Novel Method to Prevent or Treat Fibrosis
A novel method for treating and preventing fibrosis and fibrosis-related conditions using fibronectin binding proteins and polypeptides.

Problem Solved by This Technology
Fibrosis is the formation of excess fibrous connective tissue in an organ or tissue that can alter the architecture and compromise the function of that organ or tissue. Fibrosis usually occurs as a result of injury and inflammation, and can present itself in different tissues. Examples include lungs (pulmonary fibrosis, idiopathic pulmonary fibrosis, cystic fibrosis), liver (including cirrhosis), heart (myocardial fibrosis, atrial fibrosis), skin (keloids, hypertrophic scars), kidneys and many other tissues.

Applications
Researchers at the University of Rochester have developed peptides that bind fibronectin and inhibit its deposition into the extracellular matrix. These peptides also block the fibronectin-dependent deposition of other extracellular matrix proteins including collagen. These proprietary agents can be used in many clinical settings such as the following:
- Prevent fibrosis-related damage after myocardial infarction and prevent progression to heart failure
- Prevent liver fibrosis and the progression to cirrhosis
- Prevent wound overscarring, keloid formation, or hypertrophic scars
- Treat Asthma and reduce airway remodeling
- Prevent allograft vasculopathy or graft stenosis in cases of vascular grafting.
- Prevent the progression of other types of fibrosis, including pulmonary and kidney fibrosis
- May improve organ function in established fibrotic diseases

Intellectual Property Status
Patent application pending in the United States.