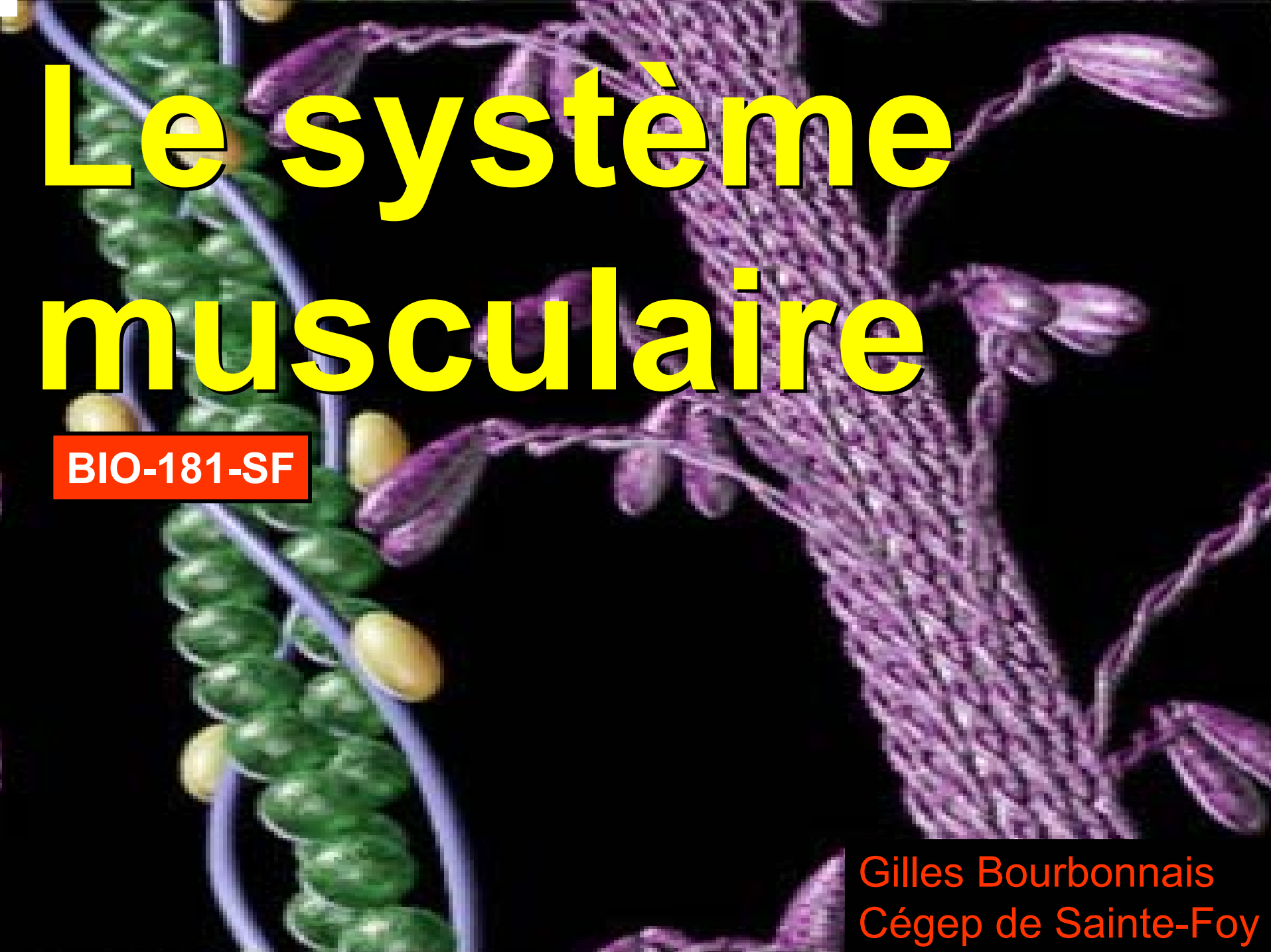


A microscopic image of plant tissue, likely a root or stem, showing green and purple structures. The green structures are elongated and arranged in a row, while the purple structures are more rounded and clustered. The background is dark, making the plant structures stand out.

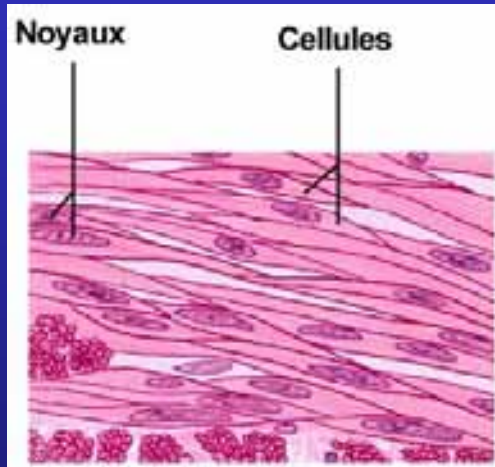
Le système musculaire

BIO-181-SF

Gilles Bourbonnais
Cégep de Sainte-Foy

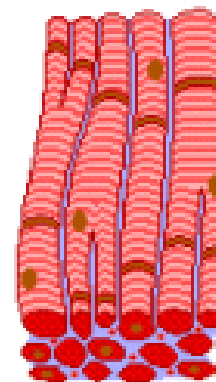
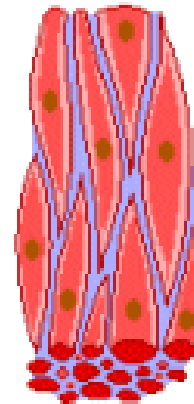
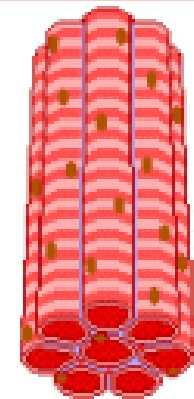
1. Types de tissus musculaires

Muscle squelettique (ou strié)

