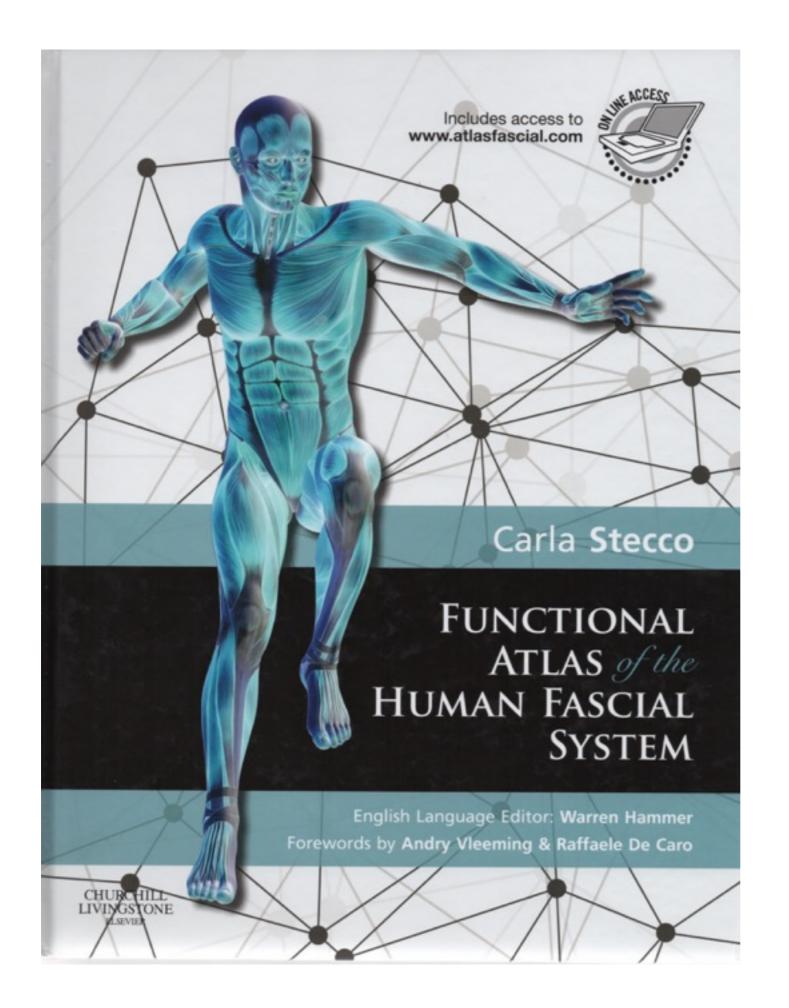
Yoga, Fascia, and Meridians

Moving beyond range of motion



When we stress fascia what are we stressing?

Cells Fibres Gels

Dr. Carla Stecco 2015 Colloid chemistry is the twilight between chemistry and physics—but that is where God has chosen to reveal himself.

Foreward to "Colloid Phenomena" 1930 - MARTIN H. FISCHER 1930

The Lyophilic Colloids (Their Theory and Practice)

By MARTIN H. FISCHER Professor of Physicalogy in the Units, support of Cincinnati

and

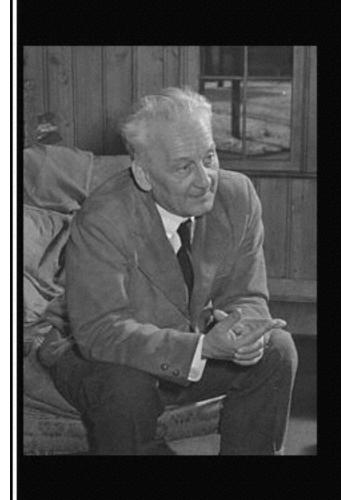
MARIAN O. HOOKER Research Associate in Physiology in the University of Cincinnati

The work of Fischer and Hooker during the past twelve years is summarized. Their theory of the lyophilic colloids, as first proposed in 1918, is restated and new experimental evidence is brought of its truth. The observations on mutually soluble systems find direct application to problems in pure and applied chemistry and to many a modern chapter in biology and medicine.

