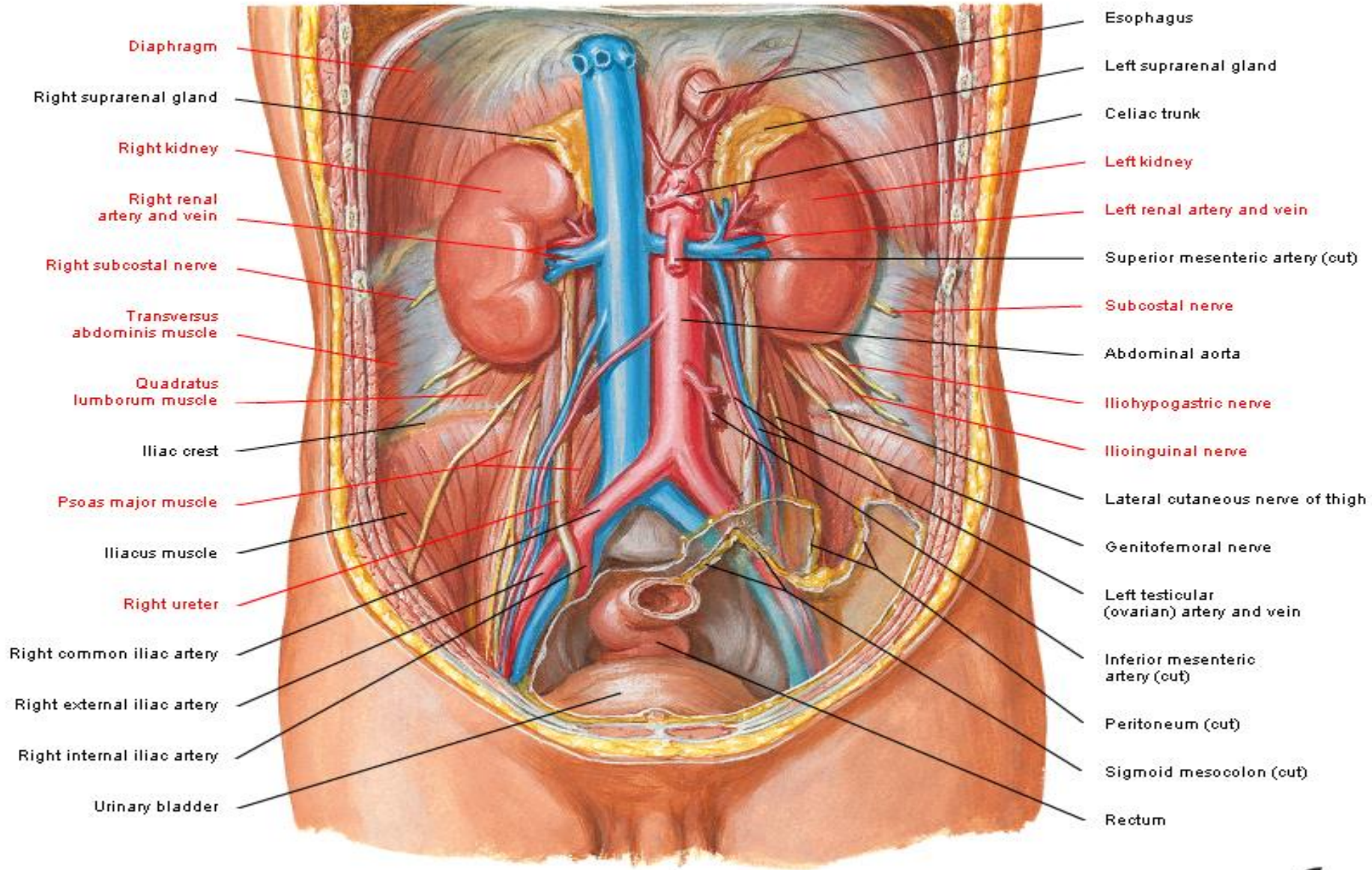


ANATOMY LAB

URINARY SYSTEM PRE-LAB

