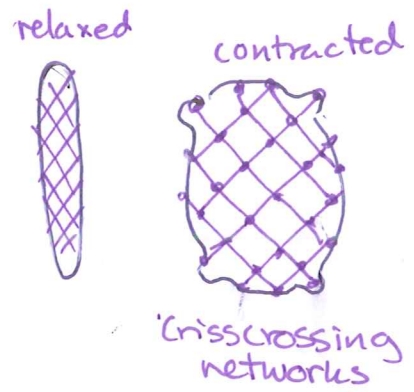


Glatta muskler

thin and thick filaments

- Ca^{2+} has an important role (instead of troponin)
- Ca^{2+} in big concentrations activate the muscles
- Acts directly on the thick filament



- Spontaneous electrical activity
- Autonomic nervous activity
- Hormones
- stretch

can activate the muscles.

På verket aktiverar kalciumet!

increase: channels
ex. v-gated

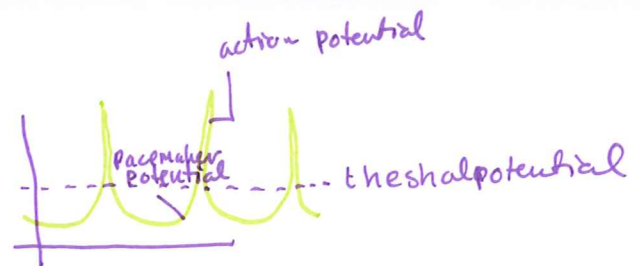
decrease: active transport

Tar mycket längre tid än i skelettmuskler

Pacemaker cells

Spontaneous electrical activity in smooth cells.

'leaky' membrane allows cations to flow into cell, causing depolarisation



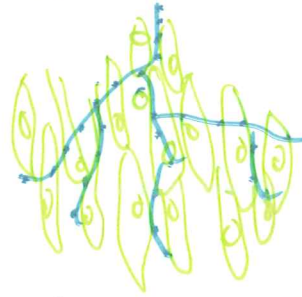
Autonomic neurons may regulate strength of contractions via hormones and modulatory neurotransmitters

'Singel unit'



magen, vagina,
Urinblåsan

'Multi-unit'



Lungorna, runt de
elastiska artärerna,

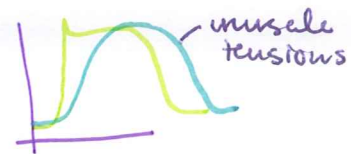
Iris, Pupillen, härens muskul

Muskler

Cardiac muscle

- * Ser mer ut som skelettmuskeln än glatta muskler
- * Fungerar mer som skelettmuskler
- * Har gapjunctions
- * Har Pacemakerceller
- * Electrical contrall

The refractory period is much longer
than in skeletal muscles



Detta gör att
aktionspotentialen
när hela hjärtat
samtidigt och
kan därför behålla
sällana tult.