Synthetic Modifications and Evaluation of Novel Lipid-Based Nanoparticles for Drug Delivery

PROJECT DESCRIPTION

Nanotechnology has recently gained much attention in the delivery of therapeutic and as imaging agents in several medical applications. Particularly, nano-carriers are emerging as a new area for drug delivery for numerous diseases. Improved half-life, high specific delivery of drugs, and controlled release over short and long durations are characteristics which make nanotechnology based drug delivery systems an attractive tool in increasing bioavailability of most therapeutic compounds which generally have poor bioavailability. Lipids have widely been investigated and in spite of their several advantages such as hydrophobic nature to encapsulate drugs, some basic limitations remain to limit their wide range applications in drug delivery. In proposed project we are working to modify lipids with biocompatible, biodegradable and hydrophilic polymers to increase their blood circulation and accumulation at diseased cites for effective delivery of drugs. It will be an excellent opportunity for international students to acquire basic knowledge and working experience on an emerging and cutting edge research area of nano-modifications and characterizations from a drug delivery point of view.

FACULTY-DEPARTMENT

Agricultural, Life & Environmental Sciences- Agricultural, Food and Nutritional Science

DESIRED FIELD OF (STUDENT) STUDY

Chemistry, Chemical Engineering and Chemical Biology

INTERNSHIP LOCATION

University of Alberta Main Campus - Edmonton

NUMBER OF INTERNSHIP POSITIONS

2

INTERNSHIP START DATE

July 4, 2018 (Flexible)

Contact: Brendan Cavanagh, Internship Coordinator (Inbound)
University of Alberta International
intern@ualberta.ca

INTERNSHIP END DATE

3 months after start date

ARE THE DATES FLEXIBLE?

Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.

Contact: Brendan Cavanagh, Internship Coordinator (Inbound)
University of Alberta International
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