3rd Jagiellonian Symposium on Fundamental and Applied Subatomic Physics



Contribution ID: 140 Type: invited talk

Spheroids as a model for tumor radiosensitivity and radiolabeling tests

Wednesday, 26 June 2019 15:05 (25 minutes)

Spheroids are multicellular and tissue –like structured in vitro 3D models which mimic microenvironment in vivo. Unlike common 2D in vitro cell models, spheroids reflect the cellular milieu and the pathophysiological conditions inside tumor nodules. Recently they are widely used in drug testing and radiation studies. Results obtained from 3D cell spheroids can be better translated to in vivo animal studies or clinical trials. In this presentation I will tell about technical issues related to spheroid generation, comparison of molecular properties of spheroids with simple 2D cell couture techniques and application of spheroids in radiobiology. Most of results will be related with melanoma cancer diagnostic and treatment.

Primary author: STEPIEN, Ewa (Jagiellonian University, Dept. of Medical Phisics)

Co-authors: Dr LESZCZYNSKI, Bartosz (Jagiellonian University, Dept. of Medical Physics); Mrs KARIMI,

Hanieh (Jagiellonian University, Dept. of Medical Physics)

Presenter: STEPIEN, Ewa (Jagiellonian University, Dept. of Medical Phisics)

Session Classification: Wednesday