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Areas of scientific interest

Currently, the main research topic is the study of **stem cell physiology** and **assesment of their plasticity and applicability in cell therapies**. In the field of regenerative medicine we study the role of mesenchymal stem cells in restoring bones, joints and other connective tissues, investigating the optimal methodology for harvesting, culture and expansion of mesenchymal stem cells from different sources.

Also, a number of studies evaluate the **interaction of various biomaterials with living tissues**, based on the in vitro and in vivo biocompatibility testing and in vitro study of the effect of certain substances and materials on growth and cellular differentiation.

We intend to implement tissue bioengineering techniques based on the use of cells in combination with bioactive materials. An important aspect is to establish **culture conditions in GMP system** allowing the use of such therapeutic products in clinical applications.

Relevant publications

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