



# ACC Latin America Conference 2017



**MEXICO CITY**  
JUNE 22 – 24, 2017

**GLOBAL EXPERTS, LOCAL LEARNING**



# Arrhythmias and Clinical EP

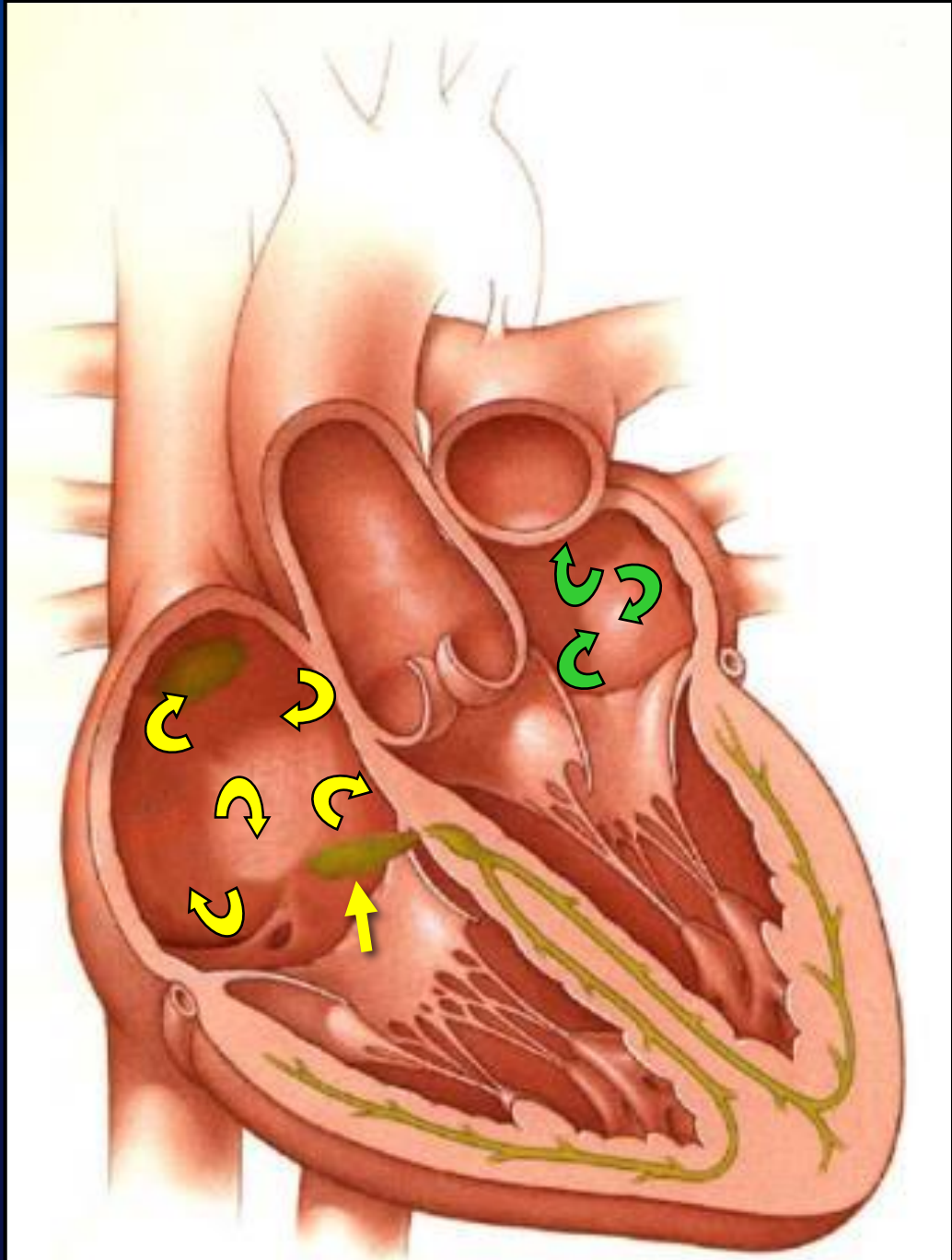
## Atrial Fibrillation: Prevention and Detection Management

**Samuel Asirvatham, MD & Ivan Mendoza, MD**

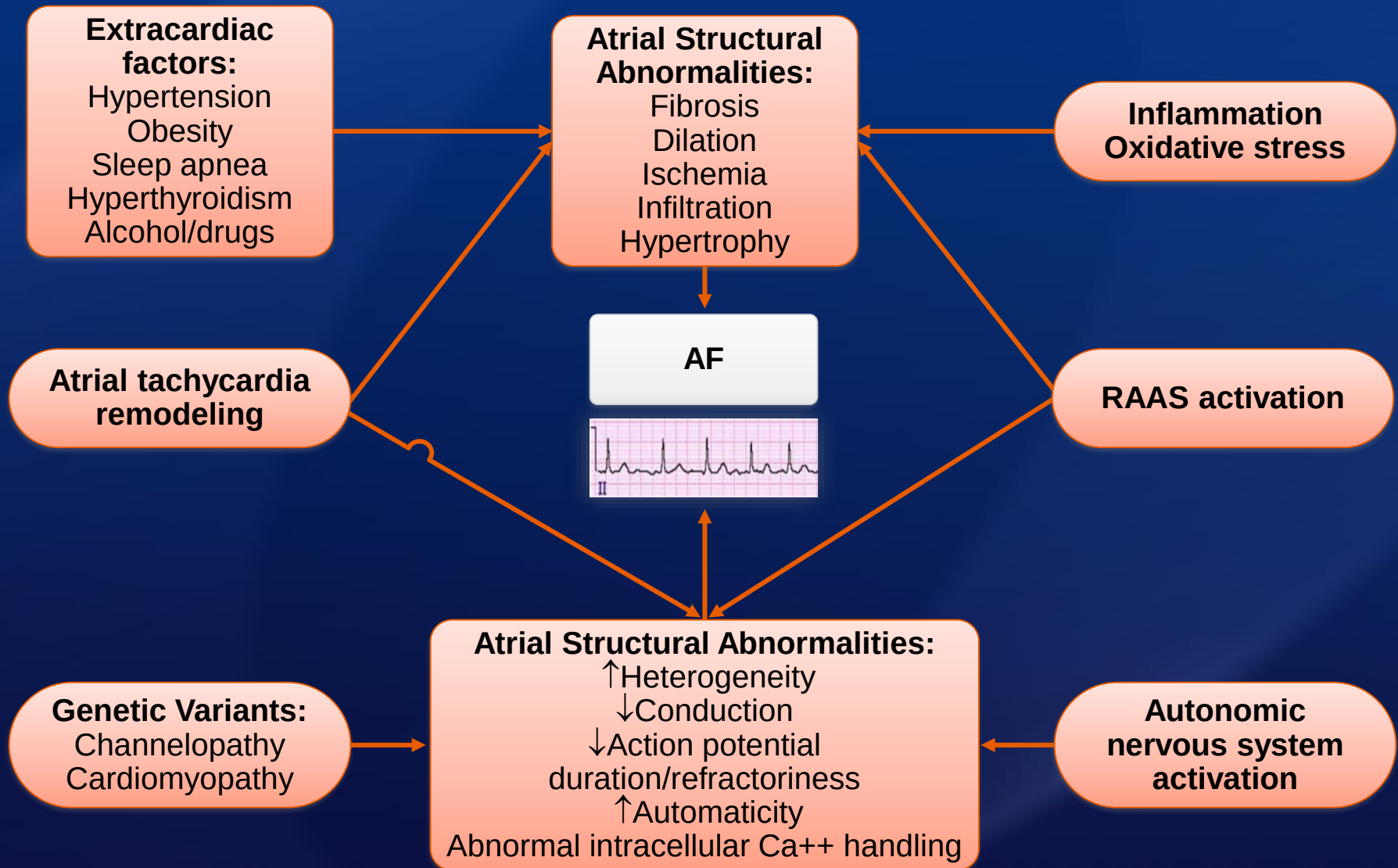
**Case Study Presenters: Drs. Alexandro Atilano Diaz  
& Adan Pacheco**

