

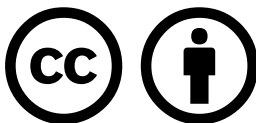
Anatomy for Echocardiography

2021.01.13

Azad Mashari

Department of Anesthesiology & Pain Management
Toronto General Hospital, University of Toronto





This work is licensed under a Creative Commons Attribution 4.0 International License.

For details see: <https://creativecommons.org/licenses/by/4.0>

You are free to:

- **Share** — copy and redistribute the material in any medium or format
- **Adapt** — remix, transform, and build upon the material

for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

- **Attribution** — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
- **No additional restrictions** — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

Notices:

- 1) You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.
- 2) No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.

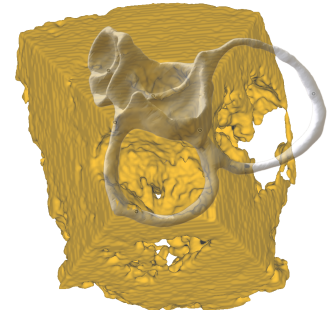
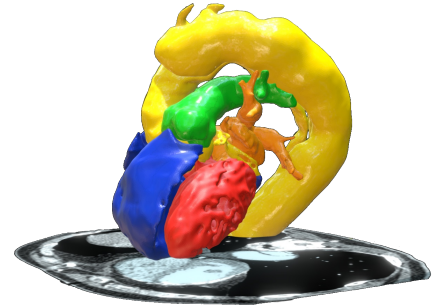
Conflict of Interest

No conflicts of interest with respect to the content of this presentation.

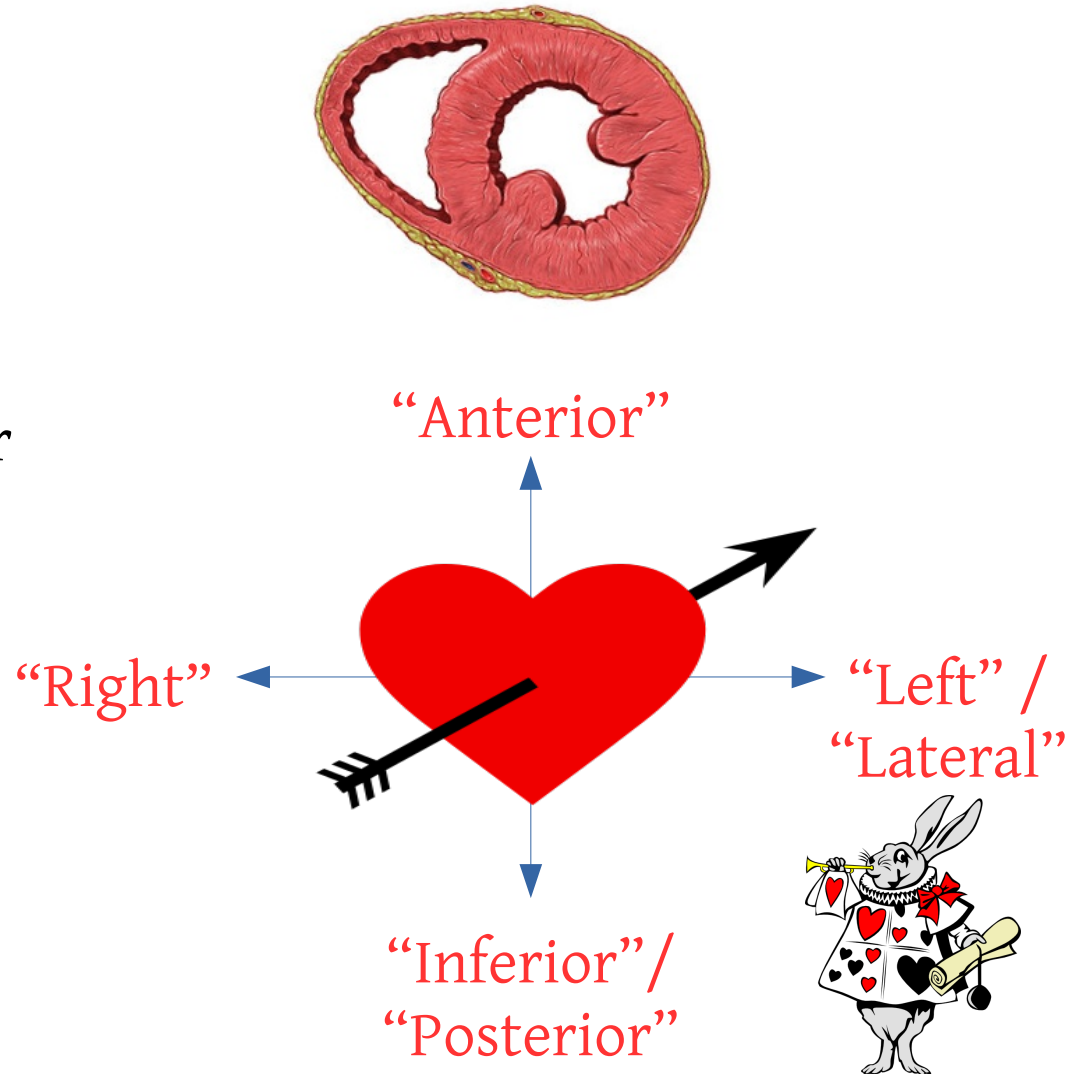
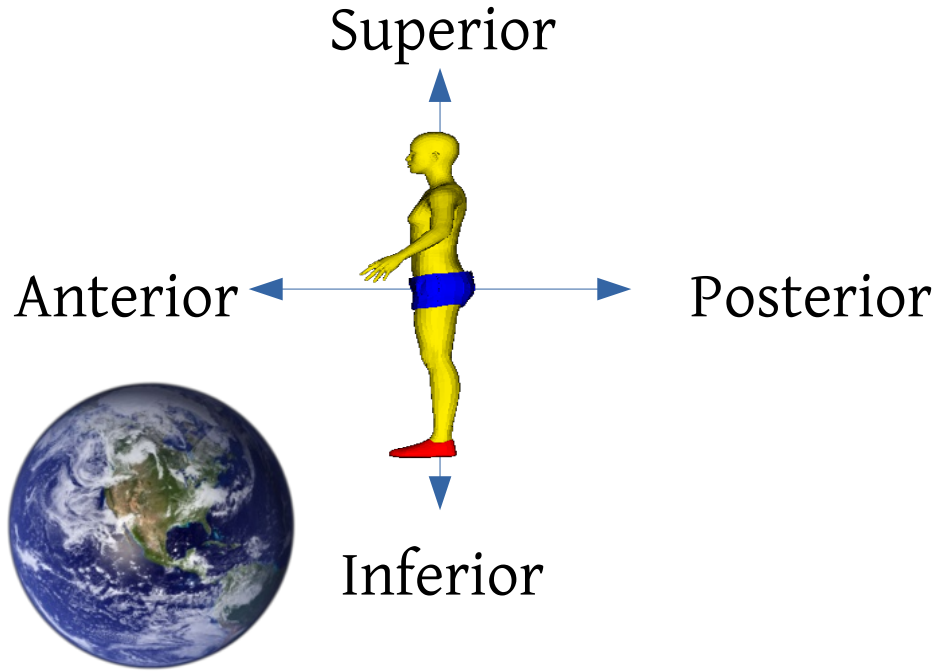
Research funding from Peter Munk Cardiac Center Foundation.

