

Biotechnologies



Biotechnology is the science that studies bioprocesses, based on the cultivation of cells, tissues of a plant, animal or microbial nature. This multidisciplinary science integrates specialized knowledge from biological sciences such as microbiology, cell and molecular biology, immunology, genetics and much more in order to use live microorganisms as well as other cell or tissue of plant or animal origin for obtaining products used in agriculture, food, medicine and pharmaceutical industry.

As a result of the biotechnology entrepreneurial discovery process conducted at the North-East Region level, there was a marked interest in 4 types of biotechnology:

1. Medical and pharmaceutical biotechnologies

2. Agro-food biotechnologies

3. Industrial biotechnologies

4. Environmental biotechnologies

Fundamental Fields:

• Chemical and technology engineering

• Biology and microbiology

• Food engineering

Future development directions & identified value chains:

• Pharmaceutical biotechnologies (obtaining effective substances, antiviral, antimicrobial vaccines preparation);

• Biocatalysts, bio-catalysts of industrial use;

• Bio-Nanotechnologies (markers and imaging for early diagnosis of diseases);

• Agri-food biotechnologies (new improved products);