**Saturday, June 24, 2017**

**9:20 to 10:05 a.m.**

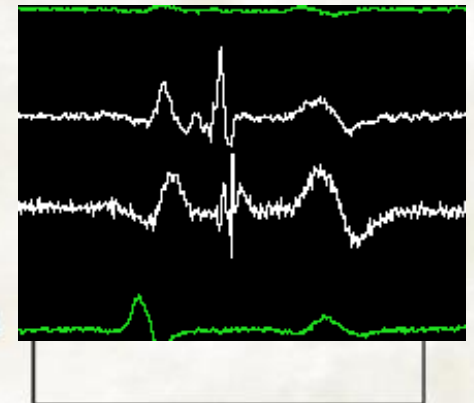
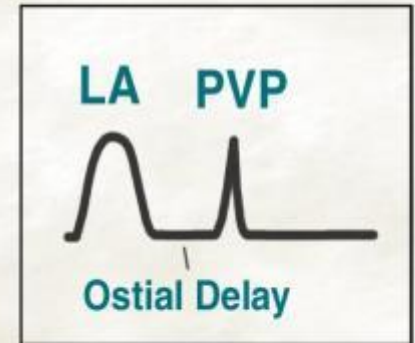
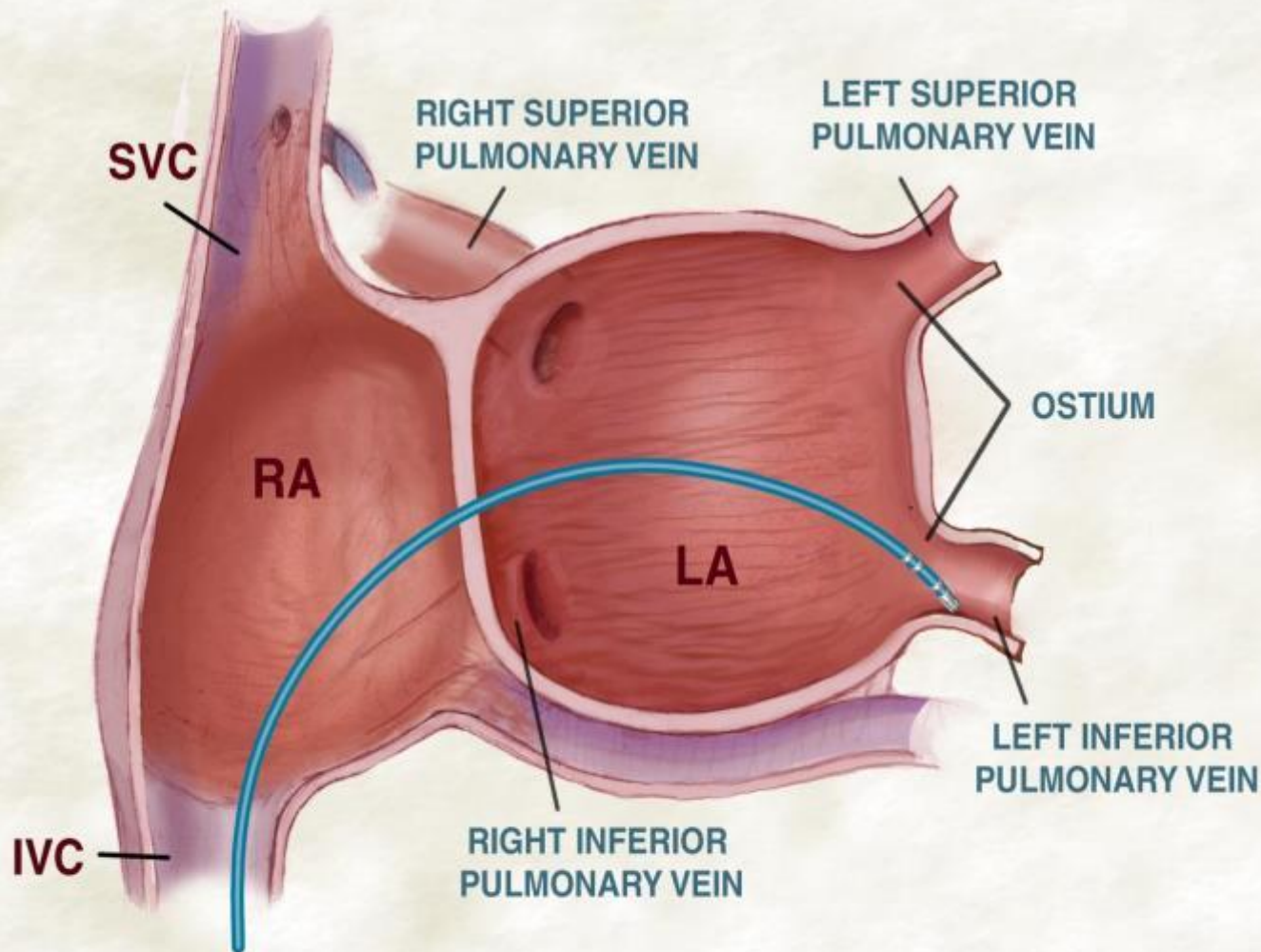


