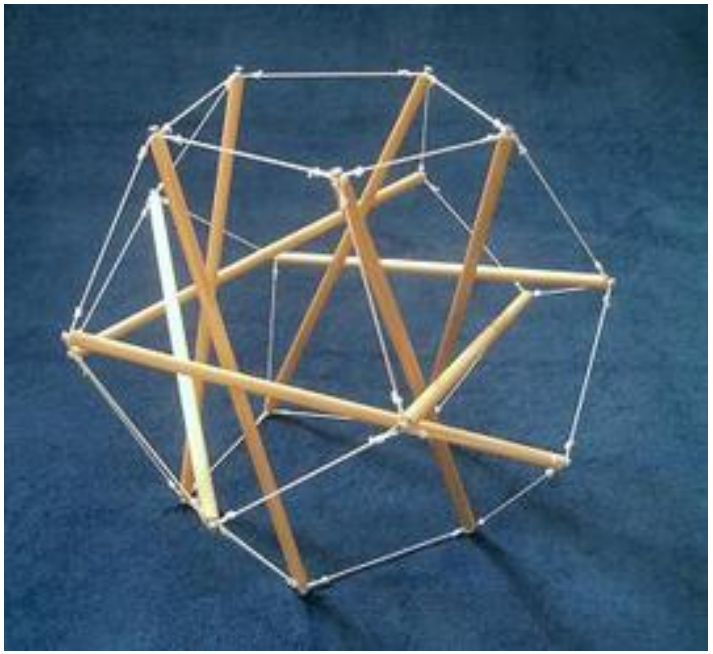
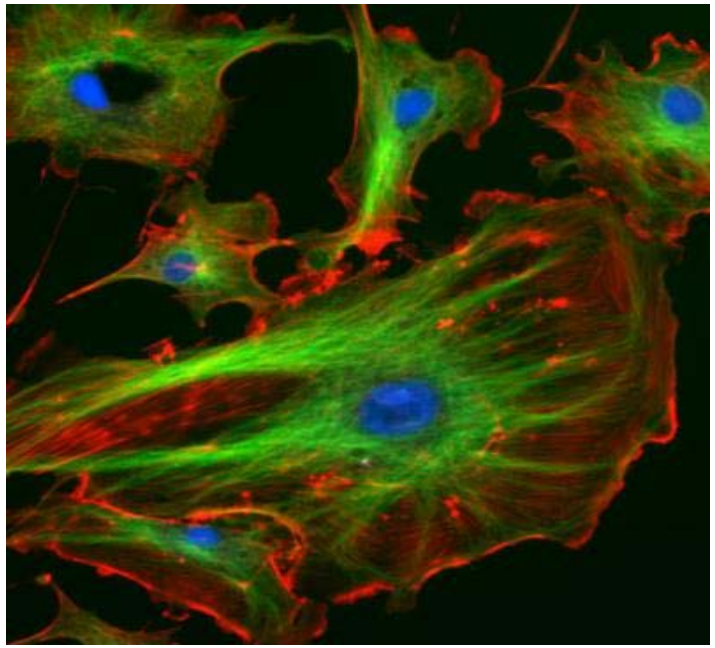
Tensegrity in Biology

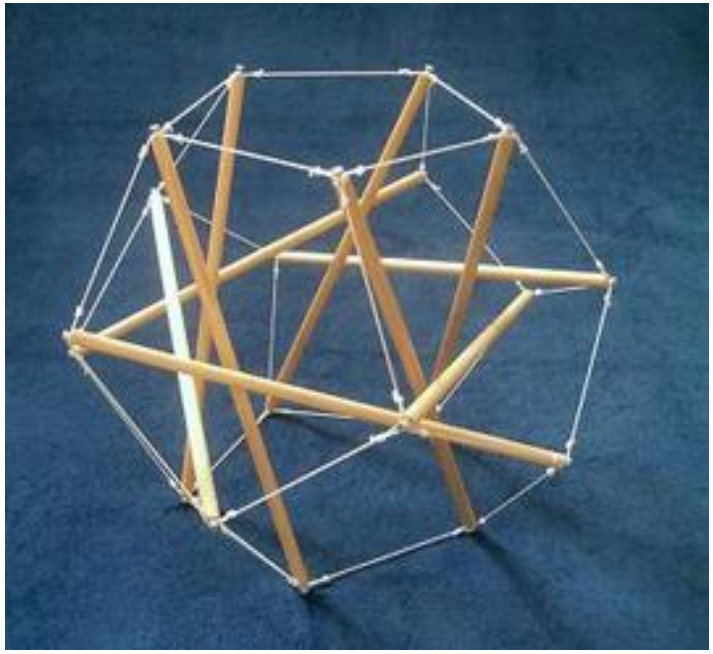
The Role of Compression and Tension in a Cell's Cytoskeleton

