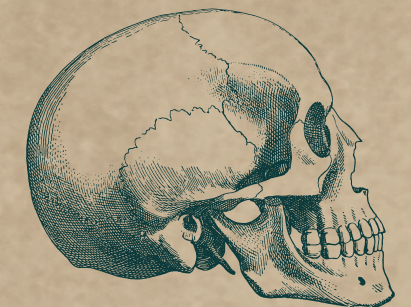
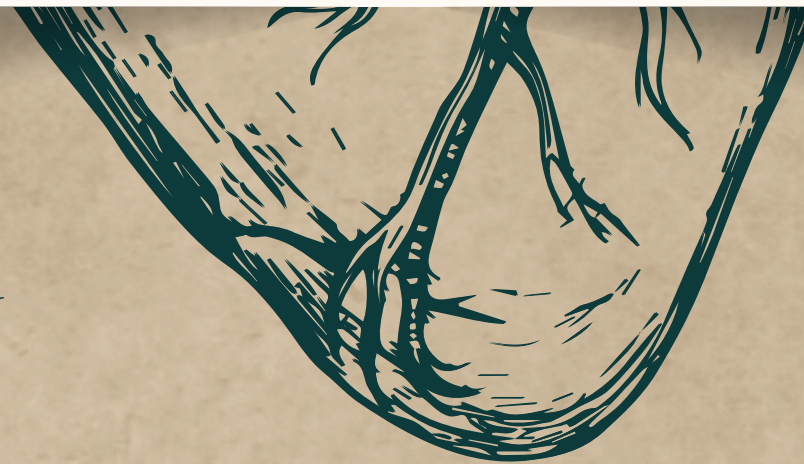
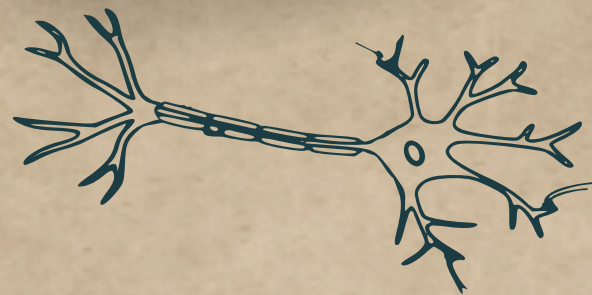
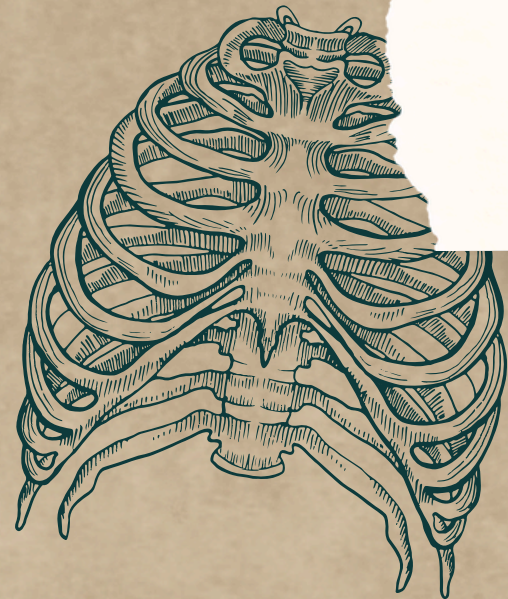
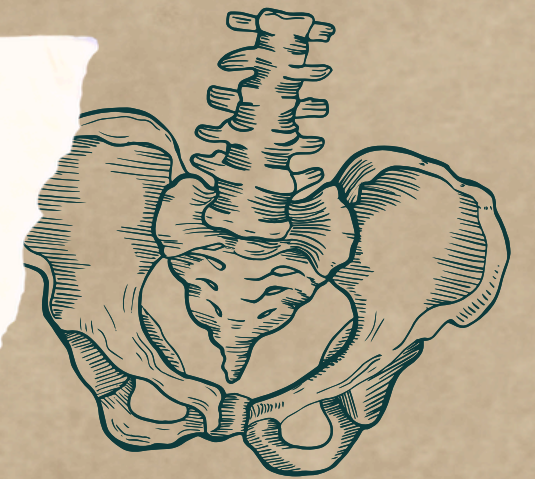


