

PhD Course in Developmental Medicine and Health Planning Sciences

EDUCATIONAL PROGRAMME

The PhD Programme in *Developmental Medicine and Health Planning Sciences* is structured into two curricula encompassing a wide range of scientific topics and research lines, spanning from basic to clinical and translational research, from genetics to the various fields of paediatrics, and including epidemiology and health planning.

The educational programme is therefore designed to address this broad disciplinary scope as well as the specific research interests of individual PhD candidates. In accordance with the University Guidelines, the Programme provides advanced and multidisciplinary training aimed at developing the scientific, methodological and transversal skills required for the design, conduct and dissemination of research in the biomedical field.

The educational programme is organised into four main areas:

1. **Common teaching activities and interdisciplinary seminars;**
2. **Elective and individual training activities;**
3. **Cross-disciplinary scientific events at University and Departmental level;**
4. **Active learning activities and development of communication and teaching skills.**

1) COMMON TEACHING ACTIVITIES AND INTERDISCIPLINARY SEMINARS

Common teaching activities are aimed at providing PhD candidates with a solid research methodology and at developing advanced skills in basic, translational and clinical research, in line with the educational objectives of the PhD Programme and University regulations.

Seminars cover the following areas:

- a) **Research methodology:** bibliographic tools, project and grant writing, bioethics, scientific communication;
- b) **Basic and translational research:** omics sciences, advanced laboratory techniques;
- c) **Clinical research:** clinical trials, regulatory and normative aspects;
- d) **Innovative topics:** big data, artificial intelligence and related applications in the biomedical field;
- e) **General scientific culture and current topics,** also through the involvement of national and

international experts, aimed at broadening the cultural and interdisciplinary background of PhD candidates.

Attendance at common teaching activities is mandatory. Participation is verified through attendance records and must be reported by the PhD candidate in the annual activity reports.

Each activity is assigned a specific number of ECTS credits. PhD candidates are required to acquire at least 80% of the expected ECTS credits each year. In the event that this requirement is not met, the PhD candidate will be required to attend the cycle of lectures in the following year, unless specific exemptions are approved by the Academic Board.

2) ELECTIVE AND INDIVIDUAL TRAINING ACTIVITIES

Elective training activities are closely related to the individual research project of the PhD candidate and are defined by the PhD candidate in agreement with the supervisor.

These activities may include, by way of example:

- participation in national and international conferences, workshops and training schools;
- participation in scientific networks and collaborative activities;
- research periods at national or international institutions.

Such activities promote the development of scientific independence, the internationalisation of the training pathway and the dissemination of research results.

They contribute to the acquisition of ECTS credits allocated to “other training activities” and must be documented in the annual reports.

3) CROSS-DISCIPLINARY SCIENTIFIC EVENTS

The Programme promotes the participation of PhD candidates in cross-disciplinary training and scientific activities organised at University, medical area and Departmental level, including:

- **Winter School:** an intensive cycle of seminars focused on clinical and translational research, organised in collaboration with other PhD Programmes in the medical area of the University;

- **PhD Day:** an annual event organised by the PhD Programmes of the medical area, during which second-year PhD candidates present the progress of their research projects;
- **Participation in scientific retreats** organised by the Department of Women's and Children's Health and the Pediatric Research Institute;
- **Seminars and training events** organised by the Department of Women's and Children's Health, the Pediatric Research Institute and the University of Padua;
- additional training events organised by recognised research institutions and scientific societies.

These activities also contribute to the acquisition of the required ECTS credits and must be included in the annual documentation.

4) ACTIVE LEARNING AND DEVELOPMENT OF TRANSVERSAL SKILLS

In accordance with University guidelines, the PhD Programme promotes the development of transversal skills, with particular emphasis on science communication and teaching experience.

Currently planned activities include:

- **Journal Club:** monthly meetings held at the Pediatric Research Institute, during which PhD candidates present and critically discuss scientific articles of interdisciplinary interest;
- **Teaching support activities:** participation in teaching activities carried out by faculty members of the Department of Women's and Children's Health, in accordance with University regulations.