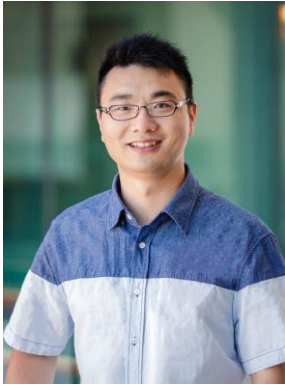


Center for Minimally Invasive Therapeutics

Seminar series



Dr. Chun Xu

University of California, Los Angeles (UCLA), U.S.A.

Thursday, Feb. 21, 2019 at 2:00pm-3:00pm

CNSI Auditorium

Hosted by Prof. Ali Khademhosseini

“Designer nanoparticles for biomedical applications”

Abstract:

Nanoparticles possess unique physical, chemical and biological properties due to the nanosize effects and offer various advantages for biomedical applications such as drug delivery and tissue engineering. Mesoporous silica nanoparticles (MSNs) are of special interest due to their good biocompatibility, high stability, rigid framework, well-defined pore structure, easily controllable morphology and tuneable surface chemistry. MSNs based delivery system offer a promising strategy to improve the drawbacks of traditional therapeutic drugs such as low stability and difficulty to cross the cell membranes. Recently, the development of MSNs with large pores enable the loading and delivery of large therapeutic molecules including proteins and genes. In particular, enhanced stability, improved activity, responsive release and intracellular delivery of proteins/genes are achieved with novel MSNs. I will talk about our previous works and the recent progress using MSNs for drug delivery and tissue engineering.

Biography:

Dr. Chun Xu received his Ph.D. in Biomedical Engineering and Nanotechnology at The University of Queensland, Australia in 2016. Before that, he got a M.D.S. in Oral and Maxillofacial Surgery and a B.D.S. in Dentistry from Wuhan University, China. He is currently a NHMRC Senior Research Officer and C.J. Martin fellow at The University of Queensland. He has published over 33 peer-reviewed scientific papers in top journals and hold 3 patents. In the last 3 years he has attracted 8 competitive grants including 1 prestigious NHMCR Fellow. He is a regular reviewer of several scientific journals and of NHMRC, ARC grants. He also serves as review editor on the editorial board of Nanoscience, Frontiers in Chemistry. He has received several awards such as WOS Young Science Ambassador Award. He is a member of ISO experts committee for Nanoscience and Nanotechnologies.

For any inquiries, contact Prof. Ali Khademhosseini at khademh@ucla.edu