Biomedical and biotechnology enterprises

The Centre for Neuroscience and Cell Biology (CNC) was founded in 1990 to foster biomedical research at the University of Coimbra, Portugal. Established in 2000 as an Associate Laboratory, its main mission is to promote excellence in fundamental and translational research. This is best expressed in its high-quality publication record and international recognition, including invitations to join international networks such as the Network of European Neuroscience Institutes (ENI-net), the MIT-Portugal Program, the Harvard Medical School-Portugal Program, and more recently the European Neuroscience Campus Network (ENC Network).

CNC is a multidisciplinary research centre that, besides its own staff researchers, brings together scientists from the faculties of medicine, pharmacy and sciences and technology, and from Coimbra University Hospitals, Paediatric Hospital and Portuguese Institute of Oncology. The Biomedical Inter-Institutional Research Programme emerged from the strong and valuable partnership developed between CNC and the clinical faculty, allowing for the translation of basic knowledge into clinical applications, enhanced by partnerships with the pharmaceutical industry. As a founding partner of Biocant, a biotechnology innovation centre, and of the Health Cluster Portugal (with the goal of developing internationally competitive and innovative biomedical technologies and healthcare devices), CNC shows a clear commitment towards promoting technology transfer and the creation of novel biomedical and biotechnology enterprises.

The core scientific activity of CNC is the study of the molecular basis of brain function with a focus on neurodegenerative processes and mechanisms of neuroprotection and regeneration that may act as future candidates for the development of disease biomarkers and novel therapeutic strategies. This activity of the neuroscience and disease research area is potentiated by a multidisciplinary approach involving other research areas, opening the scope of intervention of CNC in the biomedical field: biomedical NMR, cell and molecular toxicology, microbiology, stem cell and regenerative medicine, human genetics and pharmacogenomics, oncology, gene therapy, immunology, inflammation, high throughput analysis (genomics, transcriptomics, proteomics, lipidomics, metabolomics), systems biology, structural biology, etc.

The centre has a long tradition in outstanding graduate teaching aiming to provide Master’s and PhD students with a high-quality multidisciplinary education through programmes with a strong international component. Education at the CNC focuses on research oriented graduate training in molecular life sciences and disease, particularly in the fields of cell and molecular biology, neuroscience and biotechnology. Since 2002 CNC has organised its own Doctoral Programme in Experimental Biology and Biomedicine (BEB). CNC also collaborates with other Master’s and doctoral programmes, both at the University of Coimbra and in other Portuguese institutions. Importantly, as a member of the ENC Network, CNC participates in the Erasmus Mundus Joint Doctorate (EMJD) and the Erasmus Mundus Master’s Course (EMMC) Neurasmus, together with Amsterdam, Berlin, Bordeaux, Göttingen, Zürich, and Québec.

Another key element of CNC is its commitment towards promoting science awareness through an efficient outreach programme. This programme offers opportunities to develop partnerships with schools, museums, science centres and other organisations, extending our scientific resources to the community. The programme is designed to engage students in their science studies, promote potential careers related to the life sciences, and to broaden the public’s access to science.