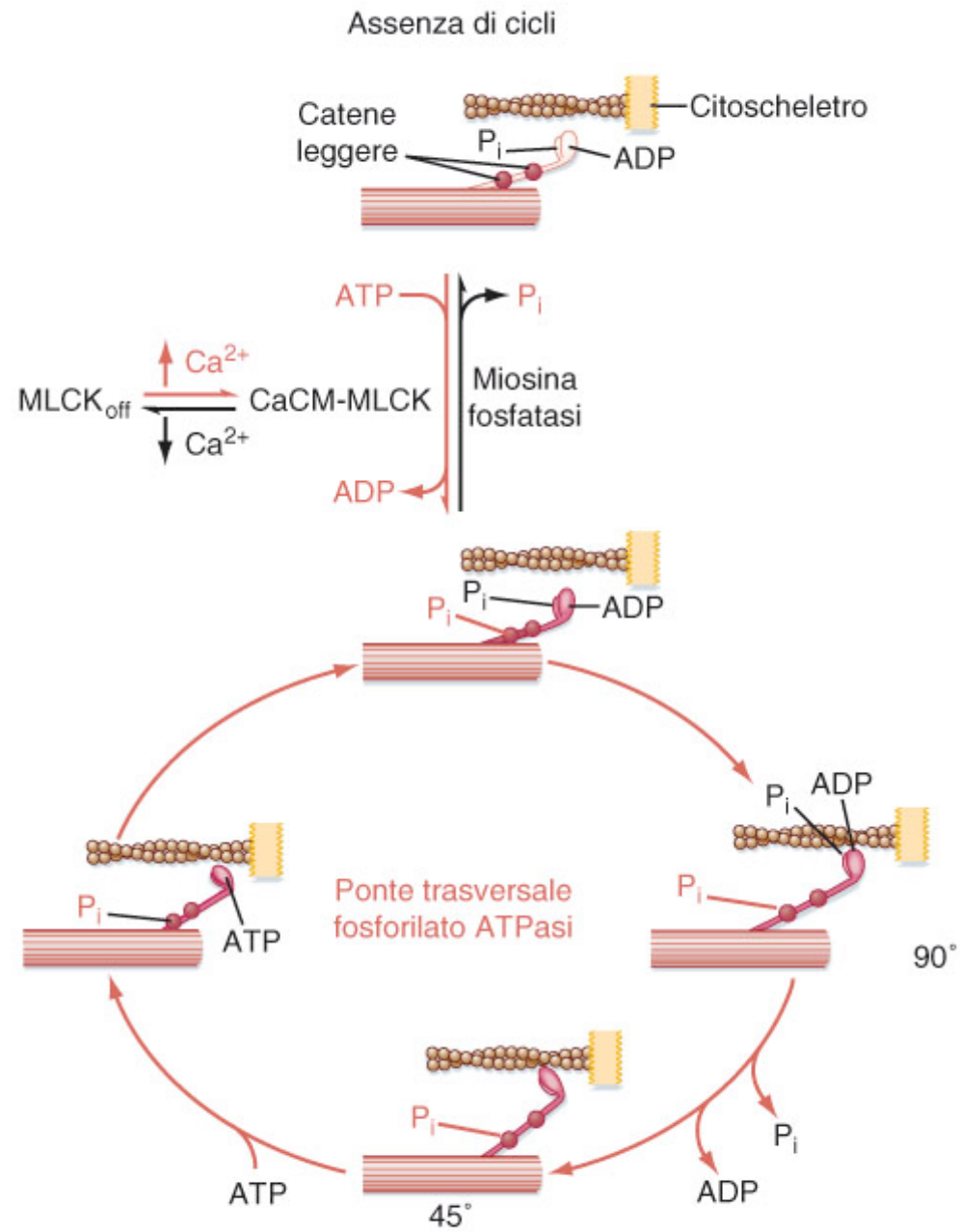
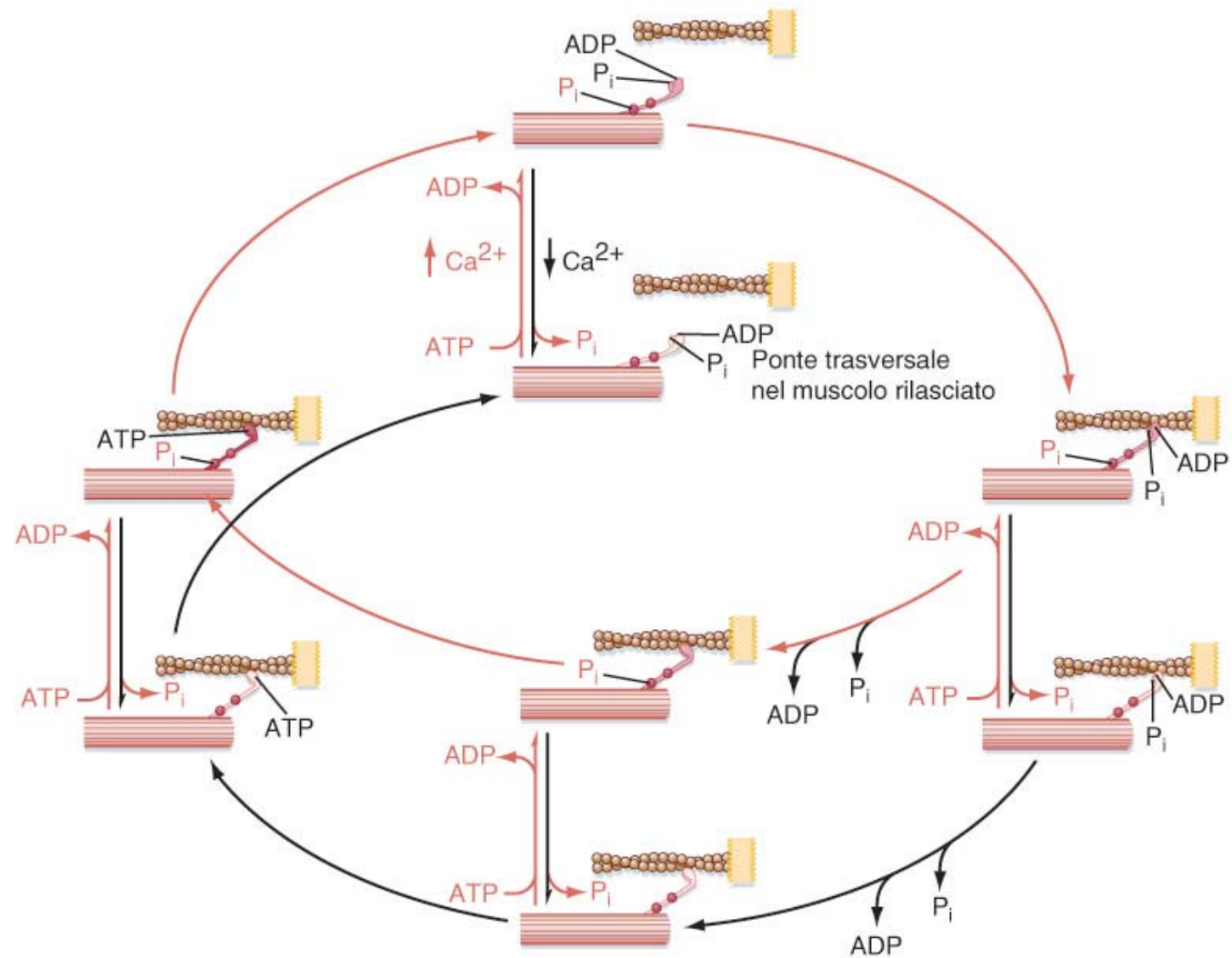
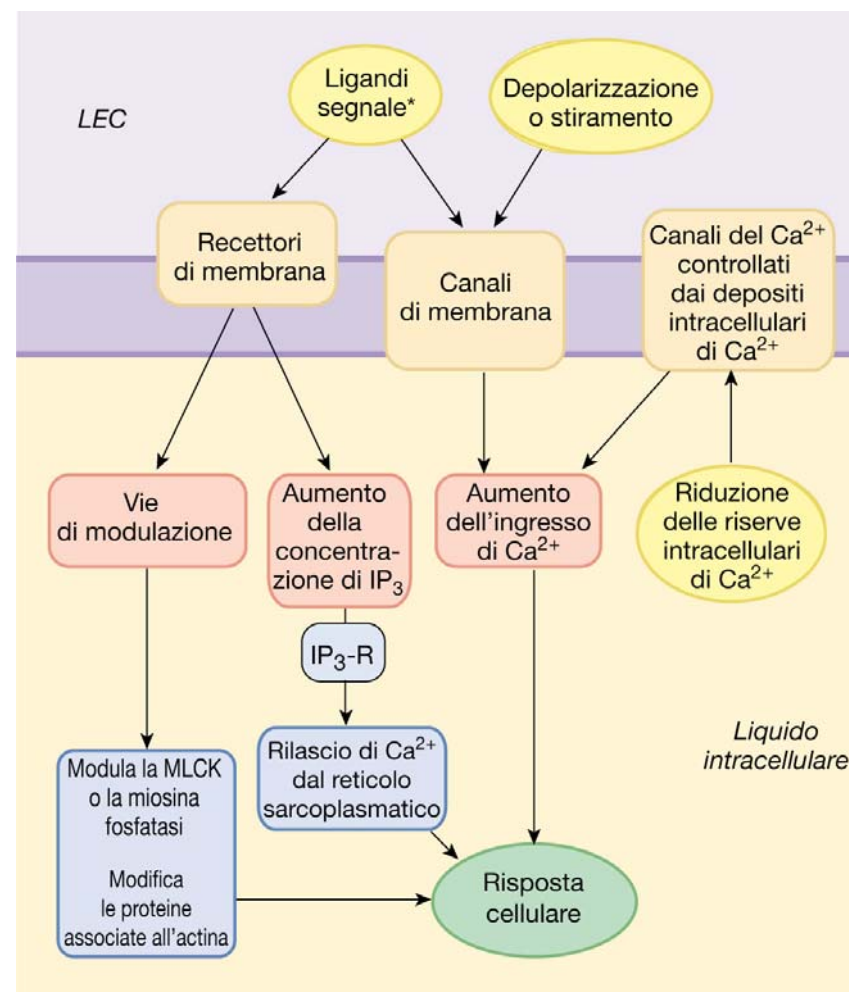
