

**LTRC Concept Sheet # 08-03-0003**  
**PTX3 is a Biomarker in IPF**

**ABSTRACT**

Long pentraxin X3 (PTX3) is an inflammatory mediator, which has important host defense properties but has also been implicated in several chronic diseases. Its role in pulmonary fibrosis is presently unclear but we have recent evidence showing that this cytokine is increased in surgical lung biopsies from IPF patients, and fibroblasts grown from these biopsies also exhibit increased constitutive expression of PTX3. We have observed that IL-13 is a major inducer of PTX3 and our published work indicates that IL-13 is a major inducer of pathological fibrotic responses in the lung. Given this background, we propose to examine serum and plasma samples from IPF and non-fibrotic patients in order to determine whether this cytokine can be detected in circulation and if so, whether levels of this mediator correlate with severity of pulmonary fibrotic disease. We plan to use an ELISA to measure the biomarker of interest.