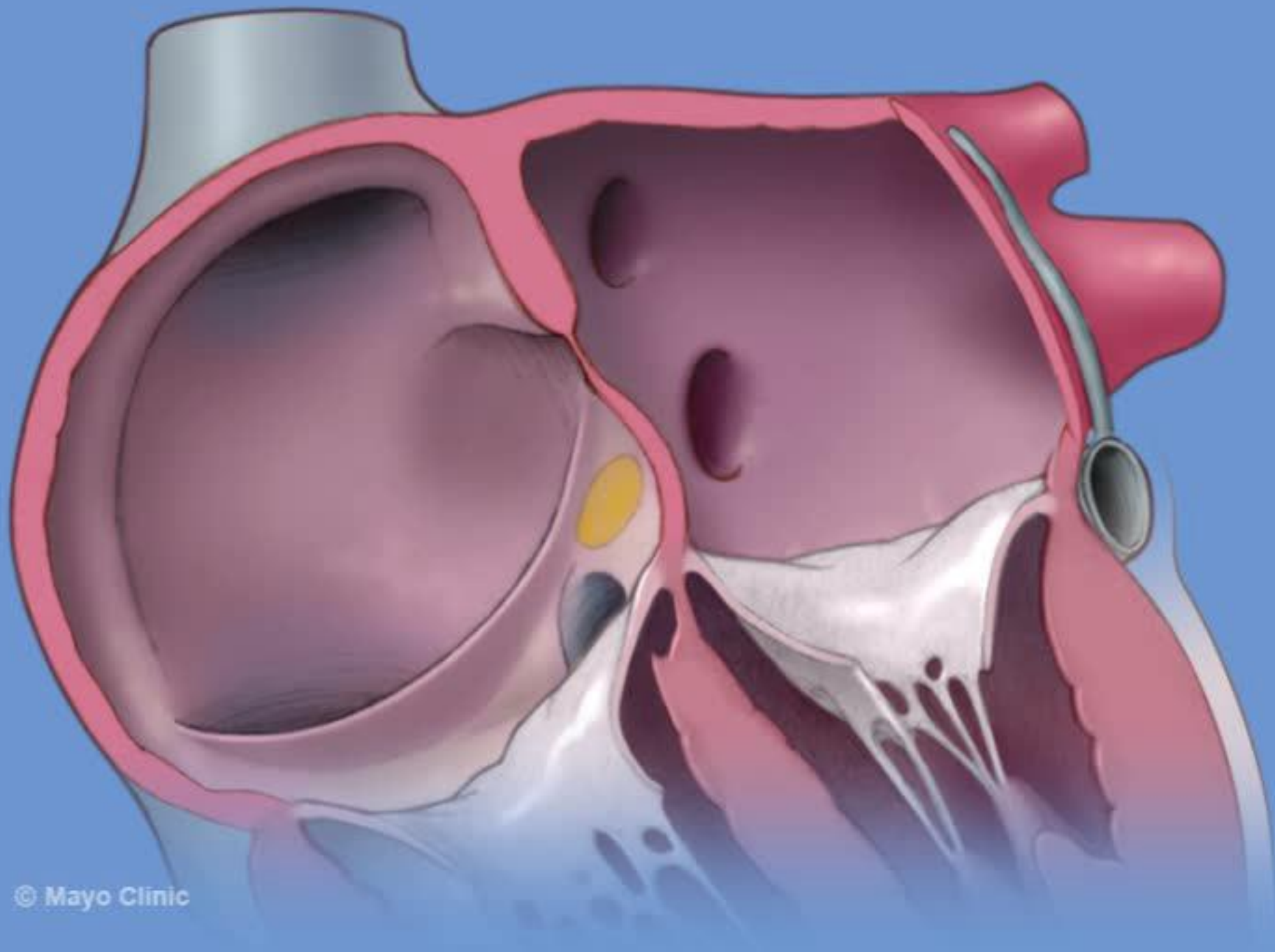
# Mechanisms of AF



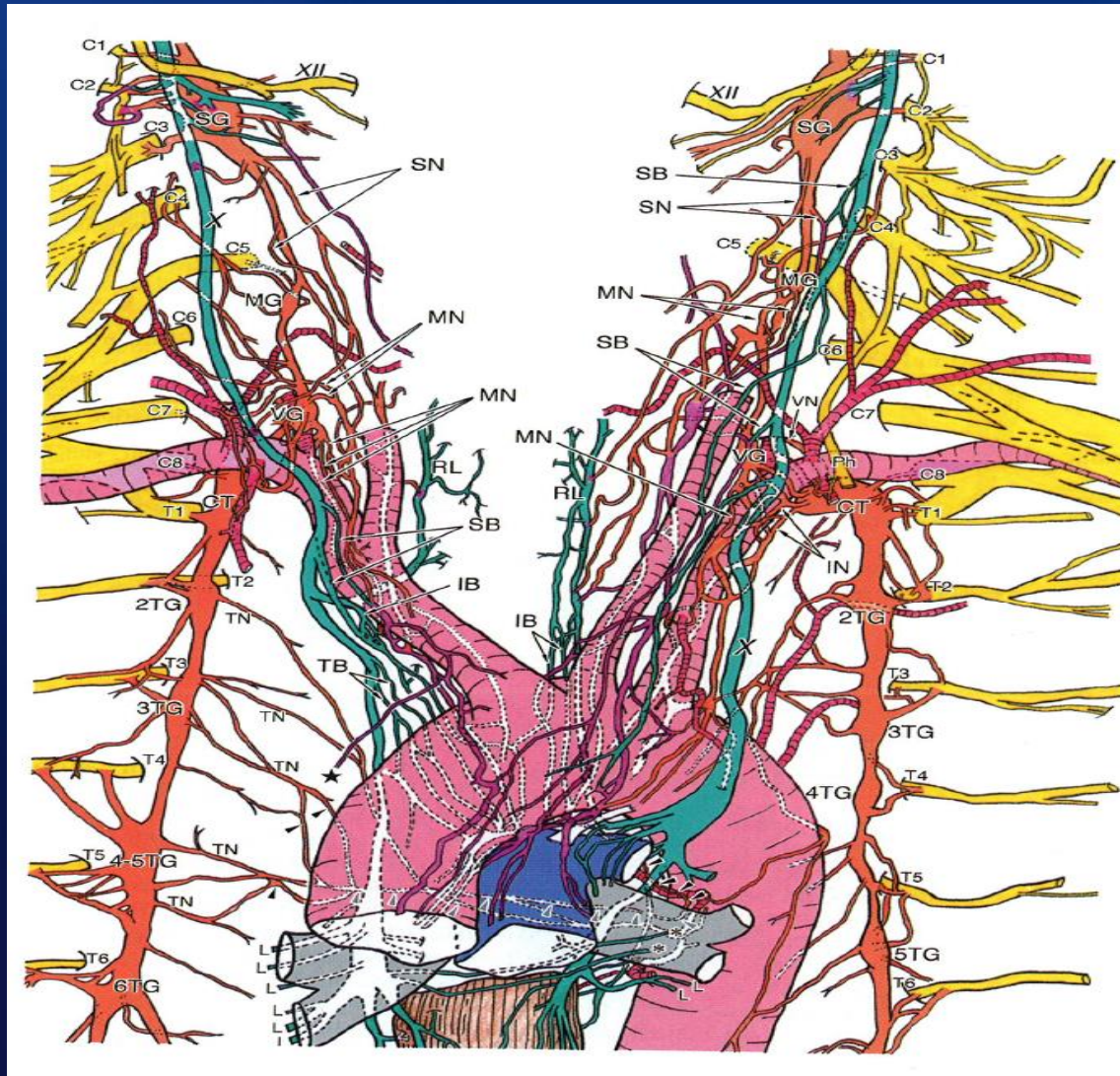


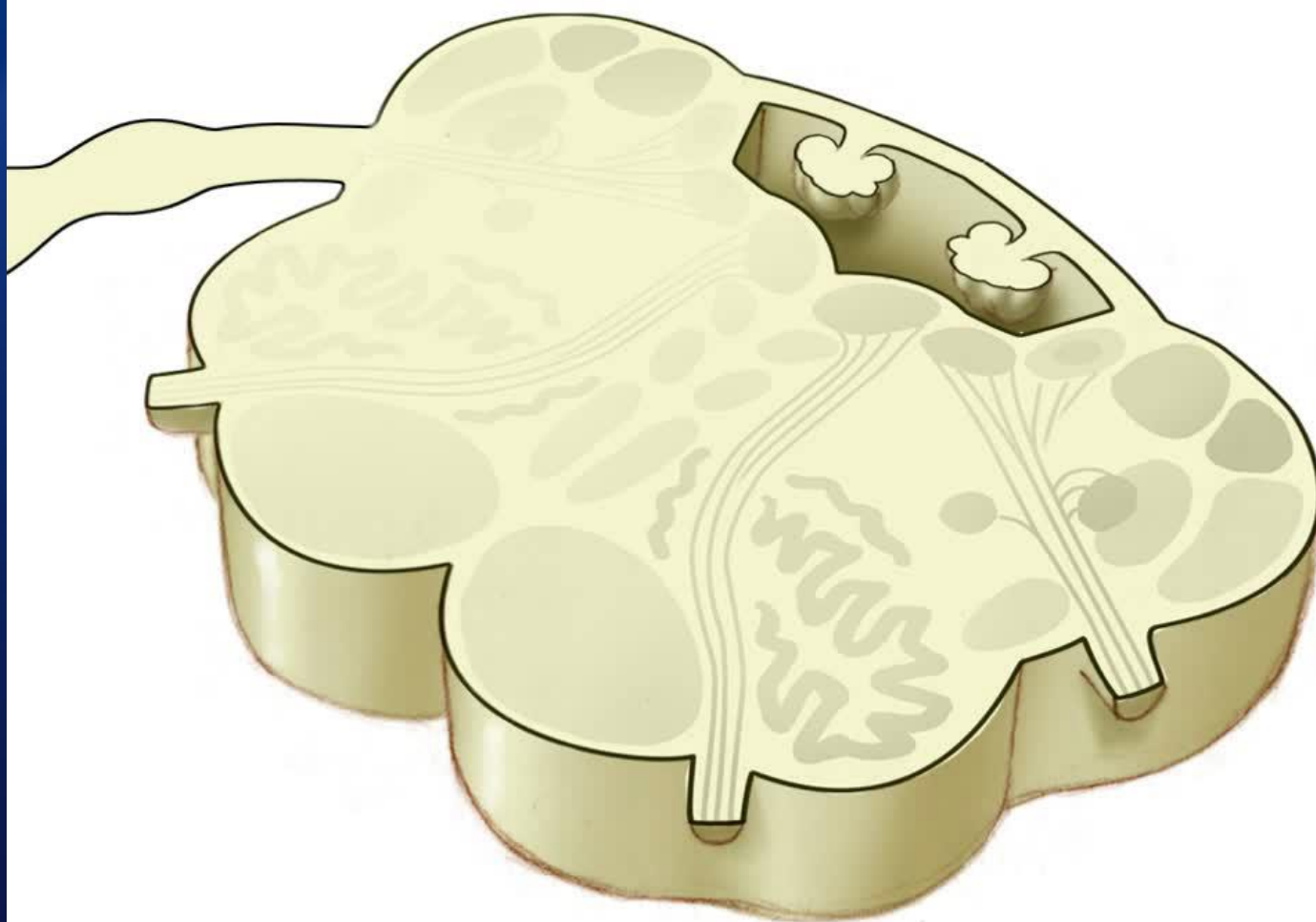