\$4.50 Postpaid

CHARLES C THOMAS SPRINGFIELD . ILLINOIS BALTIMORE . MARYLAND Orders may be addreased to the Bauer Office. 220 East Manzor Street, Springfield, Illinois

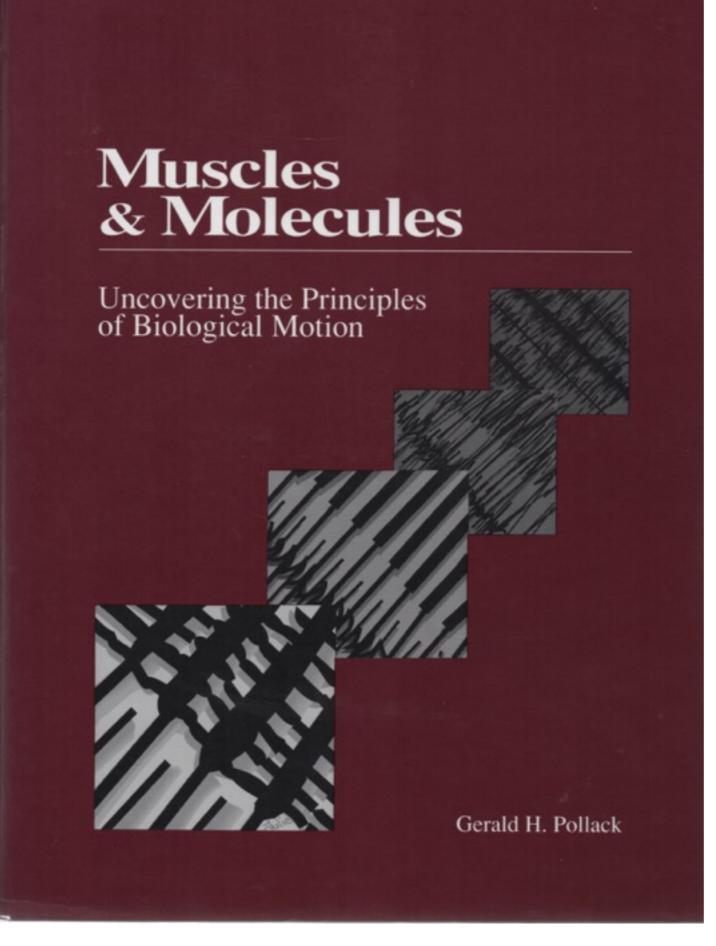
or to your Bookseller.



Life is water, dancing to the tune of macro molecules.

(Albert Szent-Gyorgyi)