Objectives

1. Visualize the structure, position and orientation of the **heart base** in the thorax
2. Visualize the chambers, great vessels in relation to the heart base



(Dis)orientation of the heart



Loukas M, Aly I, Tubbs RS, Anderson RH. The naming game: A discrepancy among the medical community: The Naming Game. *Clinical Anatomy*. 2016 Apr;29(3):285–9.

Cook AC, Anderson RH. Attitudinally correct nomenclature. *Heart*. 2002;87(6):503–506.

“it is questionable whether the so-called “posterior” descending artery is truly posterior to its purportedly ‘anterior’ partner”

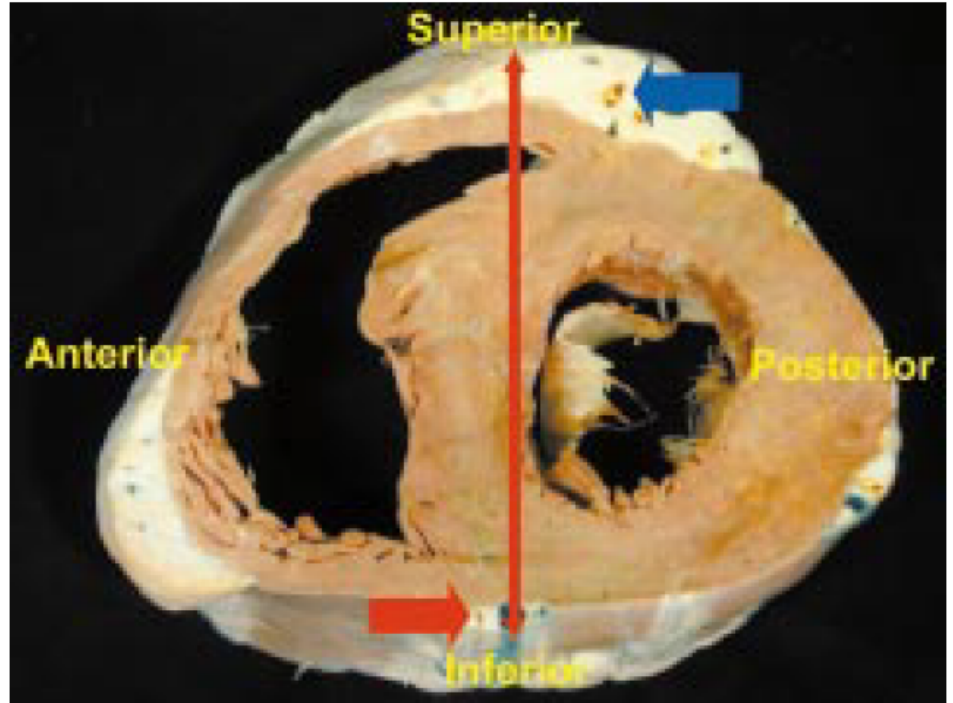
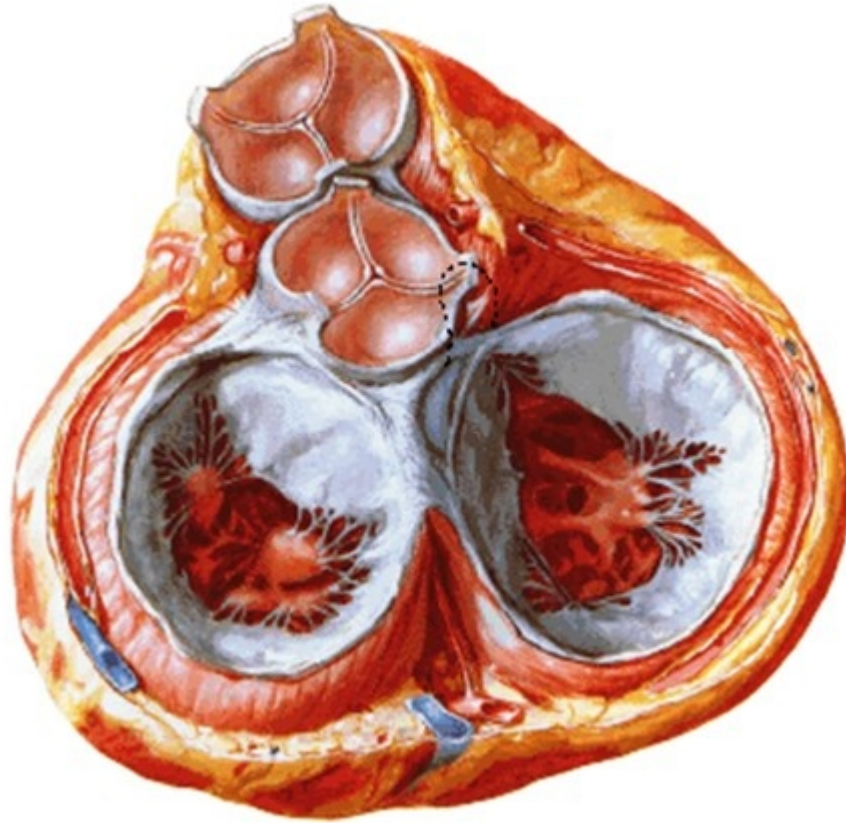
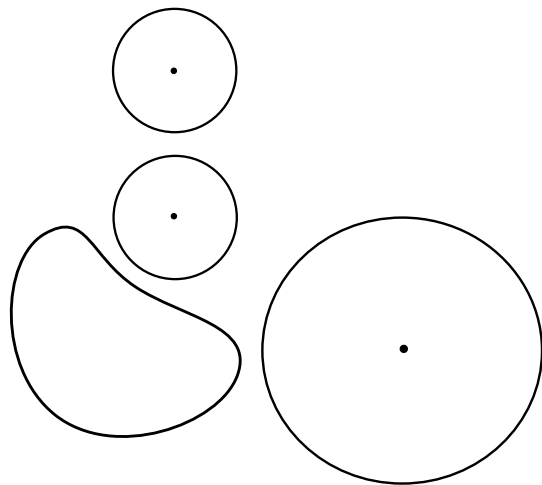


Figure 8 A short axis cut has been made through the ventricular mass replicating the left anterior oblique projection. Yellow injectate has been placed into the coronary arteries. Using current nomenclature, the artery shown supplying the top part of the muscular ventricular septum, and indicated by the blue arrow, is called the “anterior descending artery”. As can be seen, in reality the artery is superior. It is, in fact, posterior to the artery supplying the diaphragmatic surface. This artery, shown by the red arrow, should properly be called the inferior interventricular artery.