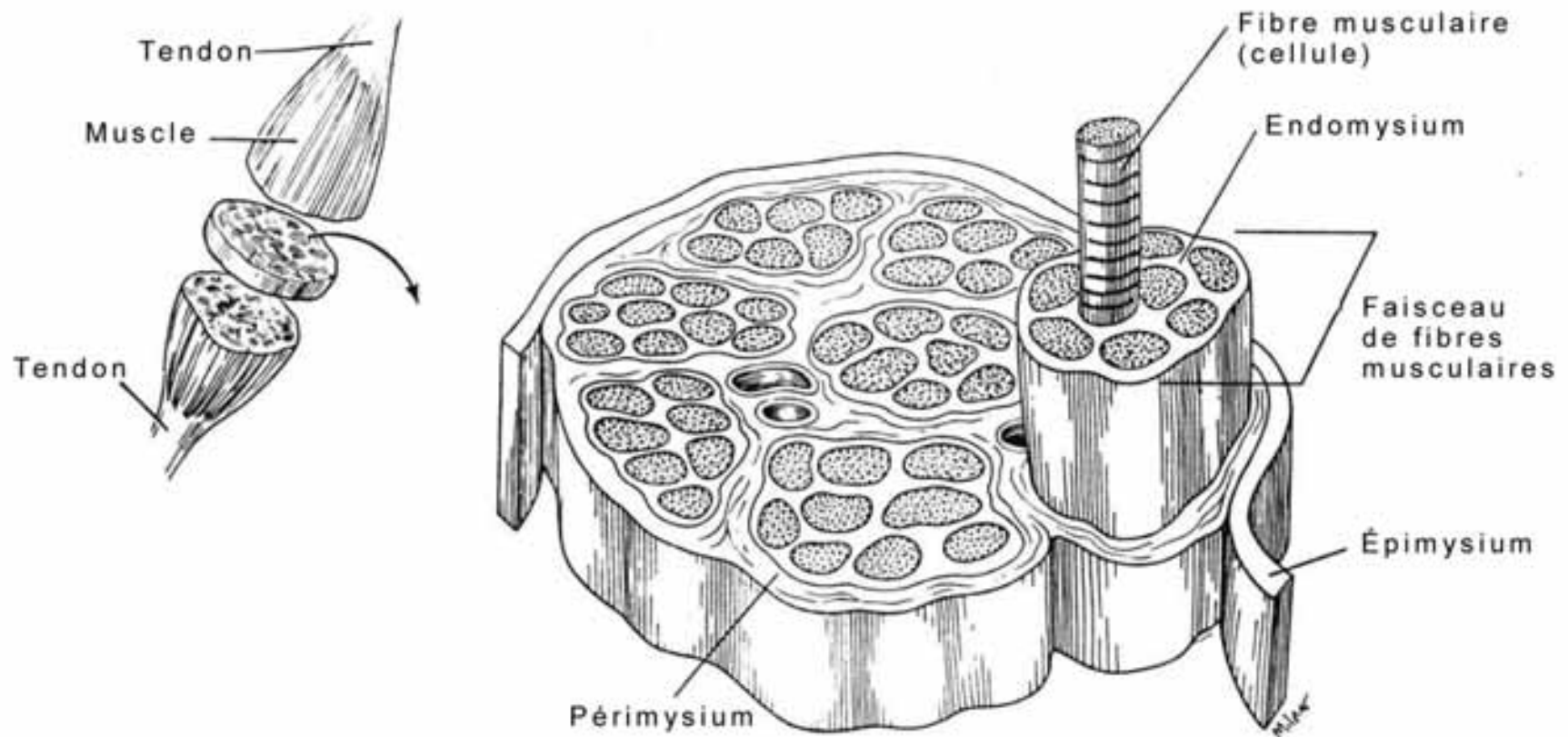


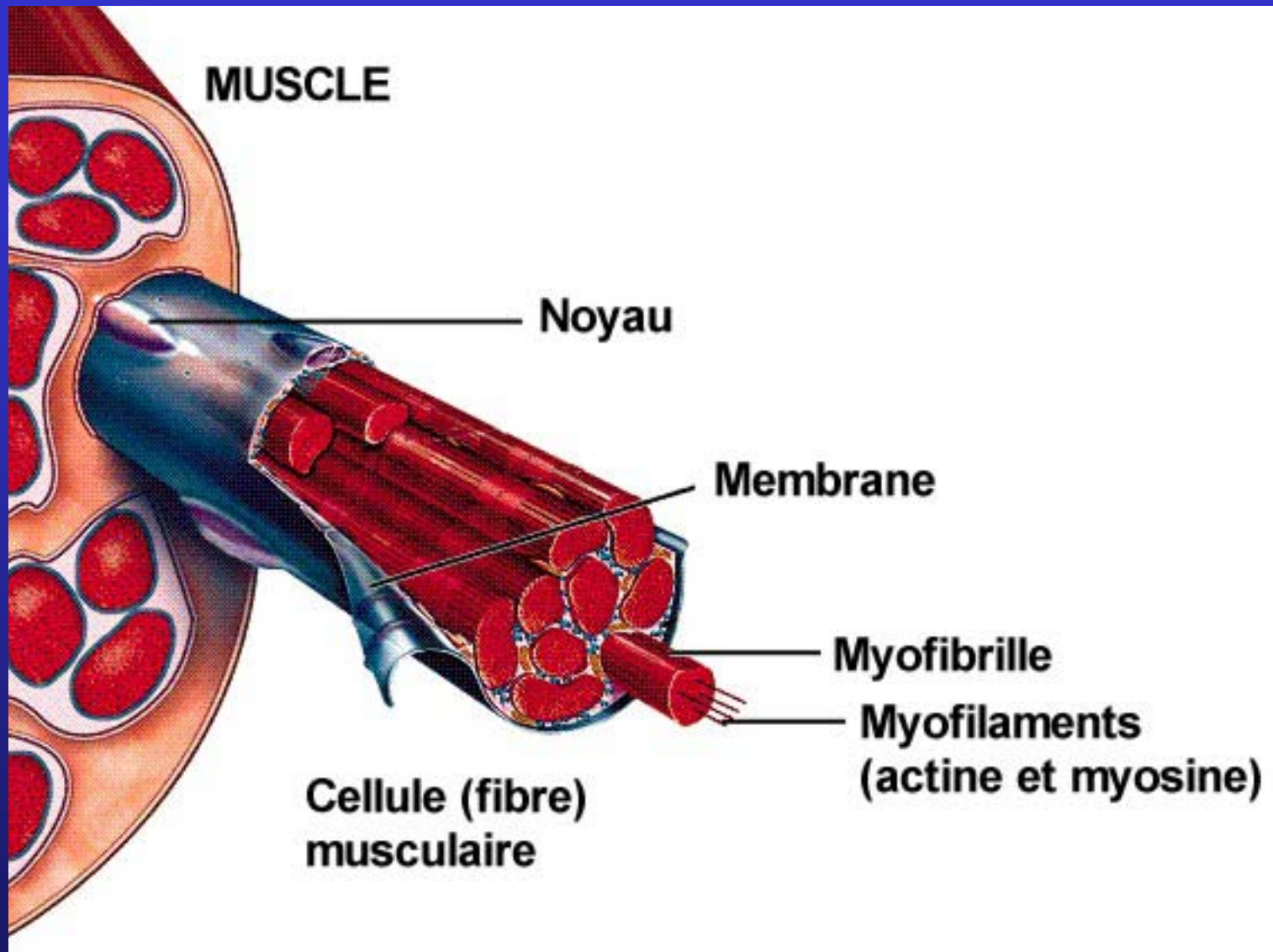
Muscle lisse

Muscle cardiaque

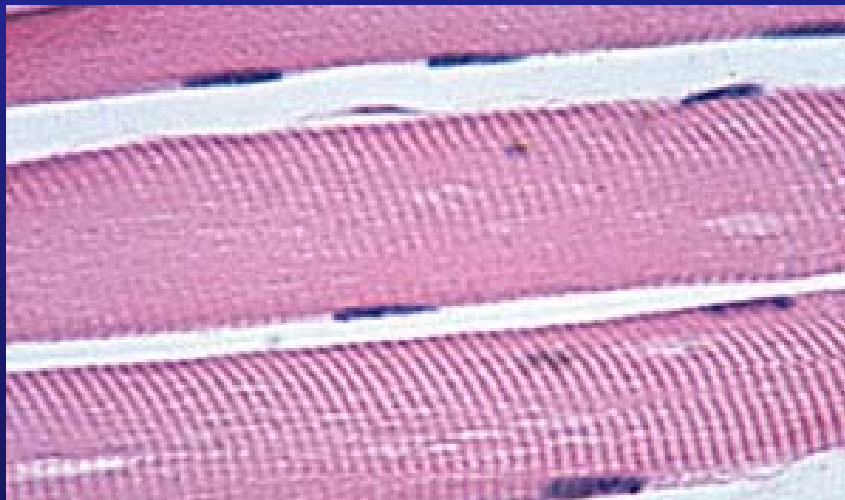
