## PhD programme
**SCIENCE OF DRUG AND BIOACTIVE SUBSTANCES**

### President:
- *Prof. Adriano Martinelli*
- *Prof. Cinzia Chiappe* (from 1st November 2018)

### Department:
Department of Farmacia, via Bonanno Pisano, 6 – 56126 PISA

### Admission requirements:
Any Master’s Degree

### Outcome of the selection procedure:
- Ranking of candidates for the whole Ph.D. programme

### PhD Positions Available

<table>
<thead>
<tr>
<th>Positions available</th>
<th>of which</th>
<th>4 with grant</th>
<th>1 with grant reserved to students who have graduated from a foreign university</th>
<th>1 without grant</th>
</tr>
</thead>
</table>

### Details:
- 4 grants financed by University of Pisa
- 1 grant financed by University of Pisa reserved to students who have graduated from a foreign university

### Selection criteria:

#### Curriculum
The curriculum, signed and accompanied by a copy of a valid identification document, shall be uploaded **only** during the application process. The curriculum must provide information about the candidate’s academic education as well as his/her professional and research experience. The candidate shall all the documents useful for the assessment of his/her curriculum.

**Minimum grade: 70 out of 100**

The list of candidates admitted to hold the interview shall be published at [http://dottorato.unipi.it/](http://dottorato.unipi.it/) “Admissions” at least five days before the interview.

#### Interview
The interview will assess the candidate’s knowledge, her/his aptitude for research, openness to academic experiences in Italy and abroad and an interest in scientific deepening. During the interview, the candidate must to be able to demonstrate the ability to use the English language both in its written and spoken forms.

**Date** 5th September 2018 Time: 9,30 a.m. (Italian Time) with the possible prolongation to the following day/s (**excluding Saturdays and/or Sundays**) All candidates shall be present on the first day of meetings to ascertain the interview schedule (except for the video conference interview).
**Venue:** Department of Farmacia, via Bonanno Pisano, 6 – 56126 PISA

**Minimum grade:** 70 out of 100

**Webconference:** YES

Candidates who choose the videoconference will have to send the filled form (attachment D) to concorsodottorato@unipi.it, **within the deadline of the announcement**. It is also mandatory to send the letter (Attachment D1) duly signed by The Rector of a University or by the Director of a Department or by the Responsible of an official Institution (eg. Embassy, Consulate). In particular, the letter must contain the name of a professor or public official who will be present during the interview, thus ensuring its regularity.

**Guidelines for the presentation of the PhD Research project**

Required: YES
to be illustrated at the interview

The candidate must upload the research project during the online application process **within the deadline of the announcement**. The research project will be evaluated together with the curriculum and/or discussed by the candidate during the interview in order to highlight his/her project planning capabilities. The project which does not influence the future research activity, needs to be presented using the attached form and needs to concern the following topics: Design and development of drugs and bioactive compounds, chemistry of drugs and bioactive compounds, biological testing of drugs and bioactive compounds, technology of drugs and bioactive compounds, separation of natural compound from natural sources.

**INFO:**

**Overview and objectives of the PhD course:**

The training program is mainly characterized by the development of a project focused on the field of pharmaceuticals and health products. The topics are:

- the discovery of bioactive molecules by means of rational design, synthesis or extraction of active compounds from natural sources;
- the study of biochemical, physiological and pharmacological mechanisms of their action;
- the formulation of drugs;
- the techniques for the evaluation of the impact that these substances have on humans and on the environment.

This training program is characterized by a central subject concerning bioactive substances and is able to put together different disciplines and methodologies in a coherent and hard manner, both with respect to different CUN areas (03 e 05) and specific ERC areas, i.e. Life Sciences (LS1, LS3, LS7, LS9) and Physical Sciences and Engineering (PE3, PE5).

The research lines developed at the Department of Pharmacy are characterized by highly interdisciplinary contents. This fact efficiently...
supports the instauration of profitable collaborations between our academic staff and national or international research groups. The PhD students are strongly encouraged to carry out parts of their project in internationally renowned research groups. In order to guarantee a complete interdisciplinary formation of the PhD students, the training activities of this graduate school also comprises:

- Cycles either of lessons, that are held by the academic staff of this graduate school, or by external lecturers;
- Seminars are delivered by professors who are experts in their fields;
- Participation in national and international schools that are specifically dedicated to PhD students.

Website:
http://www.farm.unipi.it/index.php?option=com_k2&view=item&layout=item&id=592&Itemid=495
### Applicant Name

**RESEARCH PROJECT PROPOSAL**
(Use plain typed text, in English)

<table>
<thead>
<tr>
<th>Proposal title</th>
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<tbody>
<tr>
<td><strong>Area</strong></td>
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<tr>
<td>Research program of the Doctorate which the project refers to</td>
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| **Summary of proposal** |
| Brief summary of the research project, highlighting objectives and milestones (maximum 500 characters) |

| **Current state of the art of the research field** |
| (maximum 2.000 characters) |

| **Research objectives and methods** |
| detailed description of the research project, emphasizing innovative aspects and scientific relevance (maximum 4.000 characters) |

| **Outline of work plan** |
| methodology, time scales, milestones; duration should be no more than three years (maximum 2.500 characters) |