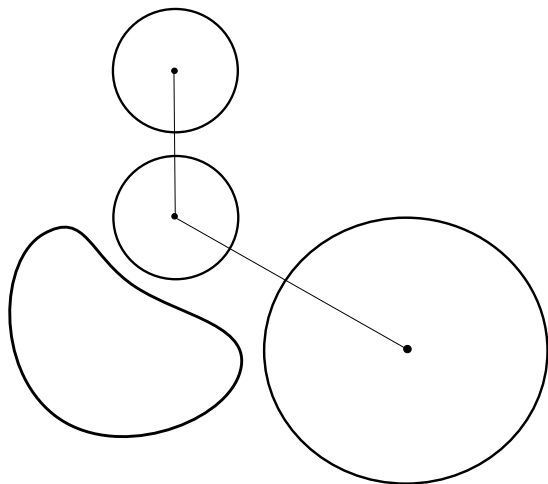
The Heart Base



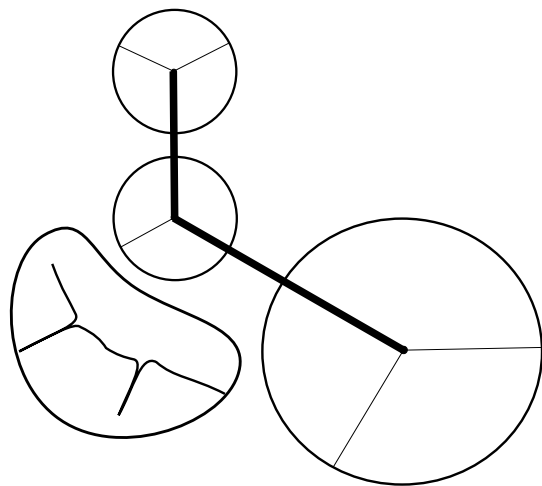
1

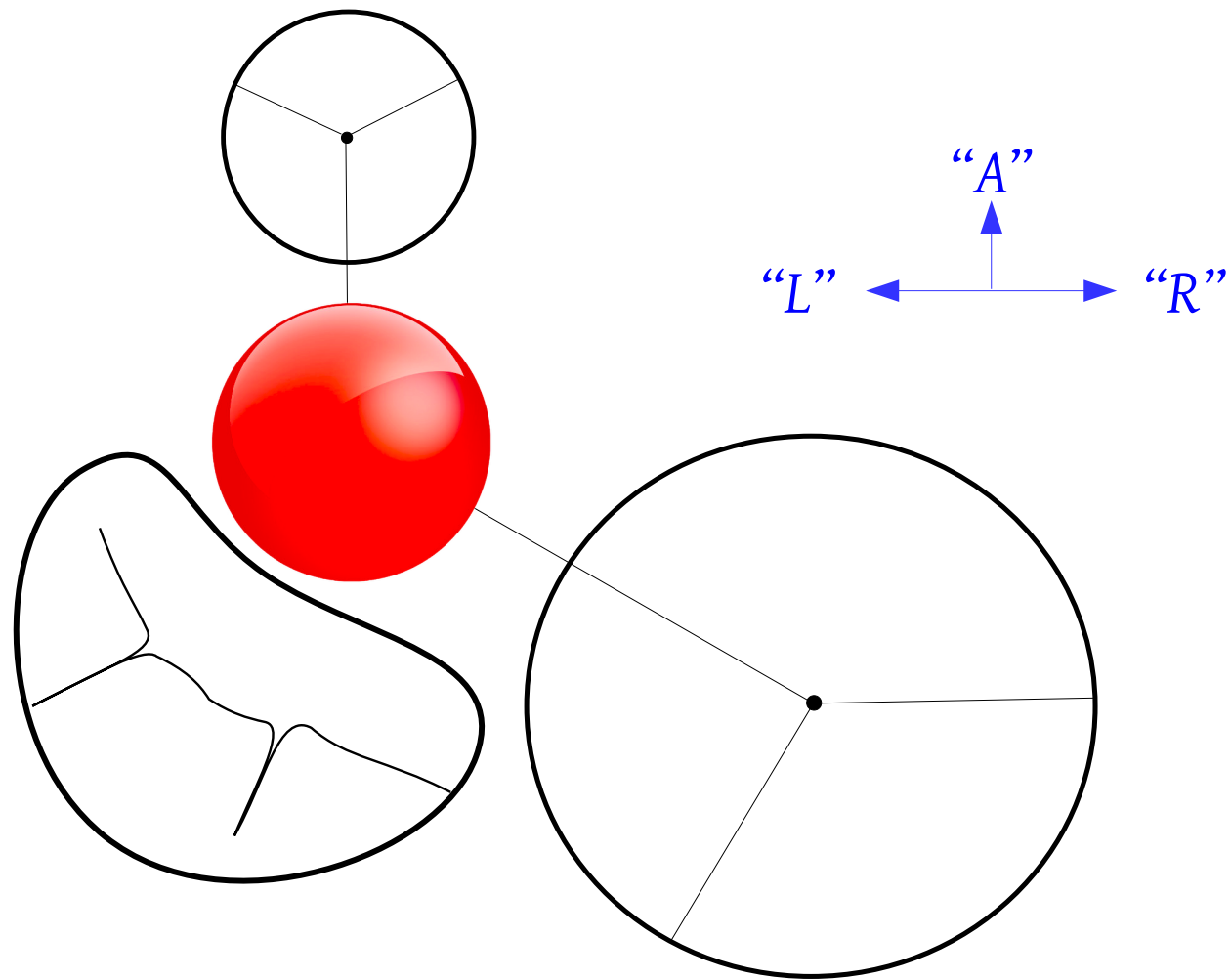