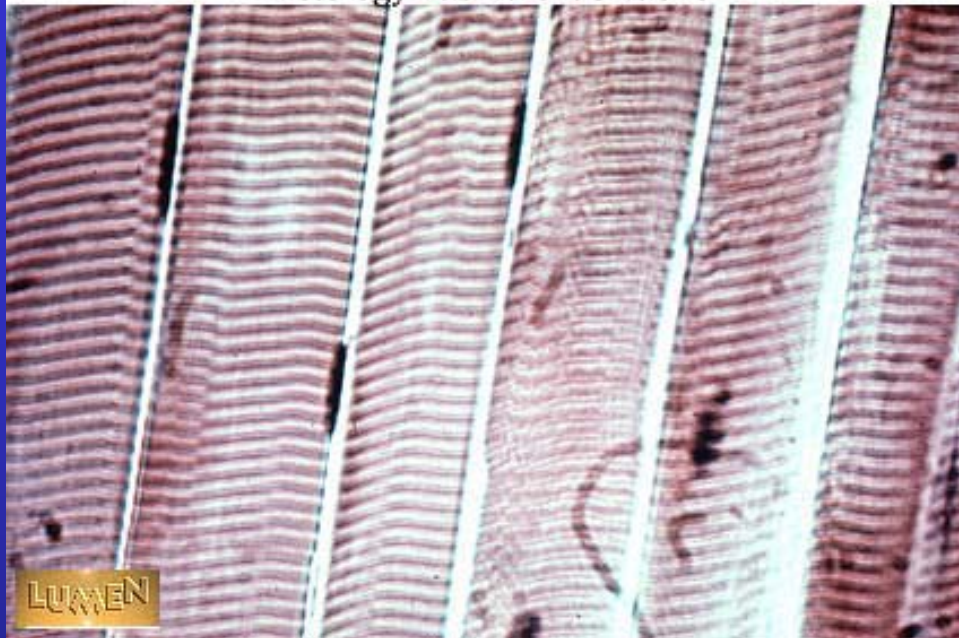


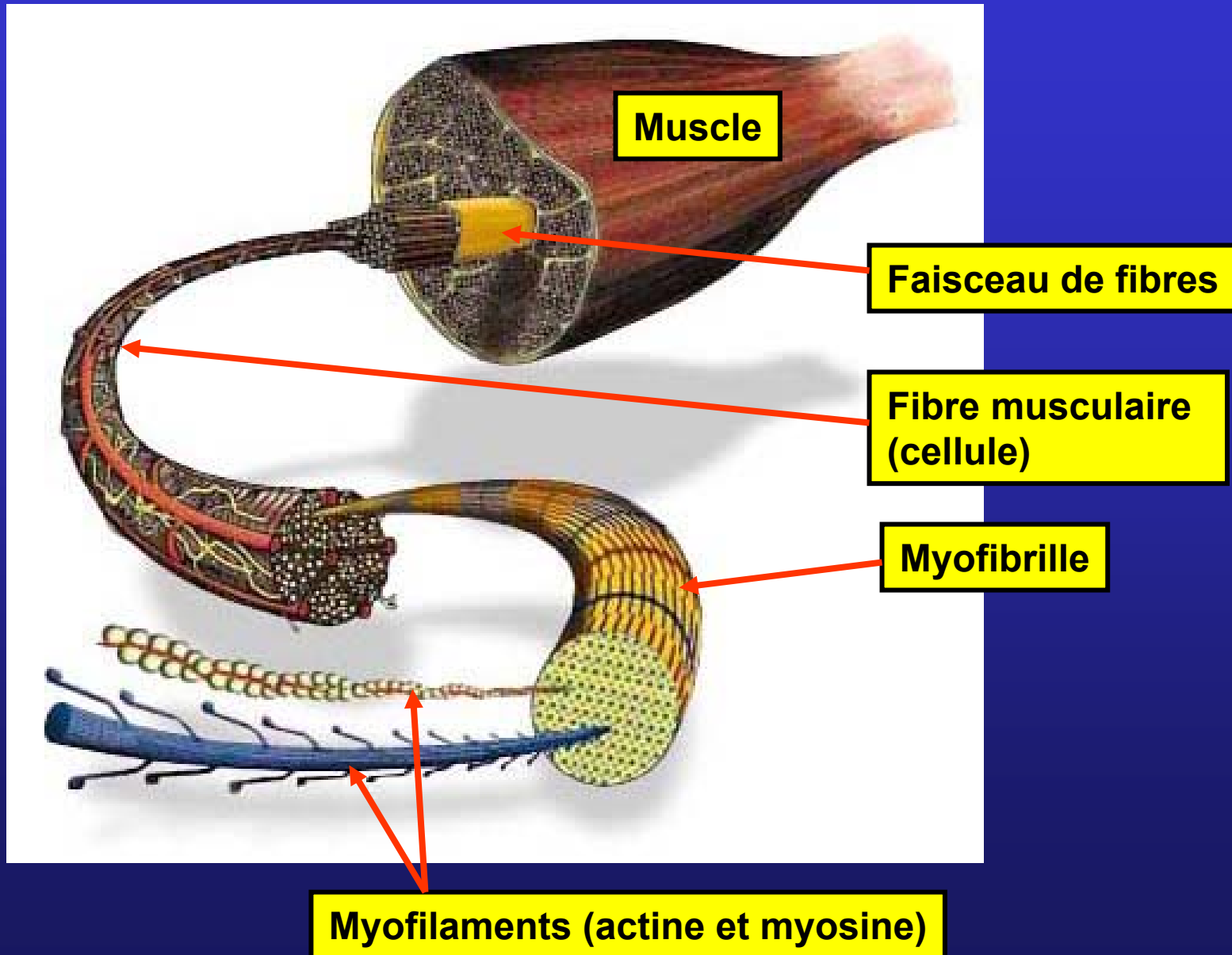
2. Structure du muscle squelettique (strié)

