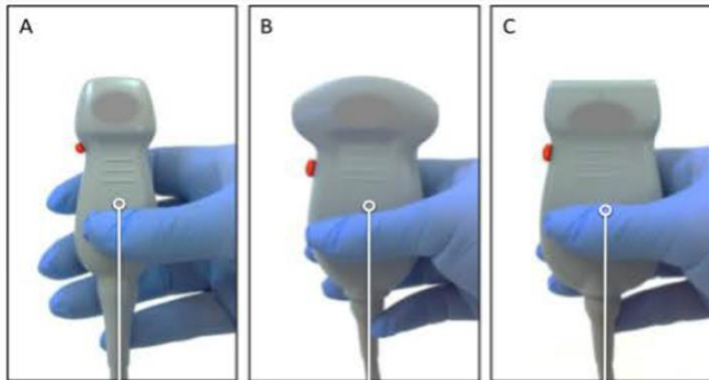


## MUSIG Cheat Sheet #1 – Ultrasound Basics

1. Ultrasound is a sound wave that oscillates with a frequency greater than 20000 Hz
2. Medium & U/S appearance:

Medium	Terminology	Appearance	Density
Bone	<b>Hyperechoic</b>	White	High
Muscle, solid organ	<b>Hypoechoic</b>	Grey	Moderate
Fluid	<b>Anechoic</b>	Black	Low

3. Settings to get clear images:
  - Gain = Brightness
  - Depth = Depth (like zooming in/out)
4. Frequency:
  - Low frequency = High penetration + low resolution
  - High frequency = Superficial penetration + high resolution
5. Probe choice:



Cardiac/ Phased array	Abdominal/ Curvilinear	Linear
Low frequency	Low frequency	High frequency
High penetration	High penetration	Low penetration

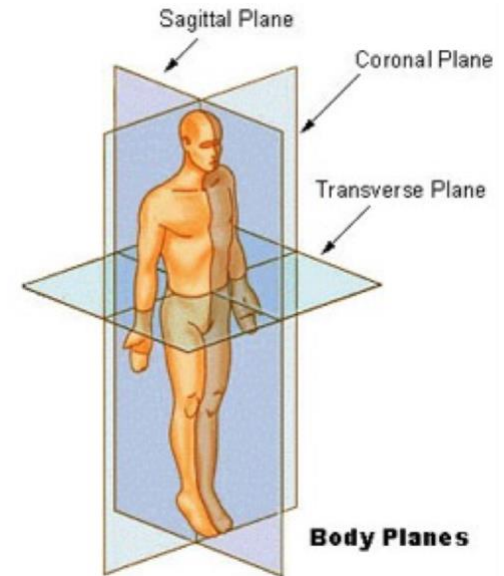
6. Anatomical directions:
  - Cephalad – towards the head
  - Caudal – towards the feet
  - Lateral
  - Medial
  - Anterior
  - Posterior

7. Anatomical planes:

- Sagittal
- Coronal
- Transverse

8. Motions of the probe:

- Slide
- Sweep (Tilt)
- Rotate
- Rock



### Cardinal Transducer Manipulation/Movement (Sliding, Tilting, Rotating, and Rocking)

