



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

Students with the strong volition of innovation related to food and health are expected.

The first European & Asian & Japanese joint-degree program to establish the study of food and health all around the



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

In this department, the master course of Agro-biomedical science in food and health is created by combining the cooperation beyond boundaries, universities, and majors rarely in the world and academic disciplines (agriculture / medical science) related to food and health.

The development of human resources that can solve the global issues related to food and health is aimed through practical education and research activities in various fields with the cooperation universities.

## **Awarding of Joint-Degree by the three universities**

Those who pass a final examination jointly held by all three universities are awarded a Master's Degree in Agro-Biomedical Science in Food and Health and receive a graduation certificate signed by all three university presidents.

- Food processing
- Food science
- Plant molecular genetics
- Plant parasitic mycology
- Plant Physiology
- Plant breeding
- Food security
- Agricultural economy
- Metabolomics
- Nutrition
- Oenology
- Horticultural science

Medical **Agricultural** Sciences **Sciences** 

- Environmental medicine
- Global health
- Microbiology
- Neurophysiology
- Stem cell biology
- Molecular cell biology
- Stem cell and nanobiotechnology
- Signal trasnsduction
- Virology
- Toxicology

## three universities

Bordeaux Science Agro

UNIVERSITY OF BORDEAUX INRA-Bordeaux (Green Campus)

Agriculture-related companies etc.

Health and Medical Science innovation Laboratory

Joint-Laboratory for International Joint-Programs

Tsukuba-Plant Innovation Research Center

Agriculture and food-related companies etc.

UNIVERSITY OF TSUKUBA





Xitao Experimental Forest

Nantou Experimental Forest

Biotechnology-related companies etc.



## Overall picture of curriculum

Classes are divided into a Foundation Course which teaches the academic basics of food and health and the basics of management etc., a Specialized Course I which cultivates the ability to identify and solve problems and the disposition of a high-level specialist through practical study, and a Specialized Course II which develops expertise in health and food resources. We also place importance on practical learning such as field activities and internships with the aim of developing high-level international professionals who have the expertise and practical skills to be able to bridge the gap between the global community and R&D.

# Specialized basic skills related to health

- Specialized basic skills related to health and food resources
   Expertise in evaluating physical benefits and safety of substances
   Entrepreneurial spirit, management skills
   Specialized English skills

- **Foundation Subjects**
- Introduction of Agro-Biomedical Science Environmental Health Perspective Entrepreneurship Training I, II English in Medical Science and Technology

- Specialized Subjects I
  Agro-Biomedical Science Laboratory
- Seminar I Research and Development for

- Research and Development for Agro-Biomedical Science I
   Specialized Subjects II
   Basic Toxicology
   Cancer Biology
   Critical Path Research Management ,etc.
- [September]
   General & first semester guidance
- Submit research plan
  Select academic advisors (1 main, 2 deputies)
  Personal academic guidance and consultation
  [September January]
  Classes (15 credits or more)
  Research guidance
  [Lanuary]
- [January]
  - Submit special subject research theme

## 2nd semester National Taiwan University

- Expertise related to health and food
- resources
  Ability to identify and resolve issues in
  Asia's social & natural environments
  R&D and management in Asian
- companies
- Foundation Subjects
- Bio-Entrepreneurship Training
  Specialized Subjects I
  Agro-Biomedical Science Laboratory
  Seminar II
- Research and Development for
- Agro-Biomedical Science II
- Bio-entrepreneurship Training Fusion of Field and Laboratory Studies

- Fusion of Field and Laboratory Studies Internship in Taiwan I Specialized Subjects II Cellular Network of Biological Molecules Contemporary Issues in Global Health Agriculture in Taiwan, etc.
- [February]
- Second semester guidance
- [February June]
  Classes (15 credits or more)
  Research guidance
- [June]
  Submit special subject research plan

## 3rd semester University of Bordeaux

- Expertise related to links between health and food Experies related to finds between resources and to the evaluation and development of food resources

  Ability to identify and resolve issues in Europe's social &
- natural environments European corporate circumstances, career development
- Foundation Subjects

- Foundation Subjects
  Job or Internship Hunting Including Technological Watch
  Specialized Subjects I
  International Scientific Seminars
  Integrative Unit with Omics & Bioinformatic Tools
  Field to Laboratory Practices with Data Management &
  Deta Mainze
- Data Mining Specialized Subjects II
- Water and Food-borne Microbiological Diseases and Dietary Habits in Human Population Nutrition, Physiological Regulation and Major Human Diseases
- Integrating & Advanced Plant Breeding
  Nutrition & Health Organization in Europe, etc.
- [September]

- Third semester guidance
  [September January]
  Classes (15 credits or more)
  Research guidance
- January]

  Interim presentation on special subject research

- Further expertise on research theme Practical skills depending on career aspirations after graduation
- Specialized Subjects I
- Internship in Japan Internship in Taiwan II Internship in France
- Specialized Subjects II
- Specialized subjects related to research theme (as necessary)

- [February] Fourth semester guidance
- [February June] Internship

- Presentation of special subject research Examination of special subject research
- report, final examination, graduation judgment

## **Faculty Member List**

### University of Bordeaux (UB)

- Dominique Rolin Professor Thierry Noel Professor
- Catherine Bennetau Professor
- Philippe Gallusci Professor
- Eric Gomes Professor Michael Kann Professor
- Michel Hernould Professor
- ▶ Gerard Barroso Associate professor Frederic Delmas Associate professor
- Stephanie Krisa Associate professor Kentaro Mori Associate professor
- Valerie Schurdi-Levraud Associate professor

- Metabolomics
- Microbiology Nutrition
- Plant Molecular Genetics
- Ecophysiology
- Virology Plant Physiology
- Mycology
- Plant Physiology Oenology
- Plant Physiology Plant Breeding

### University of Tsukuba (UT)

- Yoshito Kumagai Professor
- Masao Ichikawa Professor Osamu Ohneda Professor
- Masayuki Matsumoto Professor Kazuya Morikawa Professor
- Ryosuke Ohniwa Associate Professor
- Masahiro Akiyama Assitant Professor
- Yuichi Yamaoka Professor Hiroshi Ezura Professor
- Yutaka Kitamura Professor Chiaki Matsukura Professor
- Junichi P. Abe Assistant Professor

- Environmental medical science
- Global health
- Stem cell biology Neurophysiology
- Bacterial genetics Molecular microbiology / Incubation Studies
- Environmental medical science
- Plant parasitic mycology Plant breeding and genetics
- Agro-food processing
- Plant physiology Plant parasitic mycology

## National Taiwan University (NTU)

- Tsai-kun LI Professor Drug and health food product development
- Hsinvu LEE Professor Signal transduction ▶ Chang-Chuan CHAN Professor Environmental Epidemiology and Global health
- ▶ Han-Yi CHOU Associate Professor
- Ming-Ju CHEN Professor

Stem cell and nanobiotechnology

Animal-based foodstuff

>>> Contact Office of International Joint-Degree Master's Program in Agro-Biomedical Science in Food and Health
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About GIP-TRIAD logo mark

set the slogan of Global Innovation Joint-Degree Program as a common indicator of three universities in order to establish this department at the same time GIP-TRIAD indicates the meaning of slogan and the collaboration of Leap to the Future of three universities. Also, the current logo mark was created in accordance with it.







Summarize special subject research
[June – August]
 Submit special subject research report
 Selection of examination system