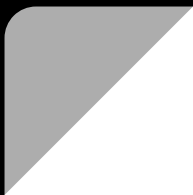


# LAST DAY! :) or :( ?

Don't update your computer's yet. But be sure to do it first thing when you get home!



# Heart Physiology

---

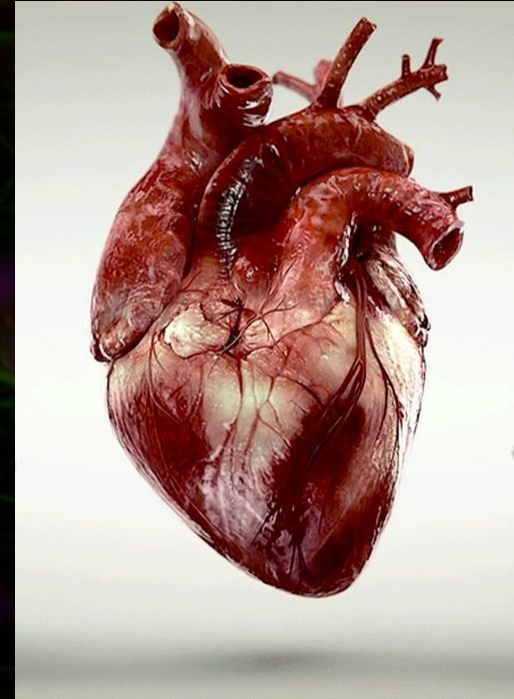
Samuel Bechara, PhD

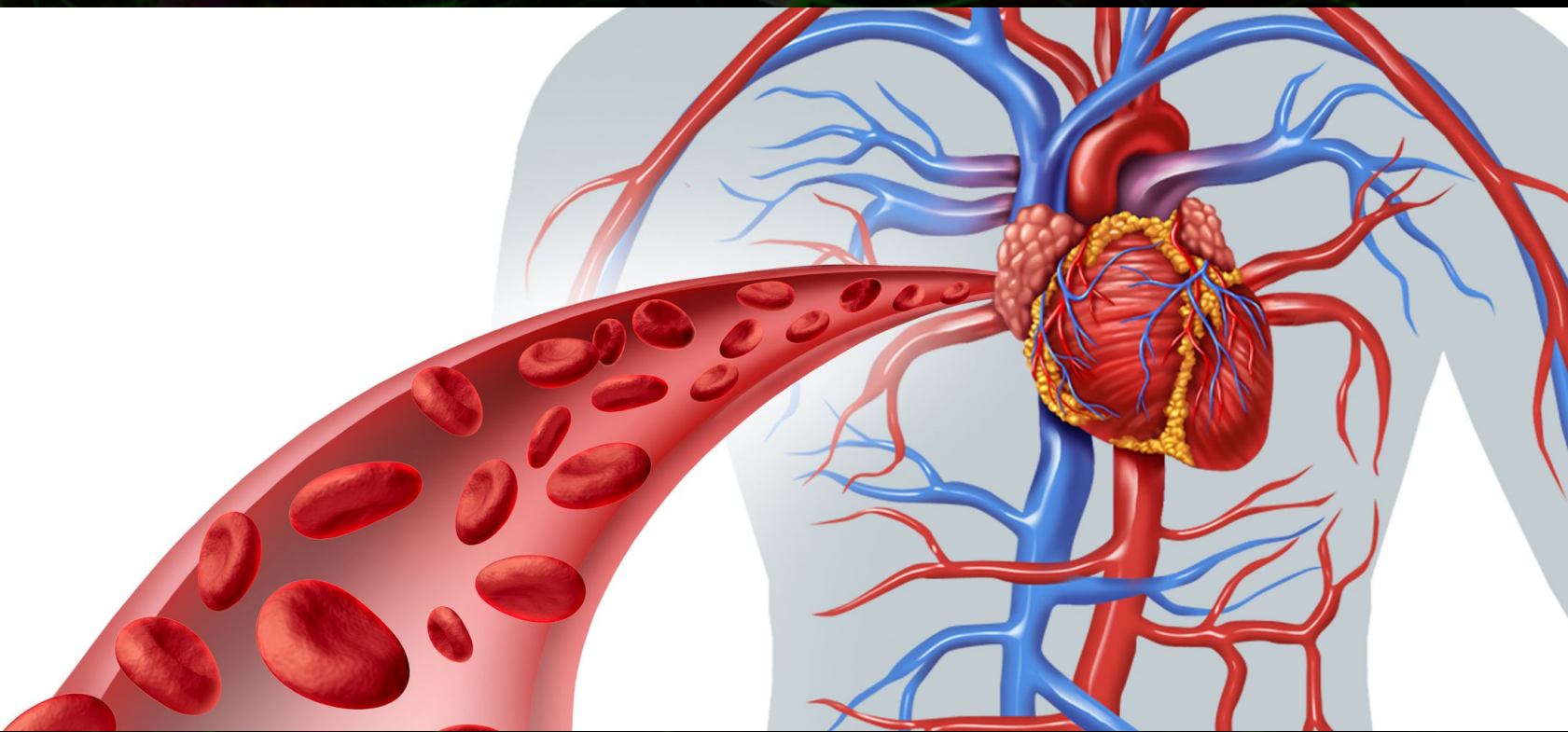
Assistant Chair and Lecturer  
Department of Biomedical Engineering  
Marquette University



