Introduction to the Female Pelvis

Learning Objective
After completing this exercise, you will be able to identify the major organs of the female pelvis and their blood supply.

Use the reference on the left to locate controls and areas referred to in the text below.

1 Start by selecting the Visible Human Female:
- From the drop down menu, choose the “Visible Human Female Pelvis Pro”
- Drag the reference plane in the dissection area by its green border to the middle of the pelvis
  ((The cross sections are numbered in the lower left corner; you should be close to 3530)
- Explore the anatomy of the pelvis by moving your mouse over the cross section

2 Now skin the cadaver to reveal the anatomy below:
- Click on the skin in the dissection area to highlight it
  (Structures change colors when highlighted)
- Click on the skin again to remove it
  (Now you can see the muscular anatomy of the abdominal wall)

3 Take a closer look:
- Zoom in using the magnification slider
- Drag the dissection with your mouse to reposition it if needed

4 Identify the viscera of the pelvis:
- Select the “Regions” tab
- Expand the “Abdomen and Pelvis” using the icon to the left of it
- Select “Muscles” from the list
- Click the “Remove” button below
- Select the “Index” tab
- Enter “Bladder” into the search box
- Select the “Urinary bladder” from the list
- Click the “Add & Highlight” button

5 Isolate the arteries that feed the uterus by simplifying the dissection:
- Click the “Clear” button to clear the dissection area
- Select the “Systems” tab
- Select “Skeletal system” and click the “Add” button
- Select the “Regions” tab and expand the “Abdomen and Pelvis”
- Expand “Arteries” and then expand the “Common iliac artery”
- Select the “Internal iliac artery” and click “Add & Highlight”
- Use the index to add and highlight the Uterus

Add, remove and highlight groups of structures with Systems, Regions and Tissues tabs

Name the other main pelvic organs?
1. ____________________________ 2. ____________________________
During pregnancy, the Uterus expands anteriorly and superiorly, displacing the previous structure anteriorly and inferiorly. What rigid structure prevents this displacement? (This displacement leads to the urinary frequency common to late term pregnancy)

1. ____________________________

Which ligament must the uterine arteries pass through to reach the uterus? (Hint: light yellow in the cross section)

1. ____________________________

Visualize a more advanced anatomical concept, the Pouch of Douglas:

- Click the “Clear” button to clear the dissection area
- Using the “Systems” tab, add the “Skeletal system”
- Dissect the right Hip bone, the right femur and all of its cartilage
- Using the “Systems” tab, add the “Genital system”
- Rotate the dissection to 90° using the rotation wheel or the command (Mac) or ctrl (PC) key while pressing the left or right arrow keys to move 5° at a time

Highlight multiple structures or un-highlight a single structure by holding the shift key when clicking

- Set the cross section through the top of the Rectum
- Follow the rectum down in the cross section
  (The dark line in the unhighlighted area between the Rectum posteriorly and the uterus and vagina anteriorly is known as the Pouch of Douglas, or the rectouterine pouch. This is a potential space (normally empty and collapsed) and may collect fluid or infectious material in cases of pelvic or abdominal injury or infection)

Which major structure is located anterior to the Uterus?
(A potential space exists between the uterus and this structure, known as the vesicouterine pouch)

1. ____________________________

Follow the uterine arteries as they branch:
- Right-click on the superior aspect of the uterus and select “Cross Section”
- Locate the uterine arteries in the cross section (they are located posterior to the uterus, just medial to the hip bones)
- Zoom in on the cross section by using the magnification slider
- Follow the arteries inferiorly by holding down the command (Mac) or ctrl (PC) key while pressing the down arrow key to move 1mm at a time through the cross sections

Move the cross section 1mm at a time by holding the command (Mac) or ctrl (PC) key while pressing the up or down arrow keys