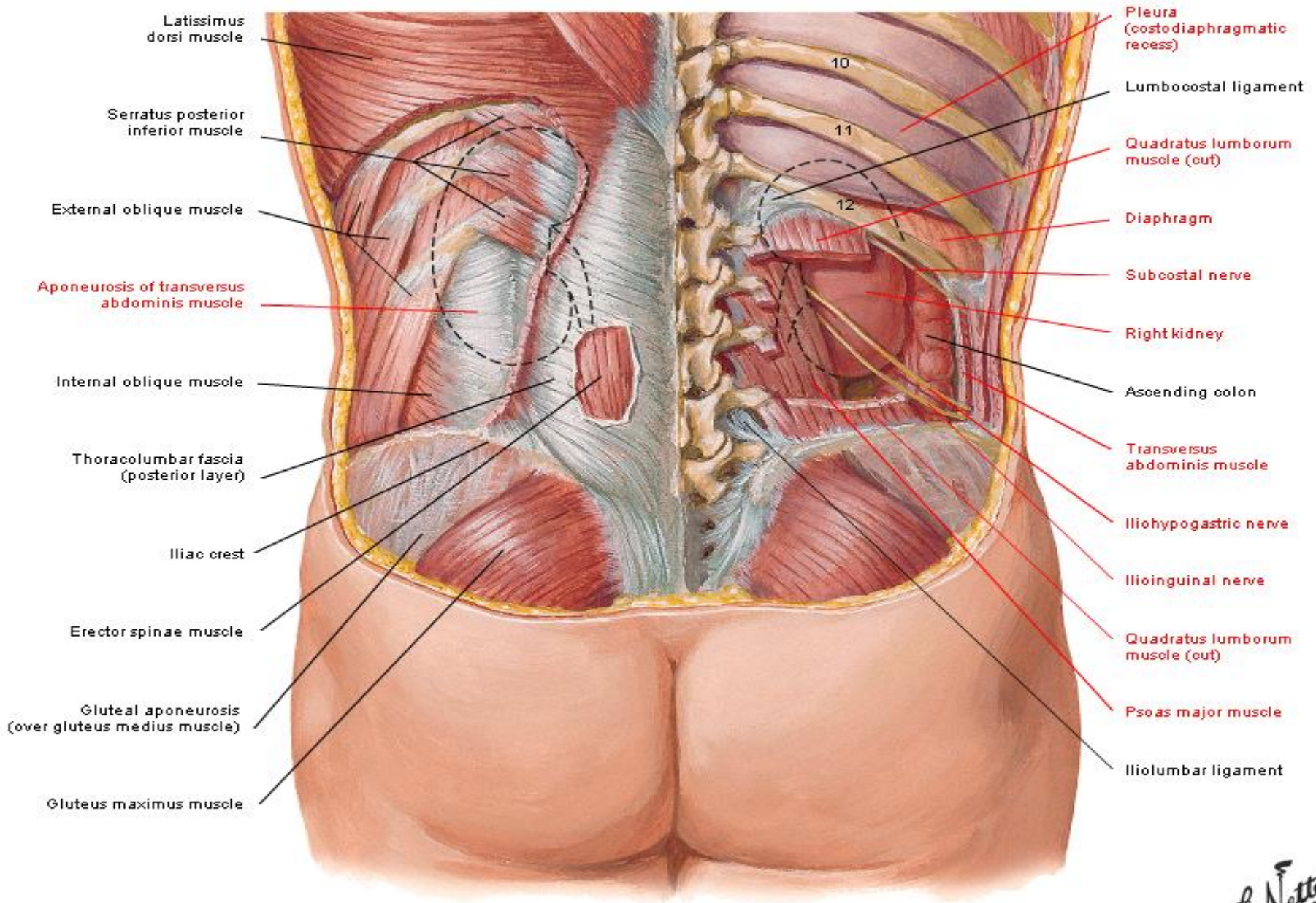
Kidneys In Situ

Anterior View



