

## CBC SEMINAR ANNOUNCEMENT



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### **Supramolecular Approach for New Targeted Cancer Therapy: From Assembly to Nanomedicine**

Cancer is one of the biggest diseases worldwide, a huge threat to humans. The endeavor to cure cancer has been developed from cytotoxic chemotherapy, targeted chemotherapy, to immunotherapy. However, cytotoxic chemotherapy has severe side effects, killing healthy normal cells, and targeted chemotherapy, which inhibits specific cancer proteins, has drug resistance problems, and immunotherapy is only applicable for limited patients. Therefore, it is highly demanded to develop a new paradigm of cancer therapy. Our research team has investigated new cancer therapy using a supramolecular approach. In this talk, I would like to discuss about intra-mitochondrial assembly and supramolecularly protein-modified nanomedicine for targeted cancer therapy. In the first part, I will talk about the supramolecular polymerization of dipeptide inside the mitochondria. At the second part, I will talk about cancer-targeted nanomedicine to prevent the clearance of the particles by macrophages, while ensuring their targeting function *in vitro* and *in vivo*. These findings can provide a new insight into intra-mitochondrial assembly for the therapeutic approach and new targeting platform for the biomedical community since numerous functional proteins can be installed by the similar fashion,

**Date:** 27<sup>th</sup> June 2019 (Thursday)  
**Time:** 11.00 am to 12.30 pm  
**Venue:** SPMS Research & Graduate Studies  
Office Conference Room  
**Host:** Associate Professor Xing Bengang