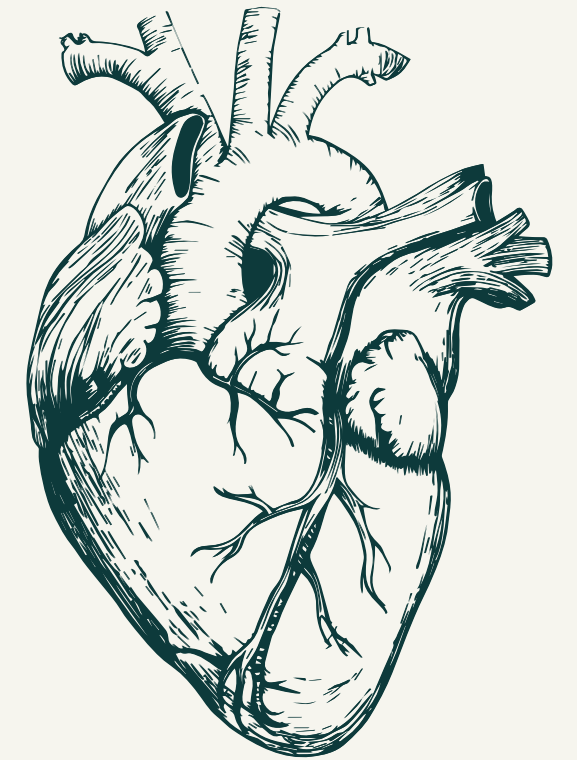
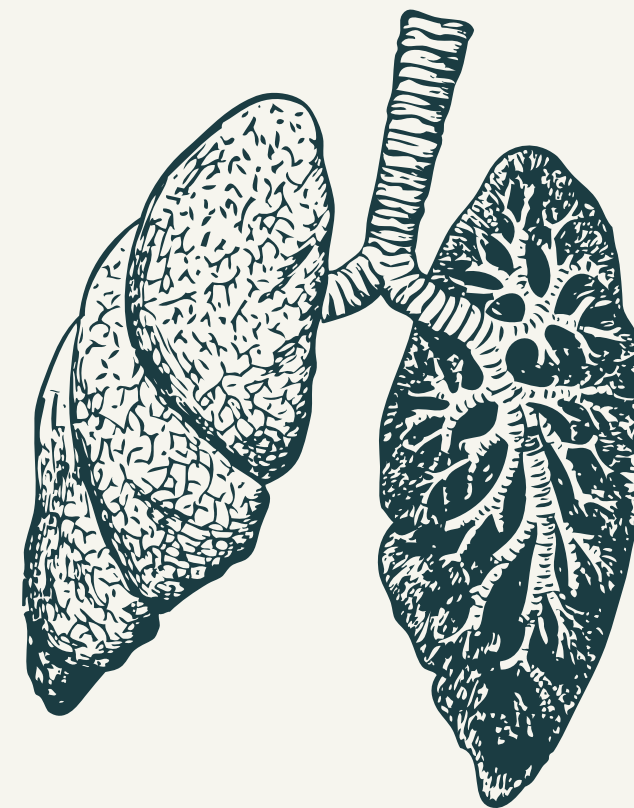
PULMONARY AND CARDIAC INSTRUMENTS



For surgical techs made by a surgical tech

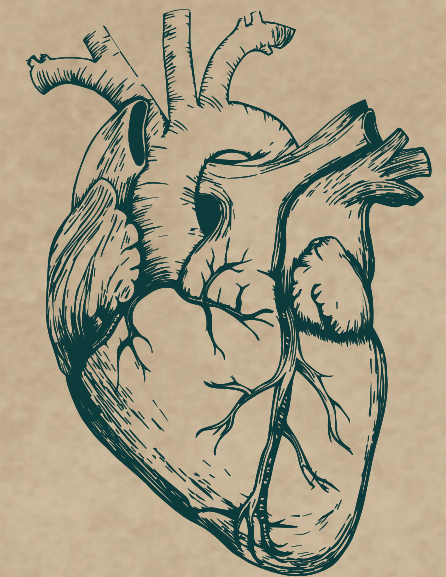
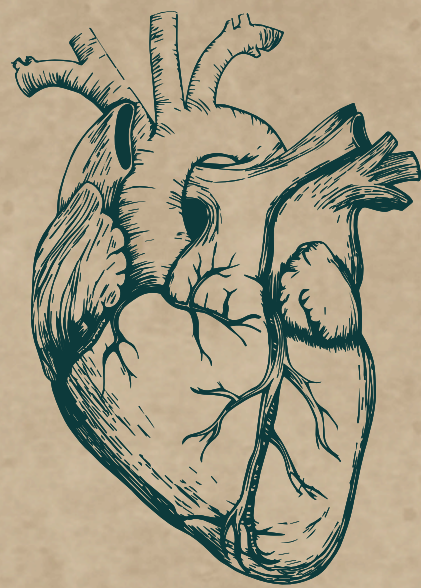
THE CVOR

For higher pay, it's important to scrub for open-heart cases. The difficulties of these surgeries are what make it a high-paying specialty. You must know what you're doing and the instruments your handling.



