

# University of Houston - Biomedical Engineering Seminar

Friday, March 26, 2021, 12 noon

Via Zoom: <https://uofh.zoom.us/j/92470065206>

## Overcoming Transport Barriers in Cancer Treatment



**Haifa Shen, MD, PhD**

### Abstract

There exist multiple physical and biological barriers that prohibit effective entry of therapeutic agents into the tumor tissue, rendering most treatment ineffective. Consequently, new cancer therapeutic agents should be empowered with the ability to negotiate with such barriers both at the systemic level and inside the tumor tissue. In the presentation, I am going to describe a number of enabling technology platforms for cancer drug design.

### Biosketch

Haifa Shen received his B. Med. degree in China and his Ph. D. degree at University of Texas/ M D Anderson Cancer Center. He spent 8 years in the biopharmaceutical industry after post-doctoral training at the National Cancer Institute, and came back to academia in 2010. He is currently Professor of Nanomedicine in Houston Methodist Academic Institute and Leader of the Innovative Therapeutics Program in Houston Methodist Cancer Center. His research interests and expertise are on delivery of therapeutic agents to the target tissues, with particular emphasis on overcoming drug transport barriers. He performs multidisciplinary research and works closely with biologists, chemists, engineers, drug formulation scientists, material scientists and clinicians. He currently serves as the principal investigator of one U54 center grant and two R01 grants from the National Cancer Institute.