

SMIA

信州メディカル産業振興会  
Shinshu Medical Industry Association



# To develop the potential of Shinshu District in the creation of medical equipment

We contribute to promoting the medical industry in the Nagano prefecture area, in collaboration with the Shinshu Incubation Center for Medical Device and Functional Food Development and Center for Shinshu Medical Innovation of Regional Technology, etc.

Development of technology seed equipment

## Shinshu Medical Industry Association

Companies in the prefecture, medical institutions, financial institutions, government, educational institutions

Experiment, analysis

### Shinshu Incubation Center for Medical Device and Functional Food Development

Preparation of experimental and evaluation instruments for medical fields

Cooperative research facility

### Center for Shinshu Medical Innovation of Regional Technology

The cooperative research facility is occupied by medical instrument development companies

## Consistent support from “identification of needs” to “cultivation of market”

Identification of needs at medical sites

Matching with technical seeds

Joint development of medical instruments

Development of global market

Pharmaceutical affairs, approval screening, etc.

Clinical research in animal experiments

Coordinators

### Shinshu University-Innovative Research & Liaison Organization

Needs of clinical sites

### Shinshu University Hospital

Collaboration with the following groups

- Nagano prefecture
- Shinshu Medical Commercialization Development Center
- Nagano Industrial and Commercial Encouragement Organization
- Matsumoto Dental University



# SMIA

Shinshu Medical Industry Association

## Shinshu Medical Industry Association Activities Introduction

### “Company technology show for members” and “Study tour in hospital” held at Shinshu University Hospital

Since “The technologies of the manufacturing companies” don't have much chance to be seen or used for medical workers, we exhibit these technologies in the hospital and try to set up a meeting of supply and demand with doctors and nurses firsthand. We discover their hidden needs and work as go-between, the companies and medical workers.

You can discuss with doctors or nurses directly based on the exhibited technologies in 'Technologies Exhibition of company members' or 'Observational Tour of our hospital', it will connect with the development of the new products using their own unique technologies. Moreover, Medical Engineering coordinators will support everything up to cooperative research development with medical workers.



“The technologies Exhibition of company members” hold in Shinshu University Hospital

### “Identify the new needs of development or improvement of medical equipment on the medical site and Introduction them to company members”

Medical Engineering coordinators survey the development or improvement needs of the medical equipment from doctors and nurses, and inform company members after the patent search or the pharmaceutical search. Furthermore, they will support everything up to cooperative research development with medical workers.



### “Cooperative of medical equipment exhibition in and outside Japan”

Securing some booths for Shinshu Medical Industry Association's exhibition in the large-scaled exhibition in and outside Japan, allow us to exhibit the products of the company members and pioneer new markets.



“Cooperative of medical equipment exhibition in and outside Japan”  
(This picture was taken in “MEDICA” which is one of the largest medical equipment exhibitions.)

### “Broadcasting the special TV programs or transmission its contents via Internet”







We plan to strengthen the understanding and the partnership among the whole community by introduction the commercialized medical equipment via special TV programs.



# Achievements in Medical Equipment Originated from Shinshu University 2022



⚠ Some of these products are not sold outside of Japan.

