



# GIP-TRIAD

International Joint Degree Master's Program  
in Agro-Biomedical Science in Food and Health



université  
de **BORDEAUX**

筑波大学  
University of Tsukuba

國立臺灣大學

## International Joint Degree Master's Program in Agro-Biomedical Science in Food and Health

Students with a strong volition of **innovation** related to **food and health** are desired.

**A unique joint-degree program involving universities in three different countries, bringing a worldwide perspective on the study of Food and Health**



### International Joint Degree Master's Program in Agro-Biomedical Science in Food and Health

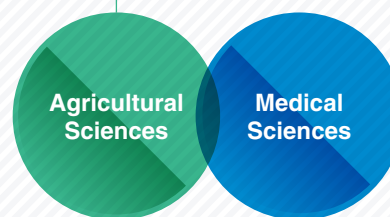
The GIP-TRIAD master's program is the only program that combines Medical and Agricultural Sciences to address issues related to **Food and Health** at an international level.

This master's program is aimed at developing human resources with both a scientific background and an understanding of the business world, taking advantage of the unique collaboration between professionals from a Japanese, Taiwanese and French universities.

#### **A degree awarded jointly by three universities.**

Graduates from the GIP-TRIAD are awarded a Master's Degree in Agro-Biomedical Science in Food and Health with a certificate signed by each president of all three universities.

- Food Processing
- Food Science
- Plant Molecular Genetics
- Plant Parasitic Mycology
- Plant Physiology
- Plant Breeding
- Food Security
- Agricultural Economy
- Metabolomics
- Nutrition
- Oenology
- Horticultural Science



- Environmental Medicine
- Global Health
- Microbiology
- Neurophysiology
- Stem Cell Biology
- Molecular Cell Biology
- Stem Cell and Nanobiotechnology
- Signal Transduction
- Virology
- Toxicology

## Partners within each university



### UNIVERSITY OF BORDEAUX

- INRA-Bordeaux (Green Campus)
- Bordeaux Science Agro
- Agriculture-related Companies etc.



### UNIVERSITY OF TSUKUBA

- Health and Medical Science Innovation Laboratory
- Joint-Laboratory for International Joint-Programs
- Tsukuba-Plant Innovation Research Center
- Agriculture and Food-related Companies etc.



### NATIONAL TAIWAN UNIVERSITY

- Xitao Experimental Forest
- Nantou Experimental Forest
- Biotechnology-related Companies etc.



## Curriculum Overview

Classes are divided into Foundation and Specialized (I and II) Subjects. Foundation Subjects cover the academic basics of Food and Health and the basics of management. In the Specialized Subjects I, students develop their ability to identify and solve problems through practical studies, guided by specialists in the relevant fields. Specialized Subjects II provide expertise in health and food resources. A strong focus is put on practical learning through field activities and internships, with the aim of forming high-level international professionals having the necessary expertise and practical skills to bridge the gap between the world of Research&Development and society.

