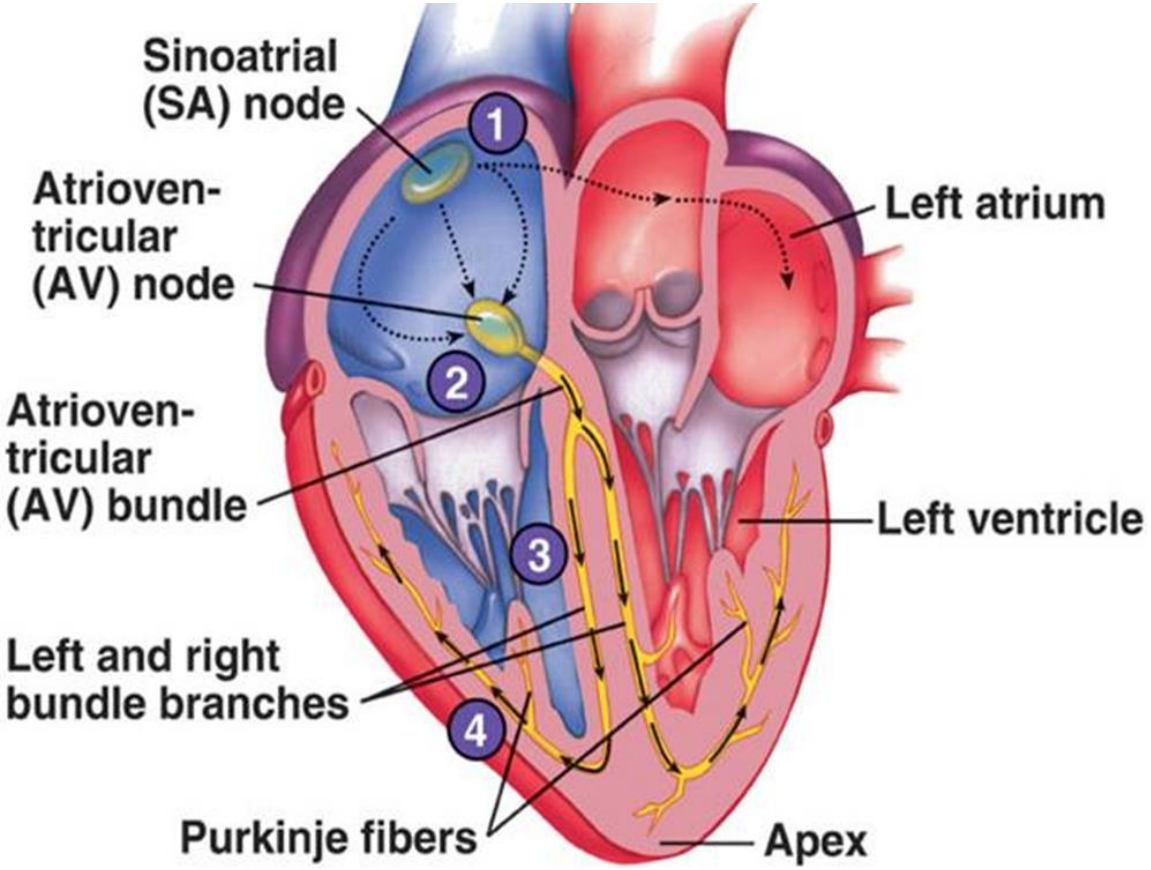
COMPONENTS OF CONDUCTIVE SYSTEM

- SA node
- Inter-nodal pathways
- A-V node
- A-V bundle
- Right bundle branch
- Left bundle branch
- Purkinje fibers