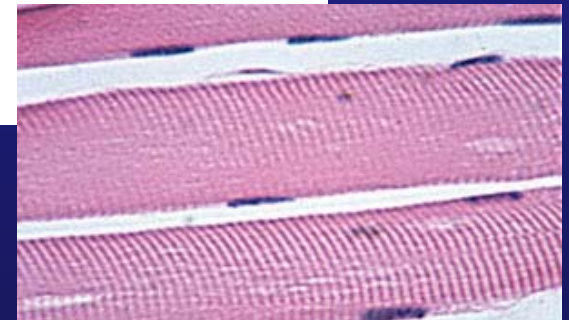
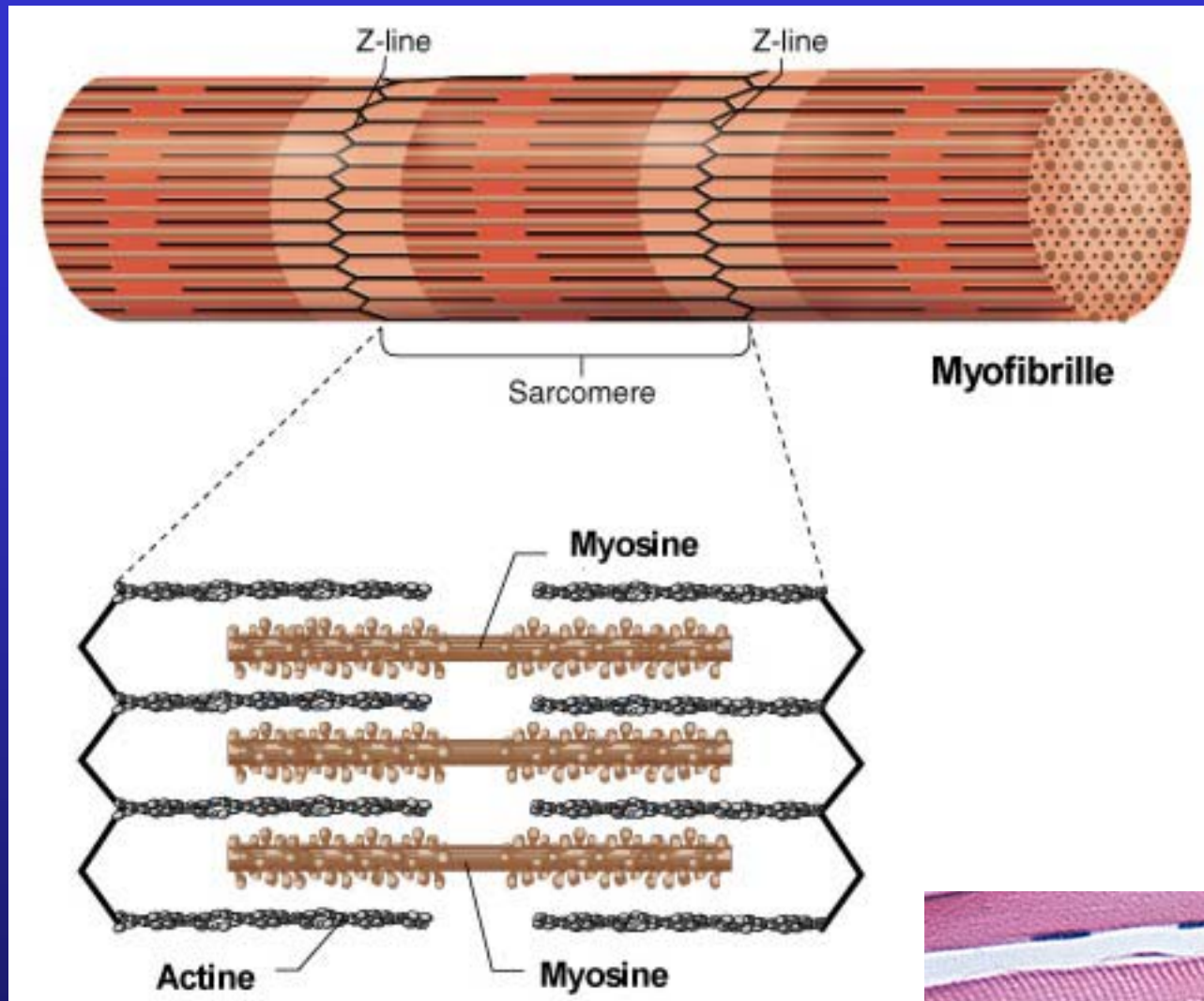




Histology Lab Part 7: Slide 45







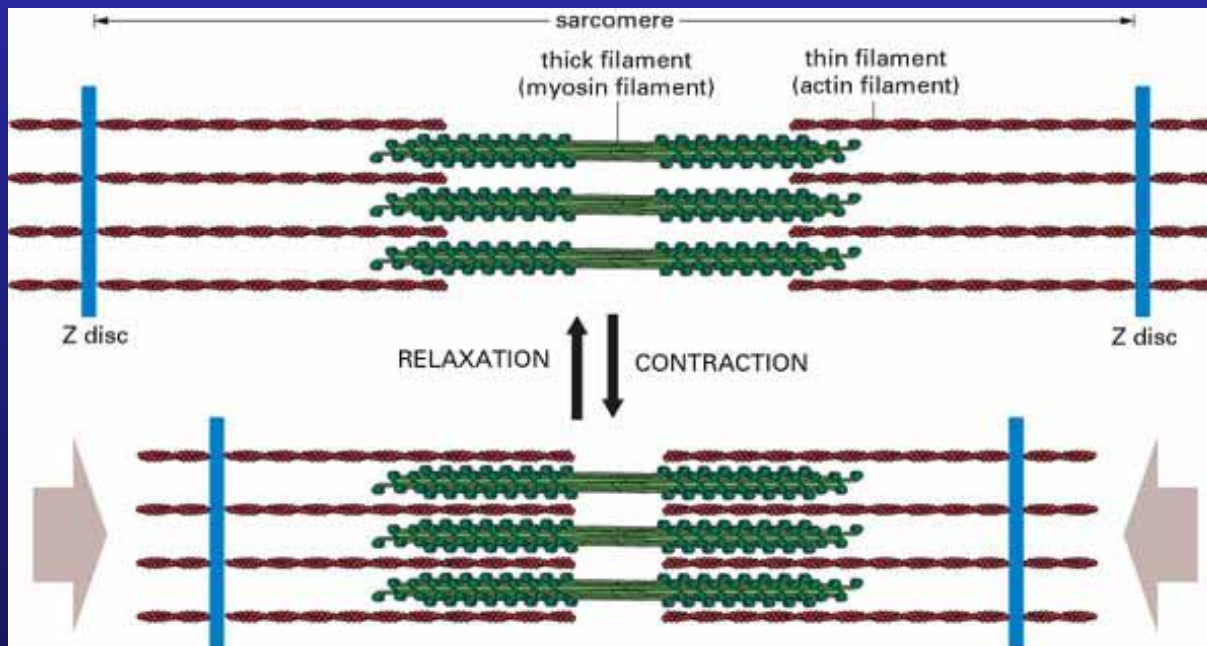
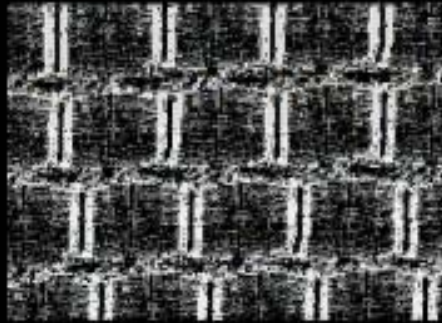
[Animation sur Internet](#)



Muscle Alive



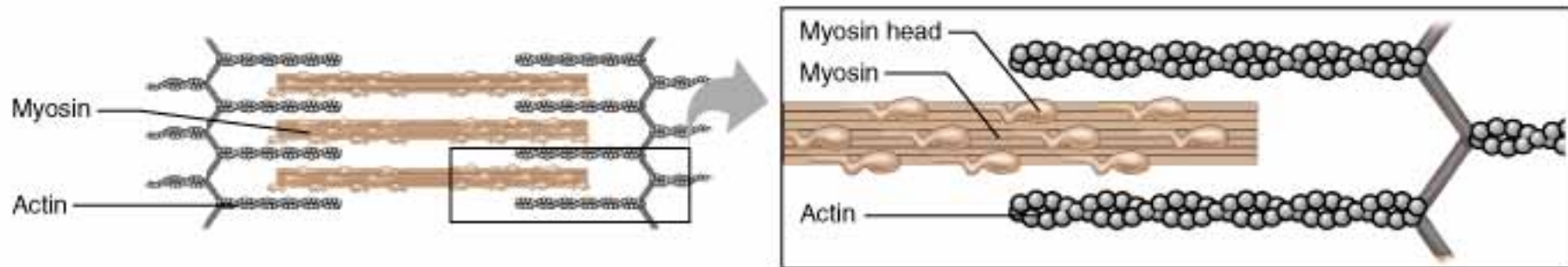
© 1994, 95 M.C.O.