**Who needs em?**

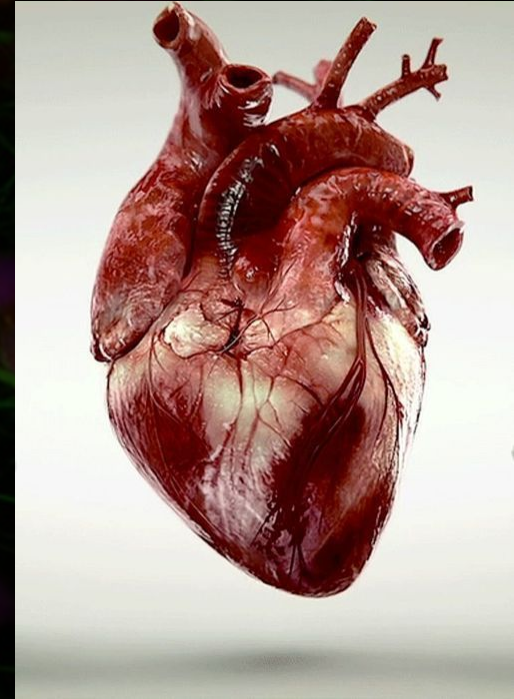
**What are they for?**



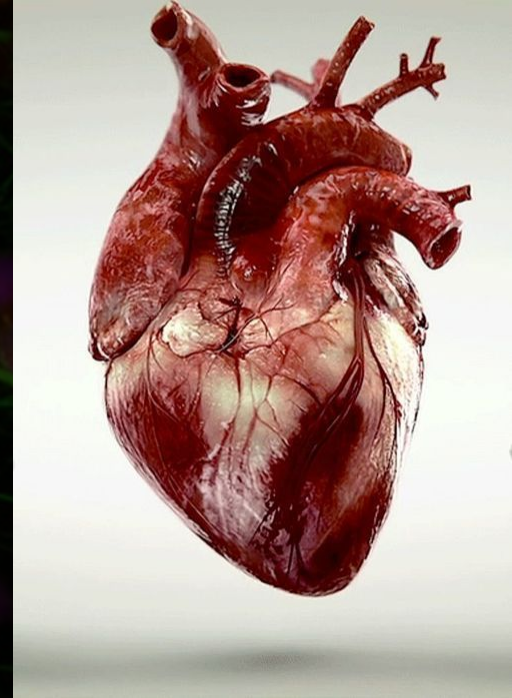




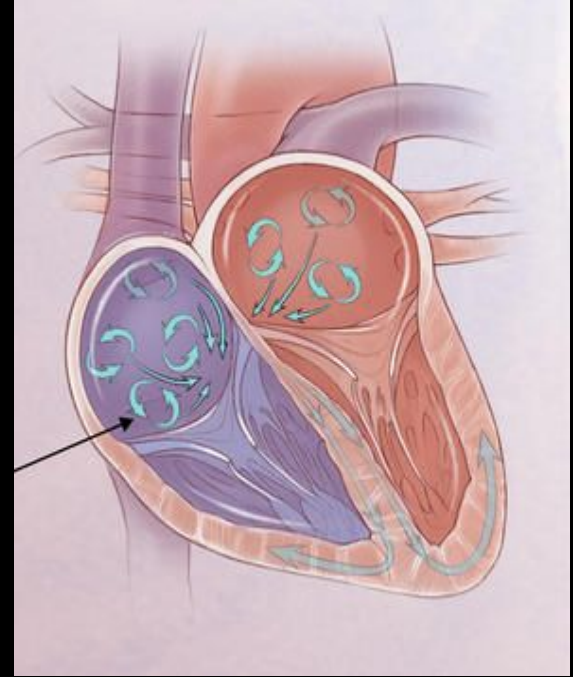
**610,000 People die from  
heart disease each year  
in the US**