INTRODUCTION

This presentation is to help familiarize you with the instruments used in Cardiothoracic cases.



LEBSCHKE KNIFE

Cutting and dissecting

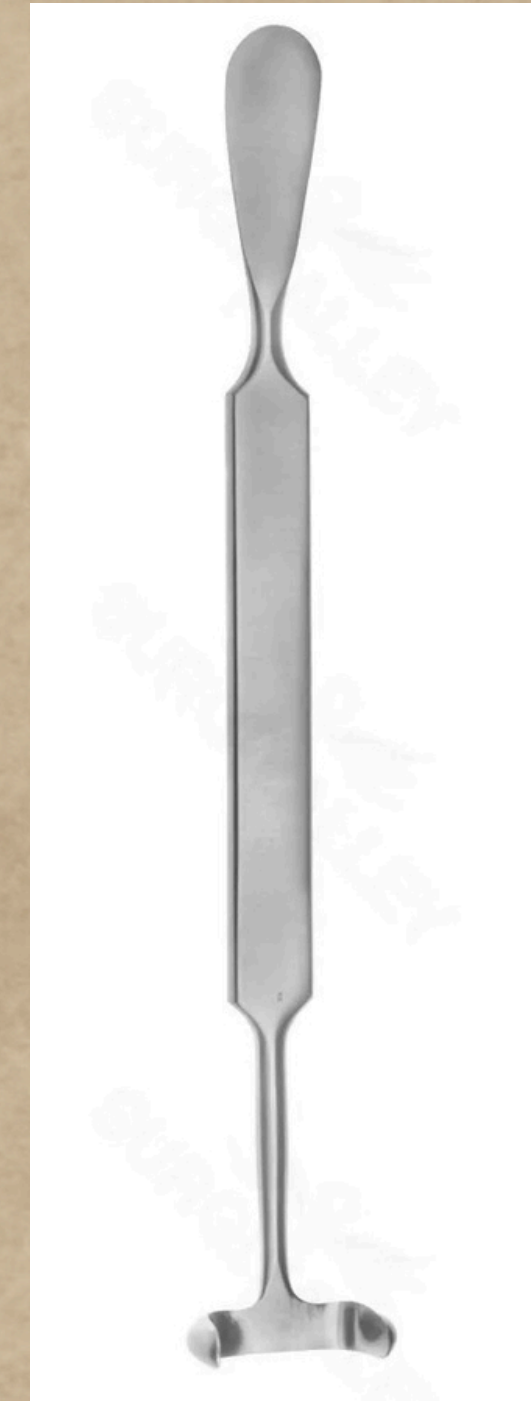
What a Lebsche Knife Is

- It's a sternum or sternal knife essentially a chiseling tool designed to split the breastbone (sternum) during open-chest procedures like cardiac surgery.
- Surgeons use it in a median sternotomy, where the sternum is divided down the middle to access the heart and lungs.
- The blade is shaped more like a chisel or heavy knife that's struck with a mallet to give controlled force.



MATSON RIB STRIPPER AND ELEVATOR

Cutting and dissecting



What They Are & How They're Used

Matson rib strippers and elevators are double-ended surgical instruments designed to:

- Strip muscle, periosteum, and soft tissue off rib surfaces to prepare for rib cutting or retraction.
- Elevate ribs or periosteal flaps to gain surgical access to the thoracic cavity.
- They are commonly used in thoracic/cardiac surgery settings.

STERNAL SAW

Cutting and dissecting

A sternal saw is a powered surgical instrument used in cardiothoracic surgery to divide the sternum (breastbone) during a median sternotomy. It typically uses a reciprocating or oscillating blade to create a precise midline cut, allowing surgeons access to the heart and lungs for procedures such as open-heart surgery. The device is designed for controlled bone cutting in sterile operating room settings.



SAUERBRUCH RIB SHEAR

CUTTING

A Sauerbruch rib shear is a surgical bone-cutting instrument used in thoracic and cardiovascular surgery to cut ribs during procedures like thoracotomies where access to the chest cavity is needed. It has hooked or angled blades designed to contour to the curved surface of a rib, allowing the surgeon to stabilize and shear through bone cleanly and efficiently with minimal soft tissue trauma. The instrument is reusable, made of surgical-grade stainless steel, and is operated by hand much like a heavy pair of shears or cutters.