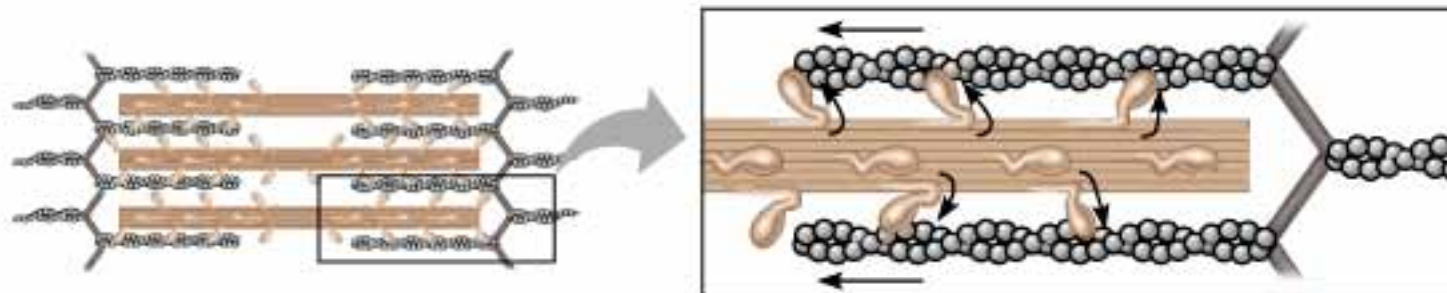


Actine

Myosine

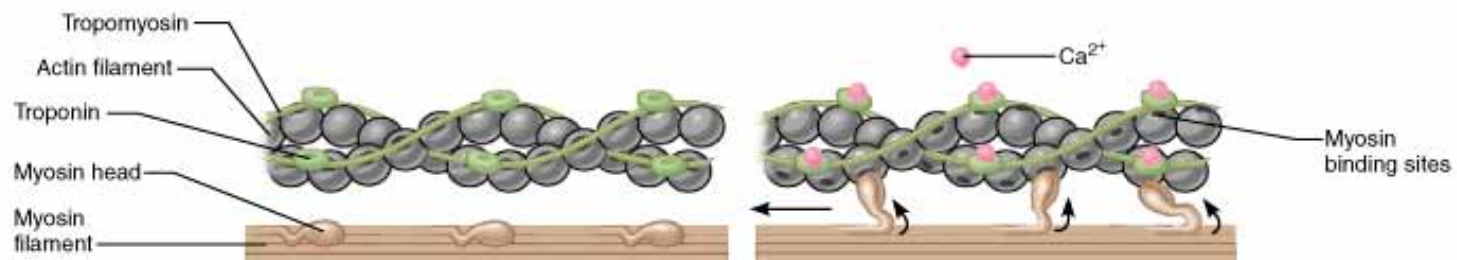


(a) Relaxed state



(b) Contracted state

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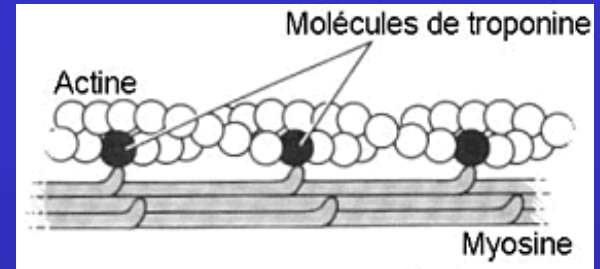


(a) Resting sarcomere

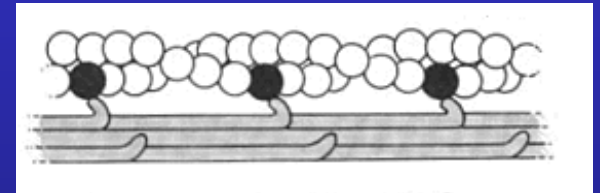
(b) Cross-bridge attachment

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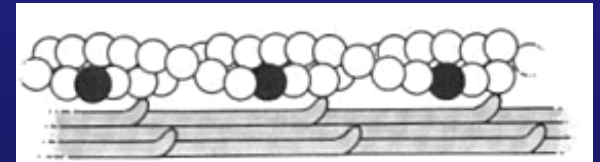
Les têtes de myosine se
lient à l'actine



Pivotement des têtes
de myosine
==> glissement des
myofilaments



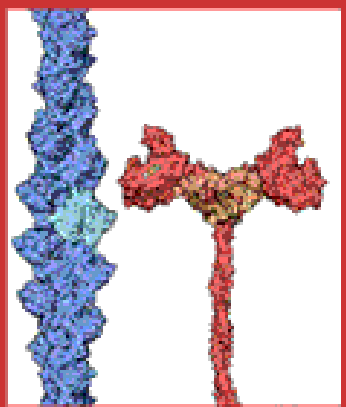
Les têtes de myosine se
détachent de l'actine