2

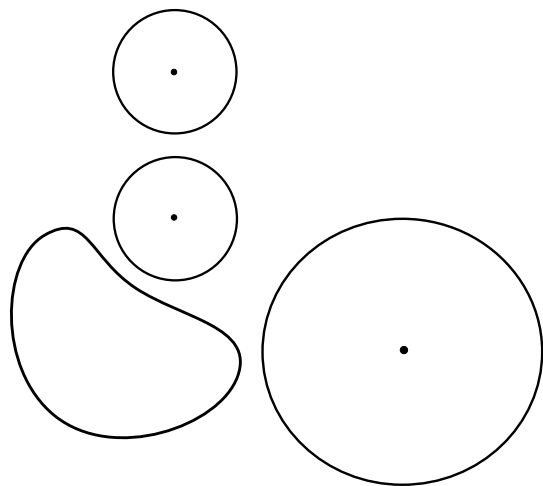


3

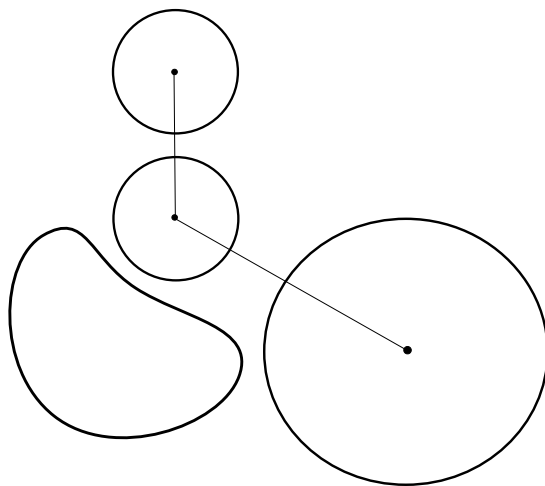




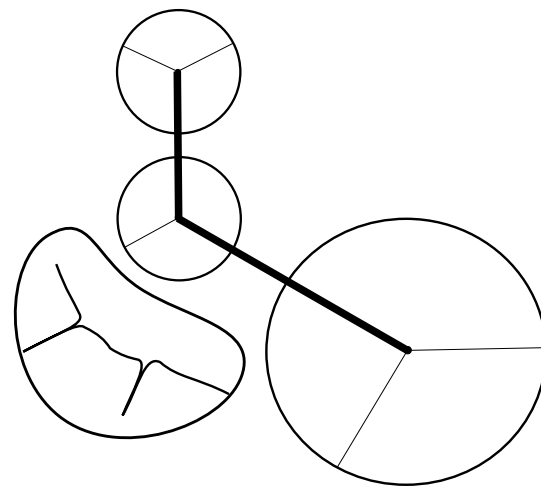
1



