International PhD Program in Digital Public Health and Public Health Data Science

Joint call for applications 2023
**Context**

The Digital Public Health Graduate Program (DPH) has been conceived in the context of the Bordeaux Population Health research centre (BPH) and the Bordeaux School of Public Health (ISPED) and funded by the third French Investment for the Future program (Programme Investissement d’Avenir PIA3). The project relies on numerous academic and industrial partners involved in digital public health.

The Public Health Data Science (PHDS) Bordeaux Network is one of the eight Impulse Research Networks (« Réseaux de Recherche Impulsion ») that have been labelled by the University of Bordeaux in 2022 to help structure communities and support the emergence of resourcing of research areas that particularly matter to the institutions. PHDS Network thus ambitions to boost collaborative research between the research teams of Bordeaux specialized in Data Science and/or Public Health. Specifically, PHDS scientific goal is to tackle the methodological challenges encountered in Public Health through the development of appropriate analytical approaches.

**Program**

The PhD program in Digital Public Health promotes interdisciplinary training through 3 years of full-time study, including coursework. The coursework is module-based. Modules have the form of interactive lectures, practical seminars, workshops and Summer/Winter School classes. They are organized by the Doctoral Schools or specifically by the Digital Public Health Program or in other contexts. Specific modules will mainly focus on epidemiology, statistics and informatics for population health. Other modules will be about any areas such as communication, health economics, law, sociology, etc. applied to digital health. The offer of PhD modules will be renewed each year which will also offer training across different disciplines and related doctoral programs (e.g. modules on writing scientific papers, developing leadership skills, improve oral skills, etc.).

PhD candidates are expected to defend their thesis by the end of the third year. Thesis work can be conducted in an academic research unit or a company (PhD CIFRE1).

**Candidate profile for a full 3-year PhD grant**

The international PhD Program in Digital Public Health is open to Master students from all nationalities and fields relevant to public health for the 2023/2024 academic year. Eligible students

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1 For more information on the CIFRE PhD, please visit [https://www.anrt.asso.fr/fr/cifre-7843](https://www.anrt.asso.fr/fr/cifre-7843)
are expected to hold a Master of Science in one major discipline (e.g. public health, epidemiology, statistics, data sciences -or mathematics- and informatics,). The subject of the thesis must be in relation with digital public health. Graduates from partner universities are encouraged to apply.

**PHDS network grant specifically**, applications require a co-supervision between two partners from the University of Bordeaux. Any co-supervised PhD project associating a methodological challenge with a public health problem is eligible. However, five research directions of particular interest to the PHDS network have already been identified:

- Translate complex, noisy, incomplete and high dimensional observations into mechanistic models
- Develop causal inference techniques for the complex dynamic settings encountered in epidemiological cohorts
- Improve individual predictions of health outcomes using statistical modelling and learning
- Unravel complex data structures using clustering methods
- Develop machine learning techniques for complex health data

Furthermore, the PhD student is expected to:

- Hold a Master’s degree or equivalent diploma in a relevant discipline (epidemiology, biostatistics, informatics, public health)
- Have a thorough training in research skills
- Prove an excellent academic and scientific level
- Be fluent in English, both oral and written
- Be able and willing to work in an interdisciplinary environment
- Be flexible and open to interdisciplinary

**Candidate profile for 3 to 12 months funding**

PhD students who are already included in the DPH program and not funded by the DPH, or already included in the PHDS network and not funded by it, can apply to this call for a 3-12 months extension of their PhD grant to finalise their work until the thesis defense. The application should clearly describe the work already done including published/submitted papers and presentation in conferences. A precise agenda of the work to be done in the extended period should also be provided.

**Cotutelle or international co-direction**

The Cotutelle² is a legal mechanism establishing a common organization of a doctorate, between a French Higher Education institution and a foreign Higher Education institution. The candidate is jointly enrolled in the two partners universities, shares his/her time equally between both

institutions, and alternates between both institutions for tuition fees. Furthermore, (s)he is jointly supervised by a thesis director from each institution, and upon successful completion of the program, graduates from both universities.

The international co-direction PhD program is based on a joint supervision from two partners’ universities: the PhD student is enrolled at the University of Bordeaux, with two supervisors, one from the University of Bordeaux and the other from a foreign institution. Upon successful completion of the program, the candidate graduates only from the University of Bordeaux.

The Digital Public Health Graduate Program will prioritize applications from international students and projects developed within the framework of a Cotutelle or co-direction scheme. Do not hesitate to contact us (dph@u-bordeaux.fr) to explore any possibility of co-supervision of your PhD thesis.

How to apply

Complete applications to this joint call (DPH and PHDS programs) must be submitted electronically to the Digital Public Health Graduate Program (contact: dph@u-bordeaux.fr) by 28/05/2023. Please note that inadmissible or incomplete applications will not be transmitted to the selection committee.

The application must include the following documents:

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<tr>
<th>Document</th>
<th>Size</th>
<th>Must include / Comments</th>
<th>Name of the file</th>
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<tbody>
<tr>
<td>Application form</td>
<td></td>
<td>The file must be renamed with the applicant’s name and converted in pdf format. Incomplete applications will not be considered</td>
<td>UB_DPH/PHDS2022_NAME.Surname_Application</td>
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<tr>
<td>Curriculum Vitae incl. photo</td>
<td>1-2  pages</td>
<td>University education, professional experience, main scientific achievements (in English)</td>
<td>UB_DPH/PHDS2022_NAME.Surname_CV</td>
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<tr>
<td>Copy of passport or ID card</td>
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<td>Copy of original + official translation in English or in French</td>
<td>UB_DPH/PHDS2022_NAME.Surname_ID</td>
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<tr>
<td>Cover letter / recommendation</td>
<td>1 page max</td>
<td>Choice of preferred PhD project(s), motivations, skills, experience, knowledge</td>
<td>UB_DPH/PHDS2022_NAME.Surname_CoverLetter</td>
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<td>Grade transcripts</td>
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<td>Official master transcript (grades, names of the courses, information about the grading scale)</td>
<td>UB_DPH/PHDS2022_NAME.Surname_Grades</td>
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<td>Mandatory for the administrative admission process</td>
<td>UB_DPH/PHDS2022_NAME.Surname_Diploma</td>
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<td>OPTIONAL</td>
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<td>English test TOEFL or TOEIC or proof of CEFR level B2 in English</td>
<td>UB_DPH/PHDS2022_NAME.Surname_Lang</td>
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3 https://college-doctoral.u-bordeaux.fr/en/Internationalization/Systems
Selection criteria

Preselected applications will pass through an oral presentation next **June 14th 2023** in order to expose their research project (15 minutes of personal and thesis presentation / 15 minutes-discussion). Applicants will be evaluated based on the following criteria:

- Quality of the proposal (scientific environment, research field and project originality, international recognition of the participating research teams, etc.).
- Excellence of the selected candidate (academic background, motivation, consistency of the candidate’s profile with the research project, level of English, etc.).
- For the DPH program: International outlook of the thesis (international profile, cotutelle or co-supervision is encouraged, etc.).
- For the PHDS program: Alignment with the themes and objectives of the network.

Notification of selection

The final official notification of acceptance will be sent by e-mail on the **June 20th-21st 2023**. This document is essential for the recruitment dossier to be compiled by the HR departments. Please note that the start date of the PhD contract must be between September and December of the year of selection.

Tuition fees

Successful applicants will be expected to register at the University of Bordeaux. Acceptance into the program implies the payment of the university tuition fees.

Fees for an academic year include:

- A maximum of 400€ for university fees at the University of Bordeaux
- 95€ for the mandatory contribution to student life facilities