Collaborating Companies	Products and Sales Points	
<p><b>Todoriki Co., Ltd.</b> Manufacture of gaskets for general industrial use</p>		<p><b>Carrying Case for Drip Infusion "IVnote"</b></p> <p>The carrying case includes all of tools necessary for drip infusion. You can easily carry this case and immediately see and confirm the tools you need for the treatment.</p>
<p><b>Chiyoda Electric Co., Ltd.</b> Medical Science Instruments, Electric Control, Instruments applying Ultrasonic and Pressure</p> <p><a href="http://www.chiyoda-electric.co.jp/">http://www.chiyoda-electric.co.jp/</a></p>		<p><b>Automatic otorhinolaryngology (nose, ears and throat) endoscope sterilizer SED-1</b></p> <p>The equipment can sterilize the insertion section and the control section of an endoscope for otorhinolaryngological observation, working efficiently in short time (13 minutes in all processes). It is also designed to work silently in a small space, which is usable for a medical examination in a private room.</p>
<p><b>KISEI COMTEC Co., Ltd.</b> System integration service, System resource service, Medical system service, Information related devices</p> <p><a href="http://www.kicnet.co.jp/">http://www.kicnet.co.jp/</a></p>		<p><b>Health TrinityNet 3.0</b></p> <p>Our system manages "Interval Walking" data in the cloud system. You can refer training data measured by activity monitors, results of physical strength measurements, graphs and advices. We are expanding the functions of our system to cooperate with smartphone applications and to communicate in English.</p>
<p><b>Thermo Fisher Scientific Inc.</b> Import and sale of research instruments and reagents</p> <p><a href="https://www.thermofisher.com/">https://www.thermofisher.com/</a></p>		<p><b>Ion AmpliSeq Hearing Loss Research Panel v1</b></p> <p>We have developed the hypacusia (deafness) gene screening panel using "Next Generation Sequencer (NGS)". The method using the NGS can analyze the gene responsible for deafness more effectively than conventional methods and the diagnostic rate will increase by 10% or more.</p>
<p><b>Sywind Co., Ltd.</b> Development, Manufacture and sales of adjustable arms for medical assistant use and versatile arms</p> <p><a href="http://www.sywind.com/">http://www.sywind.com/</a></p>		<p><b>"Free Stop" (adjustable) Versatile Arm for Medical Assistant Use</b></p> <p>The versatile arm can be customized according to users' applications, e.g., to the arm for a camera photographing small surgical operations and medical treatments and to the arm for a monitor displaying the photographed images. You can move the arm lightly and easily with only one hand and fix the arm at your desiring position.</p>
<p><b>AXION JAPAN Co.,Ltd.</b> Manufacture and sale of medical devices</p> <p><a href="https://www.axionjapan.com/">https://www.axionjapan.com/</a></p> <p><b>Shinshu TLO Co., Ltd.</b> Transfer of technology, Support of research and development</p>		<p><b>PanoACT 3D Upgrade Series</b></p> <p>All-in-one CT device integrated all dental radiographies with low dose for patients</p> <p>The system is capable of outputting innovative clear images based on abundant image information with low dose. Panoramic, dental, Cephalo and CT images can be produced with this single device, eliminating the need to enter dental X-ray film in the mouth and also preventing infectious diseases.</p>

## Collaborating Companies

## Products and Sales Points

### Tanigawa Co.,Ltd.

Manufacture of optical encoder, magnetic encoder  
Research, development, manufacture and sales of the testing equipment

<http://kk-tanigawa.co.jp/>



### Instruments for Measurement and Training of Ankle Joint Function

The instrument measures or trains reactivity of the ankle joint in the eversion direction which is necessary for preventing the inversion sprain in sports activities.

### Yoshioka Co.,Ltd.

Manufacture of punch press and bending machine, manufacture and sale of "Octa-fix" implant

<http://www.kk-yoshioka.co.jp/>



### Octafix Oral Implant System

The product focuses on not only vertical occlusal pressure but also diagonally yielding occlusal pressure in lateral movement. The product employs pure titanium G4 of high mechanical strength to accelerate rapid growth of osteoblastic cells which are excellent in osteoinductivity and hydrophilicity.

### Daiwabo Co., Ltd.

Manufacture, processing and sales of various textile industrial products

<https://www.daiwabo.co.jp/en/>

### Shinshu TLO Co., Ltd.

Transfer of technology, Support of research and development



### AllerCatcher product family

We have developed the high functional textile material which has functions required in medical sites, such as the deodorant function, the antibacterial function, the antiallergenic function and the antivirus function. The textile is applied to a mask and to sheets which are used in a odor space or used on a contracture skin, on a diaper rash and on a bed sore.

### Takashima Sangyo Co.,Ltd.

Precision parts and FA machinery

<https://www.takashima.co.jp/eng/>



### Boring Biopsy Needles

A biopsy is essential to the diagnosis of the brain tumor. We developed the boring biopsy needle which enabled coexistence of low invasiveness and the high diagnostic ability. As for this product, stratified formation can resect a tumor part of the brain by low involvement.