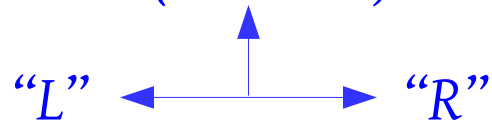
2

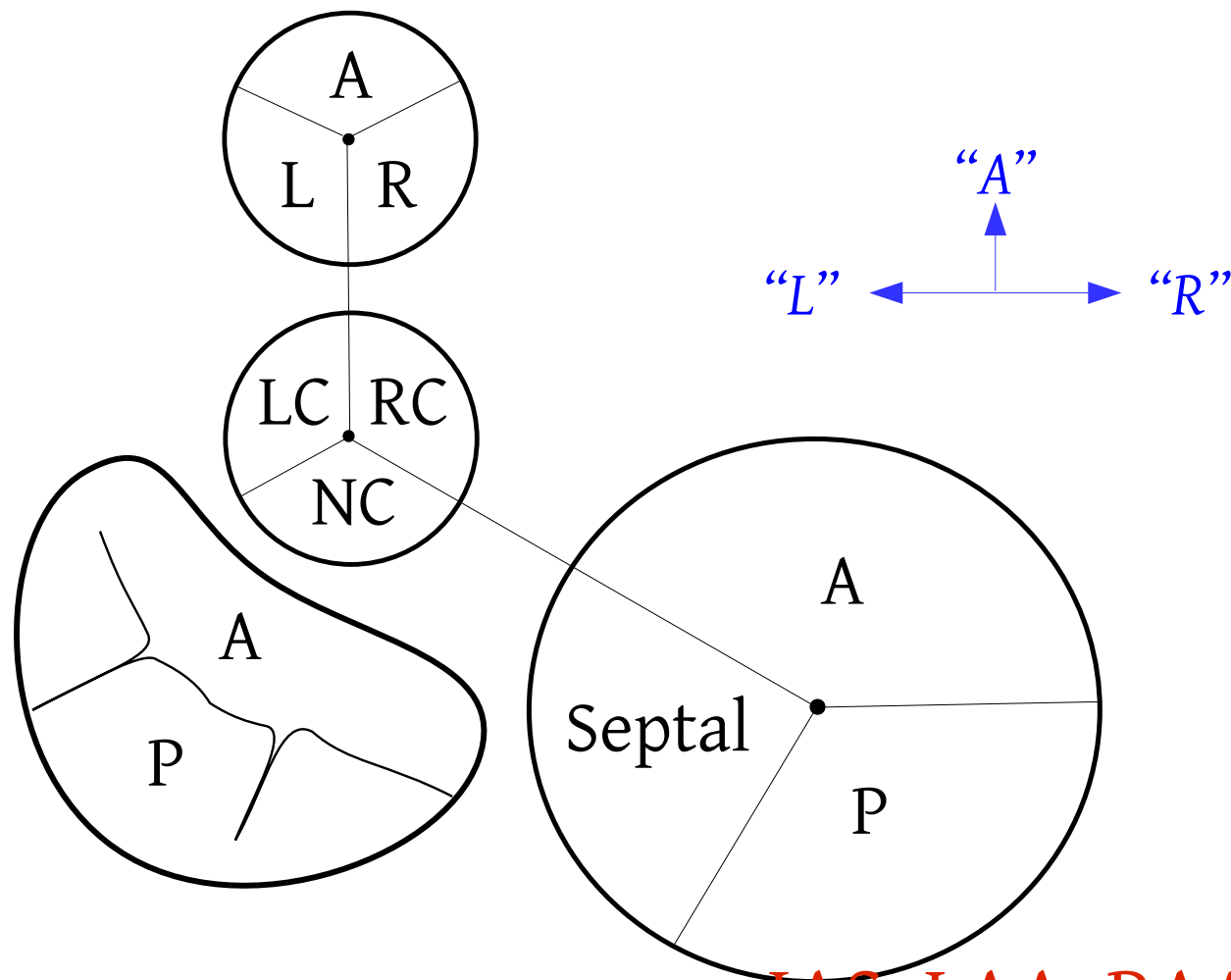


3

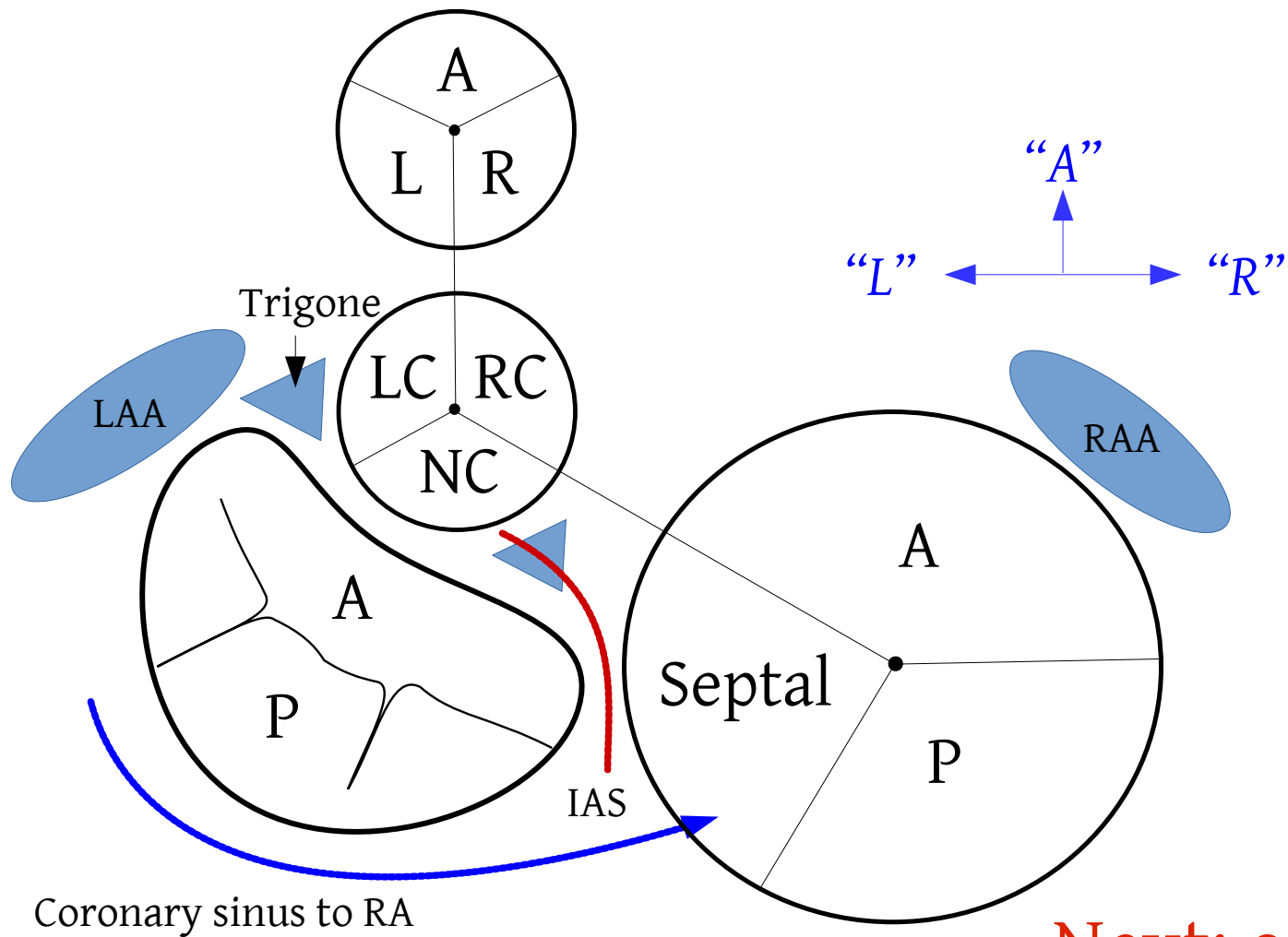


A (Sternum)