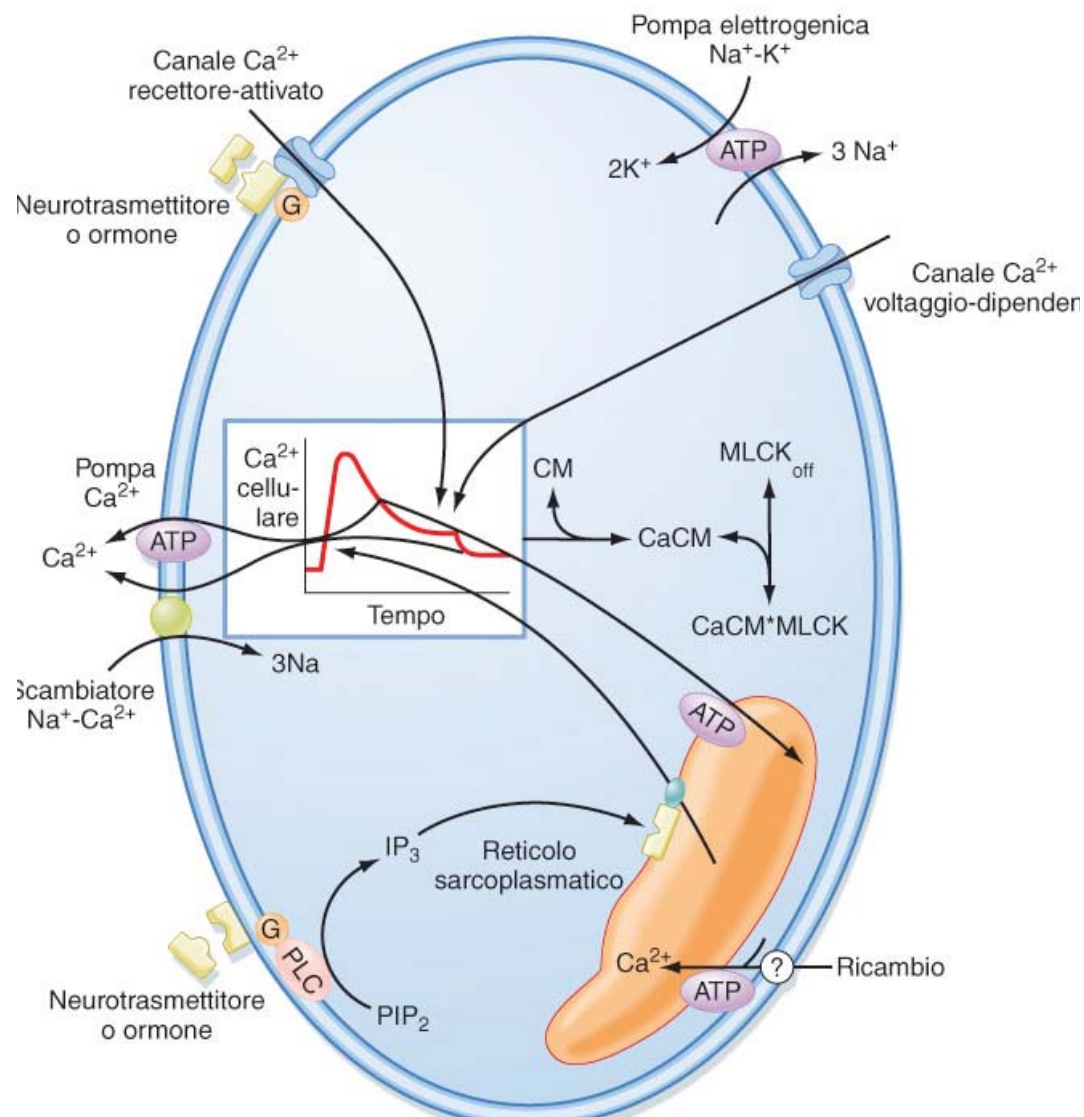
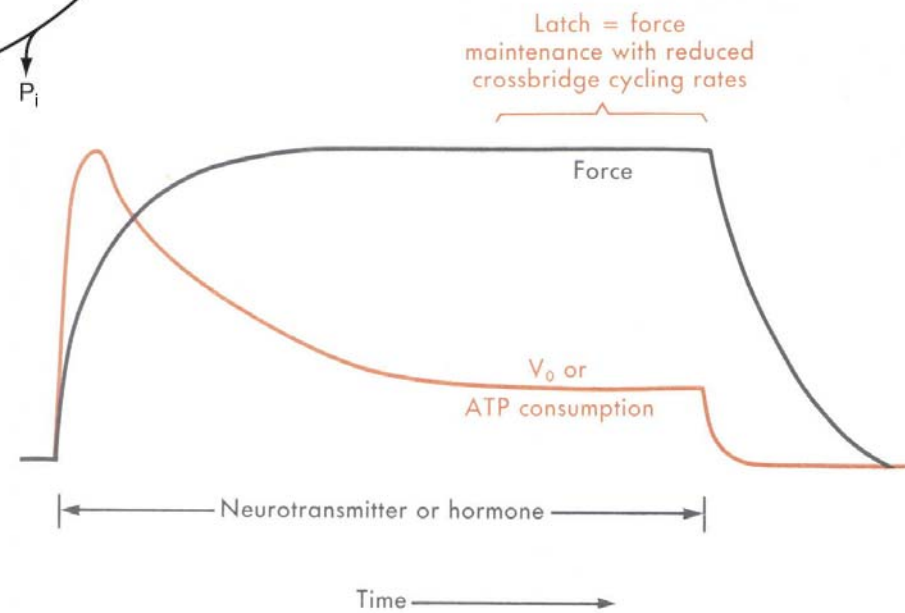
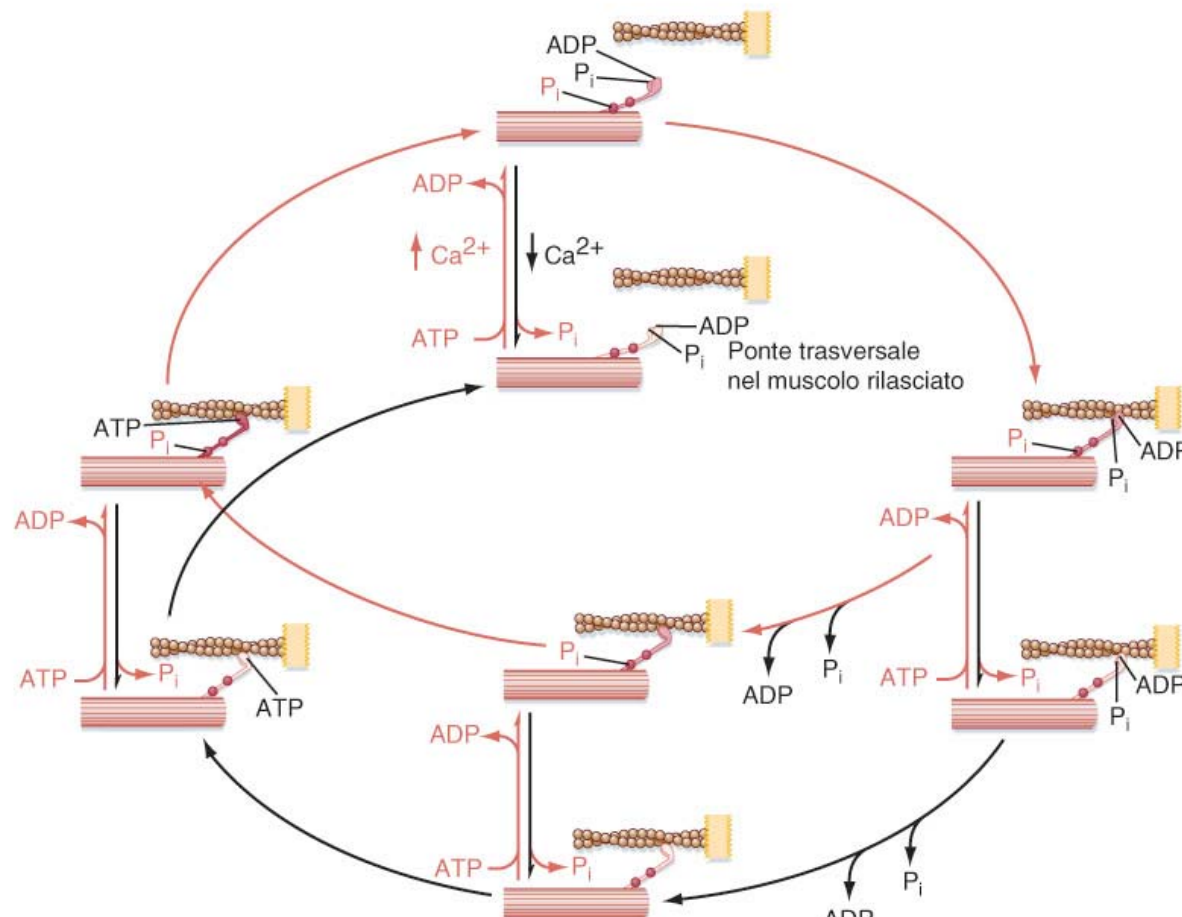




