

Cancer Cells Viability and Toxicity Studies

POSITION TITLE: RESEARCH ASSISTANT

RESEARCH PROJECT TITLE: CANCER CELLS VIABILITY AND TOXICITY STUDIES

FACULTY NAME & TITLE: RANA AL-ASSAH, ASSISTANT PROF OF PRACTICE OF BIOLOGY

RESEARCH PROJECT DESCRIPTION

The group is interested in cancer studies using 3 cancer cell-lines (HCT-116, HeLa, and SW-1088). The research will include delivery of RNAi into these cell-lines to knock down genes such as RLUC, Eg5, and ELYS and is thus interested in comparing various RNAi - cell delivery vehicles. This is in addition to performing cell death studies for a better understanding of the effect of ELYS knockdown on these cancer cell-lines.

The same cell-lines will also be screened for a better understanding of their metabolic pathways (particularly glycolysis). We will be studying the ability of these cell-lines to metabolize certain metabolites using the Biolog high throughput screening system.

RESPONSIBILITIES OF THE POSITION

- Perform basic cell culture techniques (Culture/freeze/thaw)
- Setting up plates by cell seeding (for high throughput analysis)
- Conduct transfection experiments
- Measure cell viability and toxicity
- Perform other related experiments as the need arises
- Assist in maintaining records of consumables needed for the lab

ESSENTIAL QUALIFICATIONS:

- BS in Biology (or related fields such as molecular biology, biotechnology, biomedical sciences, etc.)
- Fluent in English

PREFERRED EXPERIENCE / SKILLS:

- MS in Biology (or related fields such as molecular biology, biotechnology, biomedical sciences, etc.)
- Tissue (cell) culture experience
- Excel

- Basic statistics

APPLICANTS TO PROVIDE:

1. Statement of interest in the position
2. Transcript of degree(s)
3. CV
4. Two letters of recommendation