

STATEMENT OF WORK

Grant Title: Role of glycoproteins in lung recellularization

Bioengineering approaches for *ex vivo* generation of functional lung tissue offer novel scientific and therapeutic opportunities for lung regenerative medicine. We and others have investigated utilizes decellularized lung scaffolds as platforms for recellularization with autologous stem/progenitor cells. Linhardt Lab in RPI will be responsible for i) glycosaminoglycan (GAG) composition analysis of the decellularized lung ECM scaffolds using LC-MS; ii) characterize specific binding of key matrikines, including TGF β , FGF2, FGF7, and HGF to specific HS, CS, and DS functional groups using SPR.