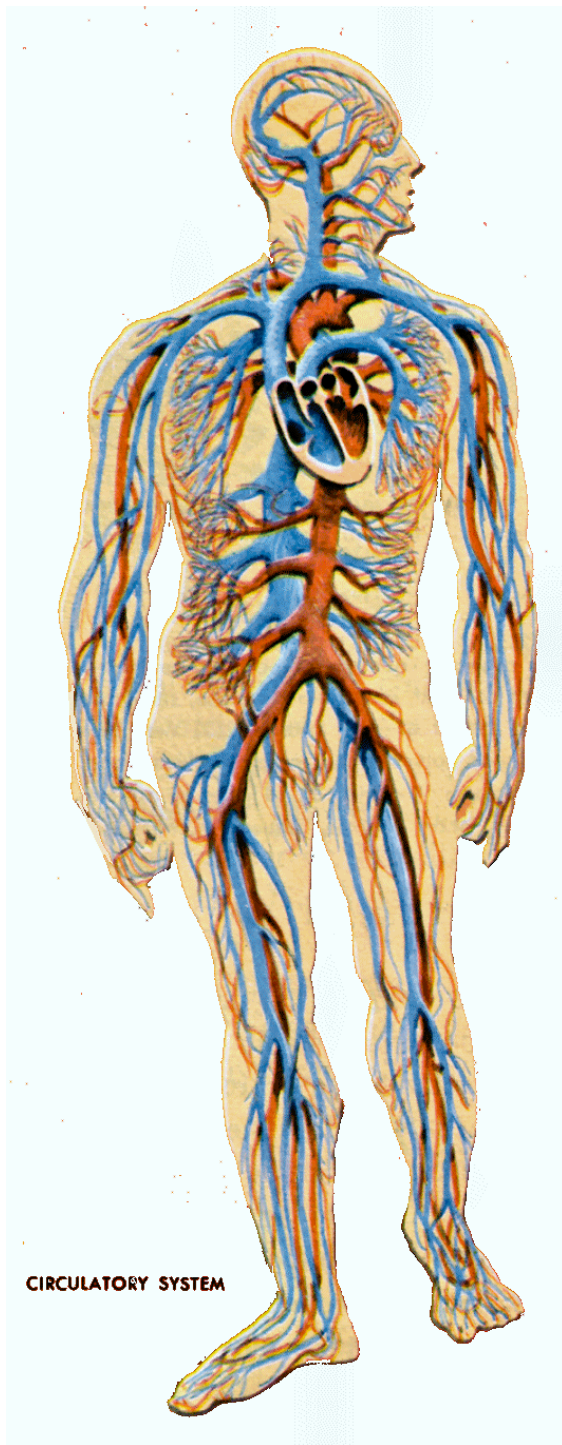




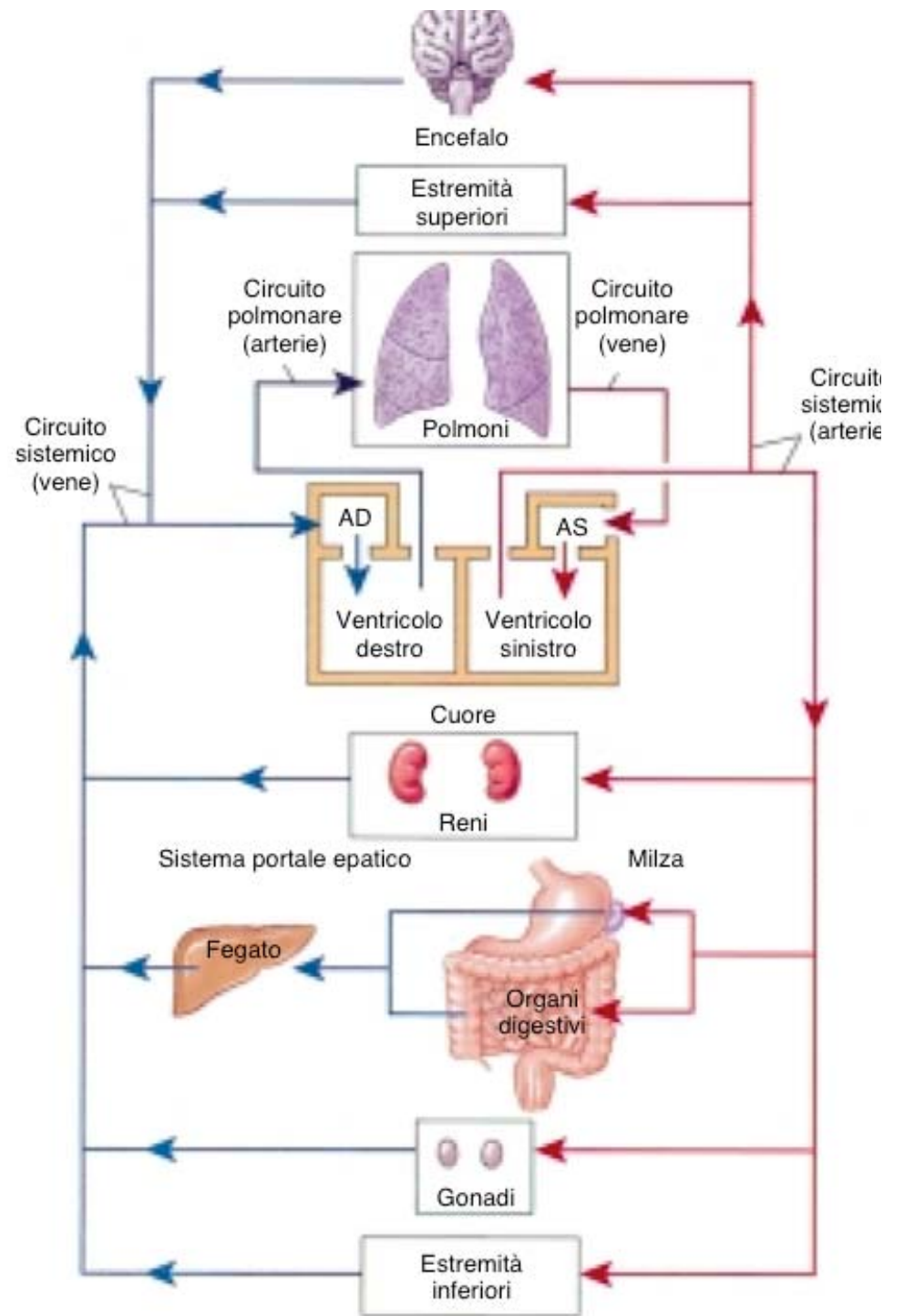
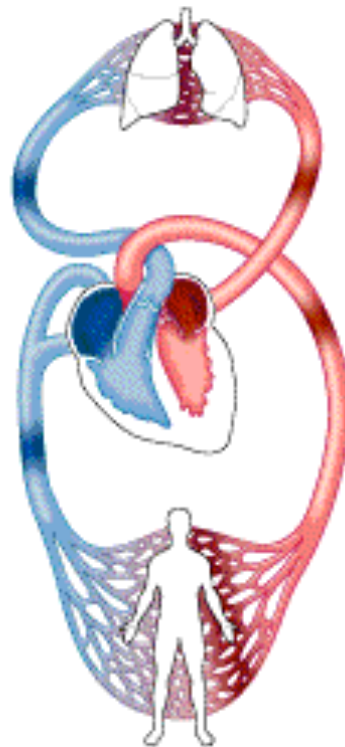


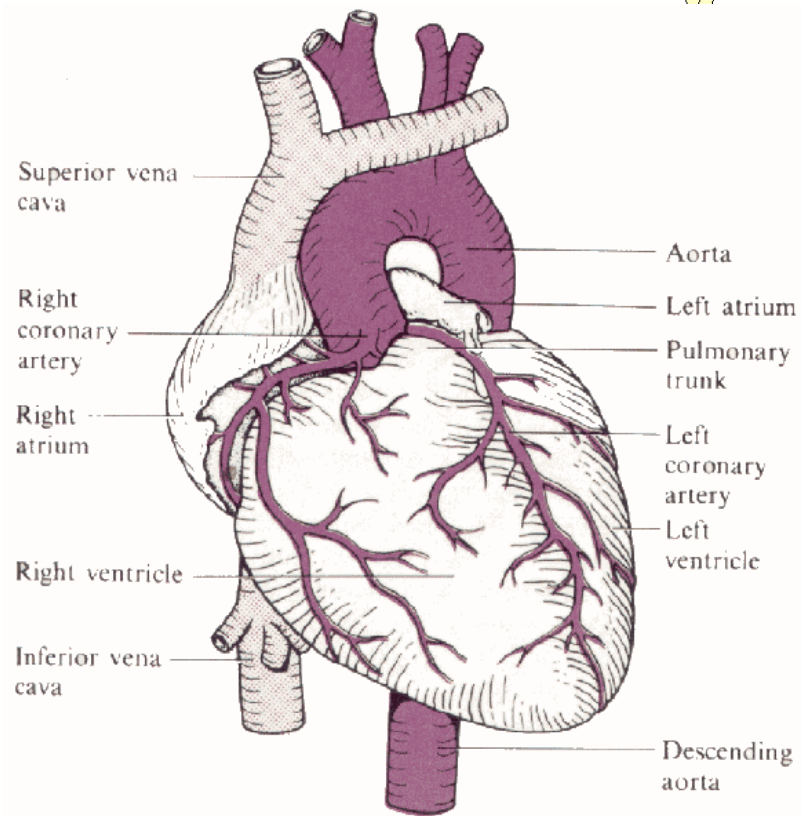
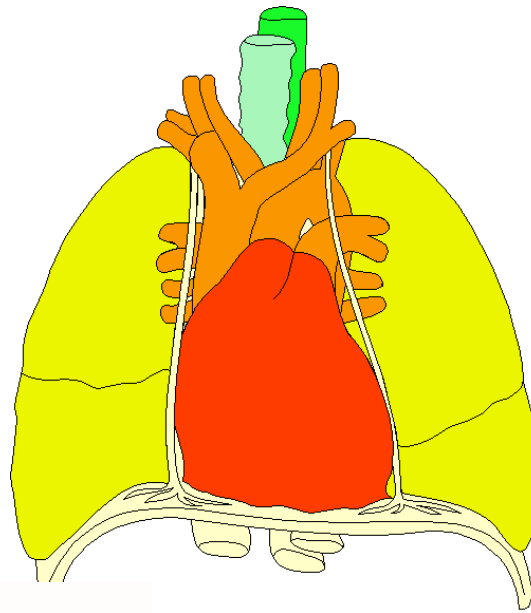
COSA DOBBIAMO RICORDARE: 12. Il Muscolo liscio