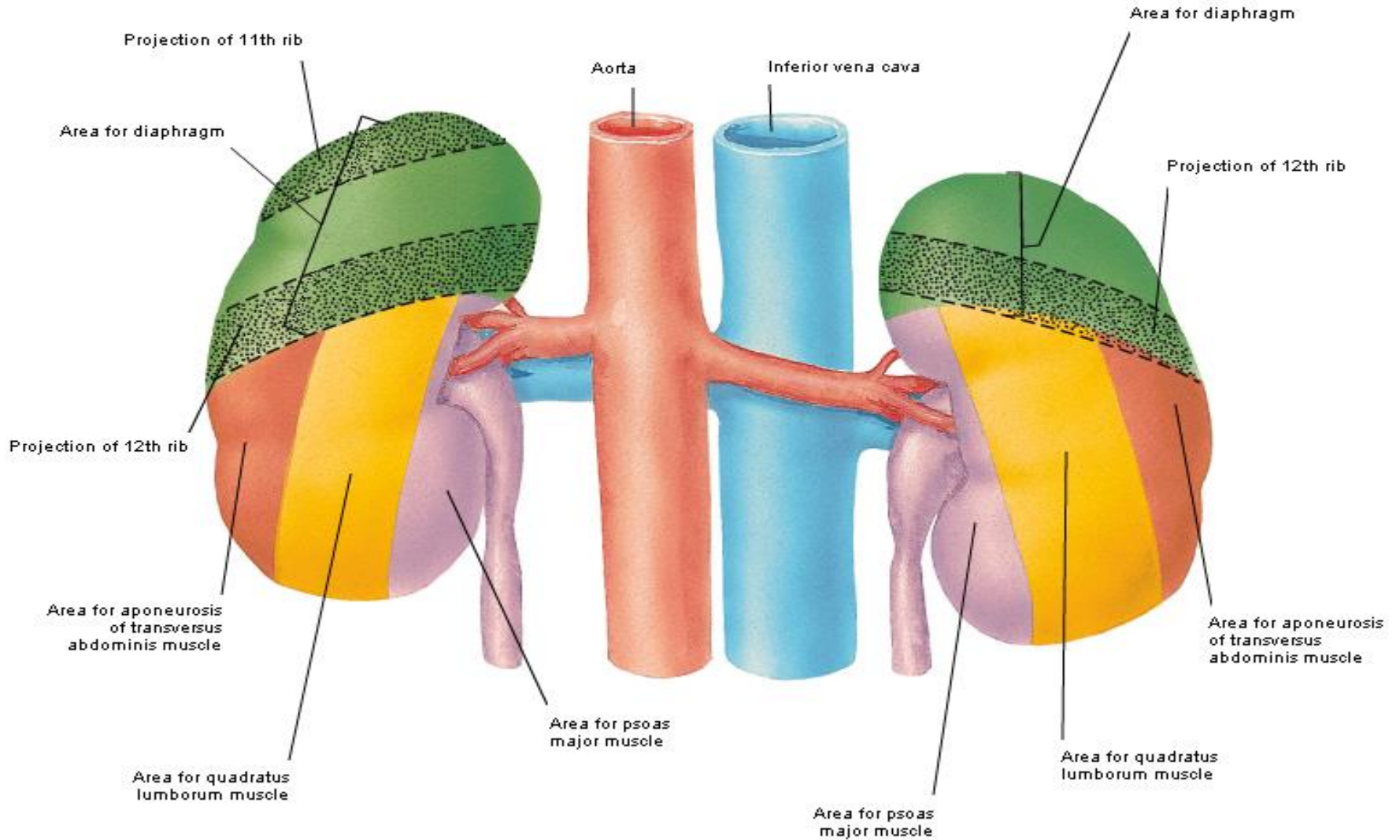
Kidneys In Situ

Posterior View