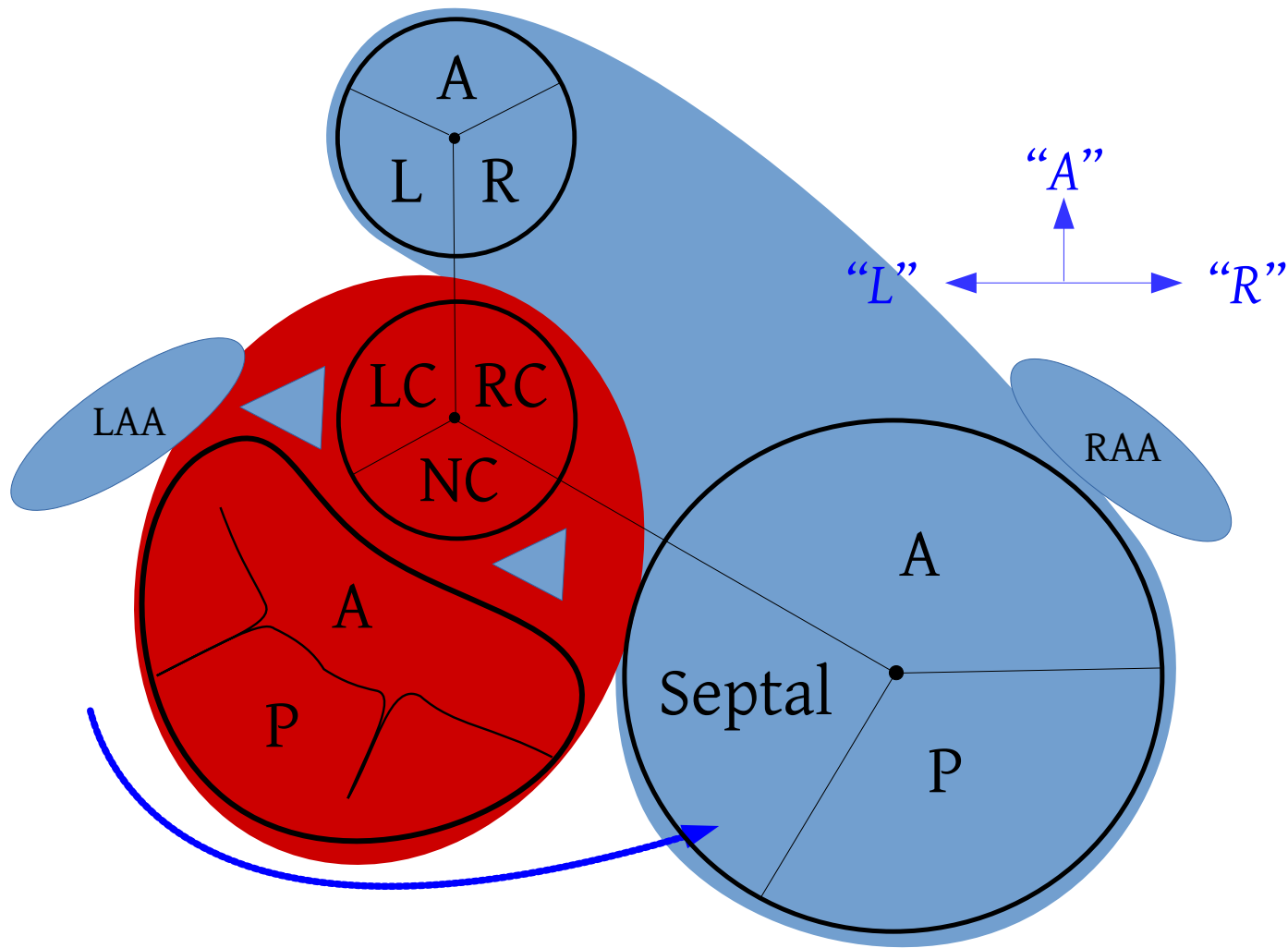


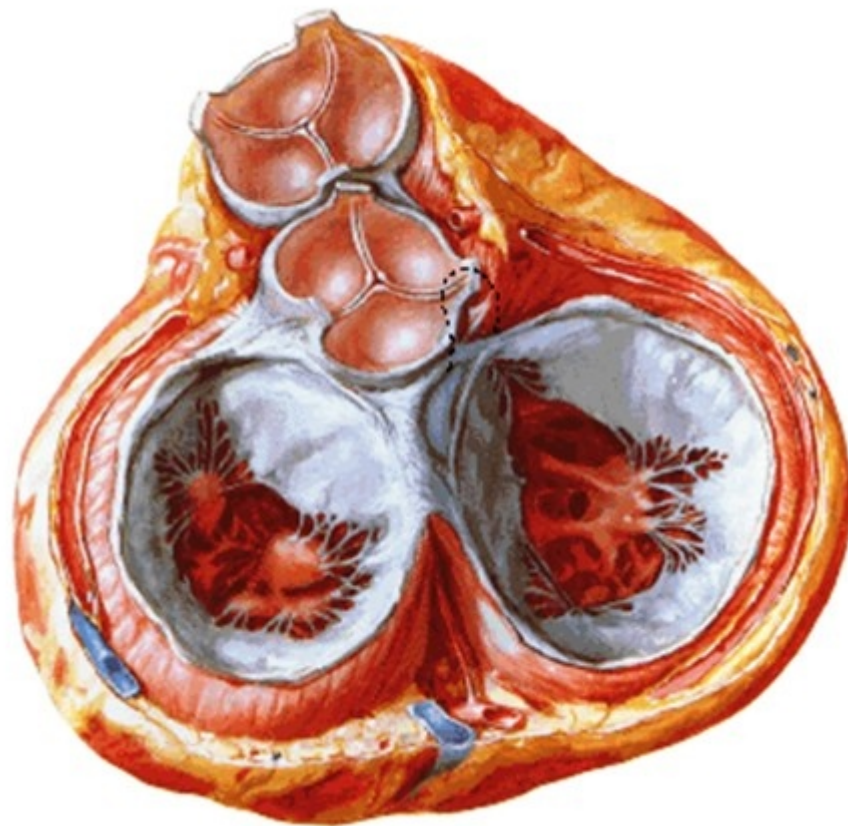
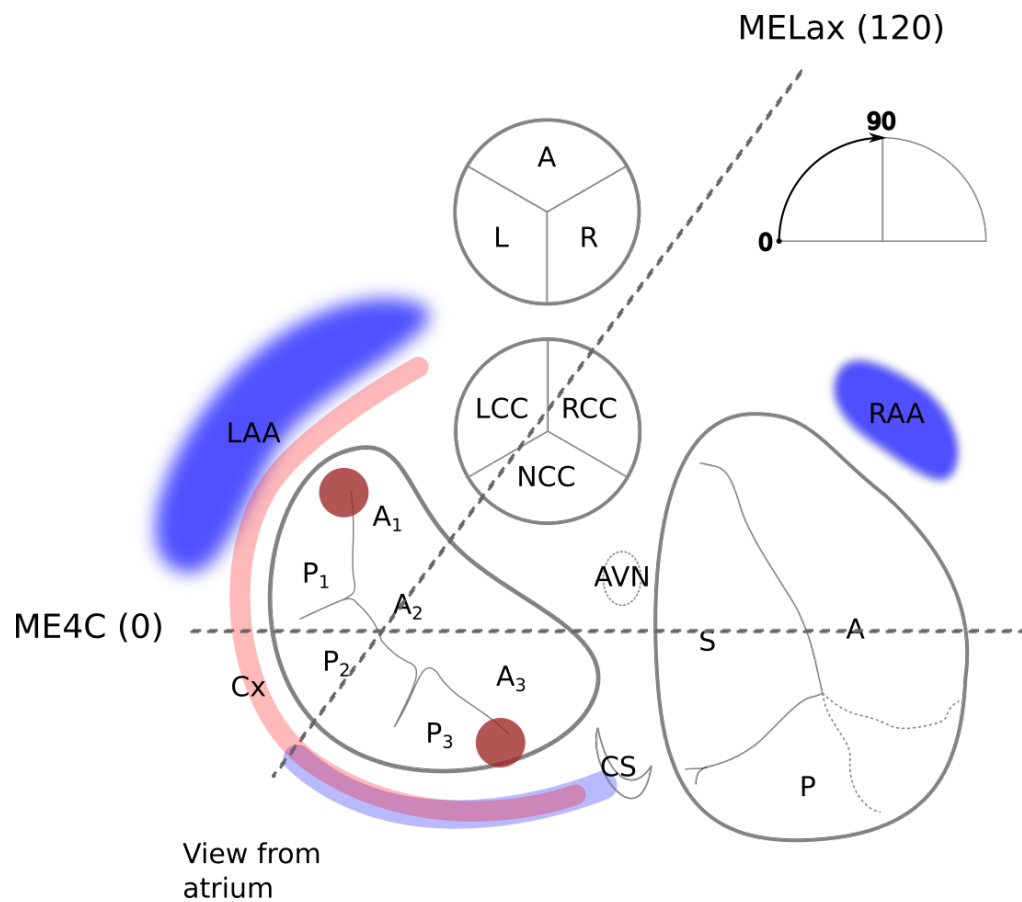