Ca^{++}

ADP + P

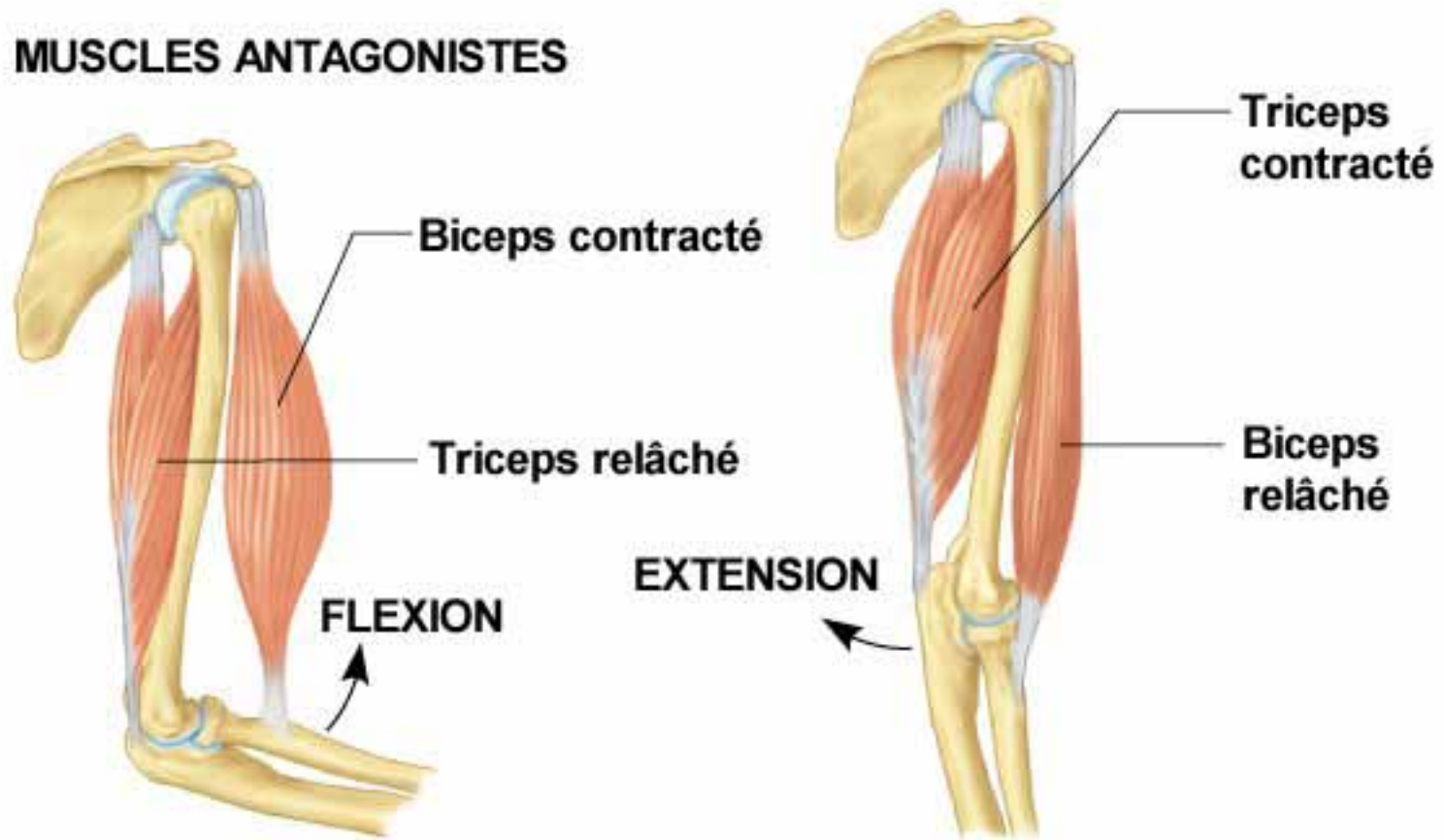
ATP

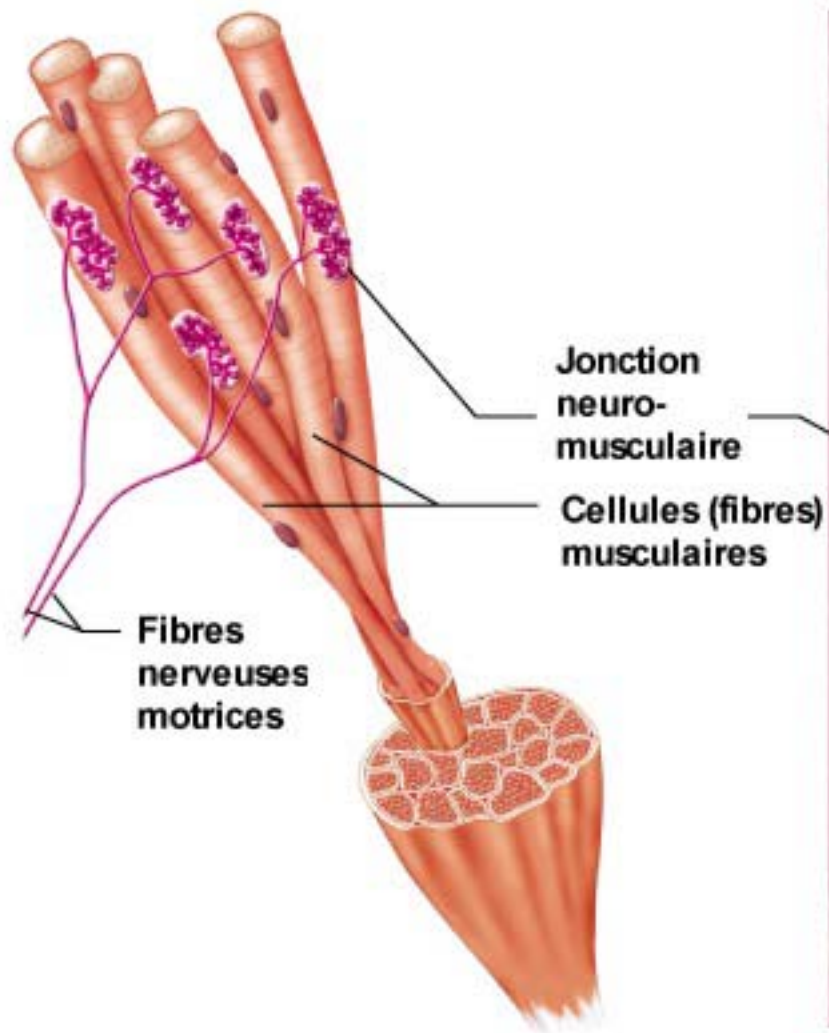


[Animation sur Internet](#)