# THE PULMONARY VEIN POTENTIAL

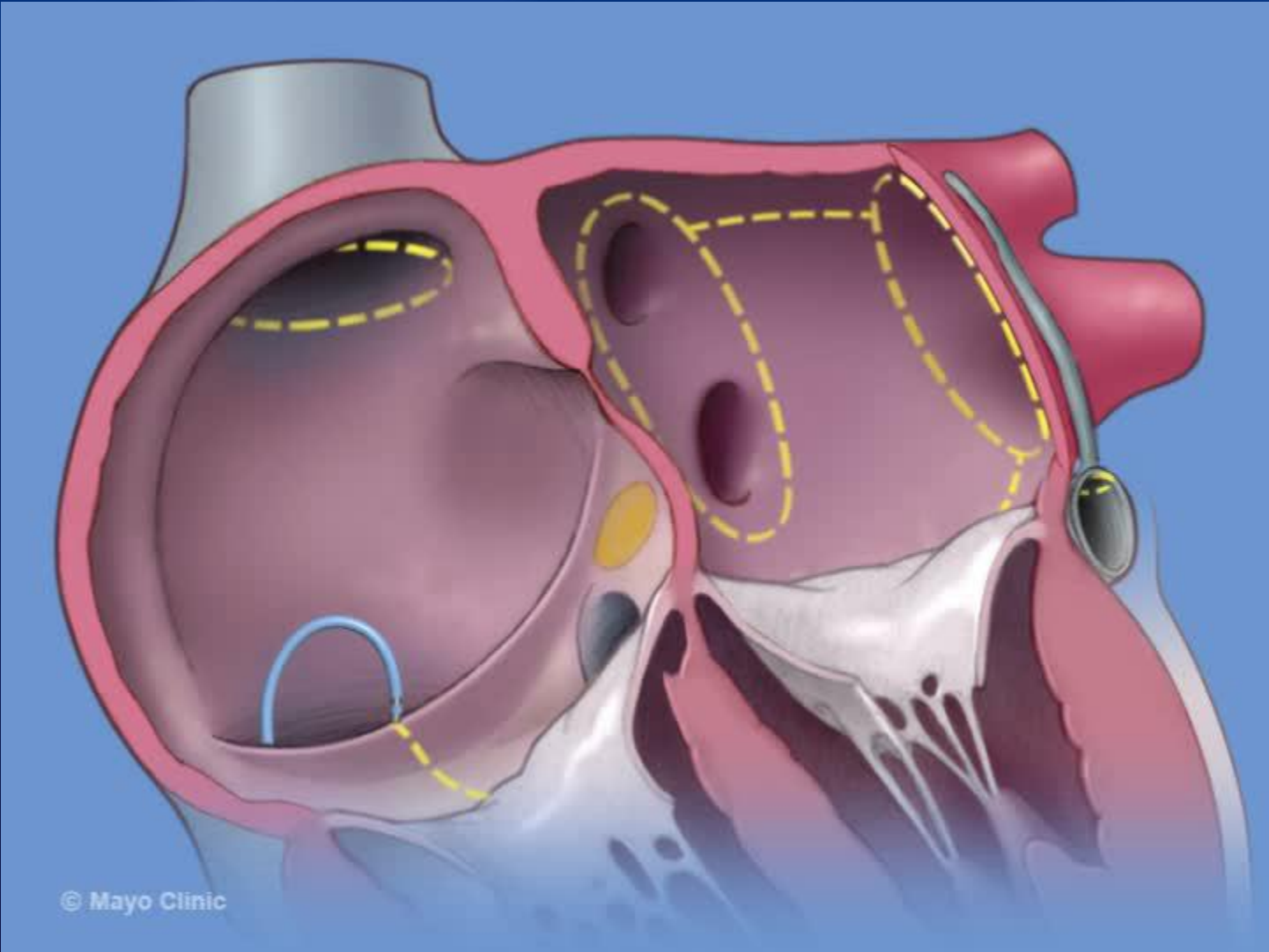


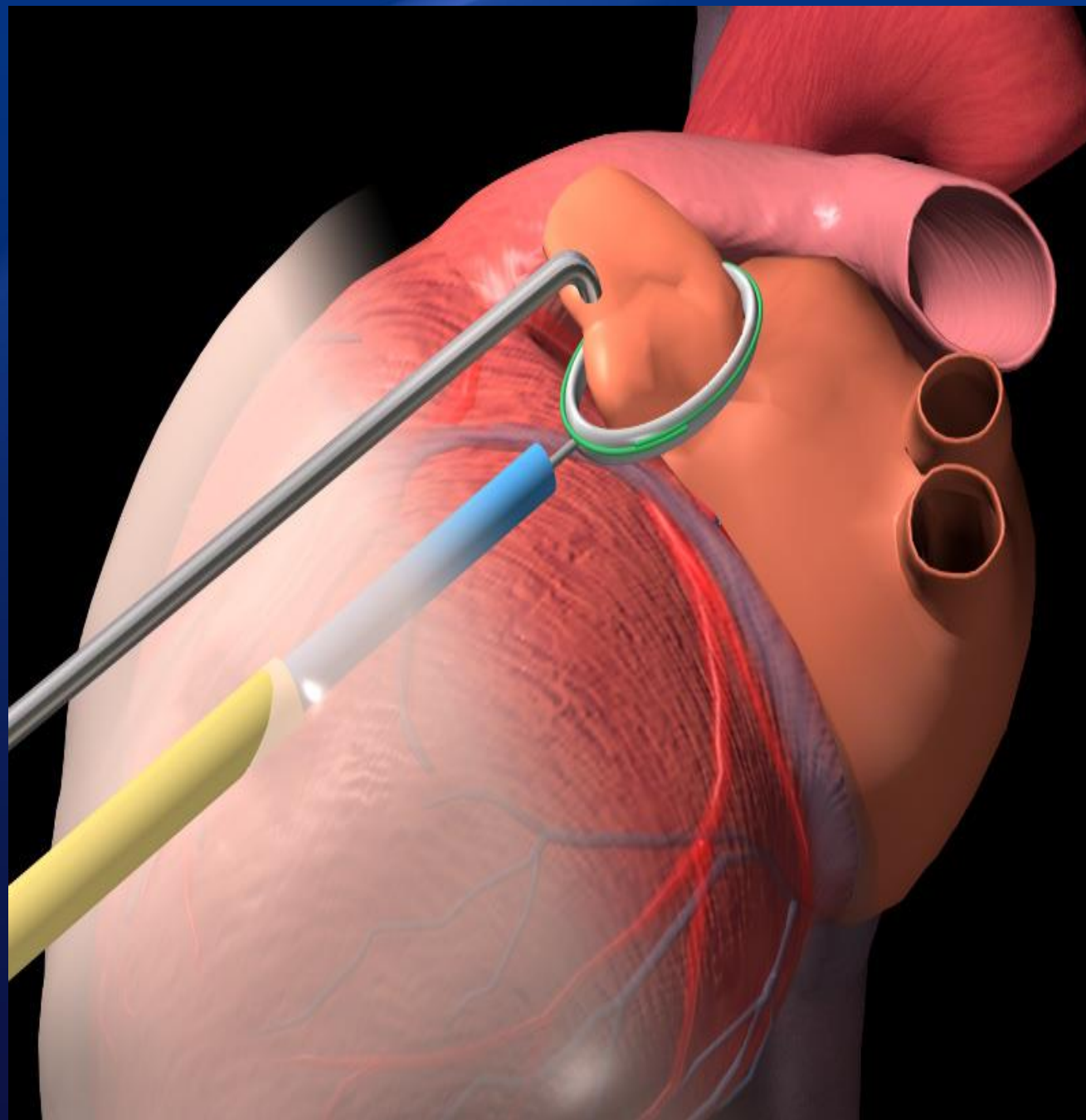