Enroll	1st semester University of Tsukuba	2nd semester National Taiwan University	3rd semester University of Bordeaux	4th semester Any of the three universities	Graduate
Study goals	<ul style="list-style-type: none"> <li>Specialized basic skills related to health and food resources</li> <li>Expertise in evaluating physical benefits and safety of substances</li> <li>Entrepreneurial spirit, management skills</li> </ul>	<ul style="list-style-type: none"> <li>Expertise related to health and food resources</li> <li>Ability to identify and resolve issues in Asia's social &amp; natural environments</li> <li>R&amp;D and management in Asian companies</li> </ul>	<ul style="list-style-type: none"> <li>Expertise related to links between health and food resources and to the evaluation and development of food resources</li> <li>Ability to identify and resolve issues in Europe's social &amp; natural environments</li> <li>European corporate circumstances, career development</li> </ul>	<ul style="list-style-type: none"> <li>Further expertise on research theme</li> <li>Practical skills depending on career aspirations after graduation</li> </ul>	
Subjects	<ul style="list-style-type: none"> <li>» <b>Foundation Subjects</b> <ul style="list-style-type: none"> <li>Introduction of Agro-Biomedical Science</li> <li>Environmental Health Perspective</li> <li>Entrepreneurship Training</li> <li>English in Medical Science and Technology</li> </ul> </li> <li>» <b>Specialized Subjects I</b> <ul style="list-style-type: none"> <li>Agro-Biomedical Science Laboratory Seminar</li> <li>Research and Development for Agro-Biomedical Science</li> <li>Bio-entrepreneurship Training</li> <li>Fusion of Field and Laboratory Studies</li> <li>Internship in Taiwan</li> </ul> </li> <li>» <b>Specialized Subjects II</b> <ul style="list-style-type: none"> <li>Basic Toxicology</li> <li>Cancer Biology</li> <li>Critical Path Research Management, etc.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>» <b>Foundation Subjects</b> <ul style="list-style-type: none"> <li>Bio-Entrepreneurship Training</li> </ul> </li> <li>» <b>Specialized Subjects I</b> <ul style="list-style-type: none"> <li>Agro-Biomedical Science Laboratory Seminar</li> <li>Research and Development for Agro-Biomedical Science</li> <li>Bio-entrepreneurship Training</li> <li>Fusion of Field and Laboratory Studies</li> <li>Internship in Taiwan</li> </ul> </li> <li>» <b>Specialized Subjects II</b> <ul style="list-style-type: none"> <li>Cellular Network of Biological Molecules</li> <li>Contemporary Issues in Global Health</li> <li>Agriculture in Taiwan, etc.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>» <b>Foundation Subjects</b> <ul style="list-style-type: none"> <li>Job or Internship Hunting Including Technological Watch</li> </ul> </li> <li>» <b>Specialized Subjects I</b> <ul style="list-style-type: none"> <li>International Scientific Seminars</li> <li>Integrative Unit with Omics &amp; Bioinformatic Tools</li> <li>Field to Laboratory Practices with Data Management &amp; Data Mining</li> </ul> </li> <li>» <b>Specialized Subjects II</b> <ul style="list-style-type: none"> <li>Water and Food-borne Microbiological Diseases and Dietary Habits in Human Population</li> <li>Nutrition, Physiological Regulation and Major Human Diseases</li> <li>Integrating &amp; Advanced Plant Breeding</li> <li>Nutrition &amp; Health Organization in Europe, etc.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>» <b>Specialized Subjects I</b> <ul style="list-style-type: none"> <li>Internship in Japan, Taiwan or France</li> </ul> </li> <li>» <b>Specialized Subjects II</b> <ul style="list-style-type: none"> <li>Specialized subjects related to research theme (as necessary)</li> </ul> </li> </ul>	Degree conferment
Schedule	<p>[September]</p> <ul style="list-style-type: none"> <li>General &amp; first semester guidance</li> <li>Research plan proposal</li> <li>Selection of academic advisors (1 main, 2 deputies)</li> <li>Personal academic guidance and consultation</li> </ul> <p>[September – January]</p> <ul style="list-style-type: none"> <li>Classes (15 credits or more)</li> <li>Research guidance</li> </ul> <p>[January]</p> <ul style="list-style-type: none"> <li>Special subject research theme proposal</li> </ul>	<p>[February]</p> <ul style="list-style-type: none"> <li>Second semester guidance</li> </ul> <p>[February – June]</p> <ul style="list-style-type: none"> <li>Classes (15 credits or more)</li> <li>Research guidance</li> </ul> <p>[June]</p> <ul style="list-style-type: none"> <li>Special subject research plan</li> </ul>	<p>[September]</p> <ul style="list-style-type: none"> <li>Third semester guidance</li> </ul> <p>[September – January]</p> <ul style="list-style-type: none"> <li>Classes (15 credits or more)</li> <li>Research guidance</li> </ul> <p>[January]</p> <ul style="list-style-type: none"> <li>Interim presentation on special subject research</li> </ul>	<p>[February]</p> <ul style="list-style-type: none"> <li>Fourth semester guidance</li> </ul> <p>[February – June]</p> <ul style="list-style-type: none"> <li>Internship</li> <li>Special subject research summary [June – August]</li> <li>Special subject research report</li> <li>Selection of examination system</li> <li>Presentation of special subject research</li> <li>Examination of special subject research report, final examination, graduation judgment</li> </ul>	
Continuous academic evaluation					

