Ph.D Course in Biomedical Science

SCIENTE BIOMEDICHE
BIOMEDICAL SCIENCES

Coordinator: Prof. Andrea Piana
Email: piana@uniss.it,
Phone: +39 07922 9091

Area disciplinare: Biomedicina
Dipartimenti interessati: Scienze Biomediche
(Sede amministrativa) – Scienze Mediche,
Chirurgiche e Sperimentali
Costo: rata unica annuale di 354,23 euro (per
ogni anno di iscrizione)
Scadenza bando: 13/09/2018
Breve descrizione: il Corso di Dottorato in
Scienze Biomediche si propone l’obiettivo
generale di formare ricercatori di elevata
qualificazione in aree scientifiche e
metodologiche di grande rilevanza per la ricerca
di base ed applicata nel campo delle scienze
biomediche. L’attività formativa e di ricerca è
caratterizzata da un approccio multidisciplinare
ed è articolato nei seguenti curricula:
- Fisiopatologia medica
- Genetica medica
- Medicina di genere dell’uomo, della donna e
del bambino
- Neuroscienze
- Oncologia molecolare
- Sanità pubblica

Disciplinary area: Biomedical
Departments involved: Biomedical Science (Head
Office)- Clinical and Experimental Medicine-
Department of Medical, Surgical and Experimental
Sciences
Cost: Single annual payment 354.23 euro
Deadline for applicants: 13/09/2018
Brief description: The Ph.D. course in Biomedical
Science proposes the general goal of promote highly
qualified researchers in scientific and
methodological areas, that represents a central
point in development of basic and applied studies in
biomedical field. Training and research activity is
characterized by multidisciplinary approach and is
structured by the following curricula:
- Physiopathology
- Genetics
- Medicine of human gender, woman and
  child
- Neuroscience
- Molecular Oncology
- Public Health
BIOMEDICAL SCIENCE

KEY INFORMATION

- **Disciplinary area:** Biomedical
- **Department:** Biomedical Science (Head Office)- Clinical and Experimental Medicine- Department of Medical, Surgical and Experimental Sciences
- **Cost:** annual fee of € 354,23
- **Deadline for applicants:** 13/09/2018
- **Coordinator:** Prof. Andrea Fausto Piana
- **Venue:** Biomedical Science - Clinical and Experimental Medicine- Department of Medical, Surgical and Experimental Sciences
- **Type of lessons:** Language: Italian - English
- **Positions open:** 8
- **ECTS:** 180
- **Deadline for applicants:** from 03/08/2018 to 13/09/2018

OVERVIEW

**Brief description:** The Ph.D. course in Biomedical Science proposes the general goal of promote highly qualified researchers in scientific and methodological areas, that represents a central point in development of basic and applied studies in biomedical field. Training and research activity is characterized by multidisciplinary approach and is structured by the following curricula:

- Physiopathology
- Genetics
- Medicine of human gender, woman and child
- Neuroscience
- Molecular Oncology
- Public Health

**Objectives of the School:** The PhD School in Biomedical Sciences is open to young Italian and foreign graduates, it proposes the objective to train researchers of high qualification, to be used in research facilities both basic and applied, public or private.

The training activity and research is focused on scientific and methodological areas, very important for basic and applied research in the field of biomedical sciences. Next to the general objectives of the School, each activated address pursue its own address goal, as part of their specific curricula and research topics.

The training objective will be pursued in collaboration with other Italian or foreign universities, or with public and private entities who meet the requirements of high cultural and scientific qualifications and staff, facilities and adequate equipment.

**Educational Goals**

**Overall objective:** Train researchers of high qualification, to be used in research facilities both basic and applied, public or private. The training objective will be pursued in collaboration with other Italian and
foreign universities or as a result of agreements with public and private entities who meet the requirements of highly qualified cultural and scientific, as well as adequate personnel, facilities and equipment.

The formation of the PhD will be aimed also to its insertion into the world of work and the production system at public and private institutions.