We promoted development by medicine and industrial cooperation to realize the boring biopsy method that was a totally new innovative

### Yutaka Engineering Corporation

Pressure regulator for Semiconductor manufacturing process and medical use, Flowmeter, Gas Mixers

<https://www.yutaka-crown.com/en/index.html>



### Cylinder level alert device "e-Alert"

This product is an alarm system that sounds a buzzer and flashes a lamp when the gas level in the cylinder is low.

We can greatly reduce the risk of cylinder empties during use without noticing a lack of remaining volume.

This product improves patient safety when going out or moving around in medical facilities or home treatment, etc., and reduces the burden on medical personnel.

### Hokushin Hanpu Co.,Ltd.

Tent, Sheet, Tent-type warehouse, Functional tent, Thermal insulated movable partition

<http://www.hanpu.jp/>



### Tent for First-aid Lifesaving Medical Treatment

This tent, being used for disaster prevention, has the double curtain structure excellent for airtightness and moisture retention. Set-up is very easy. It can be carried by human power being divided to small pieces. It can be used for a temporary clinic and for a food storage.

### NAKATOMI CO.,LTD.

Manufacture and sale such as an air conditioning instrument, the air

<https://www.nakatomi-sangyo.com>



### First-aid Kit for Heatstroke Treatment

At the time of heat stroke, it is a set to treat appropriately before hospital conveyance. The shoulder bag which it is easy to carry is adopted and can treat it without being upset by a plain manual.

### WASHIESU MEDICAL Co.,Ltd.

Sale of the medical equipment and the original brand plan product

<http://www.washiesu.com>



### The independence movement type stand for an Operative Field Shooting "The mobile arm stand"

The moving type stands which assist for the fixation of the camera for the surgery video record. The stop arm that physical strength is unnecessary is adopted and a stable surgery video scan is possible. Also, the system induction on the low budget is enabled without setting construction.

Collaborating Companies	Products and Sales Points
<p><b>Neitz Instruments Co., Ltd.</b></p> <p>Ophthalmic instruments, Surgical loupes, Contact lens inspection equipment, Low vision aids</p> <p><a href="http://www.neitz.co.jp/">http://www.neitz.co.jp/</a></p>	 <p><b>Surgical Loupe with the “Free Stop” (adjustable) Arm</b></p> <p>This product is a new concept medical device developed in collaboration with an experienced plastic surgeon. By installing this newly developed loupe on the Free Stop Arm, a “large aperture”, “wide field of view” and “Less stress” loupe was realized. This surgical loupe is intermediate magnification between the conventional loupe and the microscope.</p>
<p><b>Nishizawa Electric Meters Manufacturing Co., Ltd.</b></p> <p>Biological measuring equipment, Medical equipment, welfare equipment, Electrical measuring equipment</p> <p><a href="http://www.nisic.co.jp/">http://www.nisic.co.jp/</a></p> <p><b>SKINOS Co.,Ltd.</b></p> <p>Manufacture and sale of scientific instruments</p> <p><a href="https://www.skinos.co.jp/">https://www.skinos.co.jp/</a></p>	 <p><b>Ventilation capsule type sweat meter with flow compensation method</b></p> <p>The ventilation capsule type sweat meter supplies air to the capsule covering the skin to ventilate the sweat, and the amount of sweat can be measured from the degree of increase in the humidity of the air. This makes it possible to quantify the temporal changes in sweating onset with high accuracy.</p> <p>This sweat meter employs a newly developed “flow compensation method” that controls the air flow rate according to the amount of sweat, making it possible to measure a large amount of sweat. The feature of this device is that it enables easy and quantitative visualization of the mental sweating reaction, and enables functional evaluation of the amygdala, hippocampus, and locus coeruleus. It can be used in dermatology, neurology, psychiatry, anesthesiology, etc.</p>
<p><b>Nissha SiMICS Inc.</b></p> <p>Semiconductor development and production, development and construction of wireless sensors and systems, software development</p> <p><a href="http://simics.co.jp/">http://simics.co.jp/</a></p>	 <p><b>CPR voice guide with buzzer for life saving and crime prevention “Rescue Guide”</b></p> <p>When a person collapses from cardiac arrest, it’s very important to administer cardiopulmonary resuscitation (CPR) immediately to raise the chances of survival. Rescue Guide was developed with the hope of eliminating emergencies that lead to death because bystanders could not perform life-saving CPR.</p> <p>With the simple press of a button, Rescue Guide emits a blinking light to signal the timing of chest compressions, and a built-in voice guide talks rescuers through the appropriate procedure, helping to keep the person alive until the arrival of an ambulance or automated external defibrillator (AED).</p>
<p><b>NOMURA UNISON CO.,LTD.</b></p> <p>Medical equipment, Contract development</p> <p><a href="https://www.nomura-g.co.jp">https://www.nomura-g.co.jp</a></p>	 <p><b>Endoscopic training device “LFM trainer”</b></p> <p>This training device allows you to practice the actual gastrointestinal endoscopy repeatedly using the Loop Forming Method (LFM), feeling like playing game. Three training locations (reversal biopsy, esophageal EIS, esophageal ESD) are available depending on each doctor’s need.</p> <p>By practicing with this LFM trainer before performing treatment in the clinical setting, it is expected that the quality of the actual treatment will be improved.</p>
<p><b>Bear Medic Corporation</b></p> <p>Microvascular clip, Microsurgery sutures</p> <p><a href="http://www.bearmedic.co.jp">http://www.bearmedic.co.jp</a></p>	 <p><b>Titanium mesh plate “ORIGAMI MESH”</b></p> <p>Conventional titanium mesh plates often have a mesh or lattice structure, making it difficult to process three-dimensionally.</p> <p>In order to reduce tissue damage, this mesh plate is a newly developed design that is easy to fold and hard to create sharp edges.</p>