MUSCLES ANTAGONISTES

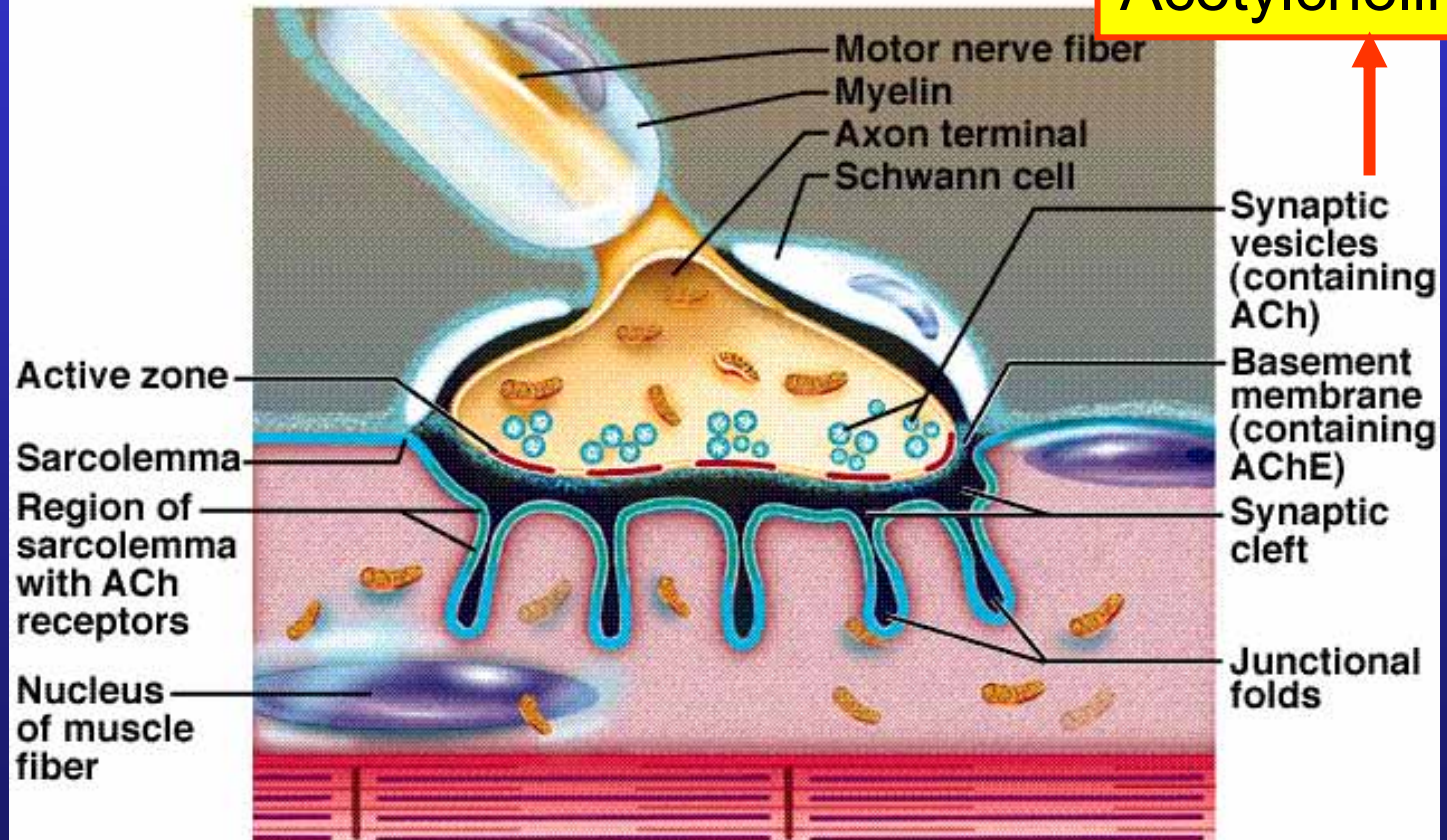




3. Innervation et contraction

Kenneth S. Saladin, ANATOMY AND PHYSIOLOGY: THE UNITY OF FORM AND FUNCTION, Copyright © 1998, The McGraw-Hill Companies, Inc. All rights reserved.