izquotes.com



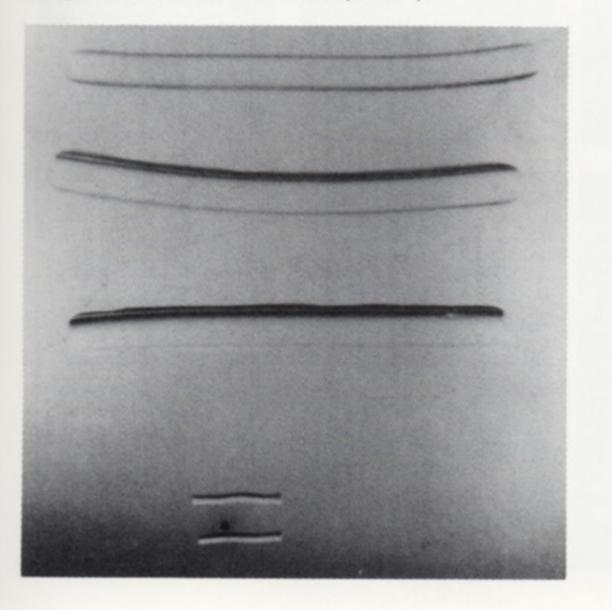
Dr. Gerald Pollock 1990

Cells, Gels and the Engines of Life

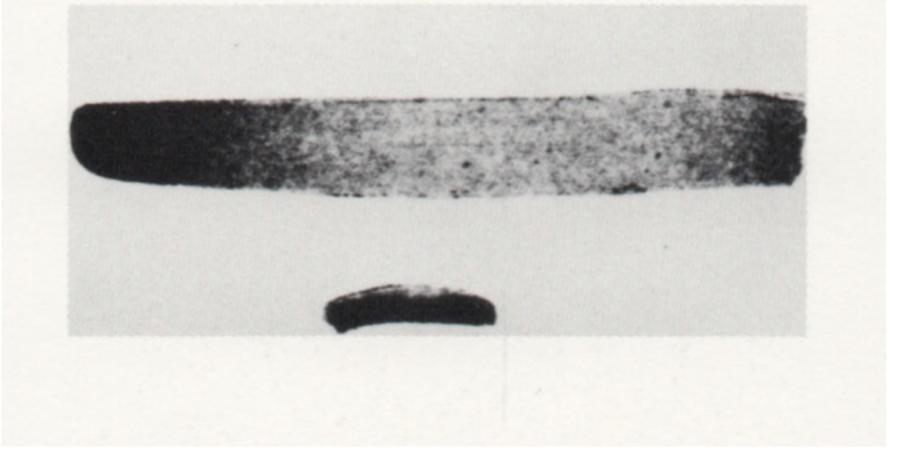
Dr. Gerald Pollock 2001

A New, Unifying Approach to Cell Function

Figure 6.2. Polyacrylamide gel in solvents of progressively varying composition (top to bottom). As the acetone/water ratio is brought beyond a critical level (between third and fourth panels) the gel undergoes a discrete transition. From Tanaka (1981).



Muscles and Molecules by Pollock p.103 Figure 6.1. Actomyosin gel, before (above) and after (below) addition of ATP. ATP causes marked shrinkage. Based on original experiments of H. H. Weber. From Szent-Györgyi (1951).



Gels are Active

Muscles and Molecules p102



FIGURE 8.5 Loose connective tissue between the superficial fascia and the deep fascia over the proximal portion of the sacrum. In appearance, it is similar to a subcutaneous bursa (sacral bursa).

Dr. Carla Stecco 2015

1. "Loose CT (or areolar tissue) is the most widespread CT of the body. It is characterized by an abundance of ground substance (Gel), plus thin, relatively few fibres and cells."

- **Dr. Carla Stecco**, Functional Atlas of the Human Fascial System

2. "The loose CT has a viscous, gel-like consistency and its consistency may fluctuate in different parts of of the body due to variations in temperature or pH...p.8

- **Dr. Carla Stecco**, Functional Atlas of the Human Fascial System

"... particularly **hyaluronan** in loose CT, forms the water of the ECM into a **hydrated gel**; this gel is responsible for the **turgidity and viscoelasticity** of the CT."

"Its viscoelasticity allows the tissue to **return to its original form** after stress, and enables the collagen fibres to move without **friction** against each other, to **absorb forces** that affect the tissue and to **protect the collagen** network from excessive stress."

- **Dr. Carla Stecco**, Functional Atlas of the Human Fascial System

"When the HA(**Gel**) becomes **adhesive rather than lubricating**, the distribution of lines of force within the fascia become altered.

By **changes in viscosity**, the receptors within the fascia can send a **pain** message from a degree of stretching that is even **within the physiological range**.

An important component of pain **therapy** is to **reverse these changes in** HA(**Gel**). ... This is accomplished with massage, manipulation, or physical therapies..."

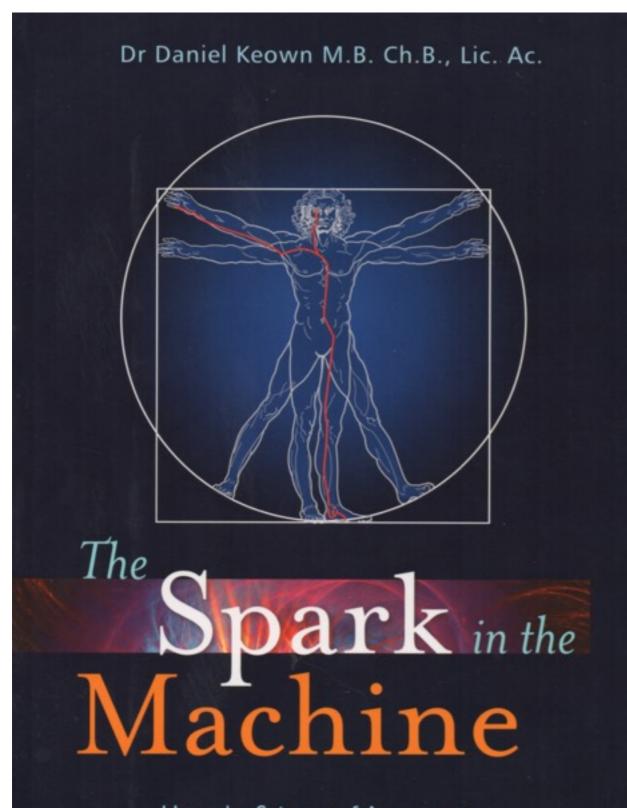
- Dr. Anthony Stecco, Fascia Congress 2015

