

THE MIGRATION OF MELANOMA CELLS IN CULTURE: A QUANTITATIVE CHARACTERIZATION

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Studies about cellular motion are important to understand fundamental process such as embrionary development, wound healing, invasion and metastasis in cancer. In this work we report on the initial results concerning the trajectories followed by cells of murine melanoma in vitro and our goal is characterize the dynamics of growth, migration and aggregation of these cells, in culture. The experimental technique used was videomicroscopy and the results were obtained by digital analysis of these images. The melanoma cells were maintained in ideal conditions and photographed at regular intervals of 15 minutes. Using the coordinates of each cell, we calculated some quantities, like velocities, turning angle and mean square displacement used to determine the nature of the migratory process employed by these cells in monolayer cultures under low cell density. Supported by: Capes and CNPq.