“Biomaterial Strategies to Modulate Inflammation”

Many chronic disabling diseases such as rheumatoid arthritis, psoriasis, multiple sclerosis and systemic lupus erythematosus are increasingly linked to inappropriate and chronic activation of inflammatory cells. A central event in the pathogenesis of these diseases appears to be an aberrant activation of innate immune sensors, most prominently the Pattern Recognition Receptors (PRRs), by nucleic acids that are released from dead and dying cells. Moreover, such extracellular nucleic acids have also been implicated in acute thrombotic disorders such as heart attack, traumatic injury, and stroke in activating the contact pathway of coagulation. In this presentation, I will discuss the application of nucleic acid-binding polymers in the configuration of either soluble or immobilized polycation to scavenge these pathogenic nucleic acids as a molecular strategy to combat inflammation.

Thursday, March 1, 2018
HSEB 2600
4:00PM – 5:00PM

Note: Regular Department Seminar. Attendance is mandatory for PHCEU graduate students. Attendance will be taken.