



UNIVERSITÀ
DEGLI STUDI DI TRIESTE

Rettorato e Direzione Generale
Sezione Ricerca e Dottorati
Ripartizione Dottorati

ATTACHMENT 7

LAST REVISED 28/07/2015

**PhD IN
NEURAL AND COGNITIVE SCIENCES
OVERVIEW**

IN BRIEF

Lines of research	1	Neurobiology, neurogenesis, and cellular neurophysiology
	2	Clinical neurosciences
	3	Neuroengineering
	4	Perception, action and attention
	5	Memory, language, and executive control
	6	Thinking, judgment and decision making
	7	Typical and atypical development
	8	Personality and social psychology
	9	Sport psychology
Administrative location		University of Trieste
Organizing Department		Department of Life Sciences
Duration		3 years
Maximum number of months to be spent abroad by each PhD student		6
Official language		Italian
Language (alternative to Italian) partially used in PhD activities		English is used in seminars, journal club, and other activities. Not Italian speaking students can complete the whole program in English
Subject Area	11b	PSYCHOLOGY
	05	BIOLOGY
	09	INDUSTRIAL AND INFORMATION ENGINEERING
	06	MEDICINE
Macro Research Fields	11/E	PSYCHOLOGY
	05/D	PHYSIOLOGY
	09/G	SYSTEMS ENGINEERING AND BIOENGINEERING
	05/I	GENETICS AND MICROBIOLOGY
	05/E1	GENERAL AND CLINICAL BIOCHEMISTRY
	06/D	SPECIALISED MEDICINE
Scientific Disciplinary Sector	M-PSI/01	GENERAL PSYCHOLOGY
	M-PSI/02	PSYCHOBIOLOGY AND PHYSIOLOGICAL PSYCHOLOGY
	BIO/09	PHYSIOLOGY
	ING-INF/06	BIOINGEGNERIA ELETTRONICA E INFORMATICA
	M-PSI/05	SOCIAL PSYCHOLOGY
	M-PSI/08	CLINICAL PSYCHOLOGY
	M-PSI/03	PSYCHOMETRICS
	M-PSI/04	AESTHETICS
	BIO/10	BIOCHIMICA

	BIO/18	GENETICS
	MED/26	NEUROLOGY
Domain European Research Council	SH	SOCIAL SCIENCES AND HUMANITIES
	LS	LIFE SCIENCES
	PE	PHYSICAL SCIENCES AND ENGINEERING
ERC Panels	SH4	THE HUMAN MIND AND ITS COMPLEXITY: COGNITION, PSYCHOLOGY, LINGUISTICS, PHILOSOPHY AND EDUCATION
	LS5	LS5 NEUROSCIENCES AND NEURAL DISORDERS: NEUROBIOLOGY, NEUROANATOMY, NEUROPHYSIOLOGY, NEUROCHEMISTRY, NEUROPHARMACOLOGY, NEUROIMAGING, SYSTEMS NEUROSCIENCE, NEUROLOGICAL DISORDERS, PSYCHIATRY
	PE7	SYSTEMS AND COMMUNICATION ENGINEERING: ELECTRONIC, COMMUNICATION, OPTICAL AND SYSTEMS ENGINEERING
	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
Erasmus Subject Area Codes	14.4	PSYCHOLOGY AND BEHAVIOURAL SCIENCES
	13.1	BIOLOGY
	12.2	PSYCHIATRY AND CLINICAL PSYCHOLOGY
	06.5	ELECTRONIC ENGINEERING, TELECOMMUNICATIONS
	12.0	MEDICAL SCIENCES
	13.6	BIOCHEMISTRY

WHO'S WHO	
Chair	Prof. Walter Gerbino - Dipartimento di Scienze della Vita - Università degli Studi di Trieste - tel. 040.558.8868; fax 040.558.2134; email gerbino@units.it
Vice	dott. Paolo Bernardis - Dipartimento di Scienze della Vita - Università degli Studi di Trieste - tel. 040.558.8872; fax 040.558.2134; email: paolobernardis@units.it
Web site	http://cicmsdev.units.it/dottorato/ncs/en
Email	ncs.program@units.it
Learning outcomes	<p>The PhD program in Neural and Cognitive Sciences (NCS) provides advanced research training focused on the interdisciplinary study of the nervous system, the mind/brain system, cognition, and on applications in clinical, ergonomic, and sport contexts. Students develop competencies relevant for becoming creative researchers in at least one of the following areas: cellular neurophysiology; neurogenesis; clinical neuroscience; neuroengineering; psycholinguistics; perception, action and attention; memory and executive control; thinking, judgment, and decision making; sport psychology; typical and atypical development; personality and social psychology. The PhD student enrolled in the NCS course will be able to formulate an independent project; to coordinate data collection integrating methods of biological and psychological sciences; to evaluate results; to propose technological innovations for clinical and rehabilitation purposes; to operate in multidisciplinary teams in public and private institutions.</p> <p>Taking into account the students' background, the PhD faculty defines individual programs, including a component focused on interdisciplinary knowledge and a component on specific advanced research abilities. Formal learning opportunities will include: lectures, journal club; seminars; scientific reporting; stages in foreign institutions; participations in national and international meetings; summer schools for young researchers.</p>
Job placement opportunities	<p>PhDs in NCS will take on qualified jobs that require:</p> <ul style="list-style-type: none"> - specific and high-level knowledge in neurobiology, neuroengineering, psychology, and related disciplines, to be employed in public and private research centres and institutes, industries and clinics; - skills for developing technology and experimental methodologies relevant for

	<p>neural and cognitive sciences, with applications to basic, pharmacological, and clinical research, to cognitive ergonomics, to the improvement of sport performance, to rehabilitation;</p> <ul style="list-style-type: none"> - skills for promoting the public understanding of neural and cognitive sciences and communicating their theoretical and experimental achievements, as well as the relevance of their applications.
<p>Main cooperating international Universities and Research Institutions</p>	<ol style="list-style-type: none"> 1 Experimental Psychology Unit, KU Leuven (Belgio), prof. Johan Wagemans 2 CRICM - CNRS UMR 7225 - Inserm UMR_S 975 - Université Pierre et Marie Curie, Parigi (Francia), Team Cognition, Neuroimaging and Brain Diseases, prof. Gianfranco Dalla Barba (TP a UniTs) 3 School of Psychology, Bangor University - Adeilad Brigantia, Penrallt Road, Gwynedd LL57 2AS 4 School of Life Sciences, Laboratory of Psychophysics, Brain Mind Institute, Ecole Polytechnique Federale de Lausanne - Professor Dr Michael Herzog 5 Institute of Computer Science II. Computer Graphics. University of Bonn,. - Dr. Björn Krüger