STILLE GIERTZ RIB SHEARS

Cutting (resection)

Stille Giertz rib shears are heavy-duty surgical instruments used in thoracic (chest) surgery to cut through ribs when surgeons need access to the chest cavity (for example, during thoracotomy procedures). They have robust, contoured blades and strong handles that allow clean, controlled shearing of bone while minimizing damage to surrounding tissues. These shears are designed for use by trained surgical professionals in sterile operating environments.



GLUCK RIB SHEAR

CUTTING

A Gluck rib shear is a specialized surgical instrument used in thoracic surgery to cut or remove ribs during procedures that require access to the chest cavity (like thoracotomies). It has strong, angled cutting blades designed to conform to the shape of a rib and allow a surgeon to make controlled, clean shears through rib bone with minimal trauma to surrounding tissues. This instrument is made for use by trained surgical professionals in sterile operating environments.



BETHUNE RIB SHEAR

CUTTING AND RESECTING

A Bethune rib shear is a specialized surgical instrument used in thoracic (chest) surgery to cut through ribs when gaining access to the chest cavity is necessary (such as during a thoracotomy). It features strong, curved, and contoured blades that are sized and shaped to match the rib's curvature, allowing surgeons to make a controlled and efficient bone cut with minimal disturbance to surrounding tissue. Like other rib shears, it's made of surgical-grade stainless steel and is intended for use by trained surgical professionals in sterile operating environments.

EXAMPLE



ALLISON LUNG RETRACTOR

RETRACTOR

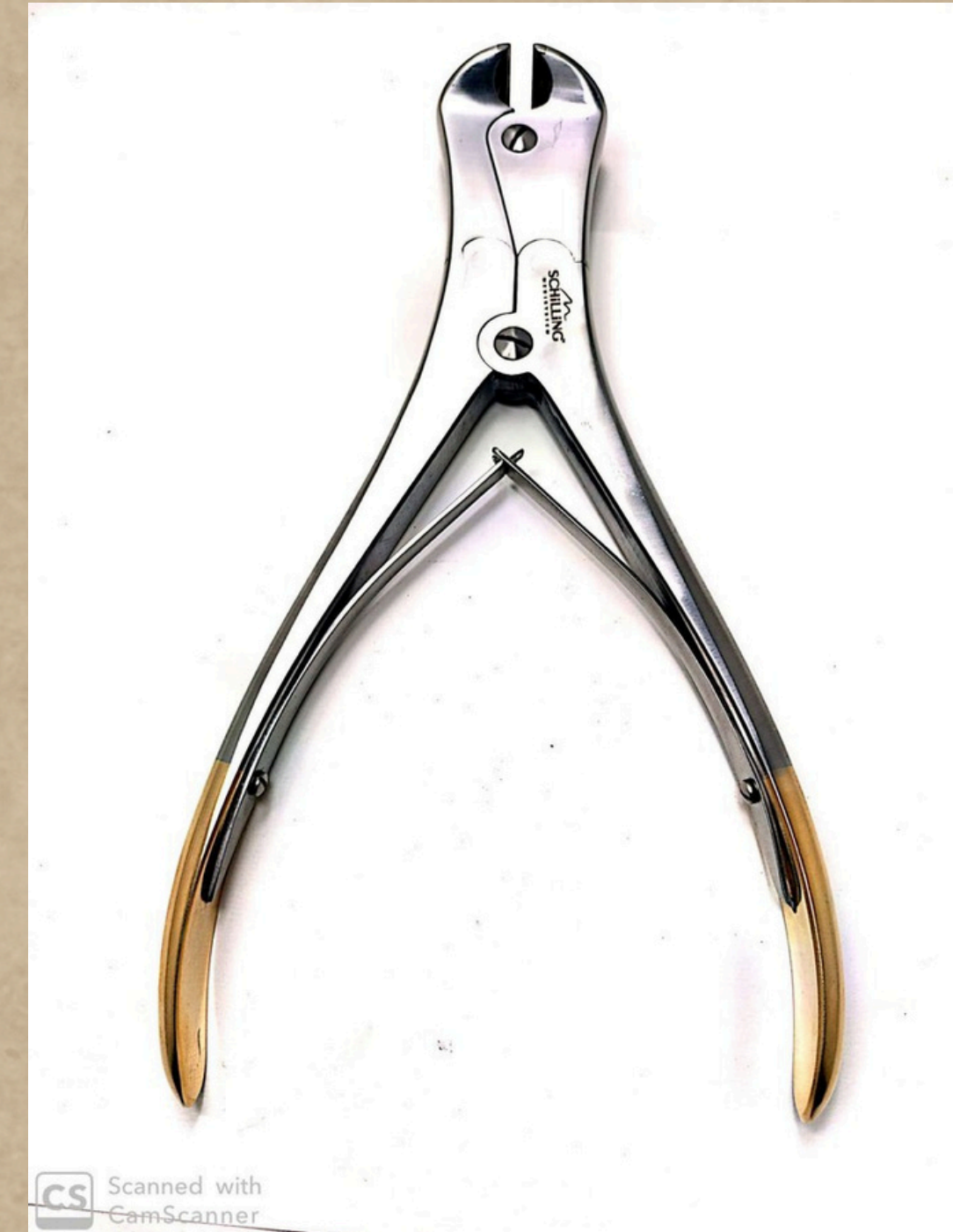
The Allison lung retractor is a surgical instrument used primarily in thoracic surgery to hold, retract, and stabilize the lungs during procedures that require access to the chest cavity, such as thoracotomies or cardiothoracic operations.



