# Device for Reconnecting Connective Tissue with More Consistent Outcomes

## Invention Summary

Current surgical techniques for reconnecting severed tendons require the artful use of suture materials. Numerous techniques have been developed that involve threading, wrapping, looping and tying of suture material to reattach the severed ends of tendons. These techniques require skill, practice and, even if practiced skillfully, the sutures can create areas of ischemia. For these and other reasons, the outcomes of tendon reattachment procedures vary widely. This invention is a device for reattaching severed tendons and other types of connective tissues exploiting a range of attachment approaches including shape memory polymers.

## Market Applications

Orthopedic Surgery – sports injury and reconstructive surgery.

## Features, Benefits & Advantages

A medical device approach for reconnecting connective tissue would eliminate variability, create an environment that is healthier for healing tissue and promote a superior outcome.

## Intellectual Property & Development Status

This concept-stage invention is the basis for one of the design projects for the Bioengineering 3801/4801 Design Class sequence, and will be further developed in that context. It is available for developmental research support/licensing under either exclusive or non-exclusive terms.

## Related Research

http://medicine.utah.edu/orthopaedics/physicians/faculty/kubiak.htm

## U of U Researcher

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