# Autonomic Nervous System Of The Human Heart







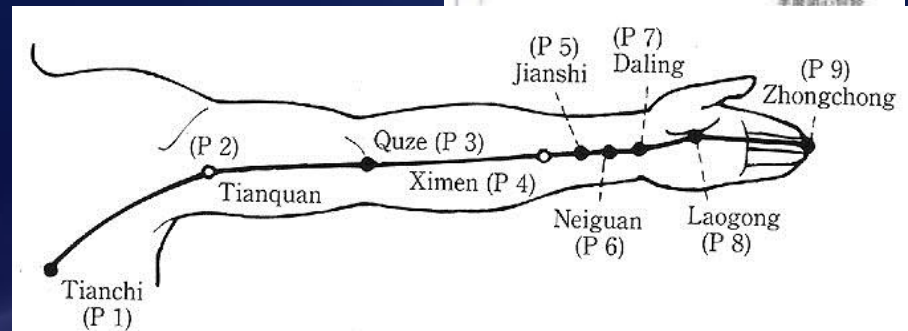


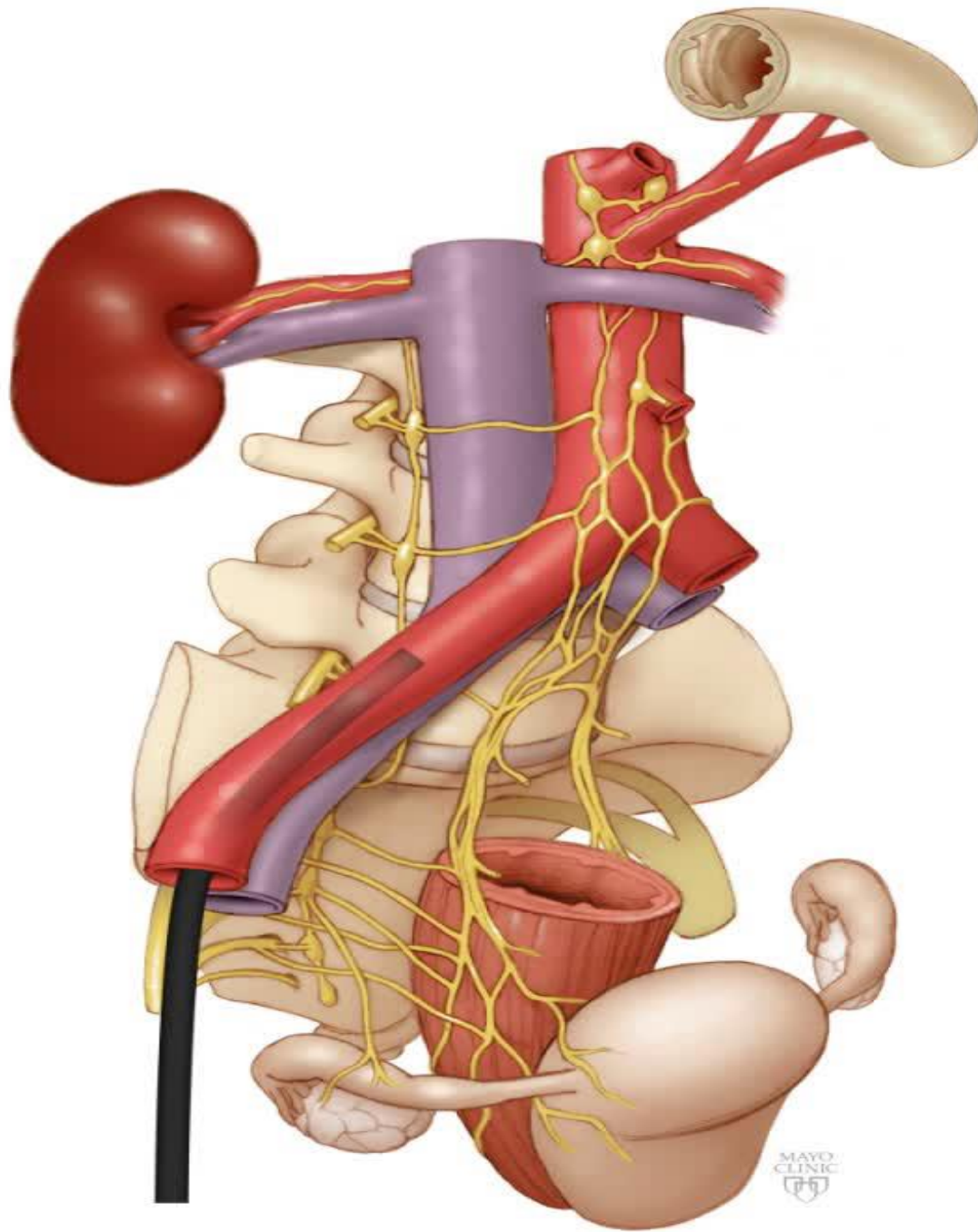
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### EXTERNAL EAR

The diagram illustrates the external ear (pinna) with the following labeled parts:

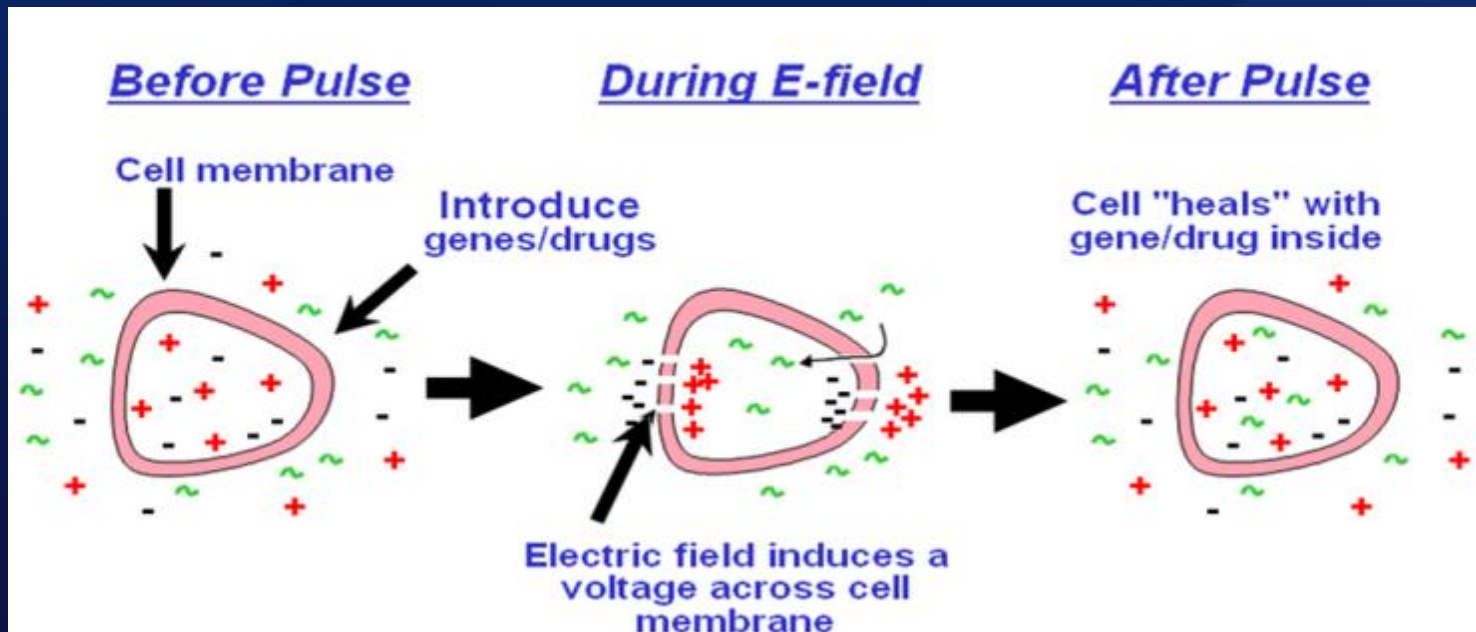
- helix
- scapha
- concha
- external auditory meatus
- antitragus
- navicular fossa
- root of the helix
- anthelix
- tragus



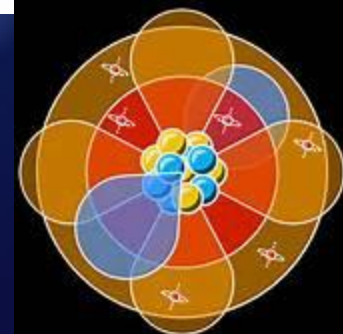
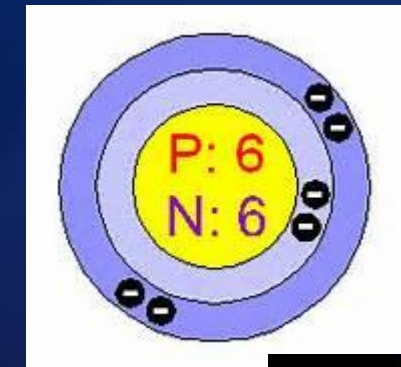
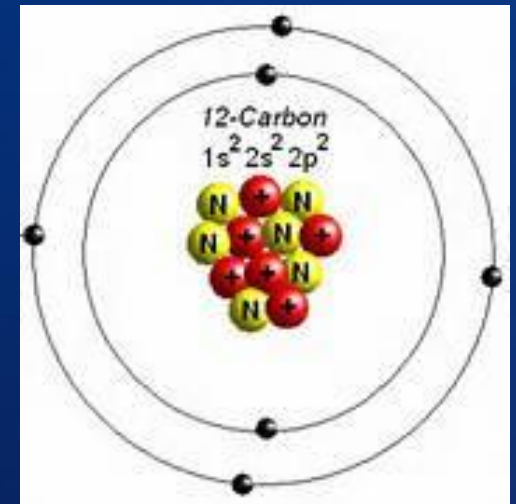
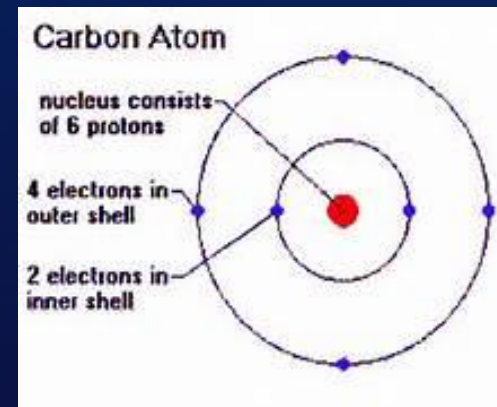
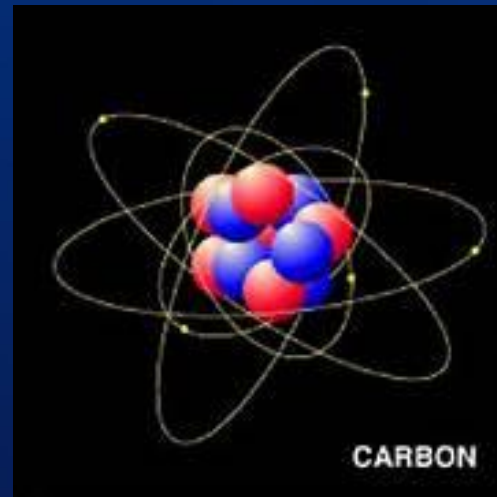
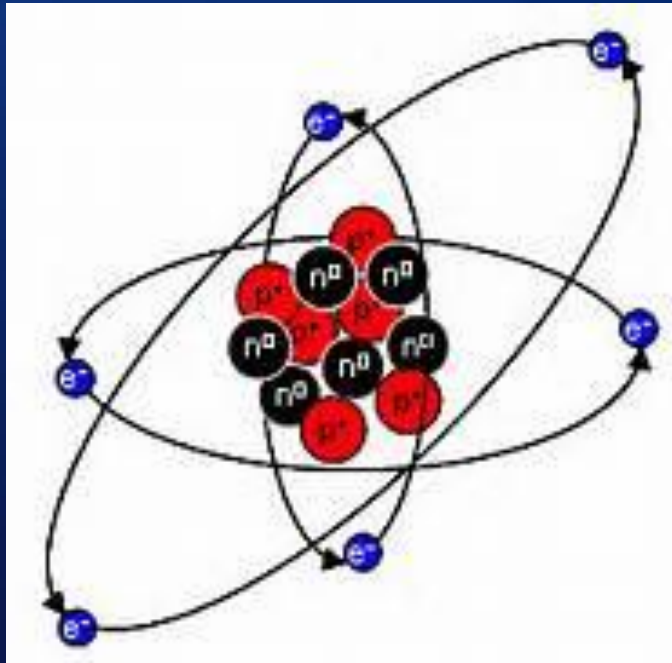


