

# apodeixis

## Hip Model

### **Pieces:**

Wood base and screws

Pelvis

Normal left femur

Arthritic right femur with detachable head

Arthritic right acetabular filler: to be removed when completing the THR

THR femoral implant (lives in the stand when not in use)

THR acetabular implant (lives in the stand when not in use)

### **Assembly:**

Use the 4 screws to insert through the wood base and into the 4 holes in the grey stand

Use a Phillips driver to tighten—be sure to not overtighten and strip the holes

### **Suggested Use:**

- 1) Normal left hip
  - a. Show the normal left femur
  - b. Show how the acetabulum is deep and congruent
  - c. Show how force is successfully transferred up through the femur to the pelvis
- 2) Dysplastic left hip
  - a. Flip the switch (medial to the acetabulum) to the forward position to turn the normal hip into a shallow hip.
  - b. Using the left femur, show the abnormal “wandering” motion, the poor force transfer across the joint, and the propensity for luxation/subluxation
- 3) Arthritic right hip
  - a. Show the absence of a functional ball-and-socket joint
  - b. Show the poor force and the propensity for luxation/subluxation
  - c. Show the extensive osteophytosis on the femoral head, neck and acetabulum
- 4) Demonstrate a right Femoral Head Osteotomy (FHO) surgery
  - a. Remove the right femoral head
  - b. The femur will magnetically adhere to the acetabulum
  - c. Discuss the pros and cons of the resulting pseudojoint
- 5) Demonstrate a right Total Hip Replacement (THR) surgery
  - a. Show the femoral THR implant and the acetabular THR implant
  - b. Remove the right acetabular filler and replace with the acetabular implant
  - c. Remove the right femoral head and insert the femoral implant
  - d. Reduce the hip with the two implant pieces in place
  - e. Demonstrate the smooth range of motion and the stable, successful transfer of force across the replaced joint