## Faculty Members

### University of Bordeaux (UB)

- » Dominique Rolin, Professor
- » Michel Hernould, Professor
- » Thierry Noël, Professor
- » Catherine Bennetau-Pelissero, Professor
- » Philippe Gallusci, Professor
- » Eric Gomès, Professor
- » Michael Kann, Professor
- » Valérie Schurdi-Levraud, Associate Professor
- » Gérard Barroso, Associate Professor
- » Frédéric Delmas, Associate Professor
- » Stéphanie Krisa, Associate Professor
- » Kentaro Mori, Associate Professor
- » Pierre Pétriacq, Associate Professor

Functional Genomics and Integrative Biology (Metabolomics and fluxomics)  
 Plant Biology and Biotechnology  
 Microbiology-Mycology-Molecular Biology  
 Animal Sciences and Health-Nutrition  
 Plant Epigenetic and Plant Molecular Biology  
 Plant physiology, Plant Pathology, Functional Genomics  
 Virology-Host Pathogen Interaction  
 Plant Breeding, Genetics and Evolution  
 Biology, Biotechnology and Phylogeny of Fungi  
 Plant Development and Plant Molecular Biology  
 Functional Low Molecules  
 Plant Physiology  
 Metabolomics, Biology of Fruits and Pathology

### University of Tsukuba (UT)

- » Yoshito Kumagai, Professor
- » Masao Ichikawa, Professor
- » Osamu Ohneda, Professor
- » Kazuya Morikawa, Professor
- » Ryoosuke Ohniwa, Associate Professor
- » Norihiko Ohbayashi, Associate Professor
- » Yasuhiro Shinkai, Associate Professor
- » Yumi Abiko, Assistant Professor
- » Masahiro Akiyama, Assistant Professor
- » Yuichi Yamaoka, Professor
- » Hiroshi Ezura, Professor
- » Yutaka Kitamura, Professor
- » Chiaki Matsukura, Professor
- » Fabien Lombardo, Assistant Professor
- » Junichi P. Abe, Assistant Professor

Environmental Medical Science  
 Global Health  
 Stem Cell Biology  
 Bacterial Genetics  
 Integrated Study on Health Information  
 Cellular and Physiological Biology  
 Toxicology  
 Environmental and Hygienic Pharmacy  
 Environmental Medical Science  
 Plant Protection Science  
 Plant Biotechnology  
 Agricultural Environmental Engineering  
 Plant Nutrition/Soil Science  
 Plant Science  
 Plant Protection Science

### National Taiwan University (NTU)

- » Tsai-Kun Li, Professor
- » Hsinyu Lee, Professor
- » Chang-Chuan Chan, Professor
- » Tang-Long Shen, Professor
- » Drug and Health Food Product Development
- » Signal Transduction
- » Environmental Epidemiology and Global health
- » Applied Microbiology

- » Ming-Ju Chen, Professor
- » Han-Yi E. Chou, Associate Professor
- » Chau-Ti Ting, Associate Professor
- » Animal-Based Foodstuff
- » Stem Cell and Nanobiotechnology
- » Genomic Evolution

» **Contact** **GIP-TRIAD Office** Address: 1-1-1 Tennodai, Tsukuba, Ibaraki 305-8575, JAPAN University of Tsukuba, Medical Area 4E610 E-mail: [gip\\_info@un.tsukuba.ac.jp](mailto:gip_info@un.tsukuba.ac.jp)  
 TEL +81-29-853-3228 Open: Monday-Friday, 8:30-17:15 (8:30-12:15; 13:15-17:15) <http://www.gip.tsukuba.ac.jp/english/>

### About the GIP-TRIAD logo

The Global Innovation Joint-Degree Program logo refers to the collaboration of the three universities, which is also referred to in the 'GIP-TRIAD' abbreviation.



GIP-TRIAD HP