



Università di Foggia

Finanziato  
dall'Unione europea  
NextGenerationEUItaliadomani  
PIANO NAZIONALE DI RIPRESA E RESILIENZA

<b>ANNEX I</b>	
<b>PhD COURSE IN INNOVATIVE TECHNOLOGIES AND SCIENCES FOR HEALTH AND ACTIVE AGING - XXXIX cycle academic year 2023/2024</b>	
<b>Coordinator:</b> Prof. Elena Ranieri (PO) - SSD: MED/05 - University of Foggia	
<b>Scientific and disciplinary sectors</b>	everyone SSD
<b>Administrative headquarters:</b> DEPARTMENT OF MEDICAL AND SURGERY SCIENCES	
<b>Length:</b>	3 years
<b>Curriculum</b>	<p>1) <b>INNOVATIVE BIOTECHNOLOGIES:</b>The curriculum in Innovative Biotechnology is mainly oriented towards basic or translational research. The research topics developed will be: biotechnologies applied to organ transplants; predictive medicine and new biomarkers in human pathology; development of innovative diagnostic technologies; biotechnologies for the characterization, molecular diagnostics, imaging and the individualization of cancer and rare diseases therapies; biology of aging.</p> <p><b>INNOVATIVE METHODOLOGIES IN CLINICAL RESEARCH:</b>The curriculum in Innovative Methodologies in Clinical Research is mainly oriented towards clinical research. The research topics developed will be: technologies for the study of emerging infectious diseases through big data analysis; robotic innovation and surgery; regenerative medicine; bioinformatics and artificial intelligence for the improvement of SSN (National Healthcare System); telemedicine and proximity medicine; promotion of strategies for active aging; risk management; innovative tools to support medical decision-making processes; government of innovation in the healthcare sector; law, healthcare responsibility and new technologies; BCT and new medical business models.</p>
<b>TOTAL NUMBER OF POSITIONS AVAILABLE: n. 9</b>	
<b>N. 7 POSITIONS WITH SCHOLARSHIP of which:</b>	

n.1 position through scholarship granted by University of Foggia  
n. 2 positions through scholarship granted by D.M. 118/2023 PNRR 4.1 PNRR Research  
n. 1 position through scholarship granted by D.M. 117/2023 co-funded by Enterprise  
n. 3 positions through scholarship granted by project PE HEAL ITALIA

## **N. 2 WITHOUT SCHOLARSHIP**

### **COURSE DESCRIPTION**

**PROGRAM, OBJECTIVES AND CONSISTENCY WITH THE PNRR pursuant to the DD.MM. nos. 117/2023 and 118/2023**

<https://www.unifg.it/en/studiare/corsi-post-laurea/ciclo-xxxix/scienze-e-tecnologie-innovative-la-salute-e-linvecchiamento-attivo>

### **SCHOLARSHIP**

n. 1 SCHOLARSHIP granted by  
**DM 117/2023 PNRR co-funded by IRCSS-Istituto Tumori "Giovanni Paolo II" - Bari**

**Topic:** Development of an artificial intelligence tool for coding and standardized automatic registration of pathological and molecular records of haematological-oncologic patients affected by lymphoma and myeloma.

**Research activity:** The PNRR scholarship co-financed by the "Giovanni Paolo II" Cancer Institute - Bari - IRCSS, provides for scientific collaboration and research at the aforementioned Institute. The reference topic of the research activities will concern the implementation of the 'beta' version of an artificial intelligence application that allows the automatic transfer and processing of paper pathological reports into standardized clinical and molecular records. This approach will allow the development of prognostic and risk prediction tools based on clinical-pathological-molecular and image data relating to a large cohort of cancer patients enrolled at the Hematology Unit of the Bari Tumor Institute.

**The research project must be written in English.**

n. 3 SCHOLARSHIPS granted by project PE **HEAL ITALIA "Innovative Diagnosis and Therapies in Precision Medicine"**

**Research activity:** In line with the PNRR HEAL ITALIA project, the themes of the PhD scholarships in "Innovative Sciences and Technologies for Health and Active Aging" will be focused on the study of the factors that modulate and control the development and/or progression of specific pathologies, to be used as preventive/prognostic biomarkers and potential target drugs for personalized medicine intervention. The in vitro/in vivo omics investigations will implement the study of the biological determinants of pathologies and will be connected to all the other external spokes and biotech of the HEAL Italia project (spoke 1).

**Specifically, the research will focus on dentistry, haematology, oncology and metabolic diseases.**

**The research projects, therefore, will be evaluated if they are coherent with the topics mentioned above.**

**The research project must be written in English.**

#### ADMISSION PREREQUISITES

Master's Degree	All Master's Degrees or the corresponding Postgraduate Degrees or the corresponding Degrees obtained according to the system prior to Ministerial Decree 509/99 or the corresponding equivalent qualifications.
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#### ADMISSION PROCEDURES

The selection will be based on the assessment of qualifications, research project (according to the Format 1/I) and oral exam. **The research project must be written in English under penalty of exclusion from the selection.**

During the in-person oral test, the research project submitted by the candidate at the time of application will also be discussed in English, as well as verification of foreign language (English) proficiency on scientific text.

The assessment will take place pursuant to art. no. 6 and 7 of the Call.

Foreign candidates can choose to take the admission test in English.

#### ADMISSION TEST CALENDAR AND VENUE

Internal Medicine Multimedia Teaching Room - II Floor Medical Clinics Pavilion (III lot - Via

<https://www.unifg.it/en/node/2972>

#### Other useful information

For all useful information, please consult the University website at

<https://www.unifg.it/en/node/2972>

#### Useful contacts

<b>Educational/scientific contact person</b>	Prof. <b>Elena Ranieri</b> email: <a href="mailto:elena.ranieri@unifg.it">elena.ranieri@unifg.it</a>
<b>Administrative contact person:</b>	Dott. <b>Maria Grazia Mariella</b> email: <a href="mailto:ufficiodottorato@unifg.it">ufficiodottorato@unifg.it</a>

