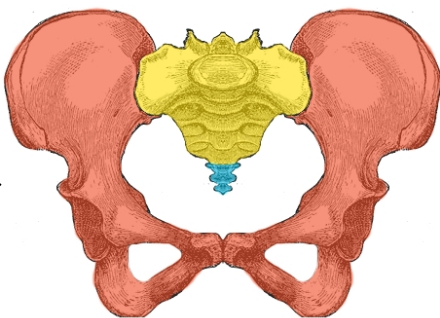


1. BASIC SHAPE(S) OF THE PELVIS

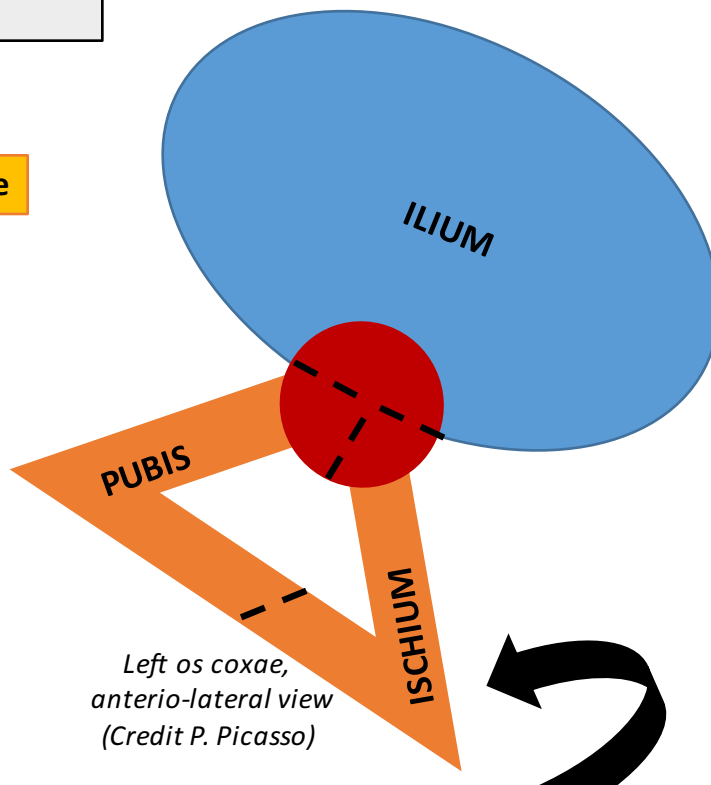
First off, you can treat the pelvis as an equation involving three shapes:

1 triangle + 1 circle + 1 oval = 1 os coxae

The bones of the pelvis are composed of two *ossa coxae* (hip bones), the *sacrum*, and the *coccyx* (tailbone). In the diagram below, the *ossa coxae* are red, the *sacrum* is yellow, and the *coccyx* is blue.



www.bonebrokeblog.wordpress.com



*Left os coxae,
anterio-lateral view
(Credit P. Picasso)*

Each os coxae is divided into three separate bones, marked approximately by the dashed black line in the figure:

1. Ilium
2. Ischium
3. Pubis

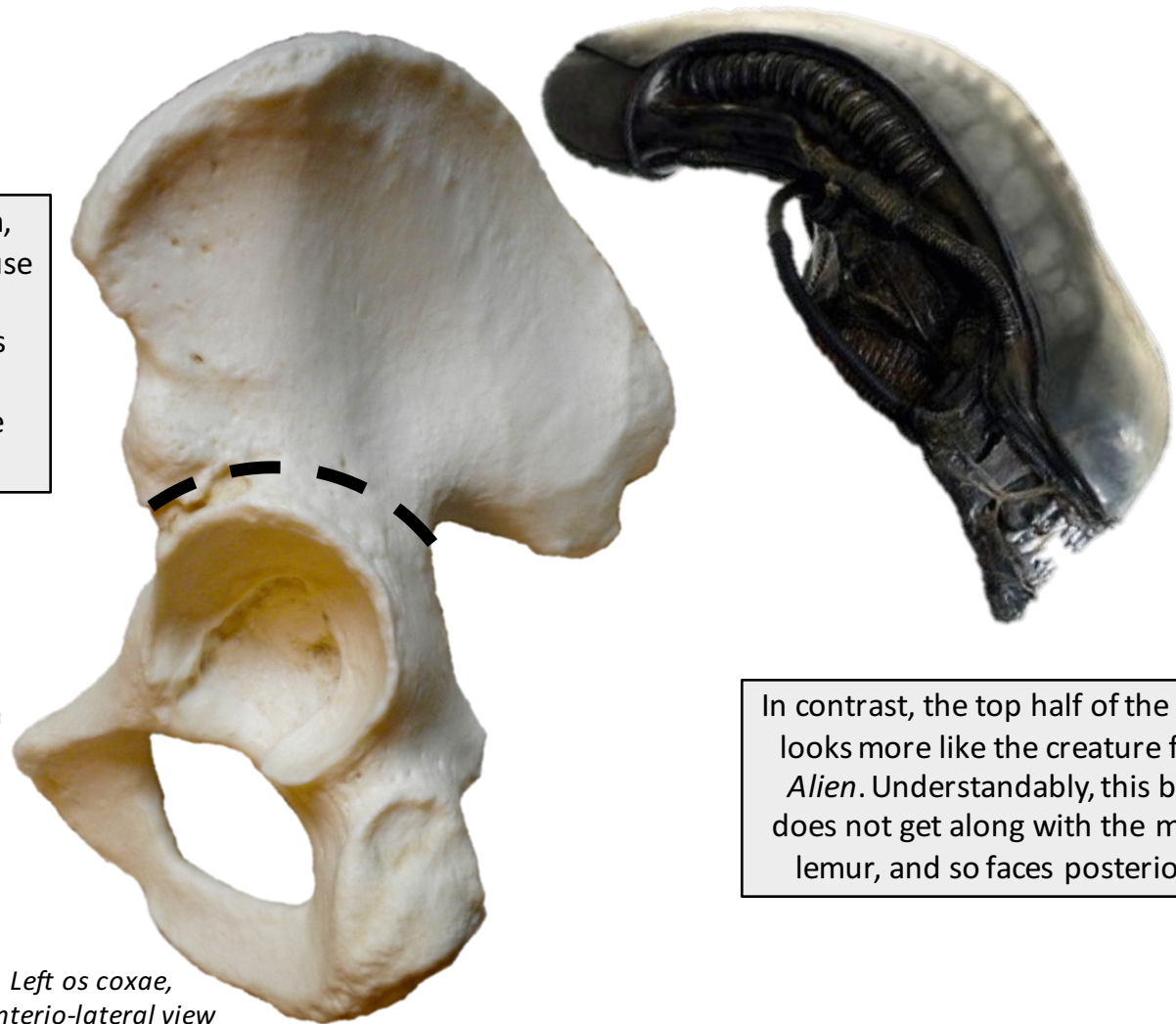
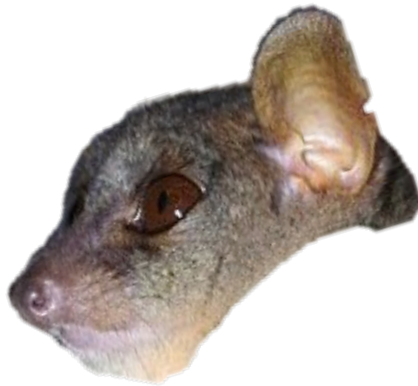
These three bones begin as separate centers of ossification, and fuse together as individuals age. The acetabulum completes fusion during adolescence.

Hmmmmm...



2. SUPERIOR AND INFERIOR HALVES OF THE PELVIS

The inferior half of the pelvis (ischium, pubis and acetabulum) looks like a mouse lemur in antero-lateral view. When orienting, remember that the lemur's nose always points in medially and inferior direction when looking at the pelvis from the front.



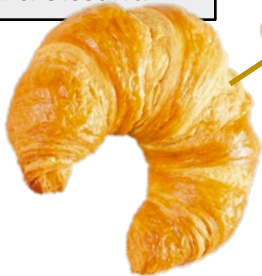
In contrast, the top half of the pelvis looks more like the creature from *Alien*. Understandably, this beast does not get along with the mouse lemur, and so faces posteriorly.

3. IDENTIFYING FEATURES – ACETABULUM, LUNATE SURFACE, GSN, PSIS, AND PIIS

Think of the *acetabulum* as PAC-MAN chomping inwards, medially and inferiorly, towards the middle of the body.



The smooth, raised ridge of bone inside the acetabulum is the *lunate surface*, the area where the femoral head articulates with the hip. It is shaped like a croissant.



