



R&D Capabilities

Departments, centres and research institutes of the UAB^{CIE} Sphere have demonstrated excellence in their field of R&D, promoting multi-disciplinary research and knowledge transfer.

Therefore, we promote collaboration, information sharing and the creation of agreements between research centres and companies with the aim of increasing innovation and business competitiveness.

In this section we present the scientific and technological capacities of the research groups of the Esfera (Sphere) UAB^{CIE} organized by subject.



Biotechnology & health

APPLICATIONS	SOLUTIONS
Cell biology	Regenerative medicine
	Cancer
	Cloning and Stem Cells
	Cytotoxic effects of physical, chemical or biological agents
	Cell death and senescence
Immunology	Cellular immunology
	Molecular immunology
	Immunology of reproduction
Bioinformatics	Computational Biology
	Theoretical Molecular Biology
	Evolutionary bioinformatics
Proteomics	Identification of proteins
	Molecular weight analysis of proteins and peptides
	Caracterización and protein modification
	Protein Sequencing
	Protein engineering and Enzymology
	Structure, development and stability of proteins
Genetics	Chromosomal rearrangements
	Evolutionary Genetics
	Genotoxicity
	Genetic diseases
	mutagenesis
	Anemia
	Genetics
	Cytogenetics
	Bacterial molecular genetics

Genomics	Comparative and functional genomics
	Genome Structure
Microbiology	Mycobacteriology
	Design of microbial sensors
	Effects of pollutants on microbial population
	Design of new vaccines
	Gene expression in pathogenic bacteriostatics
	Antibacterial resistance
	Biological applications of bacteriophages
Neuroscience	Neurodegeneration
	Neuronal regeneration and plasticity
	Behavioural, cognitive and psycho-neuro disorders
	Cellular and molecular basis of the nervous system
	Neurochemistry
	Neuroinflammation
	Neuro-immuno-gastroenterology
	Biology of stress and addictions
	Biología del estrés y les adicciones
	Physiology
Ecophysiology	
Cancer and Food	
Cardiovascular risk	
Gene Therapy	Production of new viral vectors
	Therapeutic approaches to diabetes mellitus and other diseases
	Autoimmune diseases
	Animal Models

Biochemistry	Bioprocess Engineering
	Study of biomolecules
	Sensors and biosensors
	Study of cell cycle regulation
	Molecular biophysics applied to biomedicine
	Biochemistry of the nervous system
	Biochemistry and molecular biology of plants
	Biochemistry and molecular biology in yeast
	Molecular pathology
Metabolic regulation	
Pharmacology and toxicology	Neuropharmacology
	Vascular pharmacology
	Basic pharmacology
	Clinical Pharmacology
	Asthma and other allergic diseases
	Environmental Toxicology
	Phytotoxins
Clinical psychology and health	Psychopathology
	Medical Psychology
	Psychobiology
	Genetic basis of intellectual disability
	Eating disorders and weight
	Neuroimaging in neuropsychology and neuropsychiatry
Medicine and	Morphological Sciences
	Human Embryology
	Pathology, dissection and bone library
	Surgery
	Legal, Forensic Medicine and Psychiatry
	Paediatrics
	Nursing
	Obstetrics and Gynaecology
Preventive medicine	
Biostatistics	Biomedical research methodology
	Design and statistics in health sciences
	Analysis, processing and data management



UAB Research Park

Edifici Eureka – Campus de la UAB
08193 Bellaterra (Cerdanyola del Vallès) · Barcelona · Spain
T +34 93 586 88 91 · F +34 93 581 28 41

<http://parc.uab.cat>
parc.recerca@uab.cat