium, Bulgaria, Canada, China, England, France, Germany, Greece, Holland, Italy, Japan, Russia, Scotland, Sweden, Turkey, United Arab Emirates and Yugoslavia.

40 years' experience in the fields of Bioengineering, Nano and Biotechnology, Creative problem solving, Computational and Mathematical Modeling and TRIZ (Theory of Inventive Problem Solving).

## Last publications:

- **1.** Martynov, A., Osolodchenko, T., Farber, B., & Farber, S. (2017). Influence Of Non-Metabolic Microbial Growth Promotors (AMP Activators) On The Sensitivity To Antimicrobials In The Actually Multiresistant Microbial Strains. *bioRxiv*, 143438. (Article pending on Journal "Microbial Drug Resistance")
- **2.** Martynov, A. V., Farber, B. S., Osolodchenko, T. P., Farber, S. B., & Kabluchko, T. V. (2016). Dependence between acylation degree and specific lysis activity of the Pseudomonas aeruginosa M6 bacteriophage. *AMI*, (2), 16-20.
- **3.** Influence of Microbial Growth Enhancers on Antibiotic Resistance of Polyresistance Microorganisms Strains/ SMi's Superbugs & Superdrugs, New Jersey, USA. 14-16 NOV 2016/ Farber B., Kleyn I., Martynov A.
- **4.** The novel strategy to fight multidrug resistance by multiple drugs synergism, based on docking in drug design and TRIZ/ SMi's Superbugs & Superdrugs, New Jersey, USA. 14-16 NOV 2016/ Farber B., Kleyn I., Martynov A.
- **5.** The novel strategy to fight multidrug resistance by multiple drugs synergism, based on docking in drug design AND TRIZ. Change of paradigm/ Synopsis investors conference, New-York, 15 DEC, 2016/Ph.D., Sc.D. Boris Farber, Dr.Ilya Kleyn, Dr.Artur Martynov, Tatyana Osolodchenko, Ph.D., Dr. Tatyana Kabluchko, Yury Lisnyak, Ph.D., Tatyana Bomko, Ph.D., Tatyana Nosalskaya, Ph.D., Helen Romanova, Ph.D., Helen Grishina, Ph.D.
- **6.** Influence of Microbial Growth Enhancers on Antibiotic Resistance of Polyresistance Microorganisms Strains/ SMi's Superbugs & Superdrugs, New Jersey, USA. 14-16 NOV 2016/ Farber B., Kleyn I., Martynov A.
- 7. The novel strategy to fight multidrug resistance by multiple drugs synergism, based on docking in drug design and TRIZ/ SMi's Superbugs & Superdrugs, New Jersey, USA. 14-16 NOV 2016/ Farber B., Kleyn I., Martynov A.
- **8.** Martynov, A. V., Farber, B. S., Osolodchenko, T. P., & Kabluchko, T. V. (2016). Dependence between acylation degree and specific lysis activity of the Pseudomonas aeruginosa M6 bacteriophage. *AMI*, (2), 16-20.
- **9.** Martynov, A. V., Bomko, T. V., Nosalskaya, T. N., Farber, B. S.(2012). Oral long-acting pharmaceutical form of insulin on the basis of self-organizing kvasi-living system of combinatorial peptides. AMI, (2), 64-70.
- **10.** Martynov, A. V., Farber, B. S., & Kabluchko, T. V. (2015). Synthesis of the ensembles from succinylated interleukin-2 derivatives and their biological activity in vitro. ScienceRise, (11 (4)), 25-30.
- **11.** Martynov, A. V., Didenko G.V., Farber, B. S, Cruts O. The anticancer activity and immune modulating properties of combinatorial ensemble complementary (antisense) microRNA

- (fRNA) in combination with the immunomodulator glycoproteid lectin from B. subtilis B-7025/BioRxiv doi: <a href="http://dx.doi.org/10.1101/151829">http://dx.doi.org/10.1101/151829</a> (Article pending in journal "Anti-Cancer Agents in Medicinal Chemistry"
- **12.** A method useable in clinics for significantly increasing the effect iveness of treating patients with malignant tumors Arthur Martynov, Boris Farber, Sonya Sophya Abstracts from Athens, Greece 10th Congress of the European Federation of Internal Medicine October 5–8, 2011.// European Journal of Internal Medicine, Suppl. 1 (2011), Vol. 22. S29
- **13.** The use of antiviral drugs for treatment of cancer patients Arthur Martynov, Boris Farber. Abstracts of the XXX Congress of the European Academy of Allergy and Clinical Immunology, Istanbul, Turkey 11-15 June 2011. // Allergy 66, Suppl. 94 (2011): 658-727
- **14.** A new anti-viral drug with a quick, direct effect Arthur Martynov, Boris Farber, Sonya Sophya . 2011 FIP Congress in Hyderabad (India), Pharmaceutical Biotechnology Posters on Monday, 5 September 2011, T.110.
- **15.** A new anti-cancer drug overcomes cancer resistance t.111. Quasi-life antiviral drug with a quick, direct effect, a wide spectrum of activity / FOCIS 2011, Abstract Supplement, June 23 26 Washington, D.C., P.123 (www.focisnet.org)
- **16.** Martynov A.V., Farber B.S. A method useable in clinics for significantly increasing the effectiveness of treating patients with malignant tumors// European journal of Internal medicine.-2011.-Vol.22, Suppl.1.-P. 29-31 //10th Congress of the European Federation of Internal Medicine 5 October 8 October 2011, Athens Hilton Hotel, Greece
- **17.** Martynov A.V., Farber B.S. A new anticancer drug overcomes cancer resistance// FOCIS.-2011.- Abs.Suppl. Washington, June 23-26.- P.122-123
- **18.** Constriction of recombinant liposomal vaccines: Monograph / AV Martinov, OA Romanova, BS Farber. Kharkiv: "Planet-Print", 2014.- 117 pp. Ukr. be it.
- **19.** Creation of new medical drugs based on TRIZ and computer mathematical modeling. Annals of Mechnikov Institute, N 4, 2018- pp.15-34 <a href="https://zenodo.org/record/2547580#.XGLXBFVKiWE">https://zenodo.org/record/2547580#.XGLXBFVKiWE</a>