

Area dei Servizi Istituzionali Settore Servizi agli studenti e alla didattica Ufficio Dottorati di ricerca

ATTACHMENT 2

LAST REVISED 21/05/2020

PhD IN MOLECULAR BIOMEDICINE OVERVIEW

(in partnership with the International Centre for Genetic Engineering and Biotechnology - ICGEB Trieste)

		IN BRIEF	
Lines of research	1	Molecular Oncology	
	2	Molecular Pathophysiology	
	3	Regenerative Medicine	
	4	Molecular Therapeutics and Diagnostics	
	-		
	5	Functional genomics	
	6	Molecular Microbiology	
	7	Neurobiology	
	8	Molecular Immunology	
Administrative location	University of Trieste		
Organizing Department	Department of Life Sciences		
Participating Departments	Department of Medicine, Surgery and Health Sciences		
Partner	International Center for Genetic Engineering and Biotechnology (ICGEB)		
Duration	3 years		
Attendance abroad that entitles to a scholarship increase - min. max. of months for each PhD	0 - 6		
student (over 3 years)			
Official language		ish ne activities are in English (teaching activities, students' presentations, reports, s, journal clubs, etc.)	
Official language Subject Areas	All th	ne activities are in English (teaching activities, students' presentations, reports,	
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Official language Subject Areas (in alphabetical code order) Macro Research Fields	All thes	ne activities are in English (teaching activities, students' presentations, reports, is, journal clubs, etc.) BIOLOGY MEDICINE	
Official language Subject Areas (in alphabetical code order)	All thes 05 06	ne activities are in English (teaching activities, students' presentations, reports, is, journal clubs, etc.) BIOLOGY MEDICINE ANIMAL BIOLOGY AND ANTHROPOLOGY	
Official language Subject Areas (in alphabetical code order) Macro Research Fields	All thes 05 06 05/B	ne activities are in English (teaching activities, students' presentations, reports, is, journal clubs, etc.) BIOLOGY MEDICINE ANIMAL BIOLOGY AND ANTHROPOLOGY PHYSIOLOGY	
Official language Subject Areas (in alphabetical code order) Macro Research Fields	All thes 05 06 05/B 05/C	ne activities are in English (teaching activities, students' presentations, reports, is, journal clubs, etc.) BIOLOGY MEDICINE ANIMAL BIOLOGY AND ANTHROPOLOGY PHYSIOLOGY EXPERIMENTAL AND CLINICAL BIOCHEMISTRY AND MOLECULAR BIOLOGY	
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Official language Subject Areas (in alphabetical code order) Macro Research Fields	05 06 05/B 05/C 05/F 05/I	ne activities are in English (teaching activities, students' presentations, reports, is, journal clubs, etc.) BIOLOGY MEDICINE ANIMAL BIOLOGY AND ANTHROPOLOGY PHYSIOLOGY EXPERIMENTAL AND CLINICAL BIOCHEMISTRY AND MOLECULAR BIOLOGY EXPERIMENTAL BIOLOGY GENETICS AND MICROBIOLOGY PATHOLOGY AND LABORATORY MEDICINE	

