Autoantibodies as biomarkers: induction and implications

Autoantibodies are important clues to the host’s response to environmental insults. Smoking is the environmental risk factor that is most important in Rheumatoid Arthritis pathogenesis. We have identified two linked autoantibodies namely Rheumatoid Factor and anti-heat shock protein 70 that are highly expressed in smokers with lung disease. Our studies have worked out some of the pathways from inflammation and smoke exposure in susceptible man or mouse to the induction of these autoantibodies.