FOOD SCIENCE

Cycle | XXXV
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Coordinator | Prof.ssa Chiara DALL'ASTA  
Food and Drug Department  
email: chiara.dallasta@unipr.it
Duration | 3 years
Starting date of the PhD program | 01/11/2019

Research Topics

- Unraveling the molecular determinants of protein digestion
- Lactic acid bacteria in cheese production: from knowledge of the past to prospects for the future
- Plant cells and cultured cereals as biofactories for food additives
- CAN-QUEST – Canteen Quality Elevation for University Students
- Complex indigestible polysaccharides: structural elucidation, enzymatic - hydrolysis and food applications
- Novel Analytical Strategies combined with Multivariate Analysis for solving Complex Issues within Food Integrity and Sensomics
- Study on the nutritional and functional properties as well as digestibility of innovative protein meat-substitutes
- Identification of dietary pattern through metabolomics
- Studies and education interventions for best practices promotion in school canteens in Parma

Training Objectives

The PhD candidates will acquire advanced theoretical and practical expertise to provide innovative approaches and methodologies in the agro-food sector, under a multidisciplinary perspective (food microbiology, food technology, food chemistry, food biotechnology, human nutrition and food safety)

Admission requirements

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:
- Laurea specialista or Laurea magistrale (second cycle master's degree)
- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
- Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programs

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2019.

POSITIONS PUT OUT TO COMPETITION

With Scholarship | 8
Reserved to employees of companies having an “Industrial Doctorate” arrangement | 1
TOTAL | 9
## Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Scholarship Ministerial funds</td>
<td>• Organic Chemistry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Food Microbiology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Pharmaceutical Biology</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>Human Nutrition</td>
</tr>
</tbody>
</table>

### Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by EMILIA ROMAGNA REGION</td>
<td>• Study on the nutritional and functional properties as well as digestibility of innovative protein meat-substitutes</td>
</tr>
<tr>
<td></td>
<td><strong>The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Funded by the Department of Veterinary Science</td>
<td>• Identification of dietary pattern through metabolomics</td>
</tr>
<tr>
<td>1</td>
<td>Funded by SOREMARTEC ITALIA S.r.l.</td>
<td>• Complex indigestible polysaccharides: structural elucidation, enzymatic - hydrolysis and food applications</td>
</tr>
<tr>
<td>1</td>
<td>Funded by Barilla G. e R. Fratelli S.p.A.</td>
<td>• Novel Analytical Strategies combined with Multivariate Analysis for solving Complex Issues within Food Integrity and Sensomics</td>
</tr>
</tbody>
</table>

### Position reserved according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013 (Industrial Doctorate)

<table>
<thead>
<tr>
<th>N°</th>
<th>Company/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reserved to employees of the Municipality of Parma</td>
</tr>
</tbody>
</table>

### ADMISSION PROCEDURES

**Assessment of QUALIFICATIONS:** up to 30 points  
**ORAL EXAM:** up to 90 points  
**Minimum score for ELIGIBILITY:** 70/120

**Foreign Language**  
Language the fluency of which shall be assessed during the Oral Exam: **ENGLISH.**  
The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific test.

**Possibility of videoconference for candidates residing or temporarily abroad**  
**NO**
LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

Mandatory documents to be attached to the on-line application

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
- Abstract of the second cycle master’s degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10,000 characters including spaces)
- Certificates and academic transcript of records for both Bachelor’ and Master’ degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  o University that granted the degree
  o Type of degree (first cycle/second cycle/single cycle)
  o Name of the degree programme
  o Date of graduation
  o Final mark
  o List of exams and corresponding scores (academic transcript of records)
  o Translation into Italian or English (only for degrees issued in languages other than Italian or English)

Further qualifications that may be attached to the application, if in possession of the applicant (only qualifications attested by a document drawn up in Italian or in English)

- Statement of Research Interest: Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD program and at describing the specific her/his research interests, also in relation to the research topics described above;
- Scientific Publications: Articles on national and international journals, papers presented at conferences or symposia, abstracts of reports or posters presented at intelectual conventions;
- Reference Letters: a maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities;
- Academic qualifications: First or second level Master’s degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program
- Mobility experience abroad (e.g. Erasmus or similar);
- Any other document certifying the applicant’s training and abilities (grants, awards, etc.)

**EVALUATION CRITERIA**

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>Including academic career and postgraduate experience (example grants, awards, mobility experience abroad, specialization degree) accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark</td>
<td>Up to 8</td>
</tr>
</tbody>
</table>
| Graduation mark                       | Score related to the final mark:  
  - 110 with honours (magna cum laude): 4 points  
  - 110: 3 points  
  - From 105 to 109: 2 points  
  - From 99 to 104: 1 point  
  - Under 99: 0 points                                                                                                                                    | Up to 4    |
### Average of the exam marks

(if the candidate will attain the degree no later than 31 October 2019)

Score related to the average of the exam marks:
- 30/30: 4 points
- From 28/30 to 29.9/30: 3 points
- From 26/30 to 27.9/30: 2 points
- From 24/30 to 25.9/30: 1 point

Up to 4 points

### Graduation thesis

Consistency of the thesis subject with the training objectives of the PhD program

Up to 4 points

### Statement of Research Interest

Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD and at describing the specific research interests

Up to 5 points

### Scientific publications

Articles on national and international journals, papers presented at conferences or symposia, abstracts of reports or posters presented at international conventions

Up to 7 points

### Reference Letters

A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities

Up to 2 points

### ORAL EXAMINATION

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ORAL EXAM consist in: 1) critical reading of a scientific publication chosen among those proposed by the Commission within the chosen research themes; 2) subsequent interview on the contents of the scientific publication chosen by each candidate</td>
<td>Up to 90 points</td>
</tr>
<tr>
<td>o knowledge of the written and oral foreign language: points 30</td>
<td></td>
</tr>
<tr>
<td>o ability to argue on the interpretation of the scientific impact of the research described in the text: points 20</td>
<td></td>
</tr>
<tr>
<td>o critical capacity in identifying the strengths and weaknesses of the research described in the text: points 20</td>
<td></td>
</tr>
<tr>
<td>o ability to identify future research prospects opened by the research described in the text: points 20</td>
<td></td>
</tr>
</tbody>
</table>

### SCHEDULE OF THE ADMISSION EXAMS

<table>
<thead>
<tr>
<th>ORAL EXAM</th>
<th>DATE</th>
<th>TIME</th>
<th>PLACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORAL EXAM</td>
<td>16 September 2019</td>
<td>10:30 am</td>
<td>ROOM A – Didactic Center of Food and Drug Department (Padiglione 19 Food Project of the University) Parco Area delle Scienze, 47/A – 43124 PARMA - ITALY</td>
</tr>
</tbody>
</table>

For foreign candidates it is possible to carry out the admission examination exclusively in English. For Italian candidates it will be possible to take the admission examination in Italian or in English at the candidate’s choice.