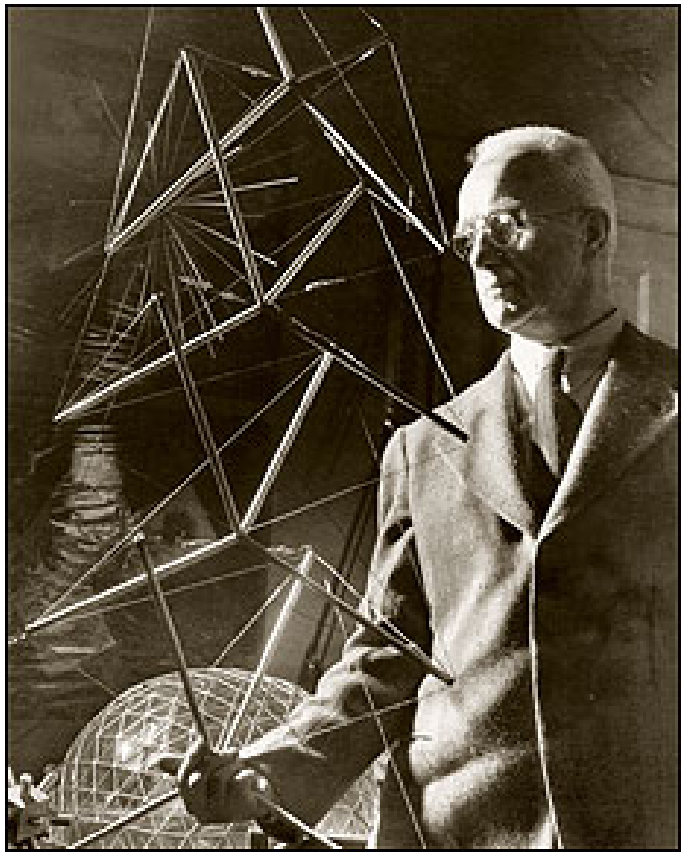


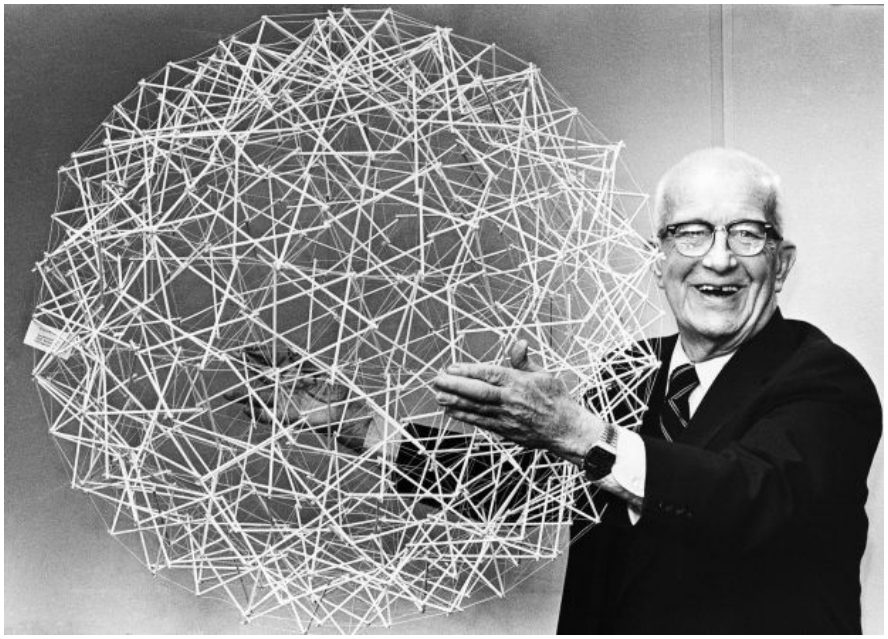


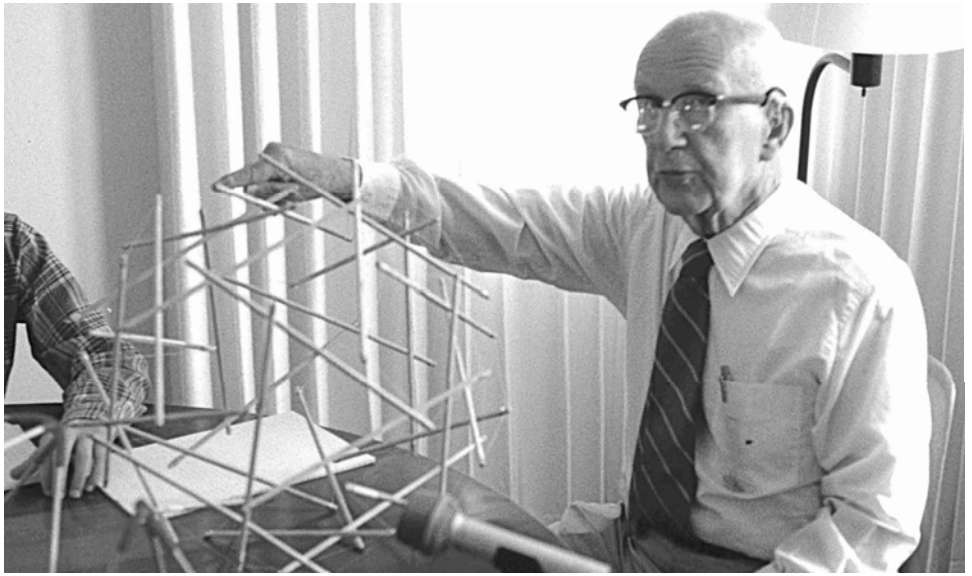
Tensegrity, tensional integrity or floating compression, is a structural principle based on the use of isolated components in compression inside a net of continuous tension, in such a way that the compressed members (usually bars or struts) do not touch each other and the prestressed tensioned members (usually cables or tendons) delineate the system spatially.

The term tensegrity was coined by Buckminster Fuller in the 1960s as a portmanteau of "tensional integrity". The other denomination of tensegrity, *floating compression*, was used mainly by Kenneth Snelson.