1. Morfologia della cellula e struttura degli elementi contrattili.
2. Il muscolo unitario e quello multiunitario: concetto di accoppiamento elettrico e meccanico.
3. Innervazione, sinapsi, ormoni e segnali paracrini
4. Filamenti leggeri e pesanti, loro interazione e scorrimento.
5. Il ruolo del calcio nell'innesco del ciclo dei ponti trasversi e nello sviluppo della tensione.
6. Il rilasciamento e lo “stato bloccato”.
7. Attivazione recettoriale e modalità del rilascio di ioni calcio

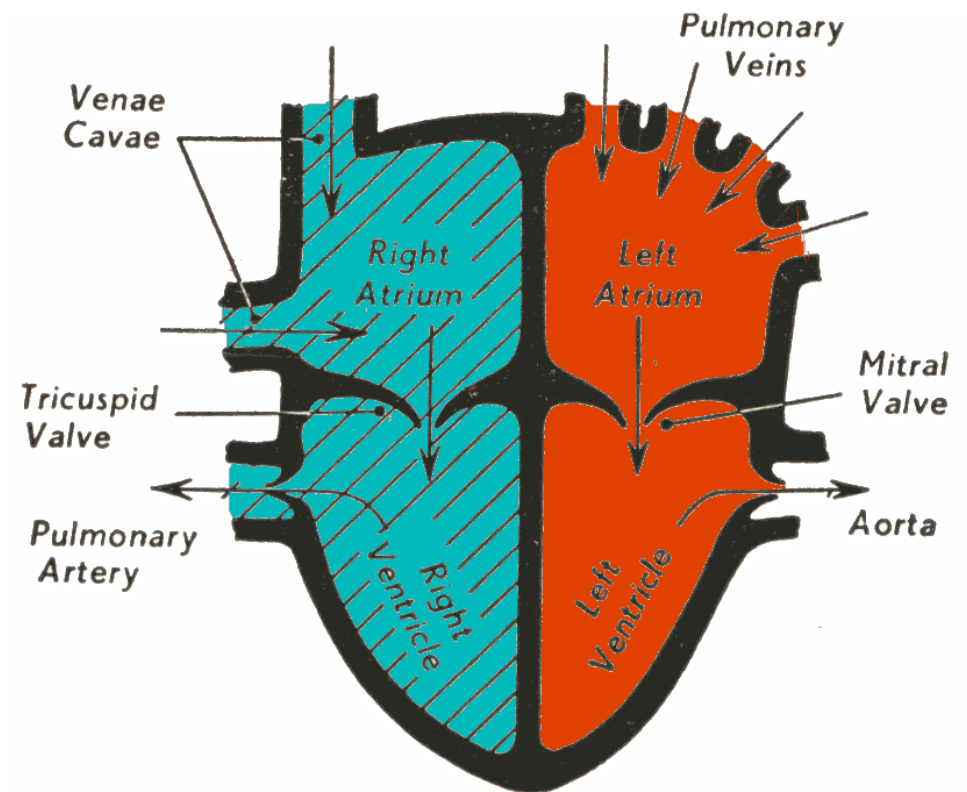


CIRCULATORY SYSTEM

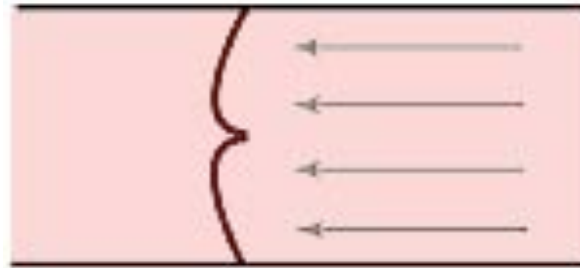




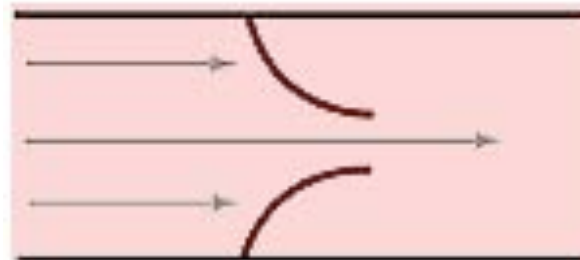
. Front view of the heart.



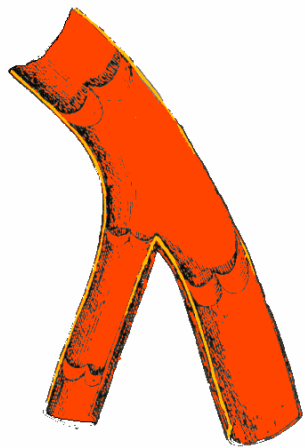
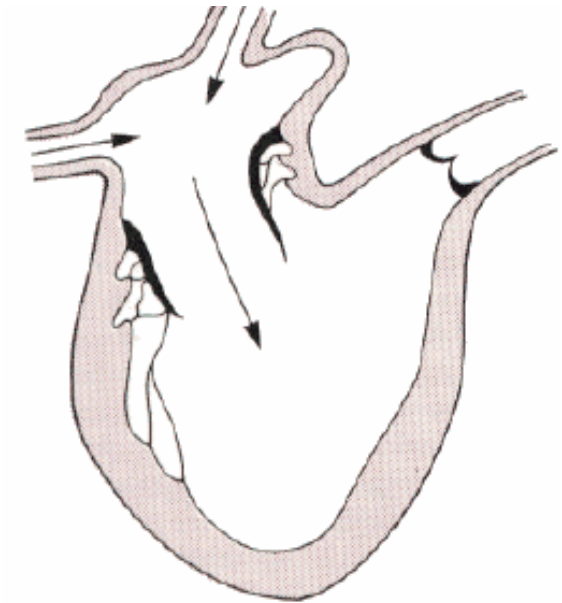
Permettono la
unidirezionalità del
flusso, prevenendo
il flusso retrogrado



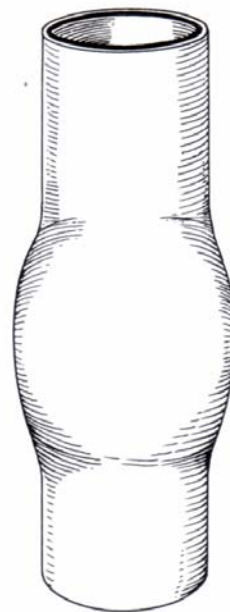
When pressure
is greater in
front of the
valve, it closes



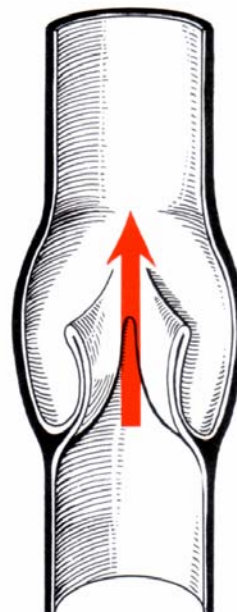
When pressure
is greater behind
the valve, it opens



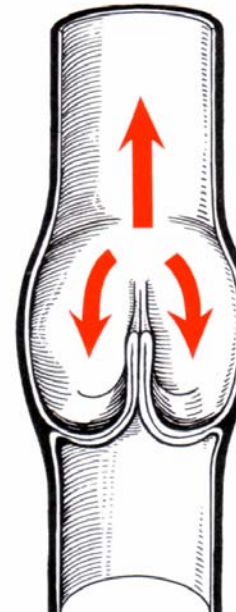
Vein cut to show V.



