Ph.D. Course Information Sheet  
40th cycle - A.Y. 2024/2025

<table>
<thead>
<tr>
<th>NAME OF PH.D. COURSE</th>
<th>BASIC AND APPLIED BIOMEDICAL SCIENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURATION</td>
<td>3 YEARS</td>
</tr>
<tr>
<td>START DATE</td>
<td>October 1° 2024</td>
</tr>
<tr>
<td>LANGUAGE(S)</td>
<td>Italian, English</td>
</tr>
<tr>
<td>COORDINATOR</td>
<td>Prof. Stefania Stefani</td>
</tr>
<tr>
<td>PLACES IN THE PH.D.</td>
<td>9</td>
</tr>
<tr>
<td>COURSE</td>
<td></td>
</tr>
<tr>
<td>SELECTION PROCEDURE</td>
<td>Evaluation of qualifications and research project; oral examination</td>
</tr>
</tbody>
</table>

### Places and scholarships

<table>
<thead>
<tr>
<th>Number of Scholarships</th>
<th>Financial support</th>
<th>Research topic associated to the scholarship (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Funds of the University of Catania</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>University NRRP Project Anthem – Spoke 4</td>
<td>Research activities related to the evaluation of the effects of liposomal sonoporation for targeted drug delivery in the treatment of tumors, with particular attention to understanding how sonoporation influences cell signaling and metabolic pathways to improve therapeutic outcomes.</td>
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<tr>
<td>1</td>
<td>University NRRP Project Infact – Spoke 1</td>
<td>Research activity in the development of new diagnostic technologies in emerging microbial infections and metabolic interactions with the host</td>
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<tr>
<td>1</td>
<td>University NRRP Project Infact – Spoke 3</td>
<td>Evaluation of the mechanisms responsible for the development of antimicrobial resistance in human pathogenic microorganisms</td>
</tr>
<tr>
<td>2</td>
<td>University NRRP Project Onfoods – Spoke 5</td>
<td>Research activity in the field of human nutrition, with specific reference to the dietary assessment of patients suffering from cardiovascular and chronic-degenerative diseases, collection of biological samples, compilation of databases, analysis of data on the relationship between dietary intake, pathology markers, metabolites and markers of inflammation</td>
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</tbody>
</table>

**One place without scholarship** is available in addition to the places with scholarship reported in the table above

**Selection Procedure**
Evaluation of qualifications and research project

Candidates’ presence not required

From July 26th 2024

Oral examination

Date: From September 2nd 2024, h. 9.30 am
Place: In presence, Dipartimento di Scienze Biomediche e Biotecnologiche – Sala Riunioni 2° Piano Torre Sud
Or
Online through Microsoft Platform

From September 5th 2024

* * If the number of admitted candidates does not allow the oral test to be held on a single day, a calendar will be published on the website together with the results of the evaluation of qualifications and the research project.

* ** The results of the admission tests will be available on the website. Publication on the site has the value of notification. No communication will be sent to candidates via email.

Documents to be annexed to the application

Only documents drawn up in **Italian, English or French** will be considered valid and evaluated by the Commission. For identity documents and qualifications issued in a different language, a sworn and certified translation into Italian, French or English made by an authorized body or the University that issued the qualification must be attached.

<table>
<thead>
<tr>
<th>MANDATORY DOCUMENTS TO BE SUBMITTED WITH THE APPLICATION FORM</th>
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<tbody>
<tr>
<td><strong>Identity document</strong></td>
</tr>
<tr>
<td><strong>Curriculum Vitae</strong></td>
</tr>
<tr>
<td><strong>Qualifications</strong></td>
</tr>
</tbody>
</table>
| **Progetto diricerca** | Research project (written in English)
  a) divided into: state of the art; description of the project; expected results; articulation of the project and implementation times; proposed criteria for the verification of the results achieved; Concise bibliography.
  b) maximum length of 25,000 characters, including title, spaces, formulas, bibliography |
| **Publications** | - List of any scientific publications (indicate DOI number, ISBN/ISSN) |
| **Documents certifying the knowledge of the foreign language, if any** | - Any certificate, attesting to the knowledge of a foreign language in the E.U., issued by a legally recognized institution (by way of example but not limited to: TEOFL, IELTS, Cambridge Exol, DELF, DELE, KEG, Goethe Institut, etc.) |
Selection procedure criteria

The assessment is expressed through the attribution of an overall score, as established by art. 5 of the call for applications, to which reference should be made.

1. **Evaluation of qualifications and research project**: minimum score to be admitted to the oral examination: 40 points, maximum 60 points

2. **Oral examination** – minimum to pass the examination: 40 points, maximum 60 points