Scientific Disciplinary Sectors (in alphabetical code order)	BIO/06	COMPARATIVE ANATOMY AND CITOLOGY
	BIO/09	PHYSIOLOGY
	BIO/11	MOLECULAR BIOLOGY
	BIO/12	CLINICAL BIOCHEMISTRY AND MOLECULAR BIOLOGY
	BIO/13	EXPERIMENTAL BIOLOGY
	BIO/18	GENETICS
	BIO/19	MICROBIOLOGY
	MED/07	MICROBIOLOGY AND CLINICAL MICROBIOLOGY
	MED/04	EXPERIMENTAL MEDICINE AND PATHOPHYSIOLOGY
	MED/06	MEDICAL ONCOLOGY
	MED/09	INTERNAL MEDICINE
	MED/10	RESPIRATORY DISEASES
	MED/11	CARDIOVASCULAR DISEASES
Domain European Research Council	LS	LIFE SCIENCES
ERC Panels	LS1	MOLECULAR AND STRUCTURAL BIOLOGY AND BIOCHEMISTRY: MOLECULAR BIOLOGY, BIOCHEMISTRY, BIOPHYSICS, STRUCTURAL BIOLOGY, BIOCHEMISTRY OF SIGNAL TRANSDUCTION
	LS3	CELLULAR AND DEVELOPMENTAL BIOLOGY: CELL BIOLOGY, CELL PHYSIOLOGY, SIGNAL TRANSDUCTION, ORGANOGENESIS, DEVELOPMENTAL GENETICS, PATTERN FORMATION IN PLANTS AND ANIMALS
	LS4	PHYSIOLOGY, PATHOPHYSIOLOGY AND ENDOCRINOLOGY: ORGAN PHYSIOLOGY, PATHOPHYSIOLOGY, ENDOCRINOLOGY, METABOLISM, AGEING, REGENERATION, TUMORIGENESIS, CARDIOVASCULAR DISEASE, METABOLIC SYNDROME
	LS2	GENETICS, GENOMICS, BIOINFORMATICS AND SYSTEMS BIOLOGY: GENETICS, POPULATION GENETICS, MOLECULAR GENETICS, GENOMICS, TRANSCRIPTOMICS, PROTEOMICS, METABOLOMICS, BIOINFORMATICS, COMPUTATIONAL BIOLOGY, BIOSTATISTICS, BIOLOGICAL MODELLING AND SIMULATION, SYSTEMS BIOLOGY, GENETIC EPIDEMIOLOGY
	LS7	DIAGNOSTIC TOOLS, THERAPIES AND PUBLIC HEALTH: AETIOLOGY, DIAGNOSIS AND TREATMENT OF DISEASE, PUBLIC HEALTH, EPIDEMIOLOGY, PHARMACOLOGY, CLINICAL MEDICINE, REGENERATIVE MEDICINE, MEDICAL ETHICS
	LS5	NEUROSCIENCES AND NEURAL DISORDERS: NEUROBIOLOGY, NEUROANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY, NEUROPHARMACOLOGY, NEUROIMAGING, SYSTEMS NEUROSCIENCE, NEUROLOGICAL DISORDERS, PSYCHIATRY

WHO'S WHO			
Chair	Prof. Germana Meroni – Department of Life Sciences – University of Trieste - phone +39 040.558.8679; email gmeroni@units.it		
Vice	Prof. Licio Collavin - Department of Life Sciences - University of Trieste - phone +39 040.3756802 - +39 040.3756804; fax +39 040.398990; email localeurin@units.it		
PhD Academic Board	<u>List of members</u>		
Web site	https://www.biologia.units.it/corsi/10/PhD-program-in-Molecular-Biomedicine		

Course description and objectives

The PhD program in Molecular Biomedicine aims to provide higher education to young University graduates in biomedical – and scientific in general – disciplines, to prepare them for a career in basic, clinical or translational research in the field of molecular medicine, with specific reference to the areas of molecular oncology, pathophysiology, molecular genetics, biochemistry and biotechnology, cell biology, regenerative medicine, and neurobiology. Key to the program is research activity in the laboratory, where students develop a critical approach to scientific observation and carry out a specific project. The Program also organizes intensive courses on core biomolecular disciplines, and seminars given by national and international experts.

The PhD program in Molecular Biomedicine is a logical choice for young University graduates who wish to pursue a career in basic and translational biomedical research. The program gathers a significant number of researchers from the University of Trieste and from the International Centre for Genetic Engineering and Biotechnology (ICGEB) with strong experience in biomedicine, thus offering to students a broad set of choices spanning the entire spectrum of modern research in molecular medicine.

The PhD program is part of the Italian Network of PhD programs in biomedical and biotechnological sciences (NEIDOS, http://dev.neidos.it).

Job placement opportunities

The PhD program in Molecular Biomedicine offers job placement opportunities primarily in basic and translational biomedical research. Mainly in academic research institutions or hospitals, but also in pharmaceutical and biotech companies. The program is designed to provide a solid scientific background and a very strong experimental competence; graduates can be directly employed in biotech companies, or they can continue their scientific career with a post-doctoral experience, eventually leading to a position of independent group leader.

This program can lead to the following employment opportunities:

- Researcher, doing basic research in academic institutions or biotech/pharmaceutical companies;
- 2) Clinical Investigator, doing clinical research in academia, public or private hospitals, pharmaceutical companies;
- 3) Medical biotechnologist, doing applied research in biotech/pharmaceutical companies, academia, public or private hospitals.

Main cooperating international Universities and Research Institutions

- 1 Max-Planck-Institut für Biochemie, Munich, Germany Dept of proteomics and signal transduction
- 2 CNIO Spanish national cancer center Spain
- 3 Scuola di dottorato in Biofisica della Facoltà di Scienze Naturali all'Università di Spalato, Croazia
- 4 Sidney Kimmel Comprehensive Cancer Center, JohnS Hopkins University, (Baltimore, MD), USA
- 5 University Shinshu di Matsumoto, Japan