HEAVY WIRE CUTTER

CUTTING DISSECTING

A heavy wire cutter is a surgical or orthopedic instrument used to cut thick wires, cerclage wires, or orthopedic fixation wires during procedures such as sternal closure after open-heart surgery or bone fixation in orthopedic operations.



DUVAL LUNG FORCEPS

GRASPING

The Duval lung forceps are surgical grasping instruments used primarily in thoracic surgery to hold or manipulate lung tissue without causing trauma. They are commonly used during thoracotomies or other chest procedures where delicate handling of the lung is required.



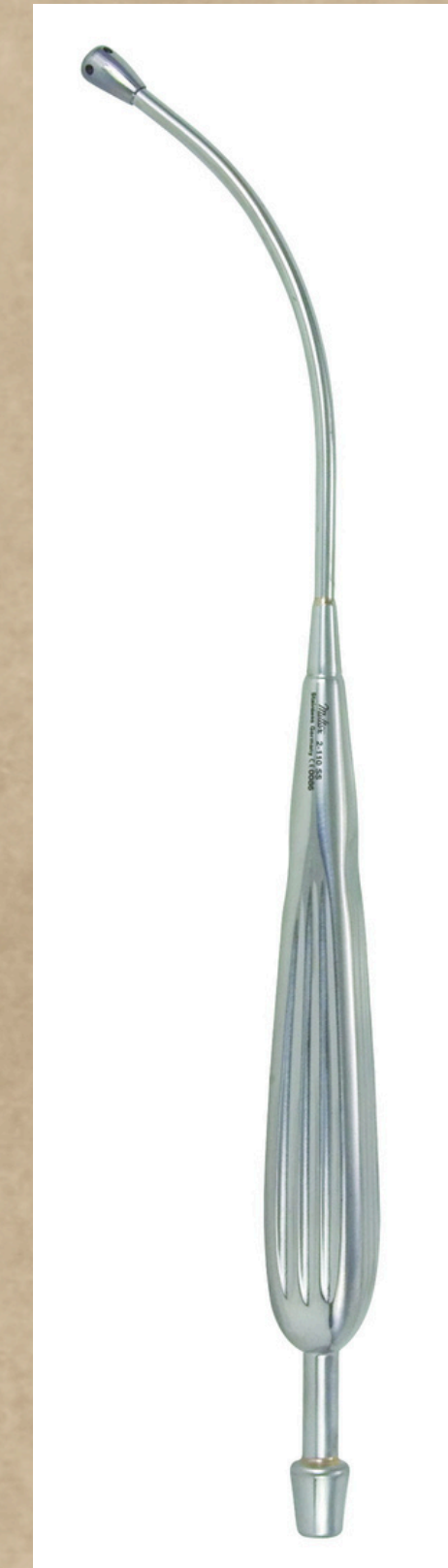
AORTIC PUNCH

An aortic punch is a surgical instrument used in cardiovascular surgery to create precise circular openings in blood vessels, most commonly the aorta, during procedures such as coronary artery bypass grafting (CABG).



ANDREWS PYNCHON SUCTION SUCTION

The Andrews Pynchon suction is a surgical suction instrument used primarily in thoracic and cardiothoracic surgery to remove blood, fluids, and debris from the surgical field while minimizing trauma to surrounding tissues.



BLALOCK BLUNT HOOK

RETRACT

The Blalock blunt hook is a surgical instrument used primarily in cardiothoracic surgery to retract or manipulate delicate tissues such as vessels, nerves, or lung tissue without cutting or damaging them.



SAROT BRONCHUS CLAMP

CLAMPING

The Sarot bronchus clamp is a surgical instrument used primarily in thoracic surgery to temporarily occlude or clamp a bronchus during procedures such as lobectomy or pneumonectomy.

