

Longqin Hu

Novel Bifunctional Dendrimers Targeting Tumor Cells

[Novel bifunctional dendritic platinum complexes are designed to contain a folate vector for folate receptor-mediated selective delivery of cytotoxic platinum complexes to tumor cells.]

Our research goal is to increase the therapeutic effectiveness and to decrease the systemic toxicity of anticancer drugs used in the treatment of cancer through the development of new therapeutic agents and novel targeting strategies. In this proposal, novel bifunctional dendrimers – polymers with defined globular structures – are designed to target folate receptor-expressing cancer cells and release multiple copies of a cytotoxic anticancer agent. These dendrimers could, in the long run, be developed into novel therapeutic agents for the effective treatment of human tumors such as ovarian cancer.