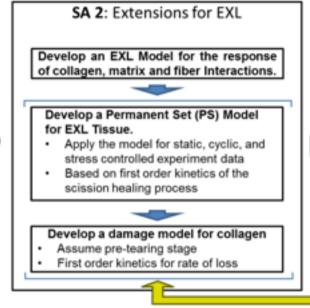
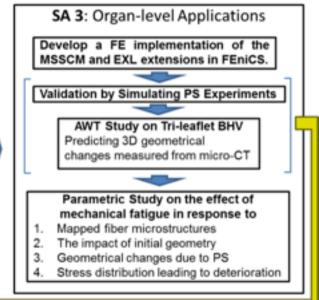
## SA 1: Generalized MSSCM

- Full fiber network model for both collagen and Elastin
- Integrated experimental structural measurements
- Utilizing layer specific measurements
- Validation for Ovine Pulmonary Artery
- Recruitment Effect
- Prediction using fiber structural measurements

## Validation for Mitral Valve Leaflets

- Layer specific mechanical response
- Predicting the fibril-level measurement of SAXS





Fatigue Damage Model Refinement