



UNIVERSITÀ DEGLI STUDI DI TRIESTE

Rettorato e Direzione Generale
Sezione Ricerca e Dottorati
Ripartizione Dottorati

ATTACHMENT 2

LAST REVISED 16/06/2015

PhD IN MOLECULAR BIOMEDICINE OVERVIEW

IN BRIEF	
Lines of research	<ol style="list-style-type: none">1 Molecular Oncology2 Molecular Pathophysiology3 Regenerative Medicine4 Molecular Therapeutics and Diagnostics5 Functional genomics and Bioinformatics6 Molecular Microbiology
Administrative location	University of Trieste
Organizing Department	Department of Life Sciences
Participating Departments	Department of Medicine, Surgery and Health Sciences
Duration	3 years
Maximum number of months to be spent abroad by each PhD student	12
Official language	English
Language (alternative to Italian) partially used in PhD activities	All activities of the PhD program are in English
Subject Area	05 BIOLOGY 06 MEDICINE 03 CHEMISTRY
Macro Research Fields	05/E EXPERIMENTAL AND CLINICAL BIOCHEMISTRY AND MOLECULAR BIOLOGY 05/F EXPERIMENTAL BIOLOGY 05/D PHYSIOLOGY 05/G EXPERIMENTAL AND CLINICAL PHARMACOLOGY 05/B ANIMAL BIOLOGY AND ANTHROPOLOGY 03/C ORGANIC, INDUSTRIAL AND APPLIED CHEMISTRY 06/A PATHOLOGY AND LABORATORY MEDICINE 06/B GENERAL CLINICAL MEDICINE 06/D SPECIALIZED CLINICAL MEDICINE
Scientific Disciplinary Sector	BIO/10 BIOCHEMISTRY BIO/13 APPLIED BIOLOGY MED/09 INTERNAL MEDICINE BIO/14 PHARMACOLOGY MED/12 GASTROENTEROLOGY

	BIO/12	CLINICAL BIOCHEMISTRY AND BIOLOGY
	BIO/06	COMPARATIVE ANATOMY AND CITOLOGY
	MED/11	CARDIOVASCULAR DISEASES
	MED/04	GENERAL PATHOLOGY
	CHIM/04	INDUSTRIAL CHEMISTRY
	BIO/11	MOLECULAR BIOLOGY
	BIO/18	GENETICS
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
Erasmus Subject Area Codes	12.1	MEDICINE
	13.1	BIOLOGY
	13.4	MICROBIOLOGY, BIOTECHNOLOGY
	13.6	BIOCHEMISTRY

WHO'S WHO	
Chair	Prof. Guidalberto Manfioletti - Dep. Life Sciences – University of Trieste - phone N. 040.558.8720; fax 040/558.3691; email manfiole@units.it
Web site	http://www2.units.it/dmm/
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Learning outcomes	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, cell biology, regenerative medicine, and pharmacology. 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

	<p>graduates who wish to pursue a career in basic and translational biomedical research. The program gathers a significant number of researchers with strong experience in biomedicine, thus offering to students a broad set of choices spanning the entire spectrum of modern research in molecular medicine.</p> <p>The PhD program is part of the Italian Network of PhD programs in biomedical and biotechnological sciences (NEIDOS, http://dev.neidos.it).</p>
Job placement opportunities	<p>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.</p> <p>This program can lead to the following employment opportunities: 1) 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.</p>
Main cooperating international Universities and Research Institutions	<ol style="list-style-type: none"> 1 Max-Planck-Institut für Biochemie, Munich, Germania. Dept of proteomics and signal transduction 2 NTNU - Norwegian University of Science and Technology, Trondheim, Norvegia. Department of Biotechnology 3 University of Maastricht, Maastricht, Paesi Bassi. Department of Surgery, Academic Hospital Maastricht (azM), Maastricht University Medical Center 4 University of Bonn, Institute of pharmaceutical microbiology 5 CNIO – Spanish national cancer center