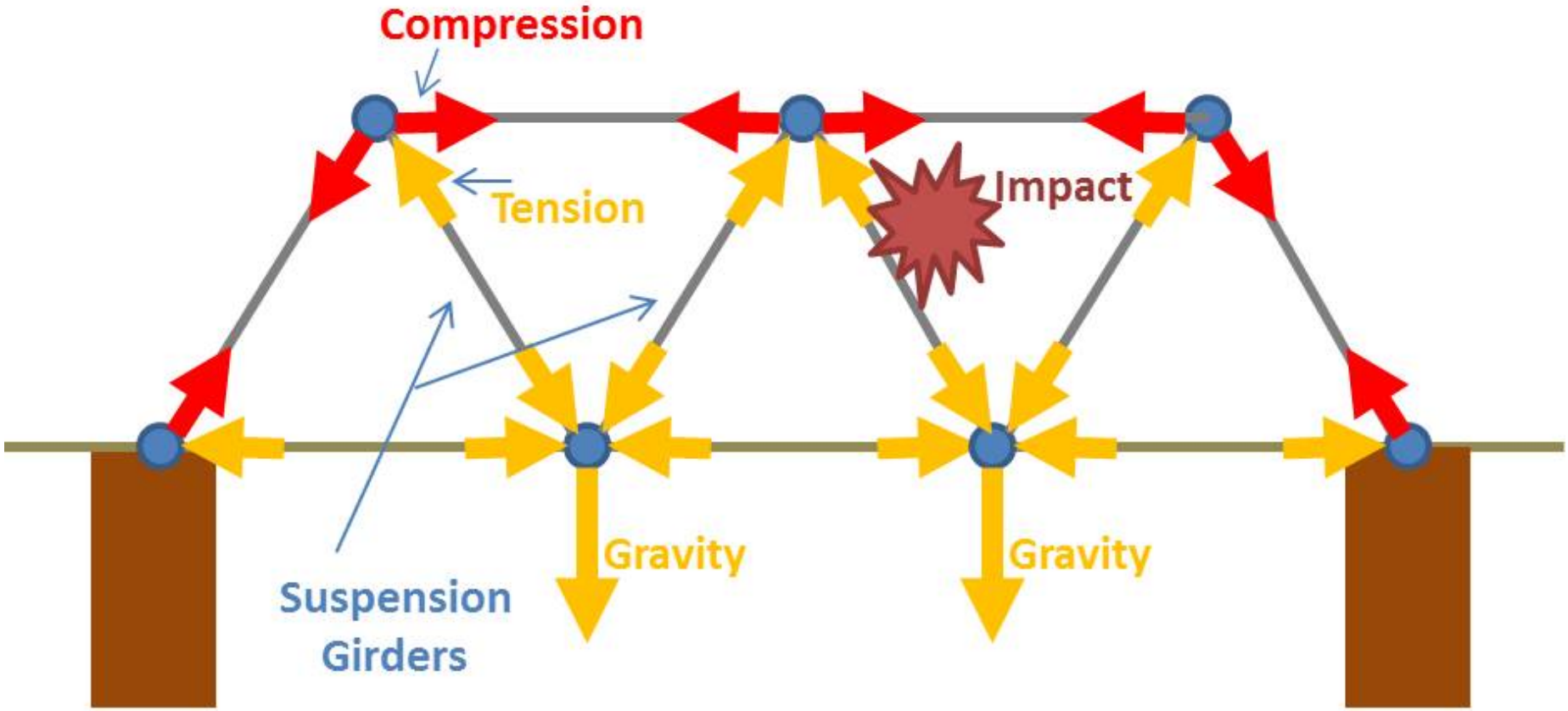




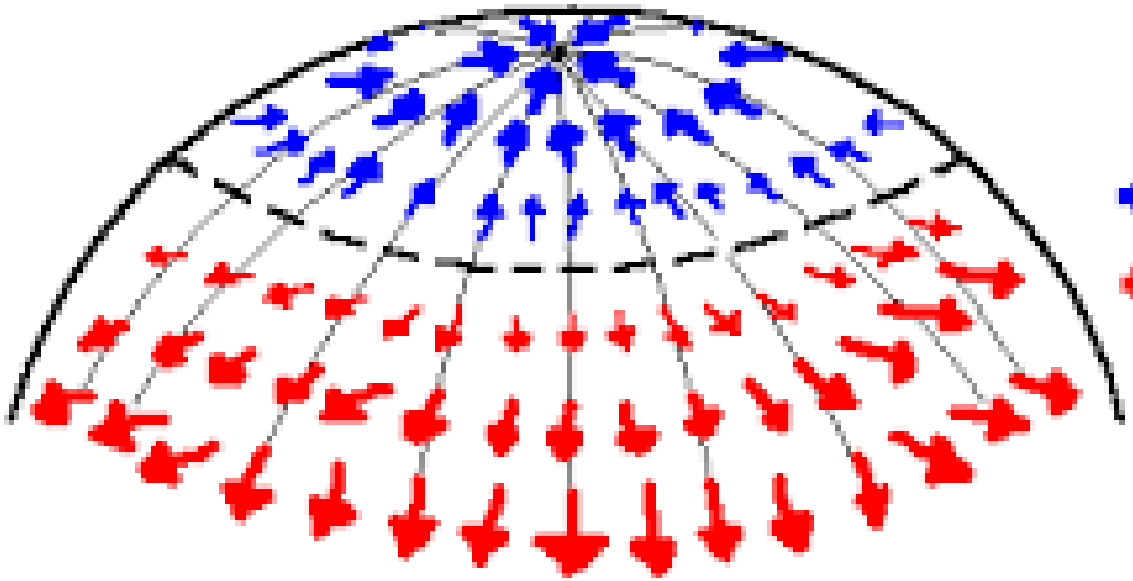


Buckminster Fuller

Inventor of Geodesic Dome


Compression
Tension
Impact
Gravity
Gravity
Suspension
Girders

UNDERSTANDING DOMES



COMPRESSION

TENSION

Kenneth Snelson - Rainbow Arch , 2001- aluminum & stainless steel - 7 x 12.6 x 2.6 feet