A

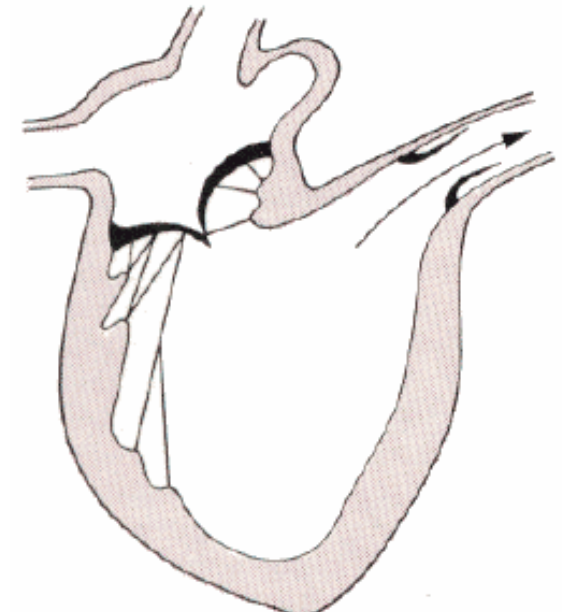


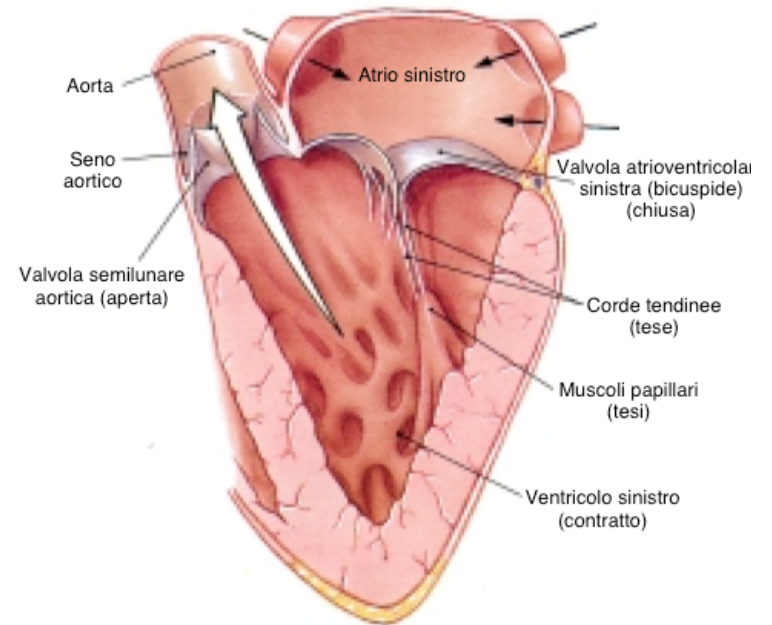
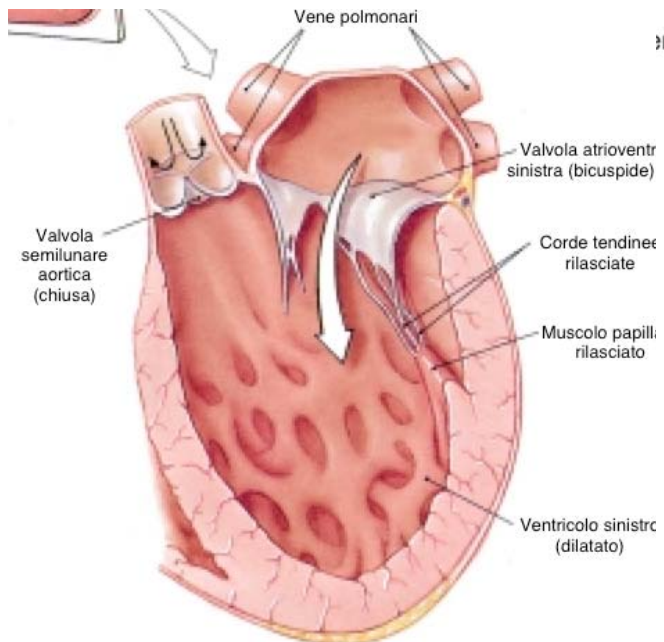
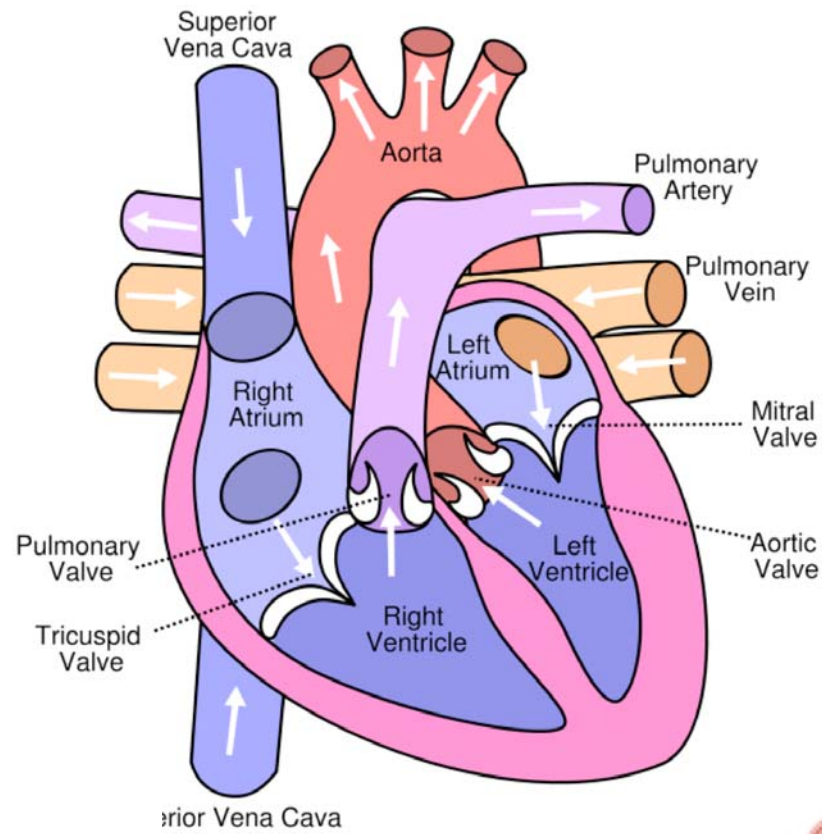
B