The *Posterior Superior Iliac Spine* (PSIS) and *Posterior Inferior Iliac Spine* (PIIS) make up the posterior end of the iliac crest. If you think of the lateral ilium as a pachycephalosaurus head, the PSIS is its snout, and the PIIS is its mouth.

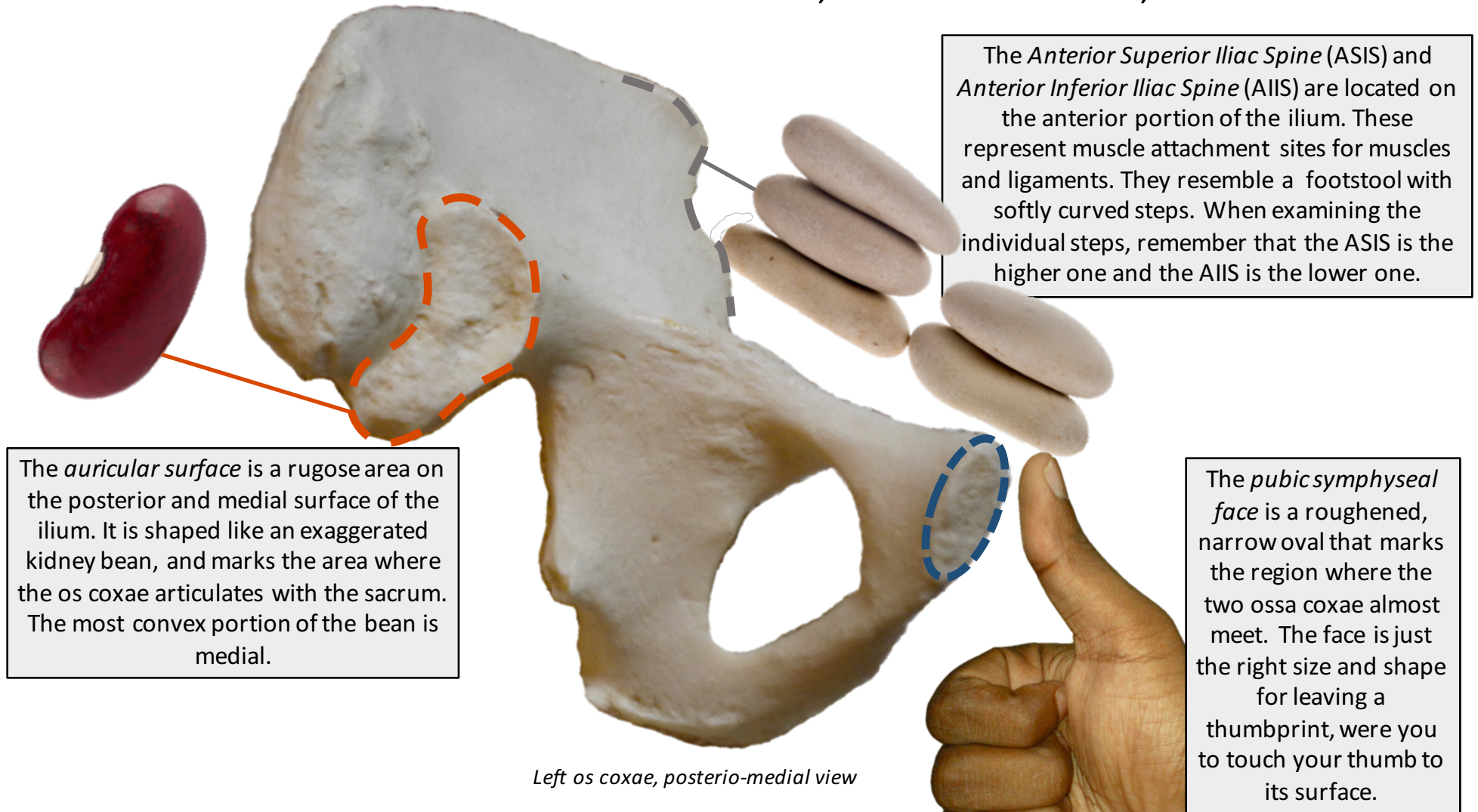


The narrow arch of the *Greater Sciatic Notch* (GSN) is unmistakable – its steep, smooth curvature resembles nothing else in the human skeleton.

