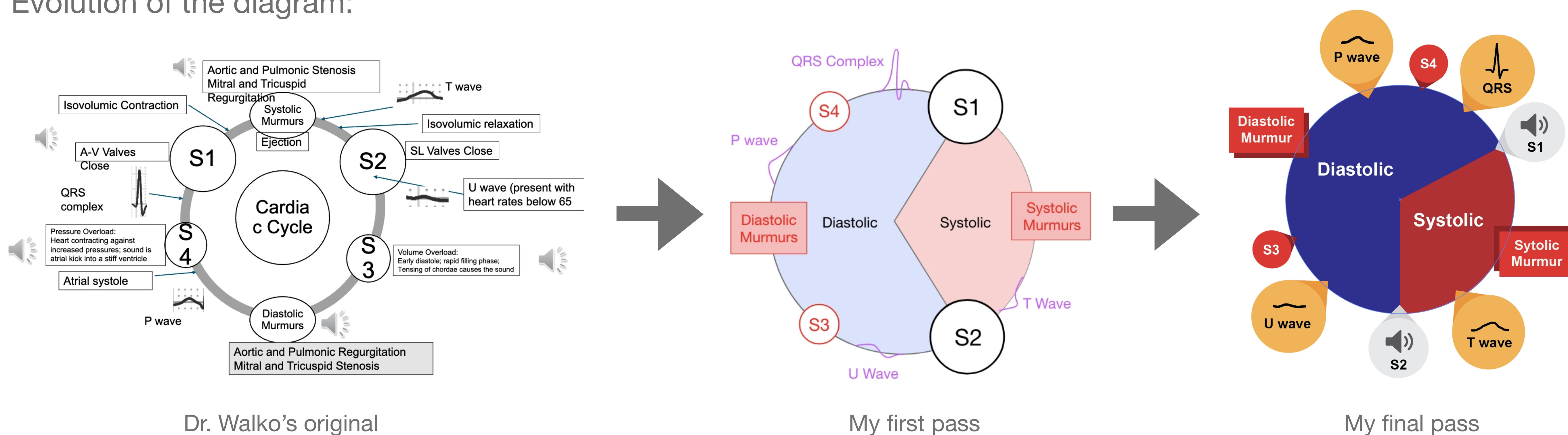


Use Case:

Teaching the cardiac cycle can be a challenge. Getting students to understand the cyclical nature of the heart is pretty hard when using a traditional Wiggers diagram. Dr. Fink and Dr. Walko conceptualized a solution that displays the parts of the cycle along a circle instead of a straight line. I took their diagram and turned it into an aesthetically pleasing interactive visualization. The purpose of this visualization is the same as the original concept: to show students how the cardiac cycle works.

Evolution of the diagram:



Interactivity:

Interactive Heart Rate Visualization

Sounds
 Electrical
 Abnormalities

Abnormalities

[Play Animation](#)

S4

S4 is an abnormal heart sound that occurs during late ventricular filling. Pressure Overload: Heart contracting against increased pressures; sound is atrial kick into a stiff ventricle

[Play Sound](#)

Horizontal ECG Reference

The arrow shows the direction of blood flow through the heart chambers. As blood flows, it triggers electrical signals and heart sounds in sequence.

Created by: Emilie Whitewolf

Users can interact with the visualization in many ways including:

- Playing/Stopping the animation using the play/stop button
- Showing/hiding layers using the filters near the top
- Showing information about each part of the cycle by clicking on it.
- Playing/Pausing the sound a part of the cycle makes by using the play sound button