BSC 589 Independent Studies (3 Credit Hours) – Fall 2012
(Alaa Qur)
G1P3-Cytoskeletal Interaction and Cancer
Instructor: Dr. Venugopalan Cheriyath, STC 352, STC 353 and STC 332

Purpose: To develop an understanding of the role of interaction of G1P3 and cytoskeletal elements in breast cancer development and progression.

Objectives:
1. Conduct literature review on the role of cytoskeletal element actin in cancer development, progression and apoptosis.
2. Grow and maintain MCF-7\textsuperscript{Vector} and MCF-7\textsuperscript{G1P3} cells in culture.
3. Investigate the effect of G1P3 on actin organization.
4. Investigate the interaction of wild type and mutant G1P3 with actin.
5. Make a research proposal and hopefully present findings at Pathway Symposium and at subsequent scientific meetings

Grading Scheme
Attendance and Participation 45 Points
Cell culture 15 points
Immunoblot analysis & Immunoprecipitation 15 points
Statistical Analysis 5 points
Presentation 10 points
Report 10 points

Requirements:
Student will be working under my direct supervision. Student is required to attend all lab meetings and work at least 20 hours of laboratory work per week. Depending on the experiments they may require to come to the everyday of the week including week ends.

Important References


5. McConkey, D.J., and Bondar, V. 6 Regulation and Function of Detachment-Induced Cell Death (Anoikis) in Cancer Progression and Metastasis.


