



NOVA
MEDICAL SCHOOL

1ST EDITION (2023-2027)

INTERNATIONAL DOCTORAL PROGRAMME IN MEDICINE

COORDINATION

Ana Maria Félix de Campos Pinto, MD, PhD (Full Professor)

CO-COORDINATION

Bruno Miguel Costa Heleno, MD, PhD (Assistant Professor)

Manuel Gonçalves Pereira, MD, PhD (Associate Professor with Aggregation)

APPLICATIONS

15th to 30th april, 2024



ABOUT THE INTERNATIONAL DOCTORAL PROGRAMME IN MEDICINE

The new doctoral program in Medicine provides NOVA Medical School with advanced training in clinical research and innovation in Health. Within the scope of the Faculty's 3rd cycle training offer, this advanced training constitutes a strategic specificity; a complement to the training offer; innovation in the teaching of methodological approaches in medical research; extension of scale and promotion of interdisciplinarity in the curricular offer; potential for extension to the community. As a strategic specificity, the program promotes training particularly aimed at medical candidates with a clinical profile, allowing them to simultaneously and advantageously maintain clinical professional activity in the area of research. The program fills a gap in the current NMS offer, for example, the acquisition of more advanced skills in qualitative, mixed or technological innovation methodologies. These methodologies have been developing exponentially and growing acceptance in Medicine and Health in general and are fundamental in the development of clinical research projects today.

COURSE DETAILS

The program takes advantage of the existing offer of the doctoral programs in Health Sciences (NOVA Medical School) and Biomedicine (NMS|UA), which have a strong biomedical slant, as well as the doctoral program in Global Health (NMS|ENSP|IHMT|FMUP) and in Health and Well-being Sciences and Technologies (NMS|ENSP|UE), which are more focused on public health and health policies. And they benefit from existing clinical research support units (namely Colab Trials, NOVA Clinical Research Unit and PtCRIN), digital innovation support units (namely Value for Health Colab) and the biobank (CHAIN biobank). The curriculum has a reduced core structure, corresponding to the compulsory courses, complemented by a wide range of optional courses. This design allows not only for personalized support for each doctoral student, but also access to an advanced and diversified training offer from the Faculty and other UNL organic units. In this way, the program expands the number of students corresponding to the current curricular offer and enhances synergies and multidisciplinary collaborations through the broad participation of other UNL organic units. Finally, the program

develops NMS's relationship with the community through the institutional involvement of the Alumni network. It does so specifically by creating a Mentoring program, promoting a culture of lifelong learning and knowledge transfer.

COURSE COORDINATION

Ana Maria Félix de Campos Pinto

DURATION

4 years

ECTS

240

APPLICATION FEE

51€

FEE

2750€/annual

(15% Discount for current and former students and Teachers/Assistants/Researchers of NMS)

LANGUAGE

The course is taught in Portuguese and English

ADMISSION REQUIREMENTS

Graduates in Medicine or with an Integrated Master's Degree in Medicine or recognized equivalence, of Portuguese or foreign nationality, with knowledge of technical English, spoken and written

SELECTION CRITERIA

Applications that meet the admission requirements will be analyzed, evaluated, selected and graded by the jury, through a Curriculum analysis and after an individual interview with each candidate

MORE INFORMATION

Academic services - postgraduate office

Campo Mártires da Pátria, 130, 1169-056 Lisboa
doutoramentos@nms.unl.pt | tel.: +351 21 880 30 66



ANNUAL MEETING 1

In this curricular unit students learn about the organization of the doctoral program and acquire essential transversal skills for the start of the doctorate (designing a bibliographic research strategy; using a citation manager; critically evaluating some of the main clinical research study designs; choosing appropriate journals to publish in).

MEDICAL AND HEALTH RESEARCH ETHICS

This curricular unit focuses on the principles of the Deontological Conduct of the Portuguese Medical Association, key issues of Bioethics in Contemporary Medicine and the legal framework of medical practice, including civil, criminal, and disciplinary responsibilities. Ethics in clinical research is highlighted, with the aim of equipping students with the tools to analyze real cases with ethical, deontological, and legal dilemmas faced in daily practice.

MULTIDISCIPLINARY PROJECT 1

This curricular unit prioritizes the development of transversal teamwork skills, promoting interaction between doctoral students. It also encourages a hierarchical and prioritized approach to information, as well as systematized problem-solving strategies.

THESIS PROJECT

In this curricular unit students are helped by teachers and mentors to identify/improve the research question they will develop in their doctoral project. The main objective is to construct the thesis project, demonstrating an understanding of the current state of knowledge on this research question; describing the general and specific objectives of the research; planning the experiments/tasks and methods to be used; identifying the expected results; planning the timetable; describing the budget; submitting the research project to the Doctoral Program, to funding sources and to the Ethics Committee(s).

