## PhD Course: BIOSCIENCES

<table>
<thead>
<tr>
<th>Curricula</th>
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<tbody>
<tr>
<td>BIOCHEMISTRY AND BIOTECHNOLOGY</td>
<td>CELL BIOLOGY AND PHYSIOLOGY</td>
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<tr>
<td>EVOLUTION, ECOLOGY AND CONSERVATION</td>
<td>GENETICS, GENOMICS AND BIOINFORMATICS</td>
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### Department

| BIOLOGIA (DiBio) |

### Duration

| 3 years |

### Scholarships

<table>
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<tr>
<th>Scholarships funded by the University</th>
<th>n. 8</th>
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- 1 scholarship funded by Dipartimento di Biologia - DiBio su fondi AIRC IG 27271 - prof.ssa Ildiko Szabo - **Topic**: From combination treatment halting the progression of poor-prognosis cancers towards possible clinical application (**curriculum**: BIOCHEMISTRY AND BIOTECHNOLOGY);
- 1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Agenzia Spaziale Italiana - ASI - **Topic**: Detectability of molecules deriving from irradiated anoxygenic microorganisms, in the context of ExoMars mission (**curriculum**: BIOCHEMISTRY AND BIOTECHNOLOGY);
- 1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Budget MUR Dipartimenti di Eccellenza 2023-2027” - CUP: C93C23001650001 - **Topic**: Network and quantitative biology: aspects of Biochemistry and Biotechnology (**curriculum**: BIOCHEMISTRY AND BIOTECHNOLOGY);

