

“Tropomyosin and Troponin: Muscle Contraction” by Bethanie Heitzman

- Tropo-myo, tropo-myo, tropo-myo, tropomyosin...and troponin.
- Tropo-myo, tropo-myo, tropo-myo, tropomyosin...and troponin.

Troponin and Tropomyosin are proteins on thin filaments.

They keep the protein Actin from interactin' with Myosin.

- Tropo-myo, tropo-myo, tropo-myo, tropomyosin...and troponin.

Calcium, please come and bind, so Troponin pulls Tropomyosin away

Myosin will then grab Actin and run. ATP will pull it back again.

- Tropo-myo, tropo-myo, tropo-myo, tropomyosin...and troponin.

Let's bring the Z lines closer together, shortening the sarcomeres.

In this way, our muscles contract, so we can play without any fear.

- Tropo-myo, tropo-myo, tropo-myo, tropomyosin...and troponin.

- A. I randomly came up with this silly little song while sitting by my fire. It is rather catchy, I think, and I wrote it in order that I might cling to some of the basic functions of the proteins and such that the song talks about. Even if it is not that understandable to others, it captures the essence for me of how I came to comprehend muscle contraction on a more intricate level.
- B. I did a song on muscle contraction at the sarcomeres, because I understood myosin and actin and how they interact. In fact, in a class where I was almost chronically lost, it was the material I understood the best, and enjoyed the most.... Anyway, this represents at least partially how I understand the interactions of the proteins myosin, actin, tropomyosin, and troponin, as well as how Calcium affects them when it floods in from the endoplasmic reticulum.