Biomechanical or Energetic

Mechanical **stress creates phase change** in the gel. Increased Range of Motion

This is **subjectively experienced** as a flow of chi. Heat/pressure Dispersal Pleasant Inhibition of Movement Emotional Calmness Mental Calmness

These are experienced when not moving



How the Science of Acupuncture Explains the Mysteries of Western Medicine **Dr. Keown** makes the case for acupuncture meridians being fascial channels.

The Spark in the Machine 2014

SINGING DRAGON "The physical location of the meridians is in the water-rich phase of the connective tissue."

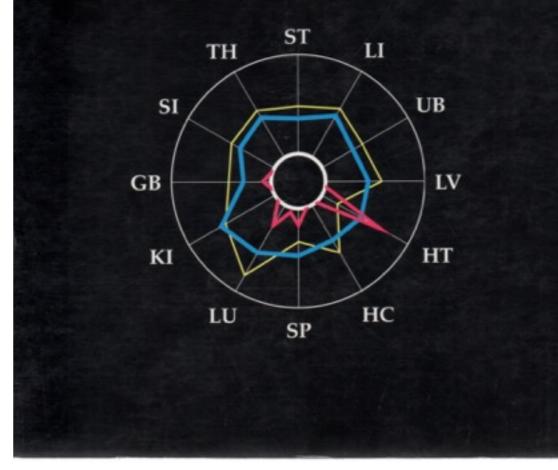
- Dr. Hiroshi Motoyama 1977,1984,1997

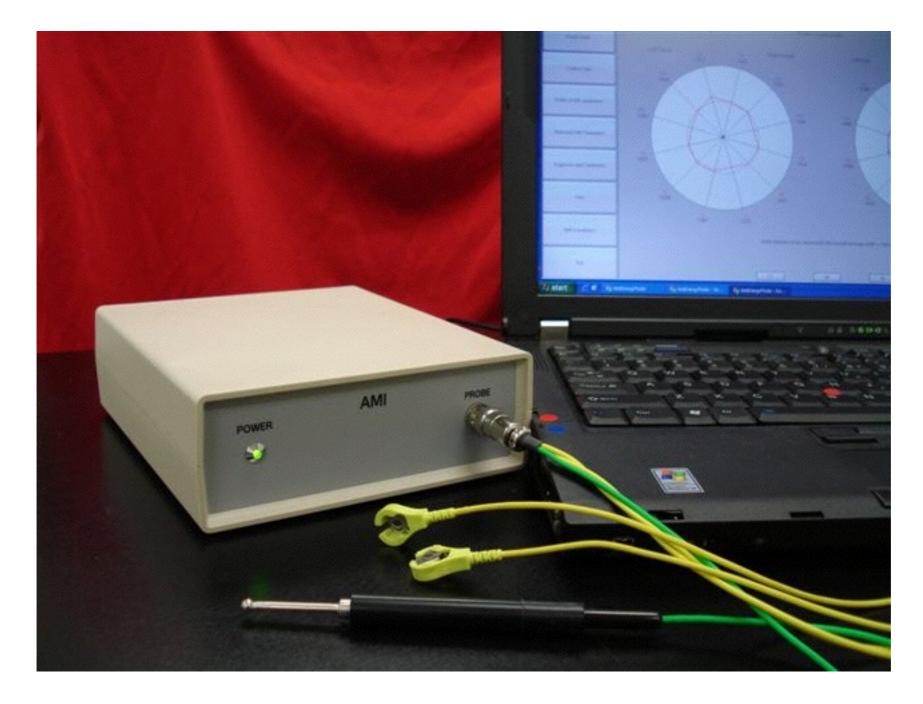
MEASUREMENTS

OF KI ENERGY DIAGNOSES & TREATMENTS

TREATMENT PRINCIPLES OF ORIENTAL MEDICINE FROM AN ELECTROPHYSIOLOGICAL VIEWPOINT

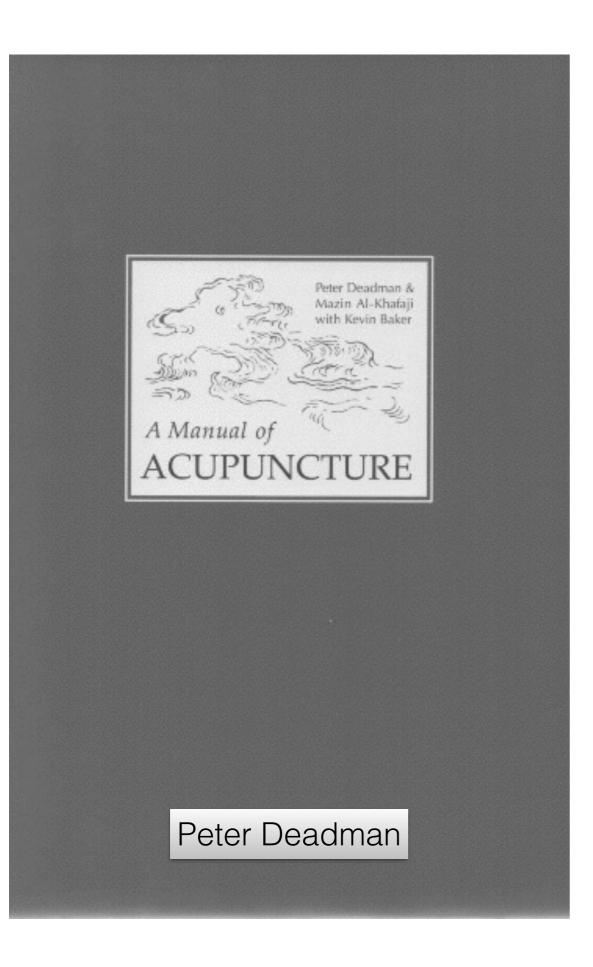
