



BIOCEV

Biotechnology and Biomedicine Centre of the Academy
of Sciences and Charles University in Vestec



BIOCEV – A Hot Spot of Science in the Heart of Europe

BIOCEV (Biotechnology and Biomedicine Center of the Academy of Sciences and Charles University in Vestec), is a joint project of six institutes of the Czech Academy of Sciences - the Institute of Molecular Genetics, the Institute of Biotechnology, the Institute of Microbiology, the Institute of Physiology, the Institute of Experimental Medicine, and the Institute of Macromolecular Chemistry, and two faculties of Charles University, namely the Faculty of Science and First Faculty of Medicine.

As of today, 56 research groups under 5 synergic research programmes are focused on obtaining a more detailed understanding of organisms at the molecular level. The results of their work are oriented towards applied research and the development of new medical procedures to combat severe health problems. The end results of BIOCEV's research work include drugs targeted at the exact location of damaged metabolism and protein and tissue engineering. The significance of the center lies in bringing together scientists from all the concerned fields under one roof in order to cooperate in state-of-the-art research environment of nearly 25 500m² laboratories in 1200 laboratories and office rooms, which is the equivalent of 12 football fields.

The BIOCEV center whose mission is to do "Excellent science in favour of modern society" had been supported by European Union funds, the total investment amounting to 2,3 billion Czech crowns. The foundation stone laying ceremony of BIOCEV was held in 2013 and it took two years for the construction to be completed. In May 2017 the BIOCEV center in Vestec counted a personnel of 420 including scientists and other staff with the aim to accommodate 600 employees of which 450 will be scientists including 200 graduate and post-graduate students by 2020. Currently one-third of the staff is made up of foreign nationals coming from Asia, Australia, Canada, France, the United Kingdom and the United States.

BIOCEV's three main pillars represent research and development, teaching and education, and the transfer of research results into practice. The latter is best illustrated through the closely-knit cooperation with a handful of other start-up and spin-off biotechnological and biomedicine companies

Being one of the five major centers of this kind in the world, one of the six BIOCEV's research infrastructures - The Czech Centre for Phenogenomics analyses the functions of genes stands out as consequential in that the scientists working in the centre together with their colleagues world-wide are part of the International Mouse Phenotyping Consortium. This initiative to identify genes in rodents has a common, grand ambition to compile a description of all genes by 2020, so that we are better able to establish effective therapeutical treatments for humans.

A vaccine to treat infectious diseases and a potential cure for breast cancer that might be available within the next 5 to 6 years are just some of the major discoveries made at BIOCEV. Implementation of complex projects requires a high-quality methodological basis concentrated in the 6 research infrastructures and core facilities like a Czech Center for Phenogenomics or Imaging Methods Core Facility. All are open to external users from the academia and industry to provide them with research top quality services.

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