... IAS, LAA, RAA, Coronary sinus

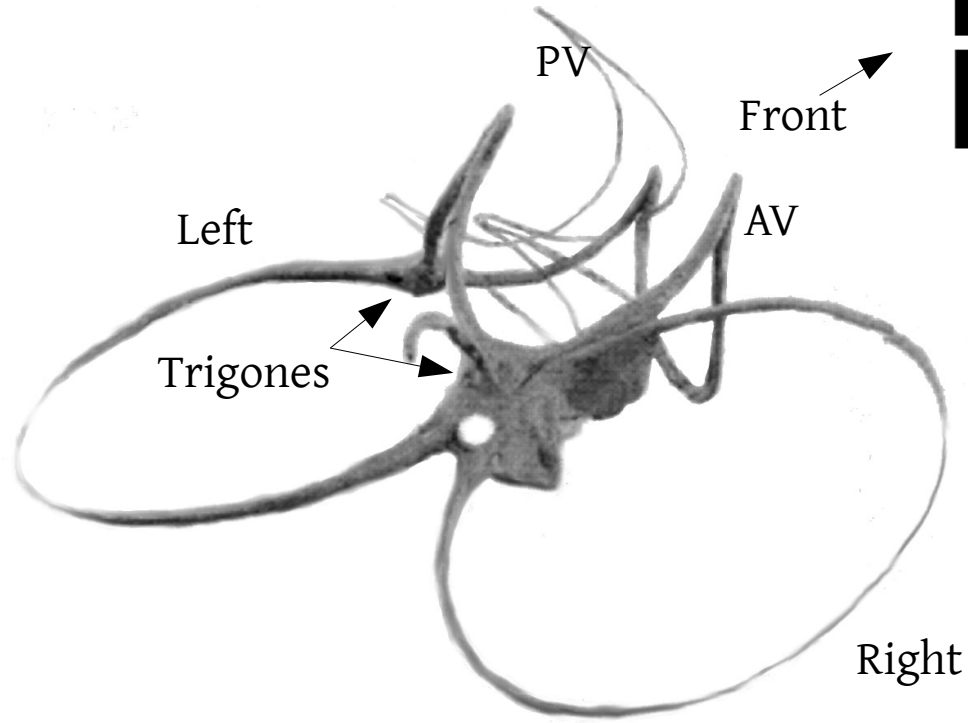


Next: outline of RV/ LV



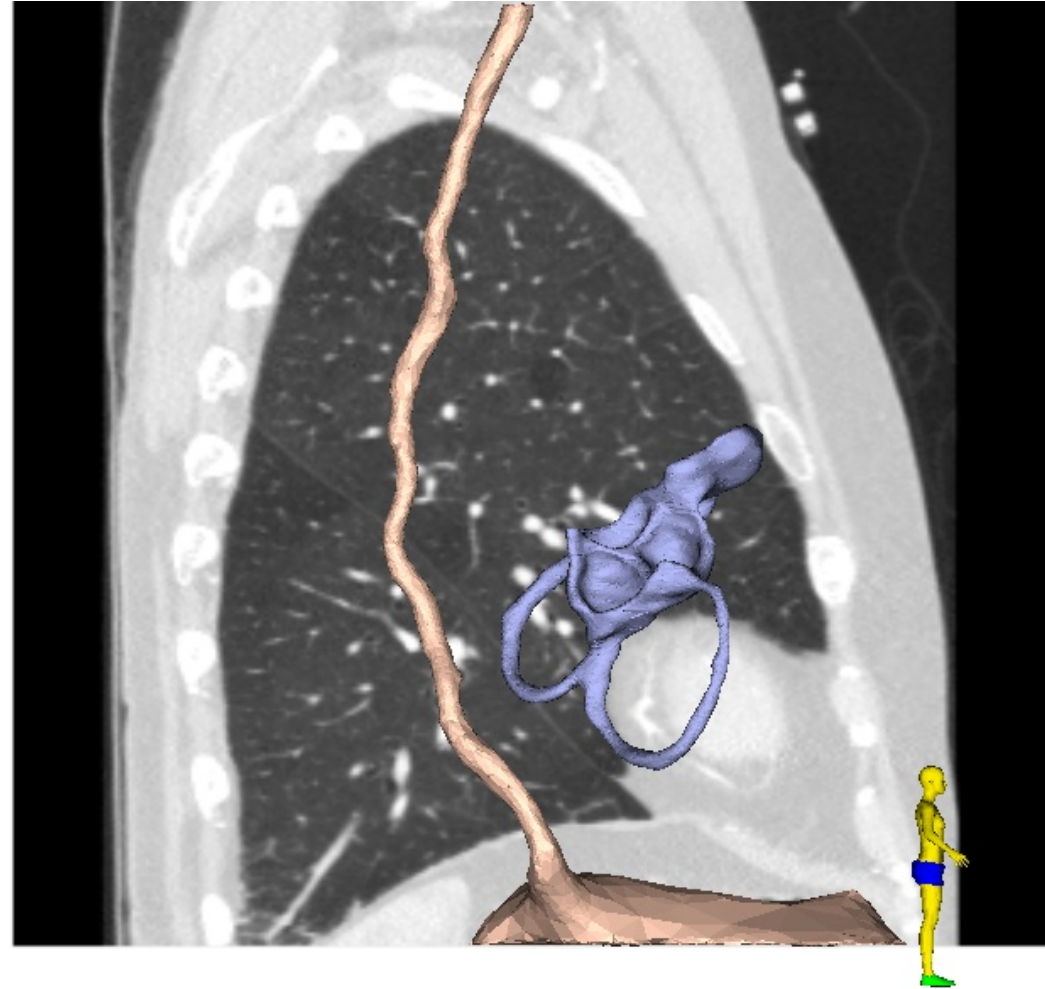
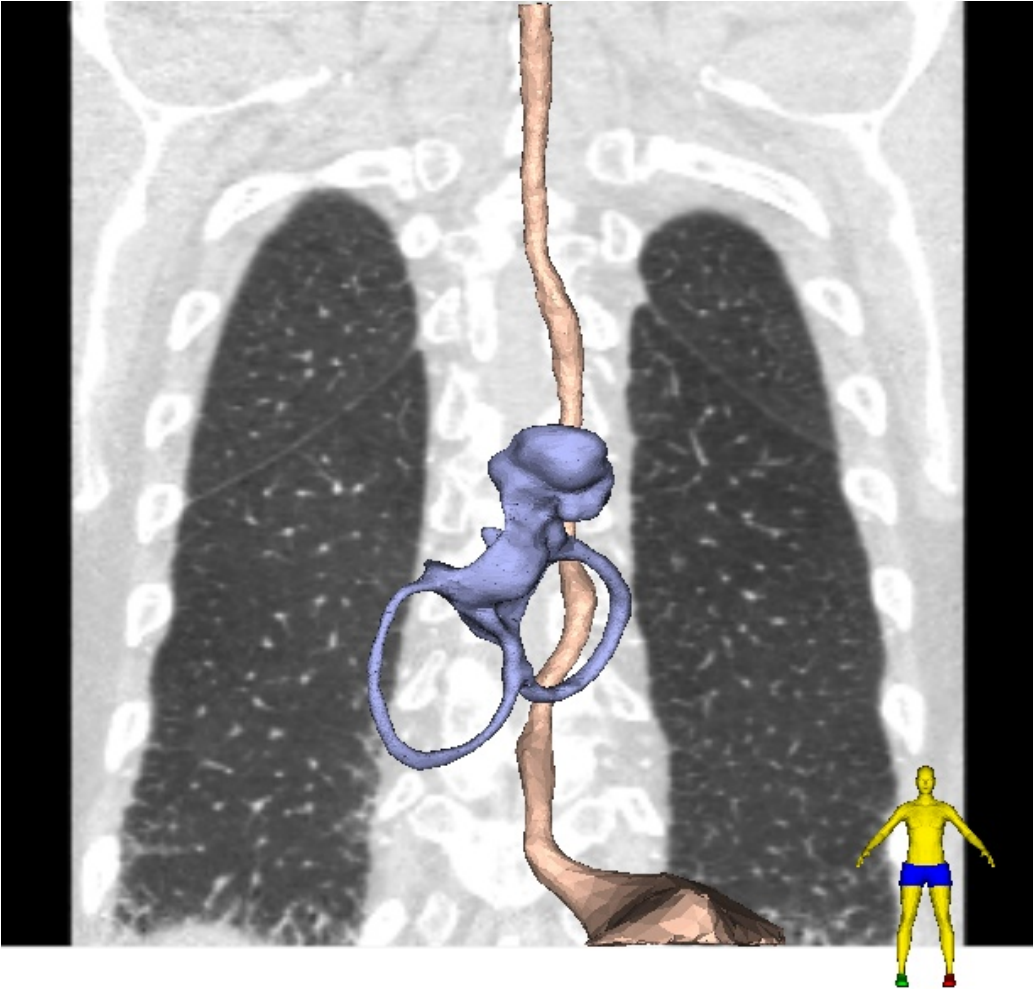


