

10th International Conference on

Nanomedicine and Nanotechnology in Health Care

July 25-27, 2016 Bangkok, Thailand

Cancer Treatment using Inorganic Nanoparticles

Zhi Ping (Gordon) Xu^a, Li Li^a and Wenyi Gu^a^aThe University of Queensland, Australia

In this talk, I will briefly introduce the research work done in our group for the cancer treatment using inorganic nanoparticles as the drug/gene carriers. Our research targets both the short term and the long term therapies. For the short term therapy, we aim to 1) target deliver drug/gene for efficient treatment; 2) use one nanoparticle to deliver two or more therapeutics and synergize the efficiency. For the long term therapy, we aim to enhance the host immune system to battle against the cancers by developing nanoparticles to deliver the immune components (vaccines, cytokines etc) or activate the immune cells (e.g. T-cells). I will present our research in vaccine nanoadjuvants and enhancement of T cell immunity by specifically delivering RNAi molecules.

Biography

Zhi Ping Xu obtained his BS degree from the University of Science and Technology of China in 1988, and received his PhD degree from National University of Singapore in 2001. After his postdoctoral fellowship at University of North Texas, he has joined the Australian Institute for Bioengineering and Nanotechnology, the University of Queensland since 2004. He has published over 190 journal papers, and his current research focuses on developing clay and clay-hybrid nanomaterials for drug/gene/ vaccine delivery to treat cancers.

gordonxu@uq.edu.au**Notes:**