

# **“Medical Health” Activity in Shinshu University**

May 20, 2018

President Congress between Russia and Japan



# Overview of Shinshu University

11,030 students  
in total

- Founded: May 31, 1949
- Number of Students: Undergraduate 9,127  
Graduate 1,903  
International 317
- Faculties and Graduate Schools:

Faculties	Capacity /Year
Arts	155
Education	280
Economics & Law	185
Science	205
Engineering	470
Textile Science and Technology	275
Agriculture	170
Medicine	263

Graduate Schools	M	D
Division of Arts	✓	
Division of Pedagogy	✓	
Division of Industrial and Social Studies	✓	
Graduate School of Science and Technology (Dept. of Science, Engineering, Textile Science and Technology, Biomedical Engineering)	✓	
Graduate School of Medicine	✓	
Graduate School of Medicine, Science and Technology (Dept. of Medical Science, Biomedical Engineering, Science and Technology)		✓

Attached University Hospital 717 beds

# Institute for Biomedical Sciences (IBS)

(One of Interdisciplinary Cluster for Cutting Edge Research in SU)



Director

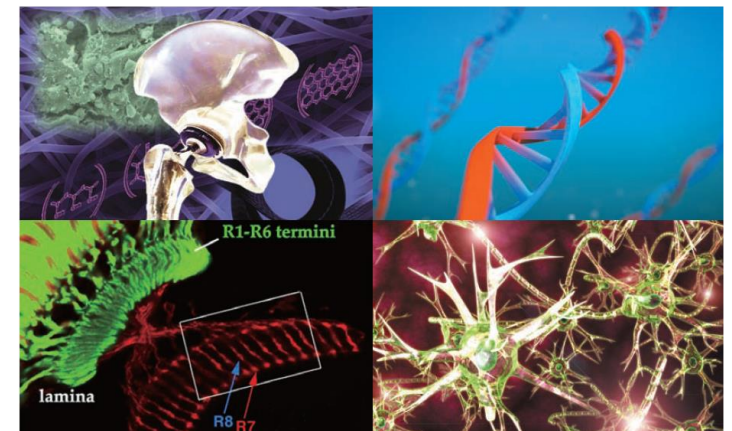
Naoto Saito

Academic Assembly Professor (Institute of Health Sciences)  
Ph. D. in Medicine

The IBS has 38 research members.

## Departments

1. Advanced Medicine for Health Promotion
2. Biological Sciences for Intractable Neurological Diseases
3. Biotechnology and Biomedical Engineering
4. Interdisciplinary Genome Sciences and Cell Metabolism



# Activity in Dept. of Advanced Medicine for Health Promotion

## Searching for new preventive medicines

Sports medical science, Aging biology, Oncology and Nutrition

### Interval Walking Training (IWT)

A new method of exercise

Brisk and slow walking are repeated alternately for 3 minutes each

Effect

Increase of muscle and stamina

Improvement in symptoms of lifestyle-related disease

### Genetically modified model animals

Studying the onset mechanisms of several diseases using genetically modified model animals

### New treatments for cancer

Analyzing inflammation and the microenvironment in cancer progression



Interval Walking Training



Gene analysis

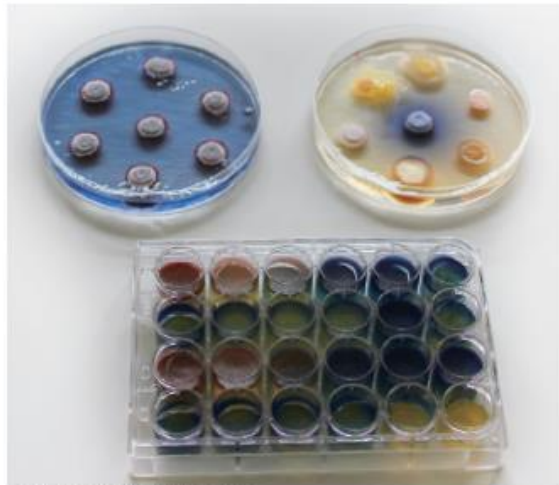
# Activity in Dept. of Interdisciplinary Genome Sciences and Cell Metabolism

Analyzing health through diet, environment, and the genome

## Functional food

Cacao beans and tea leaves shows that they have some effect on preventing obesity.

Epicatechin Oligomers Contained in Grapes and Azuki Beans may suppress the spread of cancer.



Production of useful bioactive compounds by actinomycetes.

## Drug discovery

Research on microorganisms and their secondary metabolic products  
Some microorganisms produce antibiotics. They are searching for new antibiotics.



# Promotion to Activate Health Action by Community Resident

- Seminars on “Health Action” and “Community-Based Learning”
  - Dietary Education for Local People
- ⇒ Nurturing Highly Professional Staffs Having Expertise on Healthcare