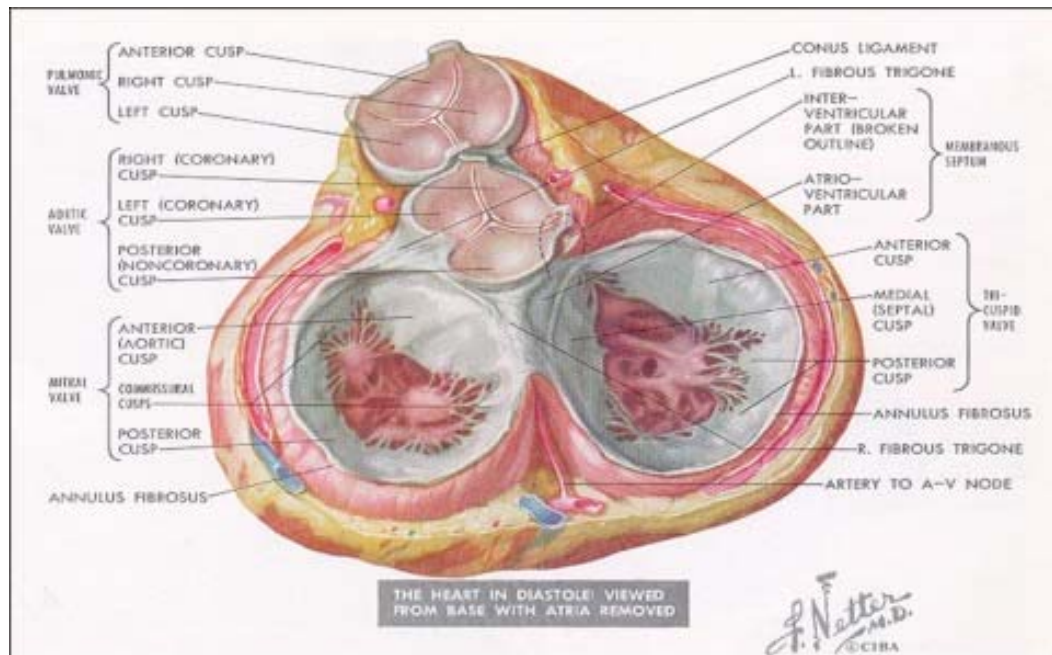


C

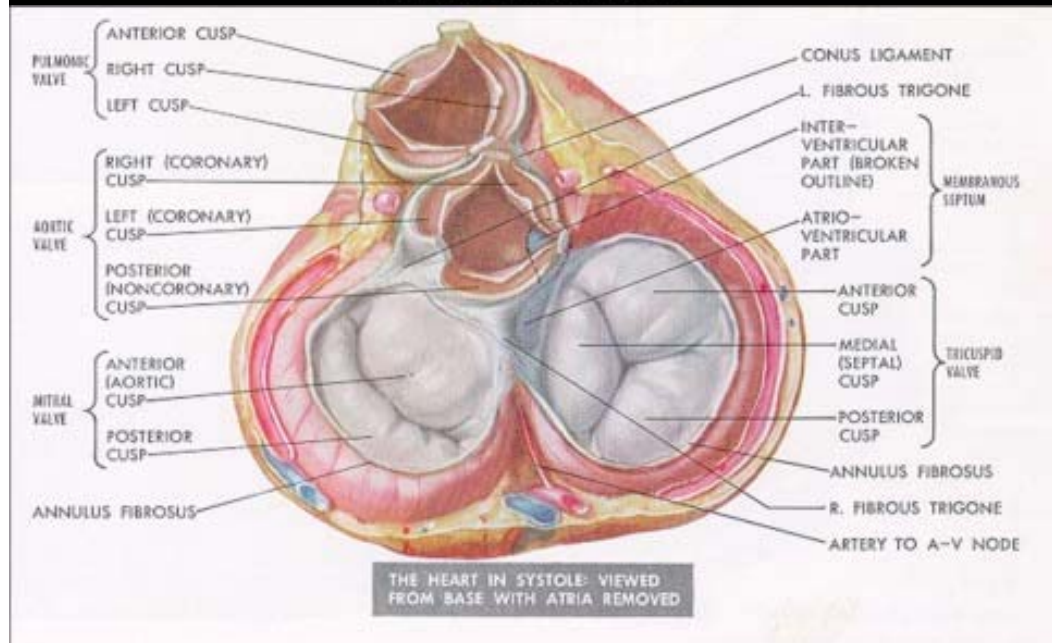
EWA







Cuore in diastole



Cuore in sistole

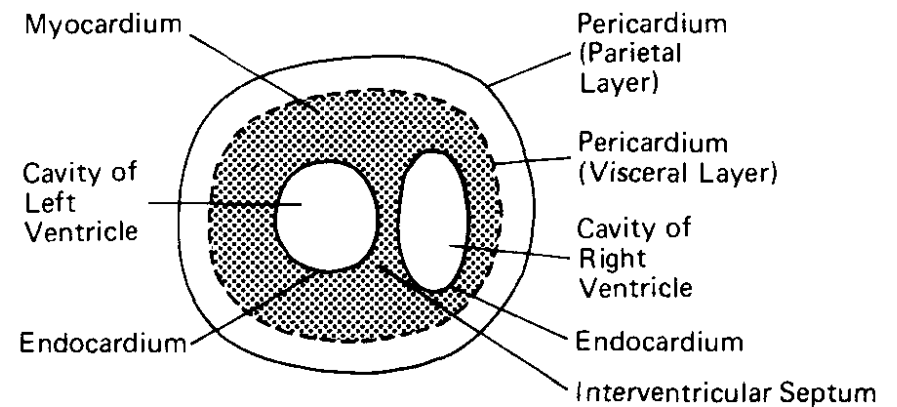
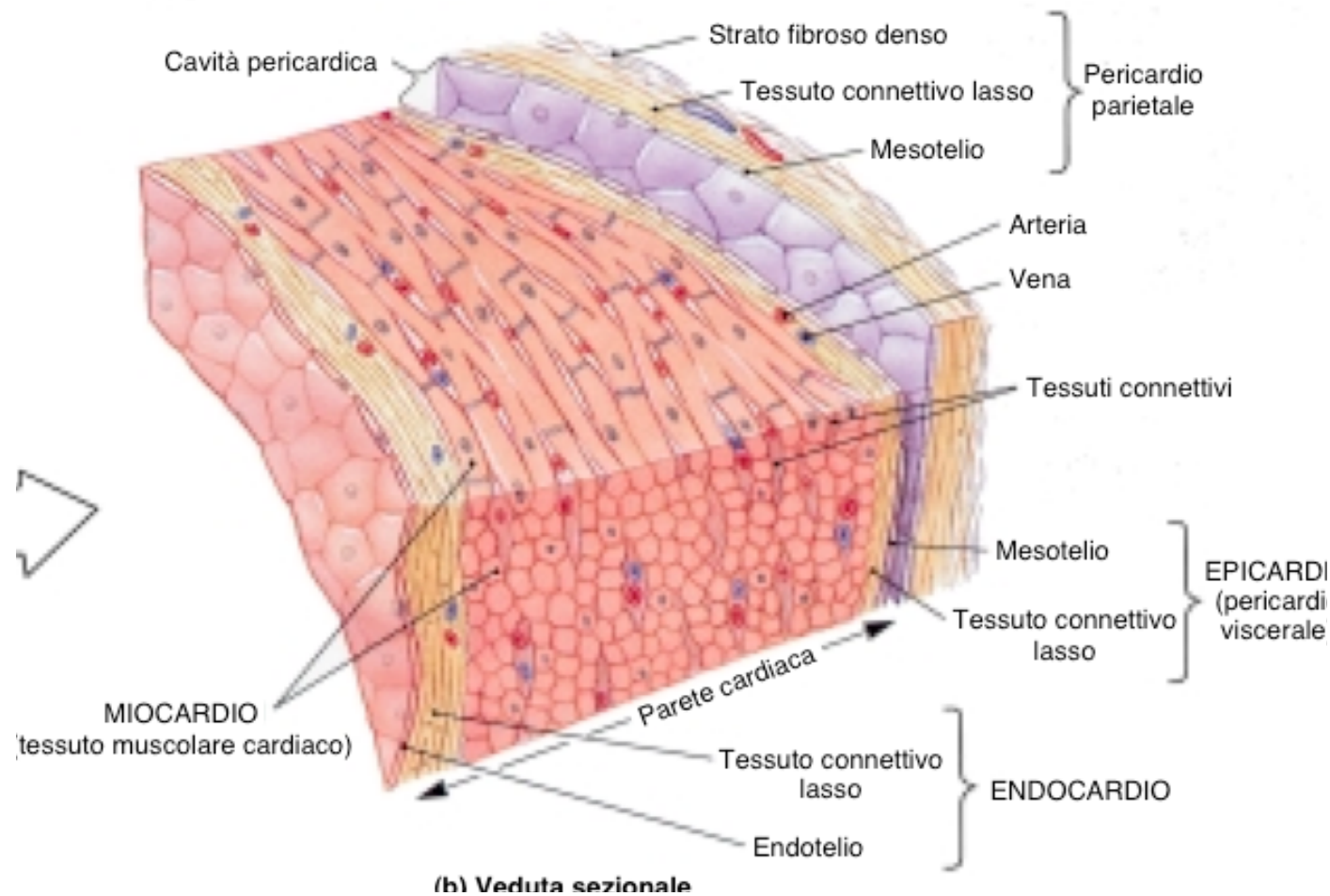
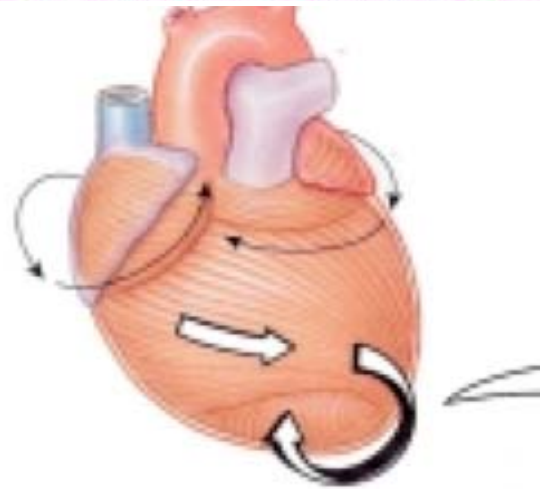
