

# JST Introduction & Patent Technology Overview

~ To Develop Science & Technology and Provide Solution for Social Issues ~

## JST's Roles and Main Activities

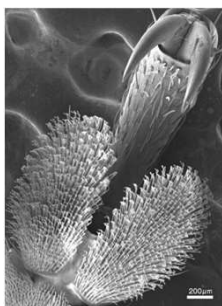
### [JST's Roles]

- Japan Science and Technology Agency (JST) is one of the Japanese national organizations to play a central role in the basic plan for Japanese science, technology and innovation.
- JST comprehensively conducts various projects in collaboration with universities, research institutes, industries, etc. in Japan and oversea countries, and contributes to the sustainable development of society and the creation of science, technology and innovation to develop science and technology and provide the solution for social issues.
- As one of the activities, JST applies for the patents based on the technologies invented by Japanese universities and research institutes, applies the patented technologies in global markets through the patent licensing.

### [Main Activities]

- To develop a world-class research infrastructure through university funds
- To propose R&D strategies that contribute to social change
- To promote the **creation of new value through R&D** that contributes to social change
- To promote R&D as a source for the creation of new value
- To support and develop the diverse human resource
- To enhance the infrastructure of science, technology and innovation

### [IP Utilization (Example)]



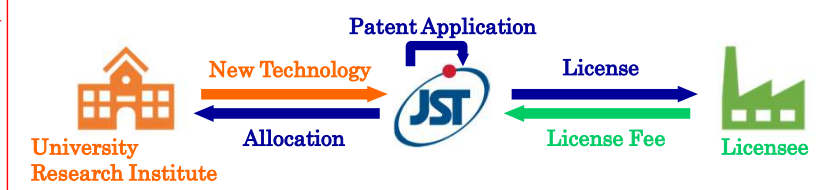
Nano Suit (Nano Polymerized Film)

[Inventors] Takahiko Hariyama  
(Hamamatsu University School of Medicine)

[Licensee] NanoSuit Inc.

- To develop R&D results created through the collaboration between industry and academia
- To create and support start-up companies
- **To support for the utilization of intellectual property**
- To support for the formation of "places" for co-creation

### IP Utilization Support Process (An Example)



## Patent Technology Overview

### [Patent Portfolio (related to Bio/Medical Technologies)]

- JST owns about 2,500 patents and about 550 patents related to bio/medical technologies.
- Most of the patents have been applied in Japan and oversea countries such as US, EU or China to apply the technologies in global markets through the patent licenses.
- The patent portfolio related to bio/medical technologies consists of **Active Pharmaceutical Ingredients (APIs)**, **Technologies & Devices for Diagnostics**, **Antibody Drug**, **Drug Delivery System (DDS)**, **Gene Therapies** and others. (See Figure below)

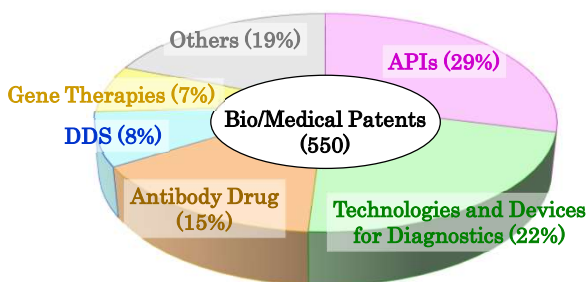


Fig. Patent Portfolio related to Bio/Medical Technologies

### (Example Patents)

- Novel SN-38 Derivatives
- V-ATPase Inhibitors
- L-Arginine for PolyQ Diseases
- Nucleic Acid Binding Proteins
- Neuronal Network HTS Device
- Dynamic Network Biomarker (DNB)
- Super Abzymes
- DDS Nanoparticle RION for Medical Oligonucleotides
- Bioparticle Vault Derivatives
- Micro Algae Cyanidiophyceae that enable to deliver drugs
- Non-Viral Gene Therapy
- Zwitterionic Liquid
- ZIC5 Inhibitor
- Nano Pro-Drug
- Oligonucleotide to inhibit HMGB1

### Contact

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