

MOTION UNDER THE MICROSCOPE – MODERN TECHNIQUES FOR STUDYING CELL ADHESION AND MOTILITY

Summary

Ability to move is one of the fundamental functions of the living cells. It is due to the motility that organism develops, immune system can work, organs are able to regenerate and wound heal. In the same time motility studies are among methodologically most difficult ones. Biochemical processes underlying motility are notoriously unsynchronized and motile cells are usually not very numerous. Current paper reviews microscope techniques de-

veloped to solve those problems. We discuss basic measurements, parameterizing motility and substratum adhesion. Classical, structural microscopy used for motility studies are also sketched shortly. We describe also use of molecular probes for signaling studies in motile cells as well as we mention about microscopic experimental techniques, allowing experiments on single cells.