

## **Pollack Bulgaria 2018**

Role of Water in the molecular mechanism of muscle contraction.

Gerald H. Pollack, University of Washington, Seattle.

Although muscle cells comprise two thirds water, the role of water in the molecular mechanism of muscle contraction is widely ignored; it is as though muscle proteins operate in a vacuum. Based on simple experiments, I will show first that the accepted mechanism of muscle contraction cannot be adequate. I will then show evidence that leads directly to an alternative mechanism. Finally, I will show how water plays a pivotal role in this proposed mechanism.