PREPARATION OF PRACTICAL STUDIES IN RA-BOT WITH OBTAINING MONOLAYER CELLS

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We have considered the theoretical basis of the methods and systems of cultivation of cells in animals and humans, used in modern biotechnology. Special attention is paid to the cultivation of the cell monolayer.

Nowadays monolayer cultures have several advantages, JW-laudisa prerequisites for their use:

- 1. The possibility of in vivo observation of cells using a microscope.
- 2. The use of a small number of cells, i.e. one cell can replace the clinic patients.
- 3. The researcher may modify the terms of growing cells in a certain limited range, which allows to estimate the influence on the growth of cells by a variety of factors pH, temperature, etc. Our research work is conducted in two directions:
- 1. Selection and training of laboratory equipment and the experimental conditions that are optimal for the chosen method of cultivation.
- 2. The development of cultivation technology of monolayer cells for effective for producing the desired product.

The first direction involves the appropriate equipment culture of Boxing, the selection of the culture dish, culture media and other solutions, providing optimal conditions to obtain a monolayer of cells, their transfer, and the choice of control methods: review and evaluation of the quality of the monolayer, cell counting, microscopy and photography. Indoor culture unit requires laminar, where we will perform all manipulations with cells, that is, it is actually working place, also need a CO₂-incubator, refrigerator, table with light and inverted light microscopes and a cupboard with kitchenware.

Monocline cultivation is carried out in bottles, probir quay, plastic plates, Petri dishes, flat-bottomed bottles, vessels Carrel. We have determined the feasibility of using Petri dishes or plastic tablets.

The creation of conditions of asepsis, the training of personnel and clothing: systematic treatment of the hands; strictly defined sequence dressing; the use of breathable bandages on his face, rubber gloves. Thus, based on the analysis of the theoretical foundations, requirements and conditions of cell cultivation, we have developed a cycle of preparatory work to obtain a monolayer of cells in the laboratory.