# DC Electroporation

- Application of **non-thermal direct current field** to the cell membrane
- Irreversible process, leading to cell death
- With lower energy, it can cause an increase in permeability of the cell membrane, allowing drug absorption
- Relative **tissue specificity** affecting only myocardium



# Carbon vs Protons

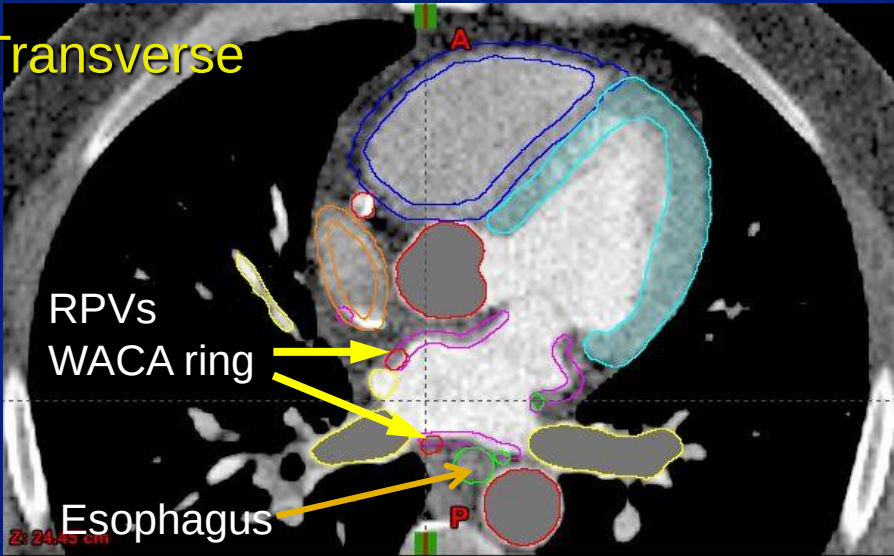


# WACA Contouring Outcome

Lesion Dimension = 6x6 mm

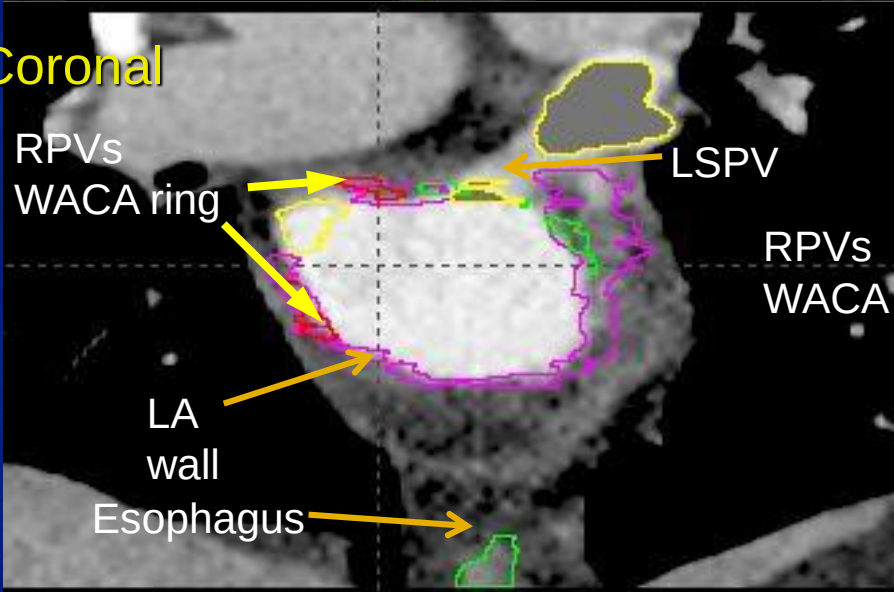
WACA-ring metrics (0% RR)

Transverse

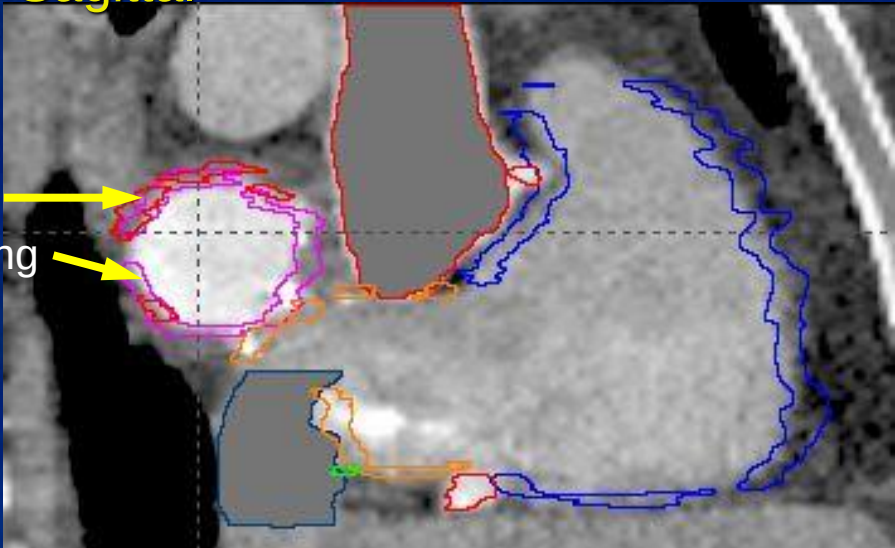


| Dimension         | Mean $\pm$ SD (mm) |
|-------------------|--------------------|
| • RPVs ant.-post. | 34.6 $\pm$ 4.2     |
| • RPVs sup.-inf.  | 33.8 $\pm$ 5.8     |
| • LPVs ant.-post. | 28.4 $\pm$ 4.3     |
| • LPVs sup.-inf.  | 29.1 $\pm$ 5.7     |

Coronal



Sagittal



# Complications