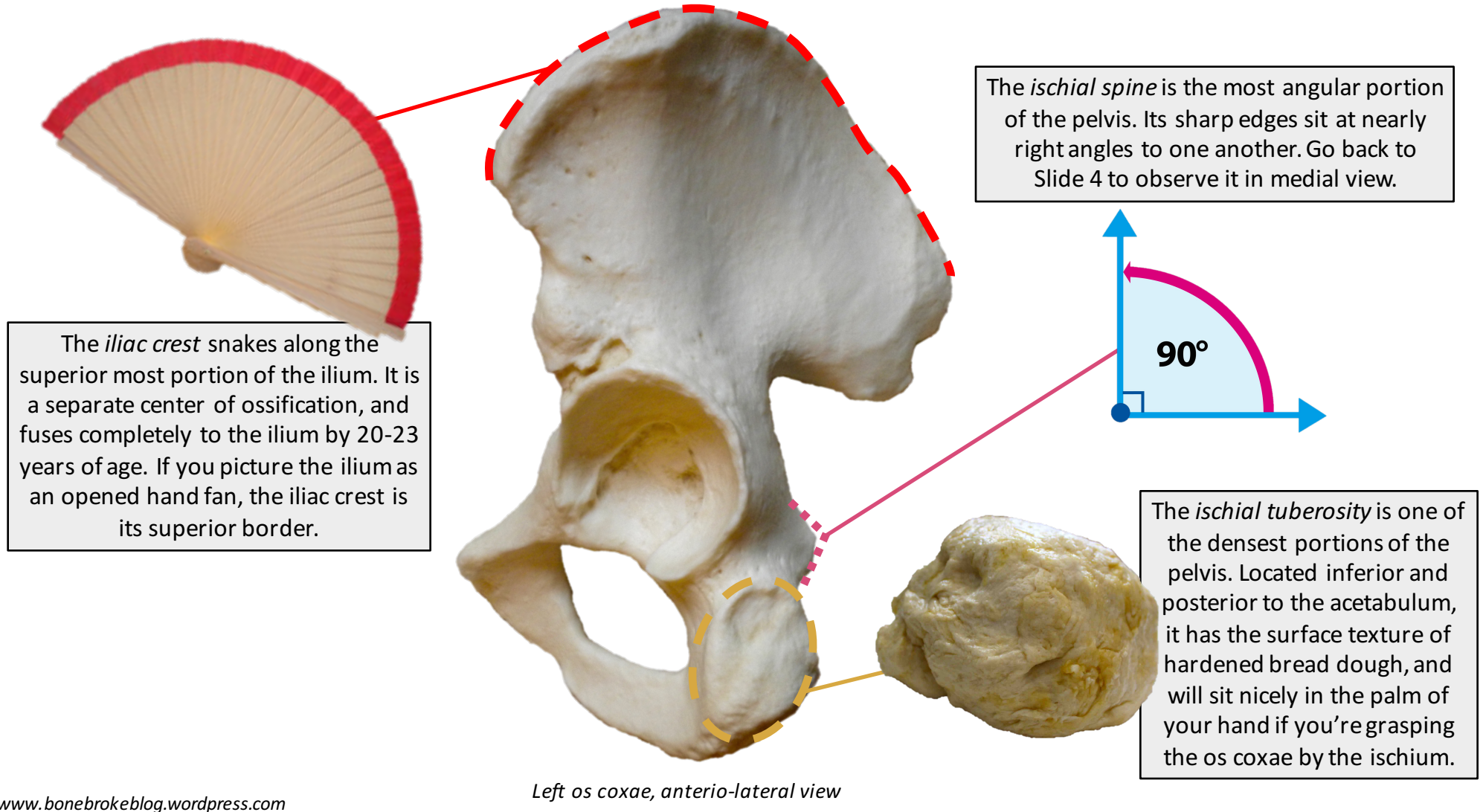


*Left os coxae,
anterio-lateral view*

4. IDENTIFYING FEATURES – THE AURICULAR SURFACE, PUBIC SYMPHYSEAL FACE, ASIS AND AIIS



5. IDENTIFYING FEATURES – THE ISCHIAL TUBEROSITY, ISCHIAL SPINE, AND ILIAC CREST

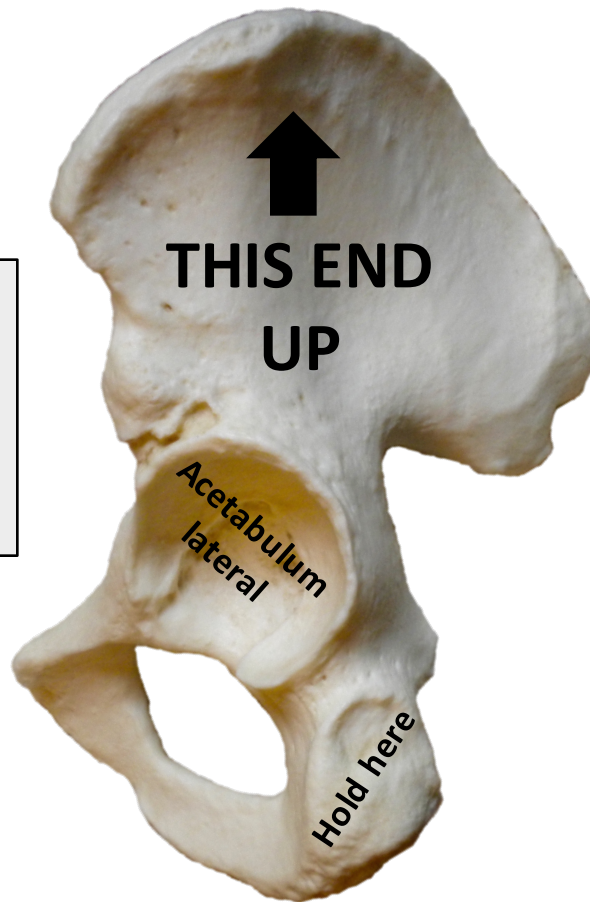


6. ORIENTING THE OS COXAE IN THREE EASY STEPS

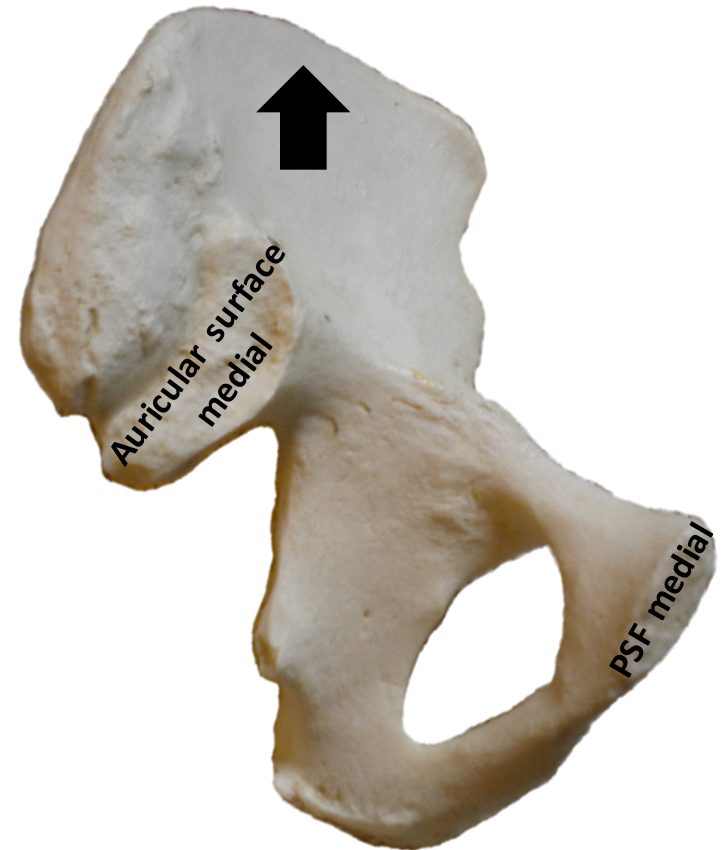
STEP 1: Identify the superior and inferior halves of the pelvis. Make sure the ilium is pointing up.

STEP 2: Identify the roughened surface of the ischial tuberosity. Grip the os coxae by the tuberosity, so that the ilium is up and the head of the alien/pachycephalosaurus is facing towards you.

STEP 3: Double check: Is the acetabulum facing laterally? Is the bean-shaped auricular surface on the medial and posterior portion of the bone? Is the pubic symphyseal face medial?



Left os coxae, anterio-lateral view



Left os coxae, postero-medial view

7. REVIEW OF ORIENTATION



Turn your hand INWARDS to see the lateral surface of the os coxae.



I always grip a complete os coxae so that the thick, roughened ischial tuberosity is in my hand.



Turn your hand OUTWARDS to see the medial surface of the os coxae.

WARNING: Always be careful when handling ossa coxae as the ischiopubic rami, iliopubic rami, and iliac blades can be very fragile. I suggest using a supporting hand and holding the bone over a padded surface.