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<tr>
<th>Scholarships funded by external public or private bodies/Departments</th>
<th>n. 15</th>
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- 1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Budget MUR Dipartimenti di Eccellenza 2023-2027” - CUP: C93C23001650001 - **Topic**: Network and quantitative biology: aspects of Cell Biology and Physiology (**curriculum**: CELL BIOLOGY AND PHYSIOLOGY);
- 1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Budget MUR Dipartimenti di Eccellenza 2023-2027” - CUP: C93C23001650001 - **Topic**: Network and quantitative biology: aspects of Cell Biology and Physiology (**curriculum**: CELL BIOLOGY AND PHYSIOLOGY);
- 1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Budget MUR Dipartimenti di Eccellenza 2023-2027” - CUP: C93C23001650001 - **Topic**: Network and quantitative biology: aspects of Evolution, Ecology and Conservation (**curriculum**: EVOLUTION, ECOLOGY AND CONSERVATION);
- 1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Budget MUR Dipartimenti di Eccellenza 2023-2027” - CUP: C93C23001650001 - **Topic**: Network and quantitative biology: aspects of Evolution, Ecology and Conservation (**curriculum**: EVOLUTION, ECOLOGY AND CONSERVATION);
quantitative biology: aspects of Genetics, Genomics and Bioinformatics (curriculum: GENETICS, GENOMICS AND BIOINFORMATICS);
1 scholarship funded by Dipartimento di Biologia - DiBio su fondi LIFE Prometheus - Topic: Development of conservation strategies for elasmobranchs in the Mediterranean Sea through sustainable fisheries (curriculum: EVOLUTION, ECOLOGY AND CONSERVATION);
1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Mini-HEART - ERC-2020-COG Mini-HEART- Grant Agreement number: 101001746 - prof.ssa Milena Bellin - Topic: Gene editing to correct inherited cardiac diseases (curriculum: GENETICS, GENOMICS AND BIOINFORMATICS);
1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Progetto FIS00001005 dal titolo “A Systematic fuNctional analysis of mitOchondrial iNterorganellar InterFaces” - CUP: C53C23000420001 - Topic: A systematic functional analysis of mitochondrial interorganellar interfaces (curriculum: CELL BIOLOGY AND PHYSIOLOGY);
1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Project: 101115536 - IMPACT - HORIZON-EIC-2022-PATHFINDERCHALLENGES-01 - prof.ssa Milena Bellin - Topic: Generation and characterization of allelic series of hiPSC to classify variants of unknown significance in arrhythmogenic cardiomyopathy (curriculum: GENETICS, GENOMICS AND BIOINFORMATICS);
1 scholarship funded by Dipartimento di Biologia - DiBio su fondi accordo AIRC - VIMM - Topic: Targeting mitochondrial dynamics in AML (curriculum: CELL BIOLOGY AND PHYSIOLOGY);
1 scholarship funded by Dipartimento di Medicina Molecolare - DMM su fondi AIRC - prof.ssa Stefania Bortoluzzi - Topic: CircRNAs involved in mechanisms of malignant transformation and relapse in T-ALL (curriculum: GENETICS, GENOMICS AND BIOINFORMATICS);
1 scholarship funded by Smart PhD 2024 - Fondazione Cassa di Risparmio di Padova e Rovigo, Intesa Sanpaolo S.p.A., UniSMART cofinanziata con BRD S.r.l. - Topic: Optimization of biogas production through an innovative
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<tr>
<th>Scholarships on PNRR and PRIN funds</th>
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<tr>
<td><strong>1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Bando PRIN 2022 - finanziamento PNRR – Missione 4: Istruzione e ricerca - Componente 2 - Investimento 1.1 &quot;Fondo per il Programma Nazionale di Ricerca e Progetti di Rilevante Interesse Nazionale (PRIN)&quot;, finanziato dall'Unione Europea - NextGenerationEU - Progetto 2022HSJS4Y - CUP C53D23006410006 (Area tematica: settore ERC LS4); Responsabile prof.ssa Alessandra Rampazzo e sulla donazione La Stella di Lorenzo Onlus - <strong>Topic:</strong> Targeting fibro-adipogenic precursors in cardiac fibrosis as a new therapeutic option (<strong>curriculum:</strong> GENETICS, GENOMICS AND BIOINFORMATICS);</strong></td>
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<tr>
<td><strong>1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Bando PRIN 2022 - finanziamento PNRR - Missione 4: Istruzione e ricerca - Componente 2 - Investimento 1.1 &quot;Fondo per il Programma Nazionale di Ricerca e Progetti di Rilevante Interesse Nazionale (PRIN)&quot;, finanziato dall'Unione Europea - NextGenerationEU - Progetto 2022YXZ2RB - CUP C53D23000680006 (Area tematica: settore ERC LS6); Responsabile prof.ssa Marina De Bernard - <strong>Topic:</strong> Characterizing the role of CD300e receptor in obesity: low-grade inflammation, insulin-resistance and immunomodulatory properties (<strong>curriculum:</strong> CELL BIOLOGY AND PHYSIOLOGY);</strong></td>
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<td><strong>1 scholarship funded by Dipartimento di Biologia - DiBio su fondi Interreg Italia Croazia progetto FishNoWaste – prof.ssa Carlotta Mazzoldi e prof. Alberto Barausse cofinanziata da Dipartimento di Biomedicina Comparata - BCA su fondi PNRR - progetto CN00000033 - Centro Nazionale Biodiversità – Spoke2 - CUP: C93C22002810006 - <strong>Topic:</strong> State, impacts and valorization of small scale fisheries in coastal areas of the Northern Adriatic Sea (<strong>curriculum:</strong> EVOLUTION, ECOLOGY AND CONSERVATION);</strong></td>
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<td><strong>Positions without scholarship</strong></td>
<td>n. 2</td>
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<tr>
<td><strong>Total number of positions</strong></td>
<td>n. 28</td>
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**Selection criteria**