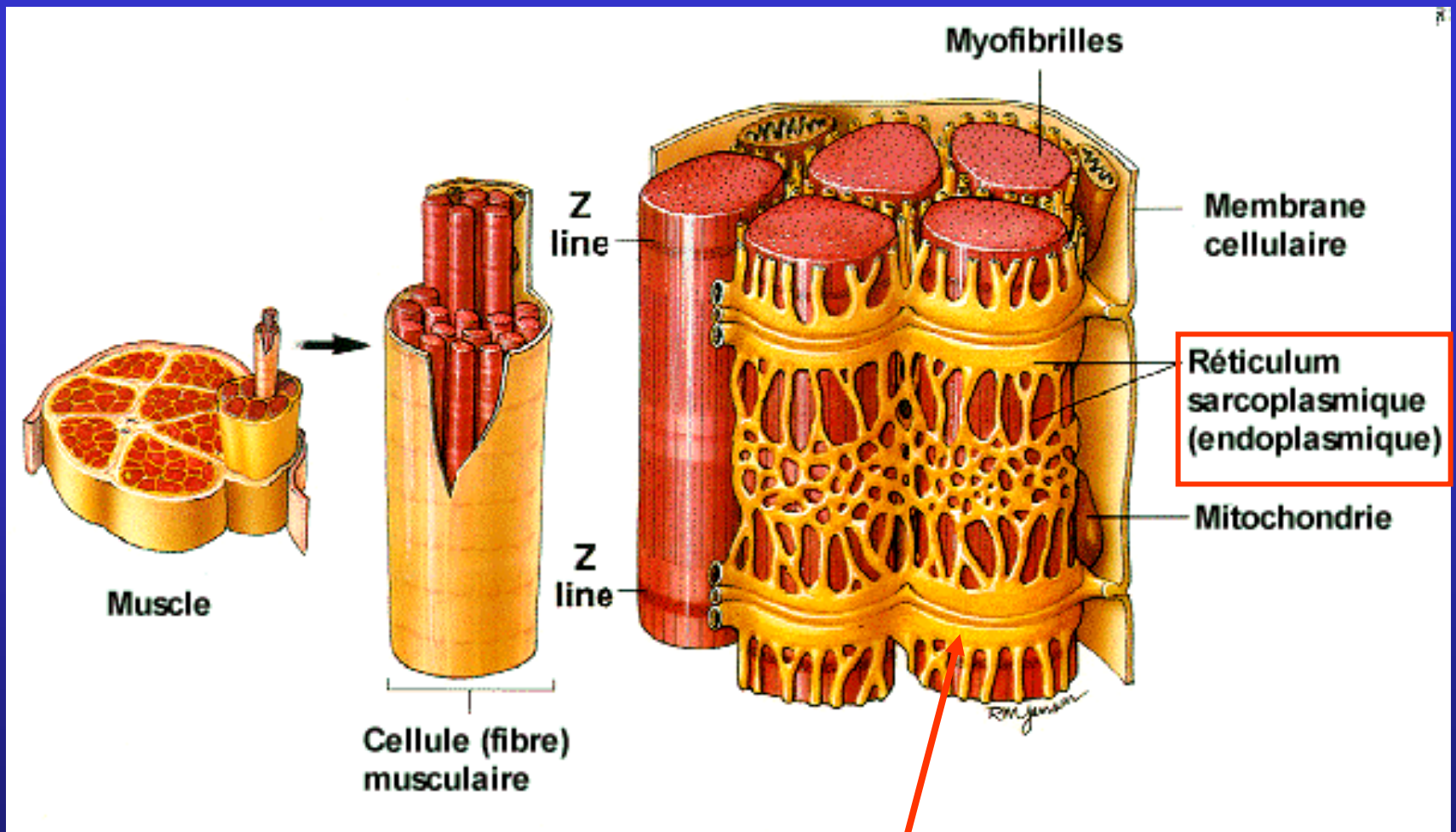
Neuromuscular Junction



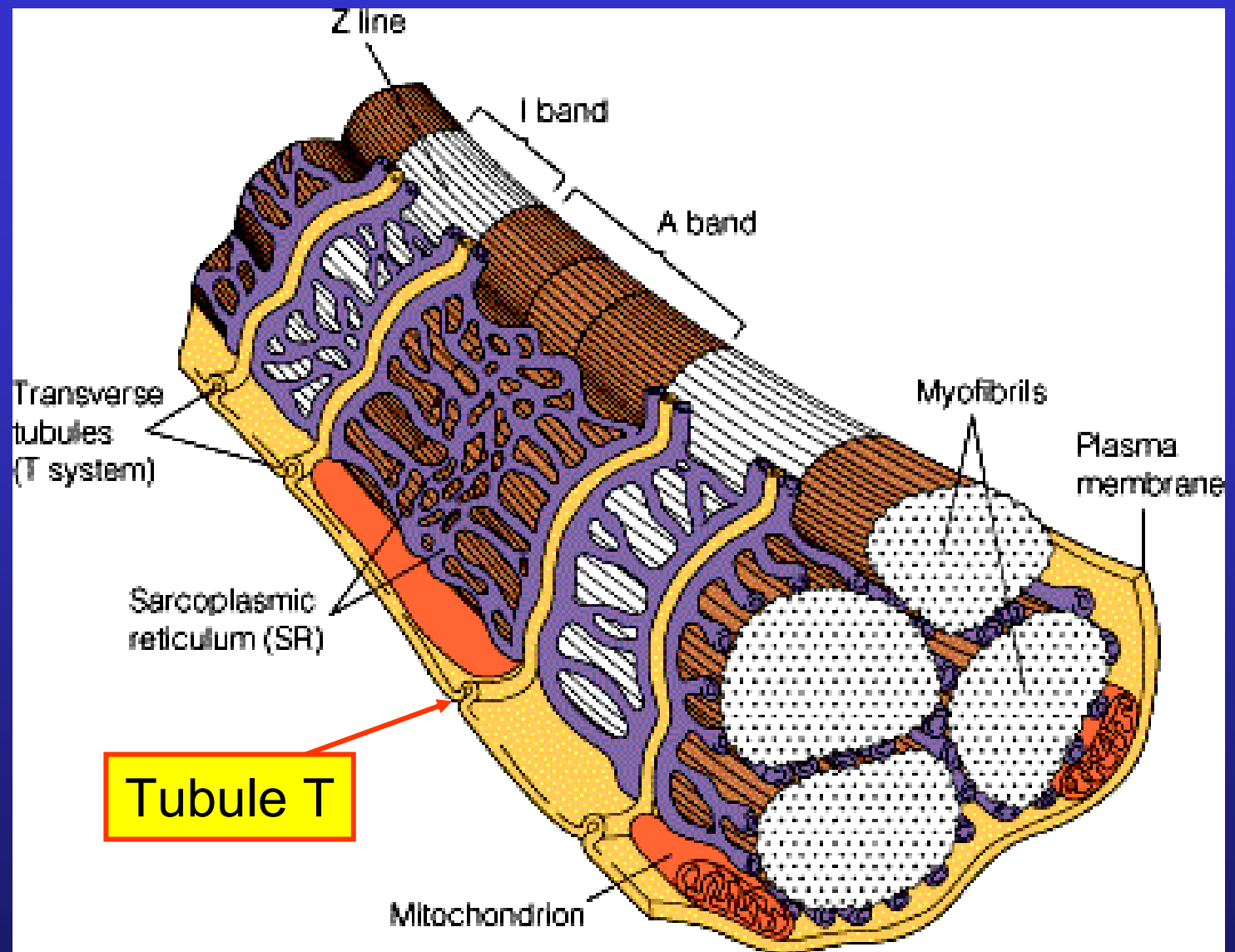
Acétylcholine

[Animation sur Internet](#)





Réticulum sarcoplasmique (contient des ions Ca^{++})



Bouton synaptique libère de l'acétylcholine



Acétylcholine se fixe sur ses récepteurs de la cellule musculaire



Entrée de Na^+ ==> potentiel d'action



La dépolarisation se propage dans toute la membrane et dans la membrane du réticulum sarcoplasmique (par les tubules T)

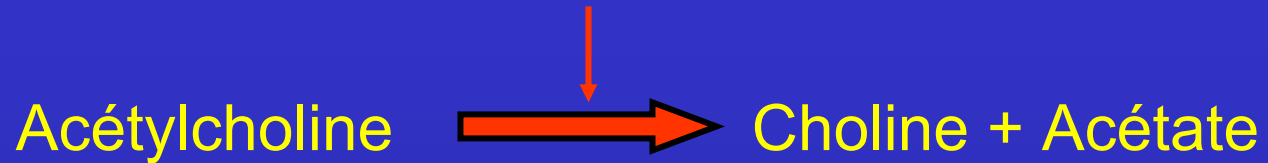


Le réticulum sarcoplasmique libère du Ca^{++} dans la cellule



Le calcium permet à l'actine de se lier à la myosine.

acétylcholinestérase



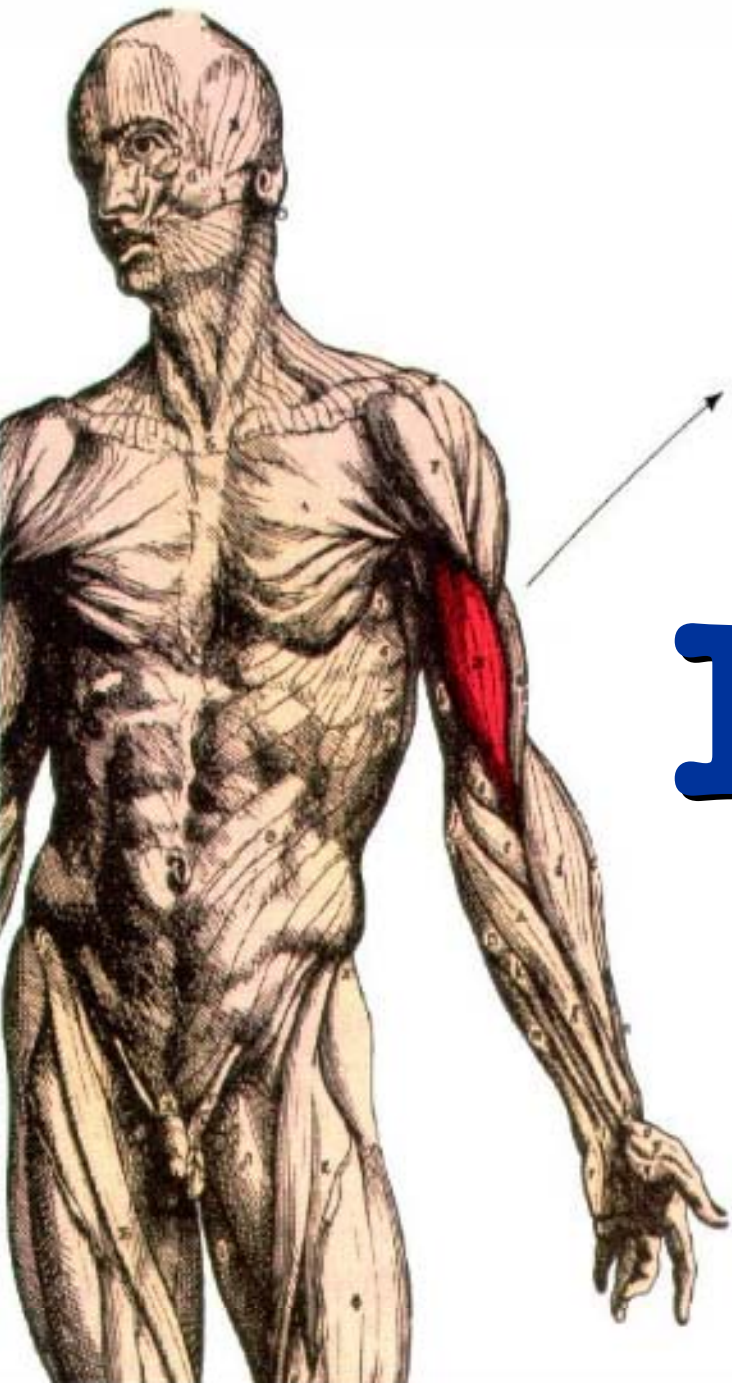
- Curare
- Gaz de combat
- Botuline

4. Types de fibres musculaires

Fibres oxydatives lentes

Fibres glycolytiques rapides

Fibres oxydatives-glycolytiques rapides



FIN

