

Development of Novel Drug Delivery Systems for Cancer

POSITION TITLE: RESEARCH ASSISTANT

RESEARCH PROJECT TITLE: DEVELOPMENT OF NOVEL DRUG DELIVERY SYSTEMS FOR CANCER TREATMENT

FACULTY NAME & TITLE: MAZIN MAGZOUB, ASSISTANT PROFESSOR OF BIOLOGY

RESEARCH PROJECT DESCRIPTION

Two of the main drawbacks of current cancer drugs are their lack of target specificity and low cancer cell uptake efficiency, with the result that the drugs accumulate in healthy tissue as well as the tumor, often resulting in severe side effects for the patient. The aim of the project is to develop novel methods and approaches to improve tumor targeting and cancer cell uptake efficiency of anticancer therapeutics. This will not only improve the effectiveness of the drugs by accumulating them at the desired site, i.e. within the tumors and cancer cells, but will also help to reduce potential side-effects and decrease the overall cost of treatment by reducing the amount of drug needed for treatment. The project will involve using cell and molecular biology methods, in tandem with state-of-the-art biophysical techniques, including high-resolution imaging.

RESPONSIBILITIES OF THE POSITION

- Cell culture
- Cell viability/toxicity assays
- Cellular delivery mechanisms
- High resolution fluorescence microscopy/imaging

ESSENTIAL QUALIFICATIONS:

- Bachelor of Science
- Ability to work as part of a team and individually
- Communication skills

PREFERRED EXPERIENCE / SKILLS:

- Motivation to learn new methods and techniques
- Desire to formulate and explore new ideas
- Ability to work as part of a team and individually
- Good communication skills

APPLICANTS TO PROVIDE:

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