Fibrous Skeleton

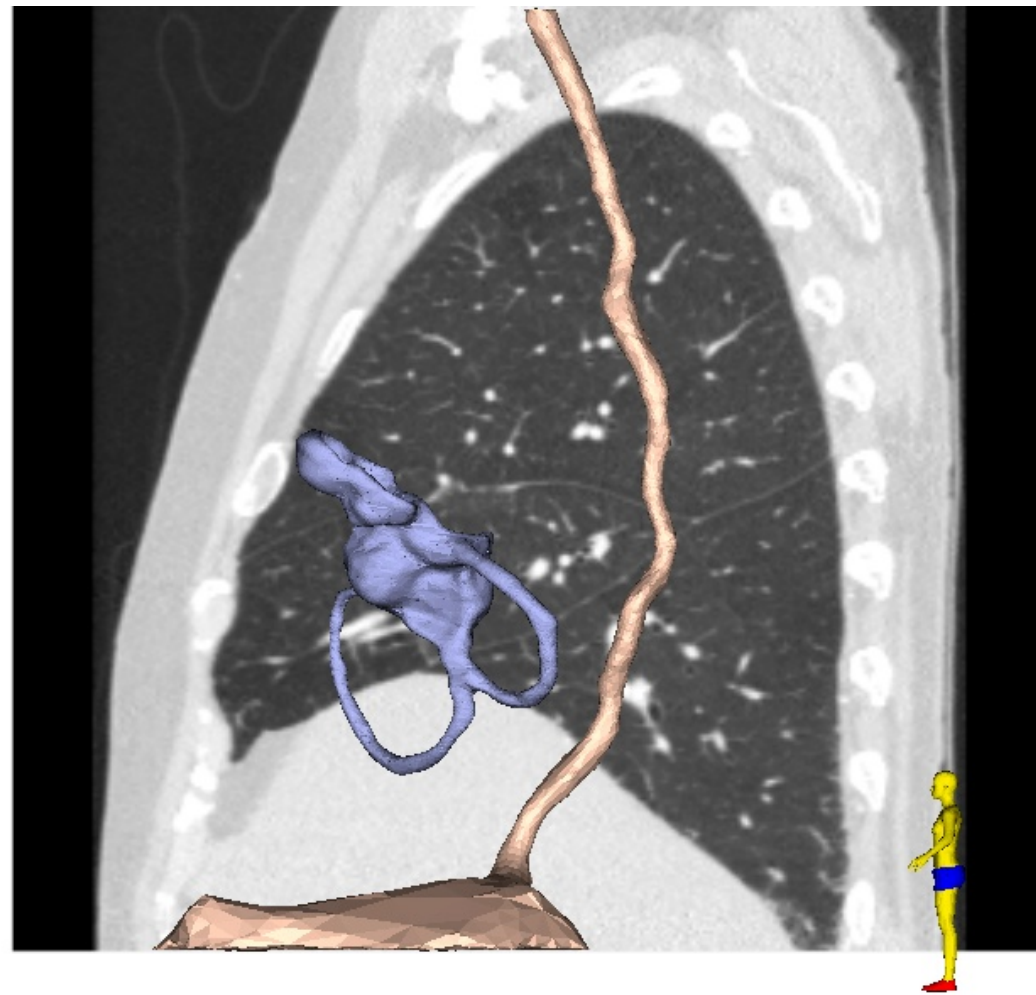
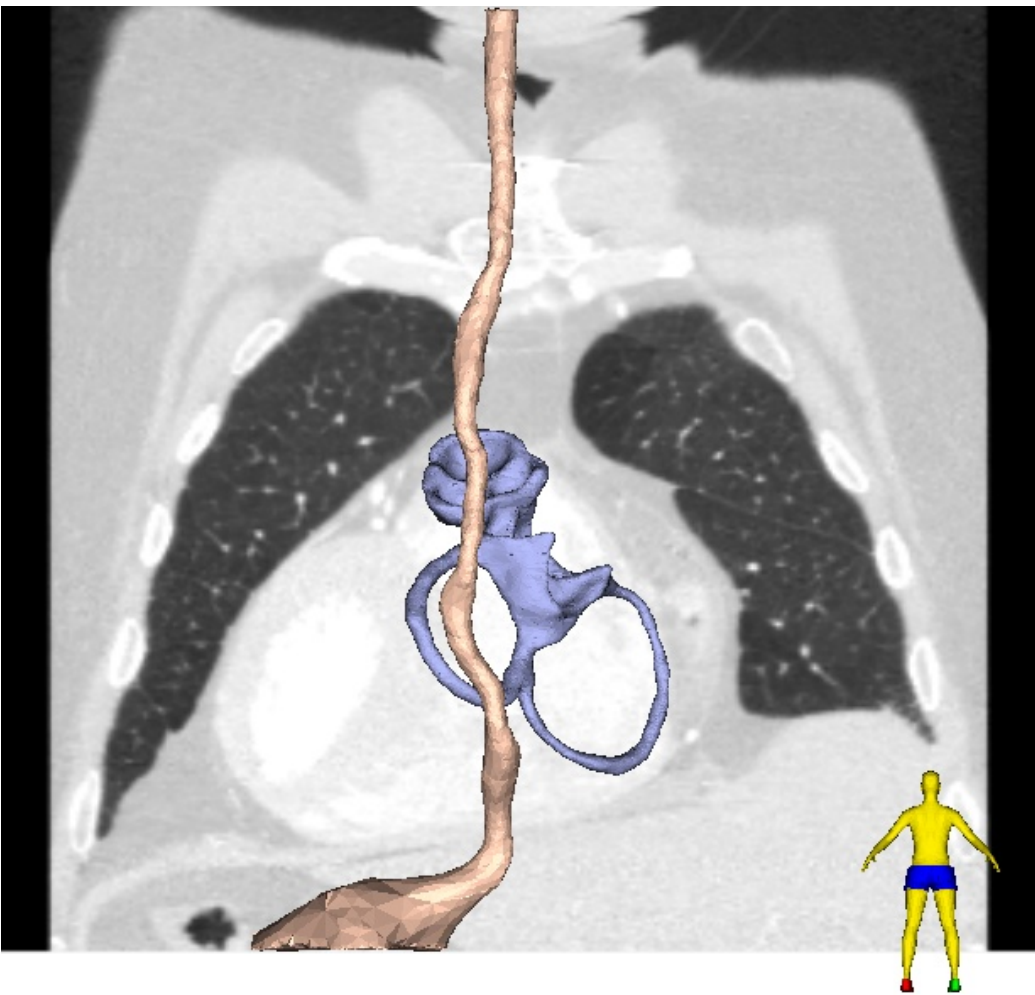


Zimmerman (1966)

Position of the heart base in the thorax



Position of the heart base in the thorax



<https://skfb.ly/6GUUW>