COMPONENTS OF CONDUCTIVE SYSTEM

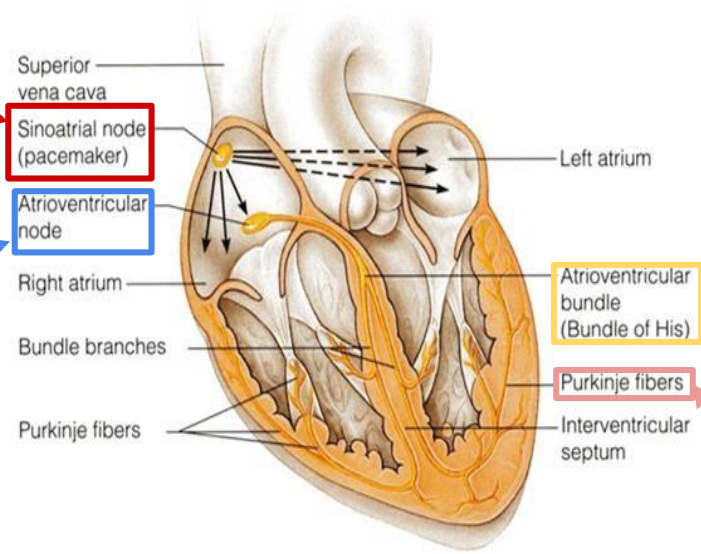


Conduction system of the heart

- The **beating of the heart** is regulated by the **intrinsic conduction (nodal) system.**
- Its function is to ensure that the chambers of the heart contract in the proper rhythm and sequence

The **main center** is the **sinoatrial (SA) node,** located in the right atrium

The **atrioventricular (AV) node** is located at the junction of the atria and the ventricles

