

EVOLUTIONARY BIOLOGY AND ECOLOGY				
Cycle	XXXV			
Coordinator	Prof. Pierluigi VIAROLI Department of Chemistry, Life Sciences and Environmental Sustainability email: pierluigi.viaroli@unipr.it			
Duration	3 years			
Starting date of the PhD program	01/11/2019			
Partner Institution	<ul><li>University of Ferrara</li><li>University of Firenze</li></ul>			
Partner Institution for University Cooperation Agreements	University Klaipėda (Lithuania)			

### **Research Topics**

- Plant Biology and Biotechnology
- Ecology and Ethology
- Evolution

# **Training Objectives**

Evolutionary Biology and Ecology are an integrated area of research which in many prominent scientific institutions belong to the same Department. The doctoral program in Evolutionary Biology and Ecology focuses on the study of biological diversity and its evolution, animal behavior, and the relationships of all living organisms, including humans, among them and with the environment. By integrating information ranging from the molecular level to organisms, populations and communities, Ph.D. students are encouraged to develop their research in both basic and applied fields of investigation. Innovative methods are given a central role, both in fieldwork and in the laboratory and numerical analyses, the latter based on state-of-the-art biostatistical and simulation methods. Therefore, the holder of a Ph.D. in Evolutionary Biology and Ecology will be highly qualified in the analysis and interpretation of biological processes and in the management of natural resources, who will be able to independently plan and conduct empirical research, to thoroughly exploit public bioinformatic resources, to develop quantitative models and to indepth analyze biological data.

#### **Admission requirements**

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:

- Laurea specialistica 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 31**st **2019.** 

POSITIONS PUT OUT TO COMPETITION	
With Scholarship	12
Without Scholarship	3
TOTAL	15



	Positions with University Scholarship					
N°	Funding entity	Research Topic				
3	Scholarship University funded by University of Parma	For information on the topics in the competition, please refer to the PhD web page https://scvsa.unipr.it/it/node/2948				
3	Scholarship funded by University of Ferrara					
3	Scholarship funded by University of Firenze	nttps://sevsu.umpr.nc/1c/110de/2546				

## 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 skills, experience and aptitude of the applicants.

N°	Funding entity	BOUND RESEARCH TOPIC		
1	Funded by University of Parma - Department of Chemistry, Life Sciences and Environmental Sustainability (excellence department project)	<ul> <li>Merging spectral and eco-physiological diversity to assess macrophyte traits and functions along multiple gradients</li> </ul>		
1	Funded by University of Firenze – Department of Biology (Project PRIN2017CTH94H)	<ul> <li>Merging spectral and phylogenetic diversity to assess macrophyte traits and functions along multiple gradients (macroDIVERSITY)</li> </ul>		
1	Funded by University of Firenze – Department of Biology (Project PRIN20174BTC4R)	Reconstructing past human population history through a paleogenomic approach		

# **ADMISSION PROCEDURES**

Assessment of QUALIFICATIONS: up to 60 points

(a minimum score of 36 points shall be required to be admitted to the Oral Exam)

**ORAL EXAM:** up to 60 points

Minimum score for ELIGIBILITY: 70/120

Foreign Language

Language which shall be assessed during the Oral Exam: **ENGLISH**.

The evaluation of the knowledge of this language will be oral and will consist in traslating of a

scientific text.

#### Possibility of videoconference for candidates residing or temporarily abroad

(the request shall be submitted using the form attached to the call for applications)

YES

#### THE INTERVIEW MAY BE HELD ALSO IN ENGLISH

#### 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):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - o Name of the degree program
  - Date of graduation
  - o Final mark
  - 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)
- Research Project: The research project shall consist of a maximum of 4 pages, be written in Italian or in English, be focussed on one of the research topic offered in the call. It shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation; it does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board;
- Statement of Research Interest: Short text maximum 2 pages 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;
- Scientific Publications: Articles on national and international journals with peer reviewing, papers presented at conferences or symposia, book chapters, abstracts of papers or posters presented at congress or meetings;
- Reference Letters: A maximum of 3 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

# 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)

- Academic qualifications: First or second level Master's degree obtained in Italy and/or specialization degreee 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 traning and abilities (scholarship, grants, university career awards, etc.)

EVALUATION CRITERIA			
QUALIFICATION	EVALUTATION CRITERIA	POINTS	
Curriculum Vitae et studiorum	Consistency of the Master's Degree or equivalent with the research topics of the PhD course. Further qualifications and academic experiences consistent with the objectives of the PhD program: language skills, any professional experience, study abroad, awards on the training path	Up to 20 points	
Graduation mark (for graduates)	Score related to the final mark	Up to 10 points	
Average of the exam marks (if the candidate will attain the degree no later than 31 October 2019)	Attribution of a score based on the credit weighted mean mark	Up to 10 points	
Graduation thesis	Relevance of the thesis topics with the themes of the doctorate course	Up to 5 points	



Research Project			Relevance with the PhD topics, with specific reference to:      Scientific value and originality of the proposal     experimental design and methodologie     proposal feasibility	Up to 10 points
Statement of Research Interest		est	Relevance with the PhD topics	Up to 5 points
Scientific publications			publications with peer reviews ISI / SCOPUS indexed, non-indexed journals, conference proceedings and abstracts of conference presentations.  The score will be normalized for the duration of the post-graduate scientific career.	Up to 5 points
Reference Letters			Relevance with the doctorate and prestige of the institution or the signer of the letter. Letter signed by members of the examination commitee shall not be accepted	Up to 5 points
Further qualifications			Academic qualifications, mobility experience abroad and any other document will be collectively evaluated along with the CV and will contribute to the CV score	
ORAL EXAMINAT	ORAL EXAMINATION		EVALUATION CRITERIA	POINTS
The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course		roject ability entific eneral	<ul> <li>knowledge of foreign languages</li> <li>presentation and discussion of the project</li> <li>general knowledge of issues relatedconnected to the PhD course</li> </ul>	Up to 60 points
			SCHEDULE OF THE ADMISSION EXAMS	
	DATE	16 Se	16 September 2019	
ORAL EXAM	TIME	10:00 am		
	PLACE	Department of Chemistry, Life Sciences and Environmental Sustainability Padiglione 14 (Podere Ambolana) – ROOM AB Parco Area delle Scienze, 33/A – 43124 PARMA - ITALY		
OTHER INFORMATIONS For foreign candidates, the examination choice.		oreign candidates, the examination may be held in English a e.	at the candidate's	