by Hiroshi Motoyama, Ph.D., Ph.D.

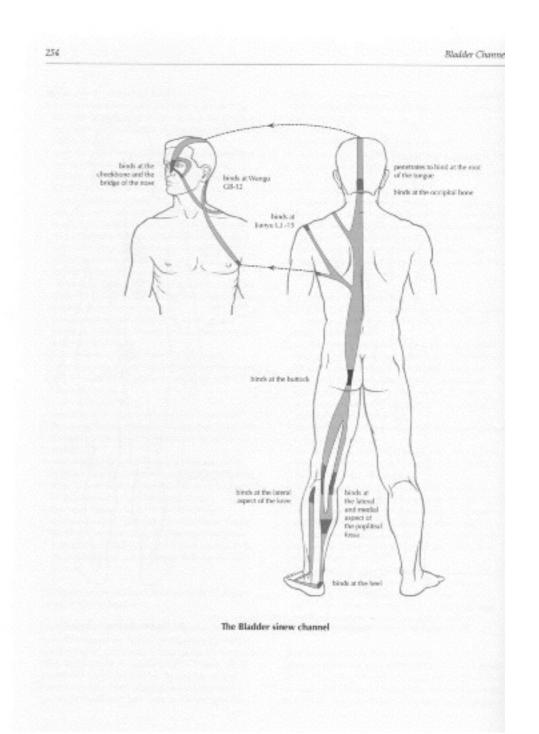




AMI (Apparatus for Meridian Identification) Device

The AMI works by monitoring the electrical conductivity and capacity at specific acupoints at the tip of fingers and toes (called Sei point, or Jing/Well points). After years of research, Dr. Motoyama was able to show that there is a close correlation between the electrical conductivity of meridians and the flow of Ki (or Chi) in the meridians. The basic research Dr. Motoyama did to support his claim about the AMI can be found in his book "*Measurement of Ki Energy Diagnoses & Treatment: Treatment Principle of Oriental Medicine from an Electrophysiological Viewpoints*" published by Human Science Press in 1977. Please see below (Dr. Motoyama's Findings using the AMI) for the pages from this book.





Sinew Channels Biomechanical Fascia or Energetic Meridians