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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
National Institutes of Health



National Institutes of Health Commercialization Assistance Program  
(NIH-CAP)

## Company Profile

**Industry Sector:** Medical Diagnostics

**Company Overview:** Allied Innovative Systems (ALLIS) is R&D company with the mission of early stage development and validation of original technologies and devices in the field of clinical diagnostics and high throughput drug screening. The company has established a sound record of bringing new technologies from the level of an academic idea into the stage of functional prototypes ready for commercialization.

**Target Market(s):** Clinical, research and hospital laboratories worldwide.

## Key Value Drivers

**Technology:** AmpliFlux is a platform technology for improving the performance of industry standard ELISA-based assays. AmpliFlux is based on the use of a unique photochemical amplification reaction, and consists of two steps: The first step is a conventional ELISA. At the second step of assay, the mixture is irradiated by visible light. Illumination of the samples leads to a drastic increase in the final signal. The second step takes just 5 minutes.

**Competitive Advantage:** A new technology allows one to increase the sensitivity, accuracy, dynamic range, signal-to-noise ratio, save costly reagents and reduce time of analysis. This unique approach has never been used before for improvement of the performance of ELISA-based methods. The outstanding results were achieved for increasing of the assay sensitivity for detection of analytes of different origin, such as Hepatitis B, HIV, Prostate specific antigen and other physiologically active substances.

**Plan & Strategy:** Seeking a strategic partner.

\*Technology funded by the NIAID and being commercialized under the NIH-CAP.

## Management

### Leadership:

Simon Bystryak, President and CEO  
Natalya Ossina, Chief Strategy Officer  
Anna Smagulova, Chief Financial Officer

### Scientific Advisory Board:


Neil Constantine, Ph.D.: Professor of Biochemistry at Department of Pathology, Medical School, University of Maryland  
Nancy D. Connell, Ph.D.: Professor at Department of Medicine, UMDNJ Center for BioDefense and Center for Emerging Pathogens at New Jersey Medical School  
Armen Sarvazyan, Ph.D., D.Sc.: Chief Scientific Officer of Artann Laboratories, Adjunct Professor of the Surgery Department, Robert Wood Johnson Medical School, UMDNJ, and Honorary Foreign Professor of Physics Faculty of Moscow State University

## Product Pipeline



### Prototype Products

#### The company's products include:

- Properly protected photochemical amplification method (PAM) is a product itself. US Patent No. 5,776,703; New patent applications in preparation
- AmpliFlux™ Detection system kits (sets of reagents) for ELISA + PAM 
- AmpliFlux™ Illuminator. 