

DOCTORAL PROGRAMS

Environmental Microbiology and Biotechnology

Identificative data of the program

Code	HOQ02
Denomination	Environmental Microbiology and Biotechnology
Areas of the program	Ciències Mèdiques i de la Salut Ciències de la Vida
Maximum number of students	25
URL of the program	http://www.ub.edu/doctoratmicrobiologia/cat/index_cat.html

Coordinator

Name	Rosa M. Pintó Solé
Department	MICROBIOLOGIA
Centre	FACULTAT DE BIOLOGIA
E-mail	rpinto@ub.edu
Telephone	934034621
Fax	934034629

Training period

UB master/s which is/are partially or totally integrated in this period:

Master

Microbiologia Avançada	Total
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Research period

General objectives of the program

The general objective of the program in Environmental Microbiology and Biotechnology is the training of students as researchers and highly qualified professionals in Environmental Microbiology, Microbial Biotechnology and Health related Microbiology. This training must prepare students to be competitive in both the industrial sector and basic research sector, where they will carry out tasks related to research, control, production, management and R+D+I in areas related to microbiology.

Therefore, the program offers PhD students a range of research lines that enables them to plan their studies in accordance with their professional interests and thesis projects, as well as in line with the needs of today's society. Application of the knowledge acquired to environmental, health and biotechnology problems will facilitate the entry of the future PhDs into the private sector.

A further objective of the program is to provide PhD students the necessary tools to complete their formation in important aspects of research as: preparing and writing scientific articles and reports, performing bibliographic searches and the use of data bases. Additionally, the capacity to present scientific results to highly specialized audiences is also an important formative goal intended to be transmitted to the PhD students.

Procedimientos, requisitos y criterios específicos de admisión al programa, así como de valoración de los méritos de las personas candidatas.

A commission formed by three professors designed by the Microbiology Department will review all the documents presented by the candidates to be admitted into the Environmental Microbiology and Biotechnology program to perform the PhD research work.

In order to be admitted in the program it is necessary to possess a Master Degree in Microbiology or similar from a recognized University. This Master Degree should guarantee a minimum of 60 ECTS and 20 out of these 60 must be from practical work developed at an accredited University or at an institution belonging to a University.

The following points will be used in the selection process:

Those students with the Master Degree in Advanced Microbiology, from the University of Barcelona (http://www.ub.edu/biologia/postgraus/masters_of/microbiologia/index.htm), will be preferred.

Those students with a Master Degree, from the University of Barcelona, in Microbiology related topics such as Biomedicine (<http://www.ub.edu/biomed/>), Molecular Biotechnology (<http://www.ub.edu/masteroficial/biotec/>), and Biology of development and Genetics (<http://www.ub.edu/masteroficial/biodelgen/>), as well as those with a Master Degree, with participation of the University of Barcelona, such as Immunology (<http://www.ub.edu/masteroficial/immunologia/>) will be chosen in second position. However, each

particular case will be analyzed by the commission to support that the acquired expertise is compatible with those necessary in the field of Microbiology.

Those students with a Master Degree in Microbiology related topics from other Universities will also be accepted, after considering the itinerary contents of the Degree and its compatibility with the field of Microbiology, and chosen in third position.

An important added value will be the knowledge of the English language.

Complements específics de formació en recerca, a cursar en màsters de la UB, que es considerin necessaris i activitats que hauran de seguir-se durant el període de recerca (seminaris, cursos metodològics o altres activitats formatives programades)

Depending on the research topic in which the PhD project is associated, the student will need to receive additional and complementary training in order to be able to proceed with the experimental work. Among these there are two relevant issues that deserve mentioning, such as the certification to manipulate laboratory animals as well as the certification to work with radioactive materials in special facilities.

Offered research lines, teachers and researchers and registering centers

[+] 100192 Biodegradación de xenobióticos y productos naturales: aspectos básicos y aplicados

[+] 100194 Microbiología de aguas relacionada con la salud

[+] 100195 Genética y biología molecular de los factores de virulencia bacterianos

[+] 100196 Biología molecular de virus entéricos: aplicaciones biotecnológicas, diagnósticas y de seguridad alimentaria

[+] 100197 Estudio de los tapetes microbianos

General information

Procedimientos para la admisión y el seguimiento del proyecto de tesis

To develop the experimental work necessary to reach the PhD Degree in the framework of the Environmental Microbiology and Biotechnology program, in the Department of Microbiology of the University of Barcelona or in other Departments or Institutions, a research proposal should be submitted. The program's commission will review the submission and analyze its feasibility and finally the Department will have to accept the proposal. The commission's analysis will include the scientific value of the work, the background of the group in which the work will be performed and, obviously, the project funding. Those students performing their PhD projects as external students, in other Departments or Institutions than the Department of Microbiology of the University of Barcelona, will be assigned an advisor, among the lecturers involved in the program, despite having their own scientific supervisor.

Documents to be presented for the PhD project proposal:

- 1.- Letter from the project supervisor accepting the direction as well as a certificate of acceptance of incorporation to his/her research group. Obviously, if the supervisor does not belong to the group of lecturers of the PhD program, a certificate of his/her PhD Degree will be required.
- 2.- A summary of the PhD project. Those summaries presented to financial agencies, to apply for fellowships, contracts or any other salary funding, are acceptable. When the PhD research project is performed at the Department of Microbiology of the University of Barcelona an approved funding for a minimum of two years is required.
- 3.- At least one reference letter from a former teacher of the University in which the student has obtained the Master Degree.

The program's commission will follow up the progress of the PhD project and of the student maturity by annually reviewing the generated results with regard to the planned objectives presented with the proposal. Those reports presented to the funding agencies that are certified by the students and validated by the supervisors will be accepted. In some particular cases, the commission may seek the help of other lecturers of the program, as well as to any other experts in the field, to review the reports. A maximum of six annual reports will be examined in order to avoid longer experimental periods of PhD research. In those exceptional situations in which this could happen, the program's commission would provide very specific solutions.

Procesos administrativos (plazos y procedimientos de preinscripción) y otros datos de interés para el estudiante sobre el programa.

All the administrative-related issues necessary to be performed by the students will be announced in advance in the web page of the program, and officially dispatched at the administrative office of the Department of Microbiology (person of contact Beatriz Planell 93 402 14 89; beatrizplanell@ub.edu) of the University of Barcelona. There are several linked web pages of interest, accessible from the program web page, such the School of Biology official web page (<http://www.ub.edu/biologia/doctorat/index.htm>), in which important information regarding schedules of the PhD school's commission and procedures for the final PhD presentation are available.

Procedimientos para que el estudiante, si lo desea, pueda formular reclamaciones en relación con el programa.

During the annual follow up process of the PhD research project, students will have the opportunity to fill in a questionnaire regarding his/her personal opinion on the development of their project, the supervising process of their directors and/or advisors and their own scientific development.

Additionally, students will have the opportunity to request meetings with the members of the program's commission in order to express any trouble and/or claim against the whole process. Also, there will be an anonymous complaints book to state to the program's commission any irregularity found in the PhD project development. If necessary, the program's commission will propose correcting measures to solve the problems.

