

## **Fibrin "Knob" Therapeutics (#4021)**

A rapid and simple method for the in vitro production of biological reagents

A rapid and simple method for the in vitro production of biological reagents including but not limited to synthetic materials, proteins, peptides, nucleic acids and lipids that are specifically targeted to fibrinogen, fibrin and fibrin monomers. The targeting component is structurally consistent, stable and has innate therapeutic potential. A variety of in vivo and clinical contexts exist where targeting to fibrinogen, fibrin and fibrin monomers would be beneficial. Dependent upon the reagents modified the resulting products can be used for therapeutics and clinical diagnostic and research related imaging. With both the therapeutic targeting and imaging capabilities of this invention, a simple platform can be targeted towards an essentially open market with little competition.

### **Benefits/Advantages**

- Simple method
- Robust production
- Innate therapeutic potential

\*\*\* Small animal studies have been successful in limiting nerve scarring

### **Potential Commercial Applications**

- Imaging and drug delivery
- Wound healing and scar prevention
- Prevention of post-surgical adhesion
- Atherosclerotic plaque detection and prevention
- Diagnostic and therapeutic reagents for Idiopathic Pulmonary Fibrosis

### **Background/Context for This Invention**

Idiopathic Pulmonary fibrosis is a disease estimated at 7 cases per 100,000 per year in women and 10 cases per 100,000 per year in men, increasing in number with age. There are currently no available early

diagnostic procedures and lung transplants are the only effective treatment strategy.

**Thomas Harrison Barker**

## **Publications**

*[New Study Reveals Ways to Better Inhibit Blood Clots](#)*, May 19, 2010

**For more information about this technology, please visit:**

<https://licensing.research.gatech.edu/technology/fibrin-knob-therapeutics>