THESIS SEMINAR 1 AND 2

At the end of this curricular unit students will be able to demonstrate research skills and knowledge suitable for pursuing the thesis project and presenting it to a thesis committee, namely: summarizing the results and disseminating the knowledge obtained from research; identifying problems/difficulties/delays; planning and designing alternative routes to solve the problems; identifying the need for specific training in advanced courses.



BIostatistics (OPTIONAL)

This curricular unit takes a practical approach to biostatistics, focusing on statistical methodologies and tools for collecting, analyzing, and interpreting data. Students learn to use SPSS for exploratory analysis and hypothesis testing. In addition, they will develop skills in critically evaluating scientific articles. Ethical principles relevant to statistics and their influence on practical decision-making with implications for decision-making will be explored.

ADVANCED COURSES 1, 2 E 3 (OPTIONAL)

At the end of these courses the students will be able to use more advanced skills to develop their projects. The advanced courses are part of a portfolio to be made available each year. There will be courses in different areas, to deepen knowledge already acquired in the Doctoral Program (for example in epidemiology, basic research, or qualitative methods). In topics related to the thesis subject, students should have acquired at least one specific methodological skill (e.g. advanced statistical or qualitative analysis, scale validation, experimental techniques). This also considers the existing curricular offer at NOVA Medical School (postgraduate or doctoral courses). Courses from other Organic Units of the NOVA University Lisbon (ENSP, IHMT, etc.) may also be taken.

ANNUAL MEETING 2, 3 E 4 (OPTIONAL)

In this curricular unit students deepen transversal skills relevant to doctoral projects. Within the Annual Meeting there will be short 1–2-day intensive courses on topics such as communicating science; writing applications for funding or other topics suggested by the PhD students.

CLINICAL EPIDEMIOLOGY (OPTIONAL)

This curricular unit focuses on clinical research methodologies. It allows students to improve their critical analysis of scientific publications, recognize the strengths and limitations of the evidence that underpins clinical decisions and promote interest in clinical research. Students learn to question, collect, and analyze data, and to evaluate the quality, costs and impacts of health interventions, taking into account health gains, sustainability and equity.

TECHNOLOGICAL INNOVATION IN HEALTH (OPTIONAL)

In this curricular unit, students learn to describe and apply different theoretical perspectives and research methodologies in this area, with a focus on digital transformation; to know and discuss emerging topics; to plan the design and development of technology-based health services, using participatory methodologies and integration into multidisciplinary teams; to critically analyze the challenges of implementation; to know methods for evaluating the impact of interventions based on technological innovation, considering different domains (e.g. clinical, social, economic, environmental).



METHODOLOGY IN BIOMEDICAL RESEARCH (OPTIONAL)

In this curricular unit participants learn specific biomedical methodologies. Basic knowledge of biosafety and good practice in laboratory work is provided in an eminently practical way. This is followed by courses that include the basic knowledge needed to choose study models, such as cell or animal cultures. In the Theoretical Course in Laboratory Animal Sciences, the learning objectives include all the theoretical content required by law (Decree-Laws 113/2013 and 1/2019) for functions A, C and D. This training, complemented by compulsory practical training, enables participants to apply for an individual license to use animals for experimental purposes.

FUNDAMENTAL AND TRANSLATIONAL RESEARCH METHODS (OPTIONAL)

Research in Medicine, even in its predominantly clinical aspects, is a multidisciplinary field that includes medicine, epidemiology, cell and molecular biology, computer science, among many others. In order to provide the best answer to a scientific question, it is often necessary to leave one's comfort zone and use methodologies with which the researcher may not be familiar. This curricular unit, aimed at clinicians, introduces the main techniques used in basic and translational research.

QUALITATIVE METHODOLOGY (OPTIONAL)

At the end of this curricular unit, students should be able to recognize the characteristics of the different research paradigms, understanding the differences between qualitative and quantitative methodologies, and developing skills that lead to carrying out qualitative research. They should understand the principles and contexts of application of qualitative methodology in health; know and develop the main stages of designing a study in this area; know and apply techniques for collecting, analyzing, and processing qualitative data.

OPTIONAL

This curricular unit will recognize specific advanced academic or other training in the research project leading to the dissertation. The training must contain a relevant component to achieve the breadth and depth of knowledge/skills required in the project/research area of the thesis and must be selected under the guidance of the Supervisor(s) and with the authorization of the Course Leader and the Coordination of the Doctoral Course.