

# サマープログラム2012 ヘルスバイオサイエンスコース

昨年度に引き続き、ヘルスバイオサイエンス研究部、疾患酵素学研究センター及び疾患ゲノム研究センターでは『サマープログラム2012ーヘルスバイオサイエンスコース』を開催いたします（各教育部において大学院統合医療学際教育英語プログラム、国際統合医療特論として認定された正規授業であり、受講者には単位認定もあります）。

海外へも協定校から広く受講生を募り、各国からの大学院生と共に、医科学・生命科学研究に必須の初歩的技術を、英語により講義をおこないます。

期間中には企業見学や、文化体験なども開催されます。

参加希望者は下記の方法に従って、申し込み用紙を提出して下さい。

## 日時・場所

2012年7月29日（日）～2012年8月5日（日）  
徳島大学蔵本キャンパス



## 申し込み方法

申込用紙を記入の上、顔写真を添付の上、kasoku@tokushima-u.ac.jpに送付してください。

申込用紙は、徳島大学ホームページ（<http://www.tokushima-u.ac.jp>）のトップページよりダウンロードできます。

**締切：2012年6月29日（金）**

## お問い合わせ

国際課国際交流係 TEL：088-656-7082

FAX：088-656-9873

E-mail：kasoku@tokushima-u.ac.jp



# "SUMMER PROGRAM 2012" -Health Bioscience Course-

Institute of Health Biosciences, Institute for Enzyme Research, Institute for Genome Research and International Center of the University of Tokushima, proudly announce the "SUMMER PROGRAM 2012 – Health Bioscience Course (TOWARD PROMOTION OF INTERNATIONAL COMMUNICATION IN SCIENCE) ”

We believe the program will have significant meaning in improving your international communication skills in sciences.

For detailed information about this program, please refer to our program schedule and curriculum design.

## **When and where?**

**July 29 (Sun) –August 5 (Sun), 2012**

**The Univ. of Tokushima, Kuramoto Campus**



## **Credits**

2 credits can be obtained in this course.

## **How to apply?**

Students who wish to apply for the summer program should access to the homepage of the University of Tokushima, and submit your application and face photo to the International Affairs Division(kasoku@tokushima-u.ac.jp).

**Deadline for Application: June 29 (Fri), 2012**

## **Contact & Registration Information**

International Affairs Division of the University  
of Tokushima

Tel: 088-656-7082

FAX: 088-656-9873

E-mail: kasoku@tokushima-u.ac.jp



# **SUMMER PROGRAM 2012**

(TOWARD PROMOTION OF INTERNATIONAL COMMUNICATION IN SCIENCE)

*Institute of Health Biosciences, The University of Tokushima Graduate School,  
Institute for Enzyme Research, Institute for Genome Research,  
& International Center, The University of Tokushima*

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**July 29-August 5, 2012**

**Health Bioscience Course**

## **PROGRAM**

- I GUIDANCE AND RECEPTION**
- II LECTURE**
- III LABORATORY TRIP IN KURAMOTO CAMPUS**
- IV EXCURSION TO VISIT THE BIO INDUSTRIES IN TOKUSHIMA**
- V EXPERIENCE OF JAPANESE CULTURES**

(II LECTURE)

## Graduate Program in English

### “Global Topics of Interdisciplinary Health Care”

-ESSENTIAL LABORATORY TECHNIQUES IN LIFE SCIENCES AND ITS APPLICATION TO  
MEDICAL AND HEALTH BIOSCIENCES-

#### Contents(Tentative Titles)

##### 1. Cell and Tissue Culture

- 1) From Basic to Clinic
- 2) Application of cell culture experiments to oral Sciences

##### 2. Protein Experiments

- 1) Expression and Purification of Recombinant Proteins
- 2) Characterization and Proteomics Analysis
- 3) Crystallization and X-ray Crystallography

##### 3. Antibody Experiments in Biochemistry

- 1) Western blotting
- 2) Immunoprecipitation experiment
- 3) ELISA and RIA

##### 4. Morphological methods for medical sciences

- 1) Basic techniques for morphological researches
- 2) Recent advances of morphological researches

##### 5. Gene analysis techniques 1

- 1) mRNA detection by Northern blotting and QRT-PCR/real-time PCR
- 2) in situ hybridization
- 3) Assessment of promoter region by luciferase assay and gel shift assay
- 4) siRNA, its principle and protocol

##### 6. Gene analysis techniques 2

- 1) Genome analysis of autoimmune diseases
- 2) SNP analysis for identifying disease susceptibility in human
- 3) Gene expression profiling and cancer drug discovery
- 4) Real-time monitoring of endoplasmic reticulum stress signaling

##### 7. Clinical oncology and Bioimaging

- 1)Gene analysis in oncology
- 2)Bioimaging for health science

##### 8. Interdisciplinary field of medicine and engineering