**That is 1 in every 4  
deaths**



# Problem: Atrial Fibrillation (AFib)



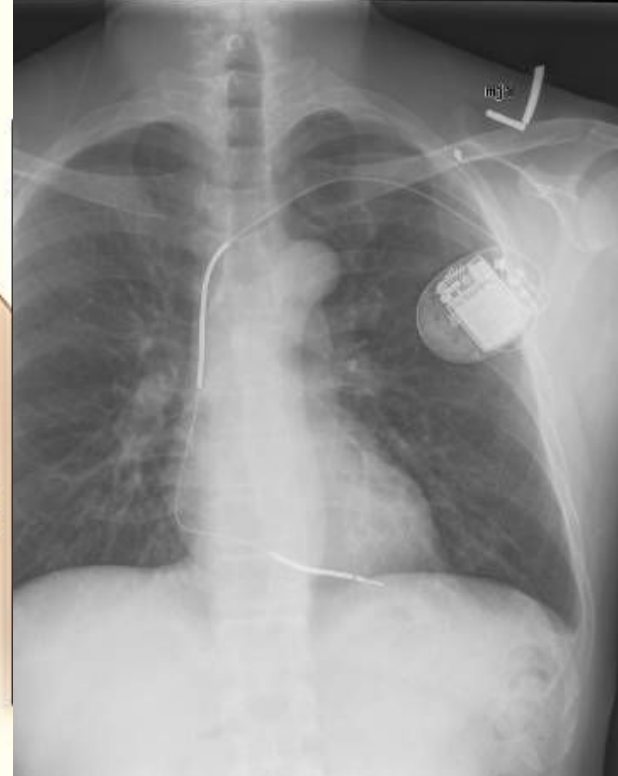
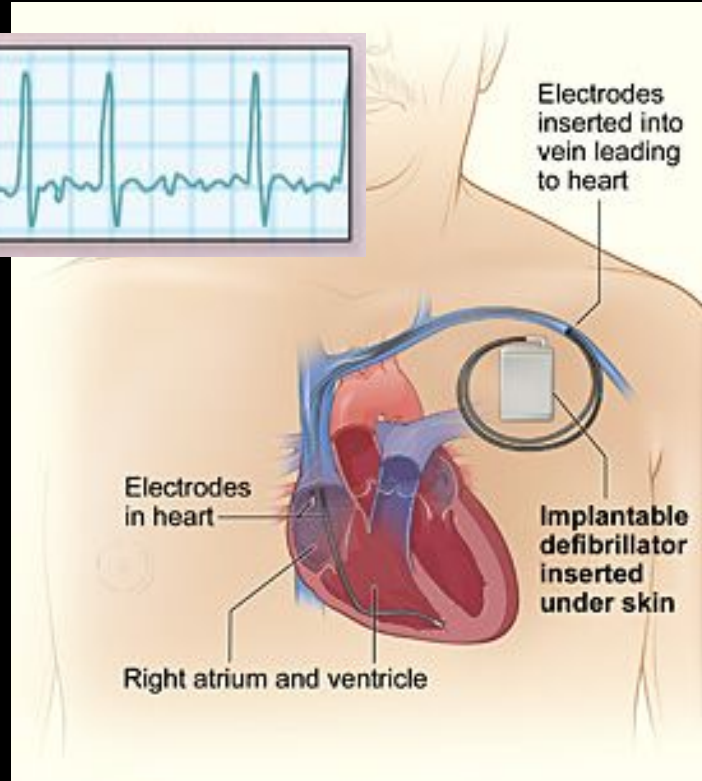
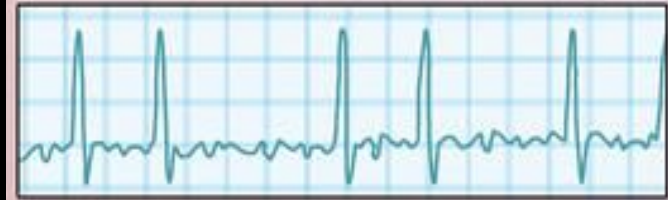


# Automated External Defibrillator





# Implantable Cardioverter Defibrillator



# Understanding an ECG

## Electrical activity

1. P-Wave  
Atrial depolarization
2. QRS - Complex  
Depolarization of the ventricles
3. T-Wave  
Ventricular Re-polarisation