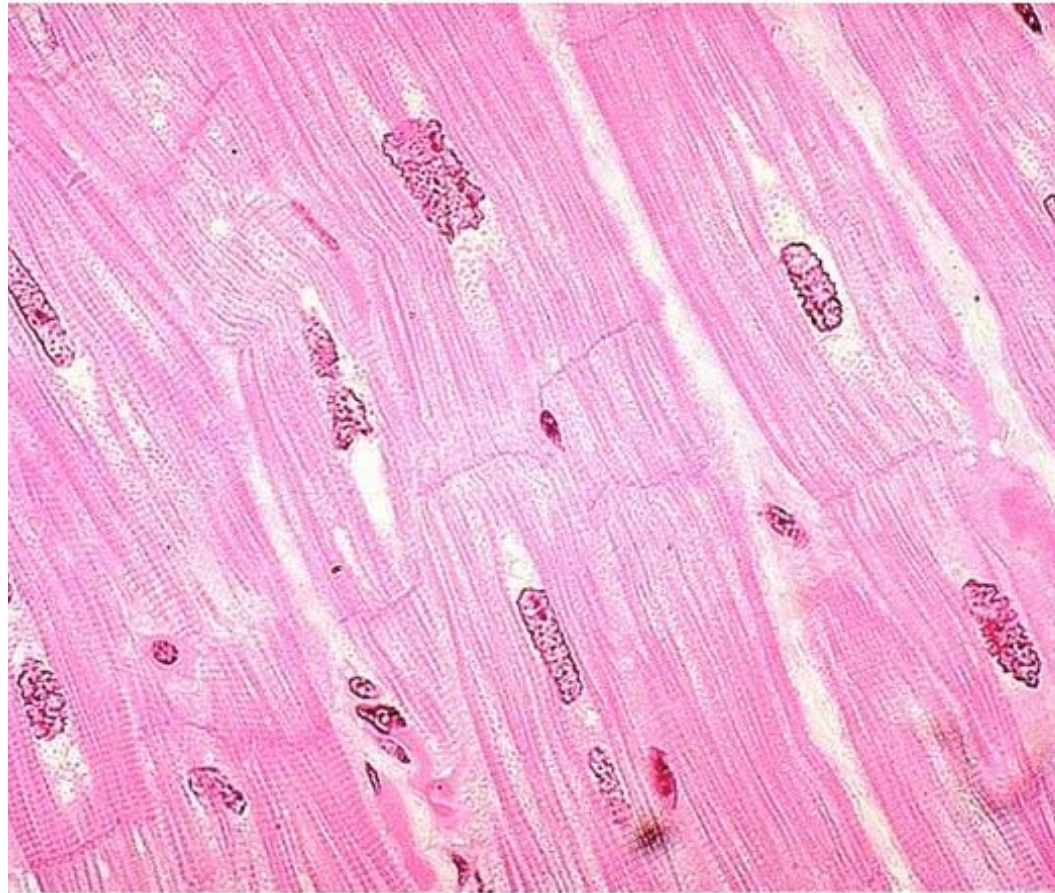
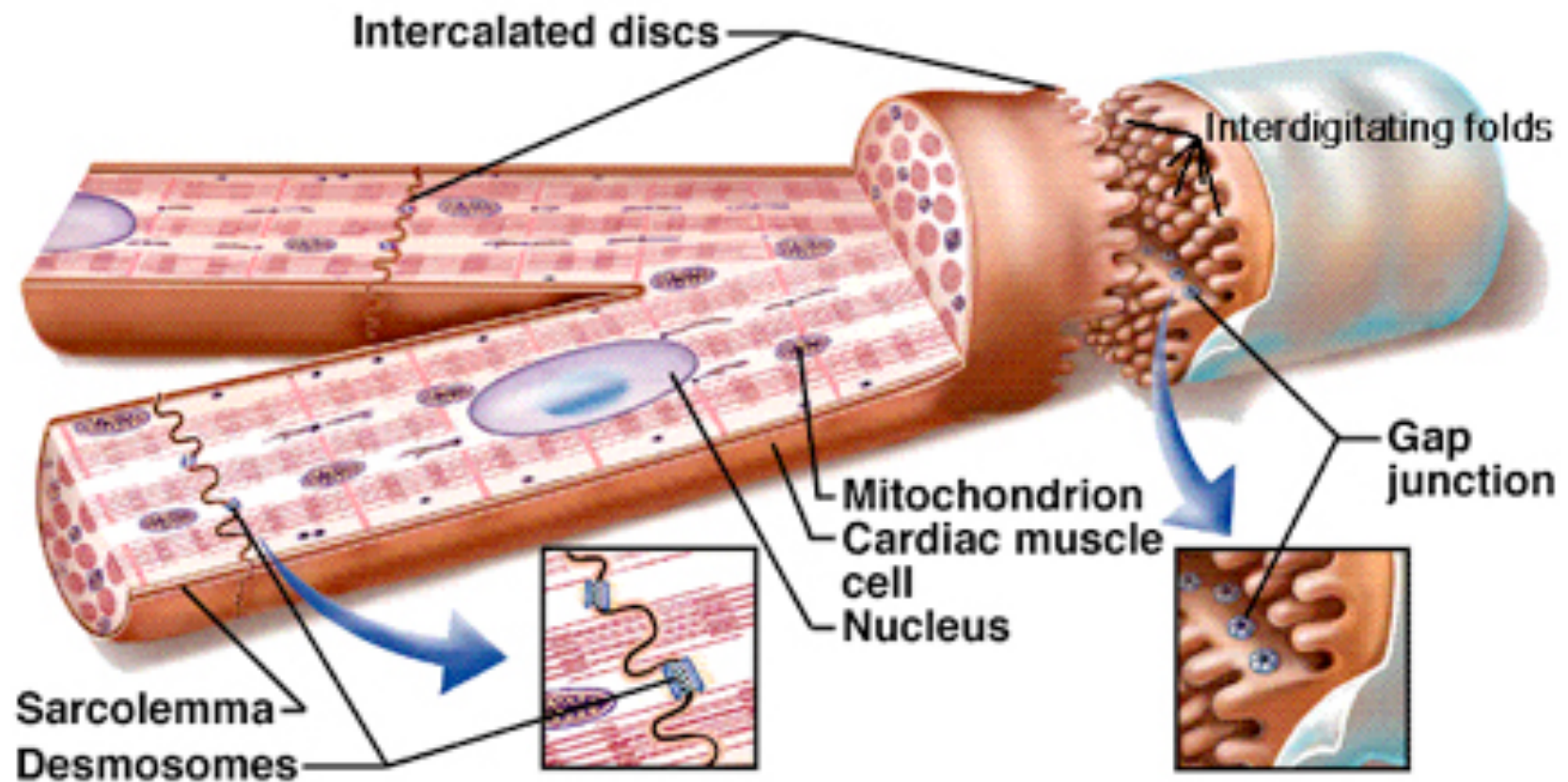
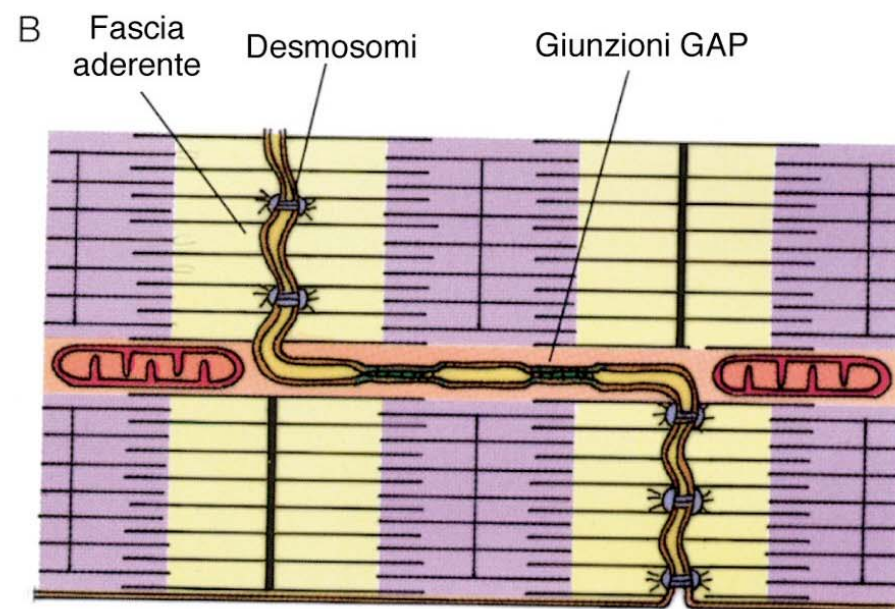
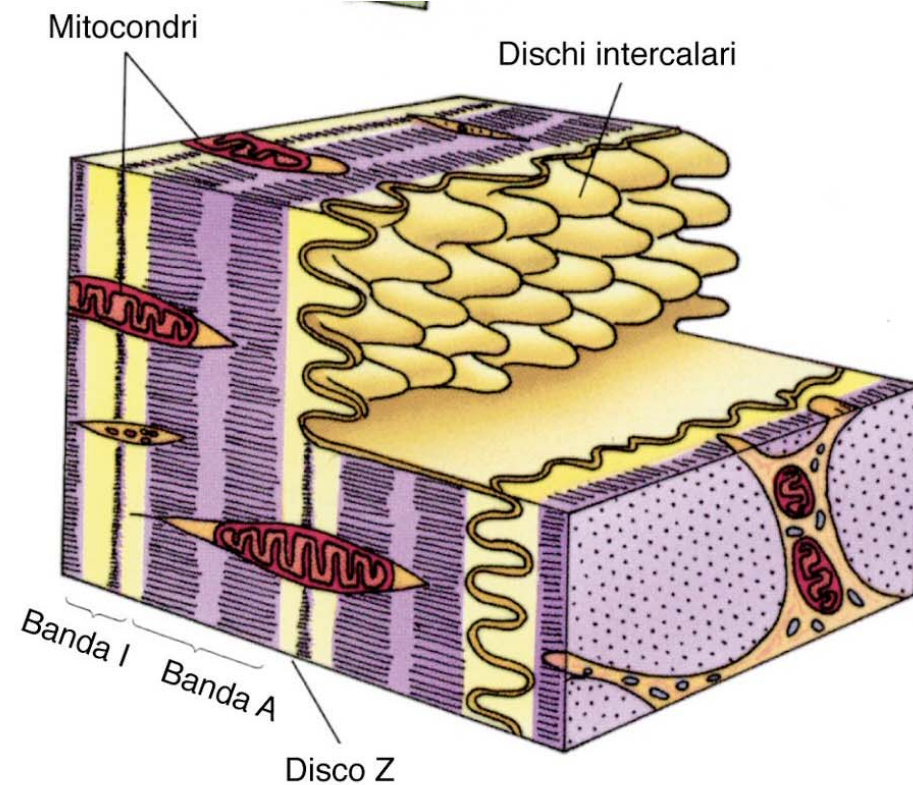
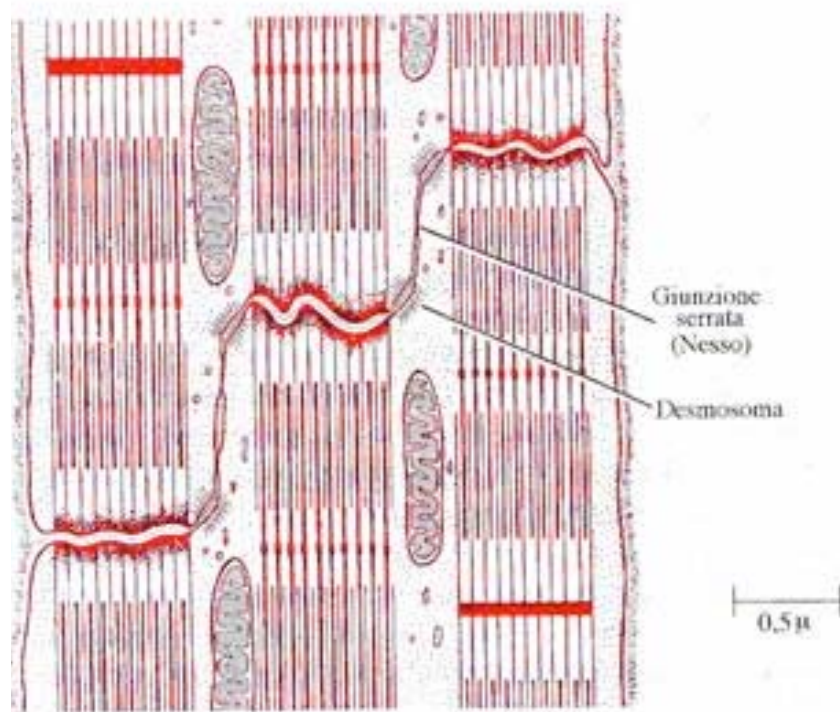
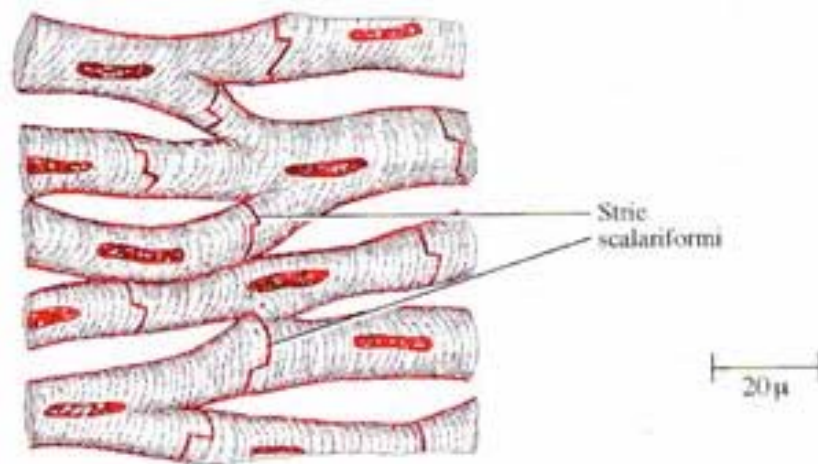


