BACKGROUND: As an orthopaedic surgeon treating sports injuries, I have realized that repairing an injured musculoskeletal structure will not yield an excellent result unless the factors that led to the development of tissue overload are addressed. Over the years it has become apparent that changes in the fascial balance around a joint are critical in the development of painful conditions. Imbalances appear when repetitive stress is applied to a part of the body that alters the normal movement patterns. Once pain develops, a vicious cycle of poor movement pattern, increasing imbalance of fascia and structural breakdown occurs.

RATIONALE: Maintenance of normal joint position sense (proprioception) and sensation of joint movement (kinesthesia) are critical to obtaining and maintaining healthy movement patterns. Fascia and skin are the major tissues containing the receptors for proprioception and kinesthesia. Therefore application of light pressure to the skin along fascial lines could enhance normal muscle firing patterns and improve joint proprioception.

METHOD: Fascial Anatomic Stimulation Technology (FAST) is a Compression Shirt that has been designed using stretchy material of two different weights (spandex/nylon combination). The less stretchy material follows normal anatomic fascial and kinetic chain pathways to connect the hand to the hip. With movement, the tensor material will apply light pressure to the skin to stimulate proprioception along the kinetic chain. There are three basic designs that may be used for different activities. Compression applied by the shirt will enhance muscle recovery. U.S. Patent No 8,887,315

CONCLUSIONS: By stimulating the proprioceptors within the skin along a kinetic chain and fascial pathway it may be possible to enhance movement patterns, fascial remodeling and muscle recovery. If the neuromuscular firing patterns and fascia are healthy then injury may be prevented. Studies in the future will be designed using the various shirts to examine the role of proprioception in injury prevention and recovery.