PRESELECTION ON THE BASIS OF EVALUATION OF QUALIFICATIONS AND ORAL EXAMINATION

**Oral examination via remote interview:**

Applicants who have requested it in the application form will take the oral exam via remote interview using the ZOOM videoconference tool.
| Evaluation criteria | Qualifications: points max 40  
Oral examination: points max 60 |
|---------------------|--------------------------------|
| Documents to be submitted | Thesis:  
Points: max 5  
Applicants waiting to be awarded the entrance qualification: those waiting to be awarded the entrance qualification by 30th September 2024 will submit a summary of the master thesis project (max. 4 pages) signed by the applicant and the supervisor. Applicants already graduated: those with the graduation will provide the pdf copy of the master thesis. |
|                      | Curriculum:  
Points: max 30  
The Curriculum Vitae should include information regarding the Education of the candidate and the expertise obtained. We ask the candidate to specify the weighted average of the exams score (based on the relative credits weight) taken in the Laurea Triennale (Bachelor)+Magistrale (M.Sc) /Specialistica or arithmetic average for exams taken in the Laurea Vecchio Ordinamento and the mark of the three-year degree/Magistrale/ Specialistica/ Laurea Vecchio Ordinamento. In addition to the curriculum vitae, the candidate should present, as a separate file, also a research statement reporting the candidate’s scientific interests in relation to the topics of the course in Biosciences (this statement should not be longer than 2000 words). For further details please see the guideline reported in the web site of the PhD Course (https://dottorato.biologia.unipd.it/admission-and-general-information/) |
|                      | Scientific publications:  
Points: max 3  
Candidates should include a list of their publications (with pdf files for each one), posters or oral communications to national and international conferences. |
|                      | Other documents:  
Points: max 1  
Language certificates. |
|                      | Further documents that the candidates think relevant to their evaluation:  
Points: max 1 |
| Preselection: First meeting of the Evaluating Commission | 28 MAY 2024 09:30 |
| Publication of the results of the evaluation of the preselection | Within 05 JUNE 2024 the evaluating Commission will publish the results of the evaluation of the qualifications in the following website: https://dottorato.biologia.unipd.it/admission-and-general-information/  
In order to be admitted to the examination, the candidate must get a score of at least 7/10 in the preselection. |
**Publication of the timetable of remote interviews and instructions on how to use the ZOOM video conferencing**

By **05 JUNE 2024** the commission will publish on the course website https://dottorato.biologia.unipd.it/admission-and-general-information/ the timetable of the remote interviews and the instructions on how to use the ZOOM video conferencing for those applicants who have chosen in the application form to take the oral examination via remote interview and who have passed the preselection on the basis of the qualifications with a pass-mark of at least 7/10.

**Oral examination**

10 JUNE 2024 09:30 - The exam may continue: 11 - 18 - 19 June 2024 at 9:30 - Dipartimento di Biologia, Università degli Studi di Padova, via U. Bassi 58/B 35121 Padova

**Language/s**

Foreign language/s assessment at the oral examination:
At the oral examination the commission will assess the knowledge of the following language/s: English

Admission exam:
The admission exam will be taken in Italian or English according to candidate's preference.

**Examination topics**

The exam will focus on the relevant topics of the four curricula selected by the applicant: Biochemistry and biotechnology; Cellular biology and Physiology; Evolution, Ecology and Conservation; Genetics, Genomics and Bioinformatics. Candidates will be asked to describe their previous research experience and their scientific interests, regarding in particular the priority projects proposed by the members of the PhD Programme, indicated on the website (https://dottorato.biologia.unipd.it/admission-and-general-information/). Regarding the priority research grants, the eligibility for the scholarship will be assessed by evaluating the skills and interest of the candidate for the topic.

**PhD Course Website:**

https://dottorato.biologia.unipd.it/

**Further information**

Department: BIOLOGIA (DiBio)  
Address: Via U. Bassi - N. 58/B, 35121 Padova (PD)  
Contact person: Brentan Martina  
telephone: 0498276312 e-mail: phd.biosciences.biologia@unipd.it

**How to apply**

The application must be submitted only via the online procedure available at: [https://pica.cineca.it/unipd/dottorati40](https://pica.cineca.it/unipd/dottorati40)  
The documents must be attached in pdf format. The application and the attached documents are submitted automatically by closing the online procedure. So no hard copy of the application and of the documents must be sent to the office.

**Deadlines**

Publication of the ranking lists and enrollment from **2 July 2024**  
Beginning of PhD courses **1 November 2024**