Diagram illustrating general structure of the heart.

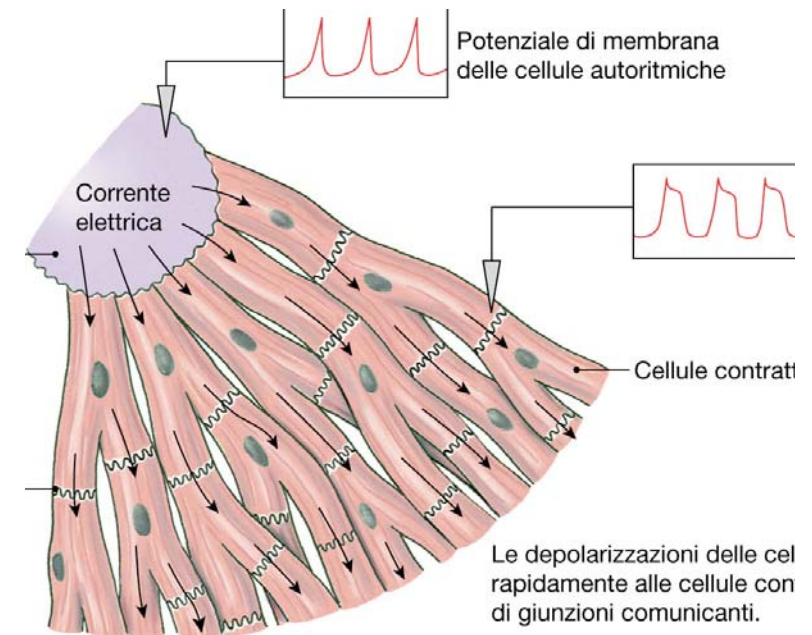
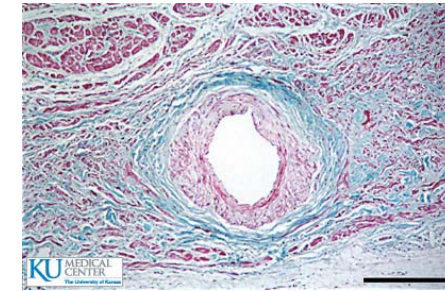
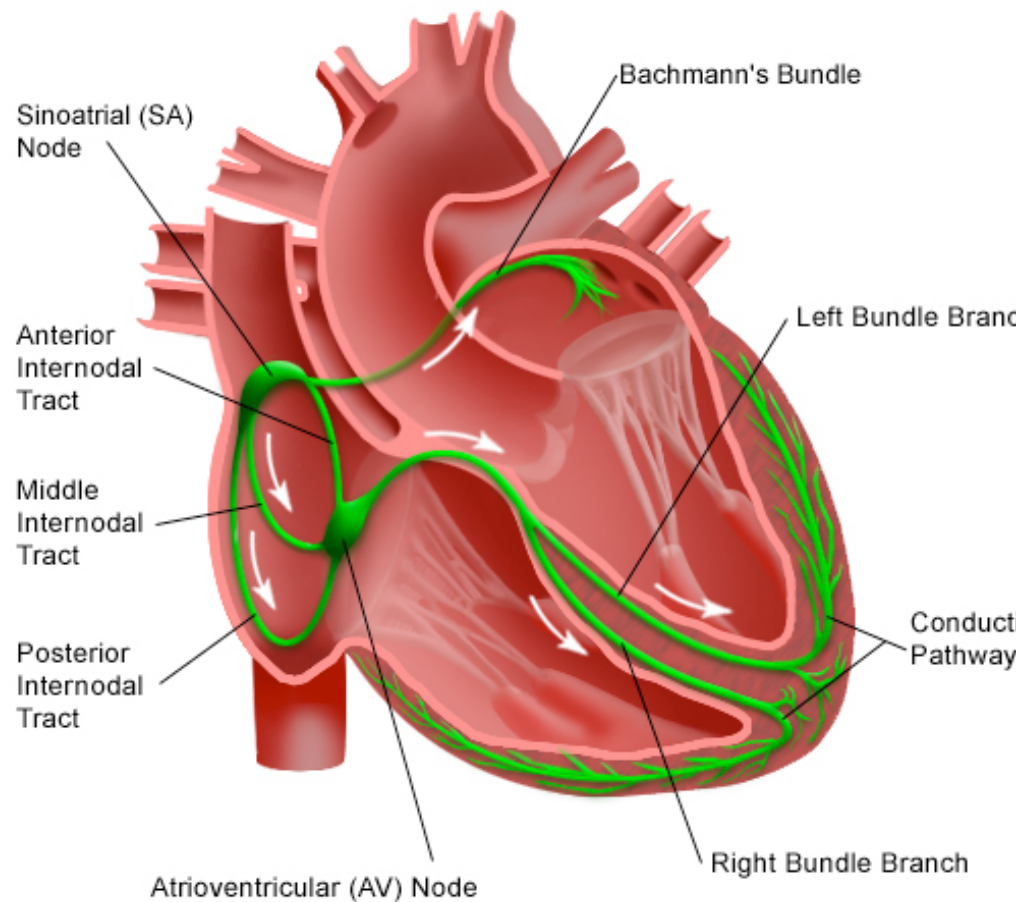




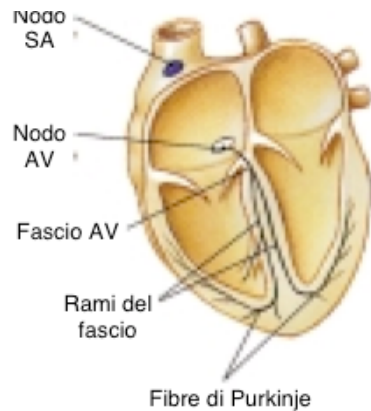
Il tessuto muscolare cardiaco è costituito da cellule muscolari mononucleate di forma irregolare (spesso a Y), connesse da giunzioni specializzate, trasversali, costituenti i dischi intercalari.



Electrical System of the Heart

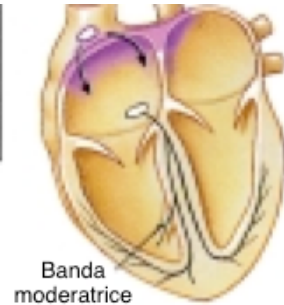


Cardiac conduction system. All cells of the cardiac conduction system are autorhythmic, and can depolarize and generate action potentials at regular intervals. The cardiac conduction system coordinates the production and pathway of the cardiac action potentials that cause the heart to beat. These action potentials start in the atria, travel across both atria and cause the contractile myocytes of the atria to contract, then travel to the ventricles and cause the contractile myocytes to contract.



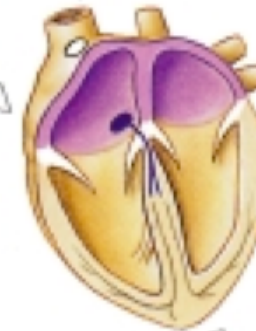
FASE 1:
Attivazione del
nodo SA e inizio
dell'attività atriale.

Tempo = 0



FASE 2:
Lo stimolo raggiunge il
nodo AV.

Tempo trascorso = 50
msec



Il sistema di conduzi-
molo per la contrazi-
one del pacemaker a livel-
l'impulso segue tre
pareti atriali per raggi-
una breve sosta, gli im-
His (atrioventricolare)
Purkinje, verso le fibr-
colari. **(b)** Il movime-
attraverso il cuore è m-



FASE 3:
A livello del nodo AV vi è
un ritardo di 100 msec.
Inizio della contrazione
ventricolare.
Tempo trascorso = 150
msec

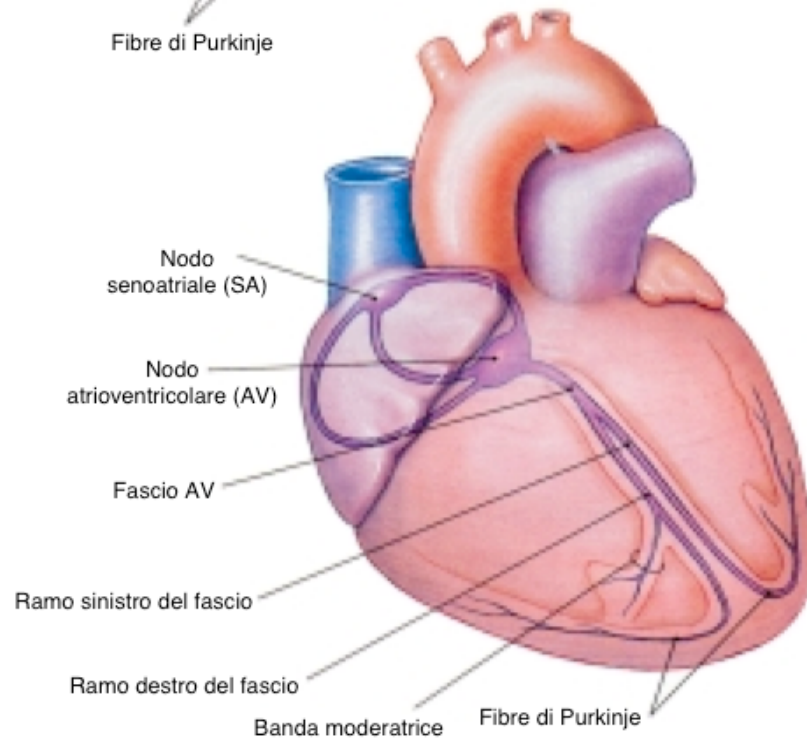


FASE 4:
L'impulso viaggia lungo il
setto interventricolare
attraverso il fascio AV e i
rami del fascio, verso le fibre
di Purkinje.
Tempo trascorso = 175 msec



FASE 5:
L'impulso è distribuito dalle
fibre di Purkinje e trasmesso al
miocardio ventricolare. La con-
trazione atriale viene completa-
ta. Inizia la contrazione ventri-
colare.

Tempo trascorso = 225 msec



(a) Nodi e fibre di conduzione

Unregistered HyperCam 2