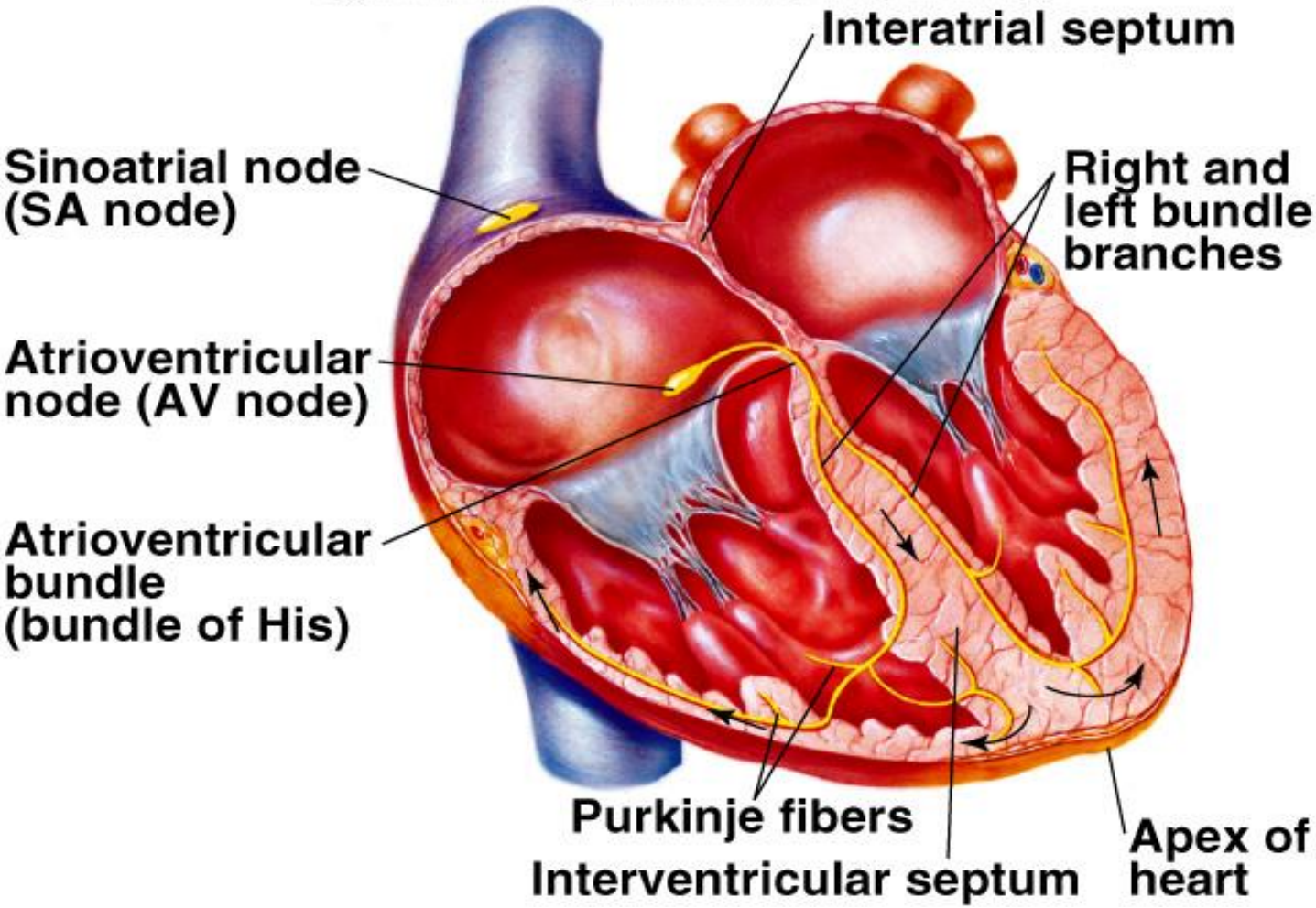


atrioventricular (AV) bundle (bundle of His) is located in the interventricular septum

Purkinje fibers are located inside the walls of the ventricles

The SA node is called the **pacemaker** of the heart, because it generates the impulse.

Conducting Tissues of the Heart



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:m for generating
ımical electrical
lses to cause
ımical contraction
e heart muscle.

Conducting Tissues of the Heart

Sequence of excitation

Sinus-Atrial node (SA node)

↓

Atria

↓

Atrial-ventricular node (AV node)

↓

Ventricles

↓

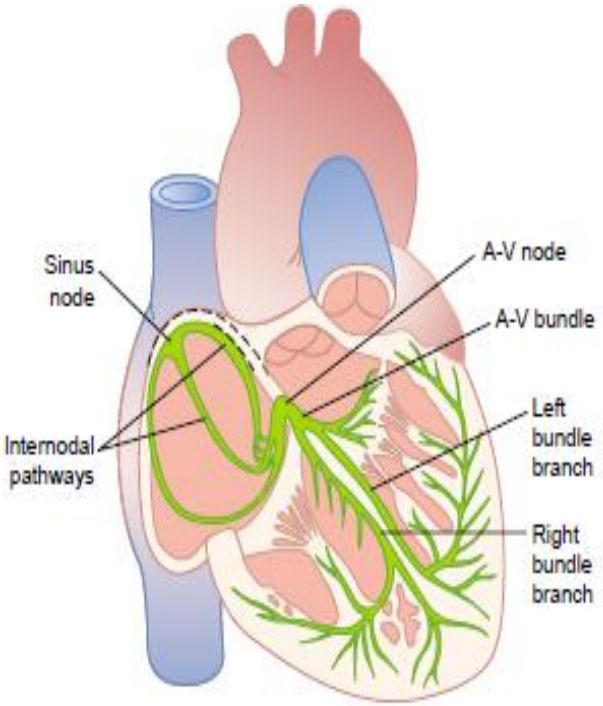
bundle branch of His

↓

Right and left bundle branch of His

↓

Purkinji fibers



SA node

- SA node is the pacemaker of the heart.
- It is located in the superior wall of the right atrium
- Responsible for contraction of the heart.

AV node

The AV node is located in the posterior wall of the right atrium immediately behind the tricuspid valve.

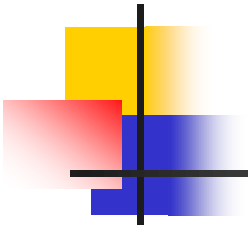
Right and Left Bundle Branches

- Bundle of His splits into two branches which are called right and left bundle branches that lie on the respective sides of the ventricular septum.

- From the time the cardiac impulse enters the bundle branches until it reaches the terminations of Purkinje fibers

Purkinje fibers

- Purkinje fibers are very large fibers.



THANK YOU