



上海交通大学

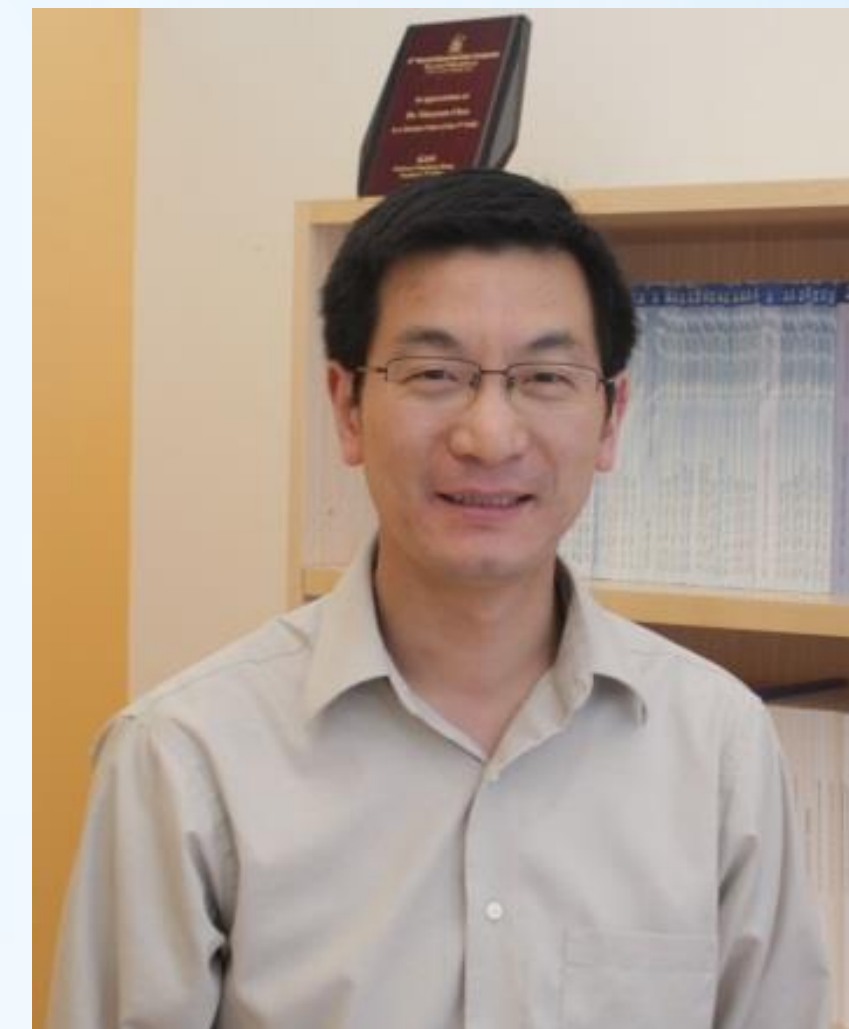
SHANGHAI JIAO TONG UNIVERSITY

# Cancer Theranostics

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**报告摘要:** Theranostics (Rx/Dx) aims to develop molecular diagnostic tests and targeted therapeutics with the goals of individualizing treatment by targeting therapy to an individual's specific disease subtype and genetic profile. It can be diagnosis followed by therapy to stratify patients who will likely respond to a given treatment; it can also be therapy followed by diagnosis to monitor early response to treatment and predict treatment efficacy; it is also possible that diagnostics and therapeutics are co-developed (nanotheranostics). This talk will give examples of designing nanobiosensors for ultrasensitive biomarker detection in vitro, applying molecular imaging techniques for in vivo measurement of cancer hallmarks, and making nanoparticle platforms for co-delivery of imaging labels and therapeutic genes and drug molecules.

**嘉宾介绍:** Dr. Xiaoyuan (Shawn) Chen received his PhD in Chemistry from the University of Idaho (1999). After two postdocs at Syracuse University and Washington University in St. Louis, he started his Assistant Professorship in 2002 and then moved to Stanford in 2004. He moved to NIH in 2009 and became a Senior Investigator and Chief of the Laboratory of Molecular Imaging and Nanomedicine (LOMIN) at the National Institute of Biomedical Imaging and Bioengineering (NIBIB), NIH. His current research interests include development of molecular imaging toolbox for better understanding of biology, early diagnosis of disease, monitoring therapy response, and guiding drug discovery/development. His lab puts special emphasis on high-sensitivity nanosensors for biomarker detection and theranostic nanomedicine for imaging, gene and drug delivery, and monitoring of treatment. Dr. Chen has published over 500 peer-reviewed papers (H-index = 95, total citations > 34,000 based on Google Scholar) and numerous books and book chapters. He is the founding editor of journal "Theranostics" (2014 IF = 8.022). He is also the President of Chinese-American Society of Nanomedicine and Nanobiotechnology (CASNN) and President-Elect of the Radiopharmaceutical Science Council (RPSC), Society of Nuclear Medicine and Molecular Imaging (SNMMI).