## Contact Information

### Shinshu Medical Industry Association

[https://www.shinshu-u.ac.jp/group/smia/index\\_en.php](https://www.shinshu-u.ac.jp/group/smia/index_en.php)

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### Shinshu University

### Innovative Research & Liaison Organization

<http://www.shinshu-u.ac.jp/english/>



# SMIA

Shinshu Medical Industry Association

## Organization

<b>PRESIDENT</b>	NISHIZAWA ELECTRIC METERS MANUFACTURING Co., Ltd.	TAKAE NISHIZAWA
<b>DIRECTOR</b>	SAKURA SEIKI CO.,LTD KISSEI PHARMACEUTICAL CO.,LTD SEIKO EPSON CORPORATION NOMURA UNISON CO.,LTD NABELIN CO.,LTD SHINSHU UNIVERSITY-INNOVATIVE RESEARCH AND LIAISON ORGANIZATION SHINSHU UNIVERSITY HOSPITAL SHINSHU UNIVERSITY SCHOOL OF MEDICINE MATSUMOTO DENTAL UNIVERSITY NAGANO PREFECTURAL GOVERNMENT NAGANO EMPLOYERS' ASSOCIATION NAGANO INDUSTRIAL And COMMERCIAL ENCOURAGEMENT ORGANIZATION MATSUMOTO CITY GOVERNMENT	KEIICHI ICHIMURA MAKOTO MORO TAEKO KUSUMOTO KENJI WADA TAKAYUKI NAKAYAMA CHISATO MUKAI MIKITO KAWAMATA JUN NAKAYAMA NOBUYUKI UDAGAWA HIROSHI KURASHIMA YASUHISA HIRABAYASHI MASAHIRO OKIMURA HIROYUKI KOBAYASHI
<b>EXECUTIVE DIRECTOR</b>	SHINSHU UNIVERSITY-INNOVATIVE RESEARCH AND LIAISON ORGANIZATION	NOBUHIRO SUGIHARA
<b>ACCOUNTING AUDITOR</b>	OKI ELECTRIC CABLE CO.,LTD. IHI LOGISTICS & MACHINERY CORPORATION	JUNICHI KAMOSHIDA YUKIHIRO KAMASE
<b>MEMBER</b>	101 members as of October 2022 (59 members from companies, while the remaining 42 members are from universities, hospitals, governmental groups, financial institutions, and individual members)	

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