**Specific objectives:**

- Orientate the training activity and research on extended scientific and methodological areas, very important for basic and applied research in the field of biomedical sciences;
- Perform the theme proposed in the activated curricula with interdisciplinary approach;
- Record the scientific work on the proposed topics by the teachers involved in training;
- Perform specific aspects of the training within interchange projects established with research institutions both public and private, Italian and foreign, willing to accommodate the graduate students in their structures.

For the realization of these educational objectives the PhD program will establish a joint teaching commission, that will provide the educational activity organization and coordination.

**Career and professional opportunities**

The PhDs in Biomedical Sciences have title and competence to be employed in public or private facilities with research purposes (experimental and applied, clinical and laboratory investigations), training and assistance in order to implement projects of national and international research on topics of neuroscience, genetics, molecular pathophysiology, cellular and medical, public health, aesthetic adhesive odontostomatology, gender medicine and biostatistics.

The PhD student will be provided with extensive knowledge in biomedical and technology field, which will enable them to acquire skills to plan and carry out biotechnological applications that can contribute both to a basic knowledge enrichment that their application to human health, especially to the diagnosis, prevention and treatment of diseases.

The training and research activities offered by the PhD program in Biomedical Sciences face problems and emerging issues to which more and more national and international organizations devote significant financial and human resources. Therefore the future PhD in Biomedical Sciences will find source of employment at: Italian and foreign universities, , public and private research centers, public institutions, companies.

**REQUIREMENTS**

**License for access:** Master’s Degree o Degree prior D.M 509/1999

**Selection criteria:** Public selection based on curricula data, Research Project and interview

**Language:** English language is required as admission criteria
## TEACHING

Lessons learned during Ph.D. course in A.A 2017/2018

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<thead>
<tr>
<th>COURSE</th>
<th>PROFESSOR</th>
<th>HOURS</th>
<th>CFR</th>
<th>FINAL EXAM</th>
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<tbody>
<tr>
<td>Descriptive and Inferential Statistic applied on research</td>
<td>Prof. G. Sotgiu/Dott.ssa L. Saderi</td>
<td>16</td>
<td>2</td>
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<tr>
<td>Advanced Statistic: Linear Model in scientific research</td>
<td>Prof.ssa G. Solinas</td>
<td>4</td>
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<tr>
<td>Evidence Based Medicine</td>
<td>Prof. P. Castiglia</td>
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<tr>
<td>Role of Ethics Committee</td>
<td>Prof. G. Sotgiu</td>
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<td>Yes</td>
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<tr>
<td>Epidemiological Methodology</td>
<td>Prof. A. Piana</td>
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<td>Molecular Epidemiology applied to infection and chronic-degenerative diseases</td>
<td>Prof. A. Piana</td>
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<td>Yes</td>
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<td>Scientific Communication</td>
<td>Prof. G. Campus</td>
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<td>Detrimental practices in scholarly publishing</td>
<td>Dott. A. Manca</td>
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<td>Neuromodulation</td>
<td>Prof.ssa F. Deriu</td>
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<td>Stamina cells in rigenerative medicine, between past and future</td>
<td>Prof.ssa M. Maioli</td>
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<td>Development and characterization of bio-sensor for monitoring molecules involved in biomedical process</td>
<td>Prof. P.A. Serra</td>
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<td>Fundamental of Ethics</td>
<td>Dott. B. Arru</td>
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<td>Ethic in Biomedical research</td>
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<td>0,5</td>
<td>Yes</td>
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<td>Application of R-Software</td>
<td>Dott. Matteo Floris</td>
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<td>Molecular Model in biological systems</td>
<td>Prof.ssa M. Maioli</td>
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<td>Yes</td>
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Attendance for student is obligatory for at least 70% of amount of hours.

For student without grant and who works for companies, the frequency required, is at least 40% of total amount.

CONTACTS

Ufficio Alta Formazione: Piazza Università, 11 - Palazzo Zirulia – First floor, rzallu@uniss.it, +39 079 229992, Monday – Wednesday and Friday from 10:00 to 12:30.

Administrative Office of the Department: Viale San Pietro, 43/C, c.testone@uniss.it, +39 079 228583

Coordinator: E-mail piana@uniss.it, Phone: +39 079 229091