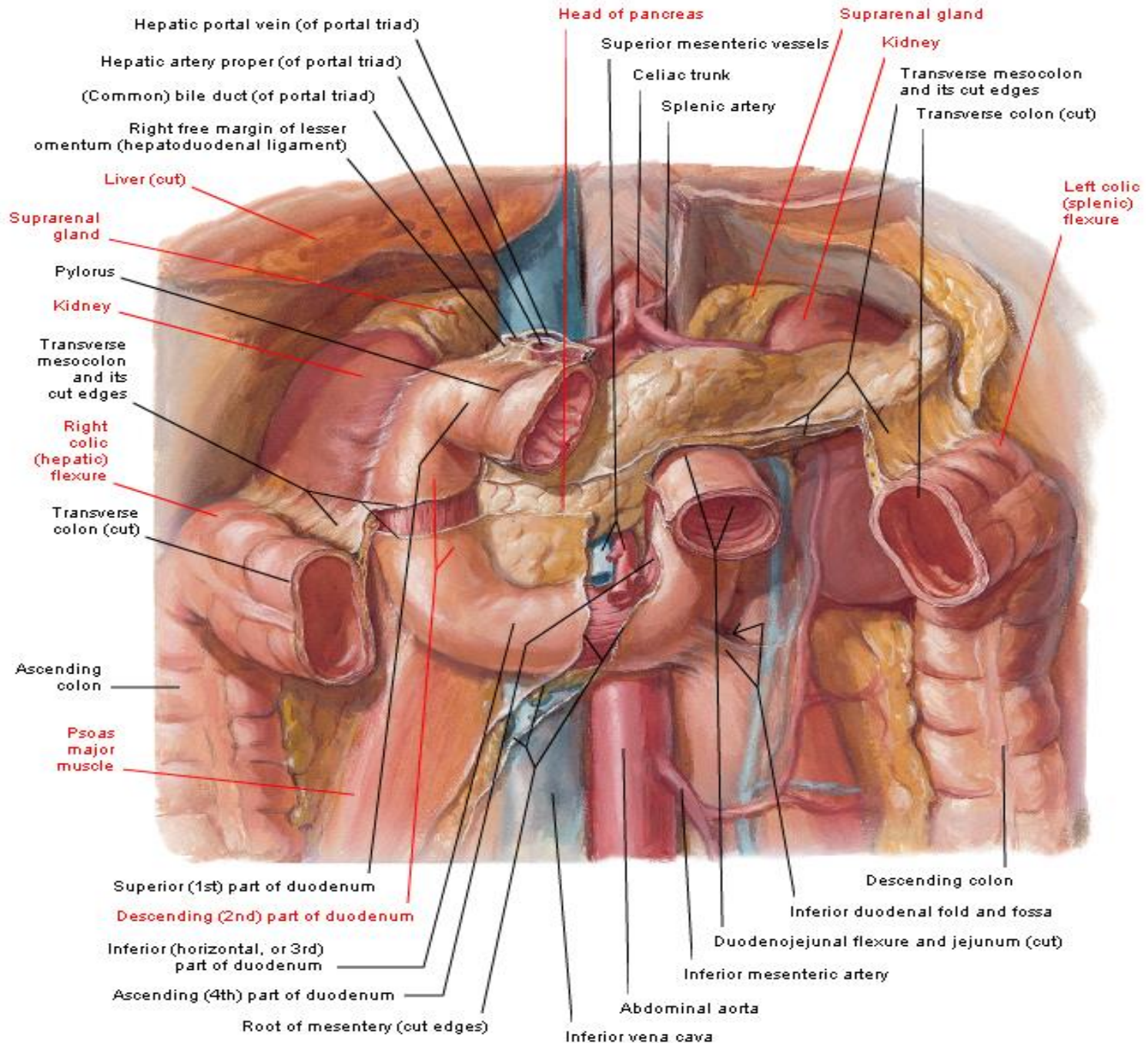


Kidneys

Posterior Relations of Kidneys

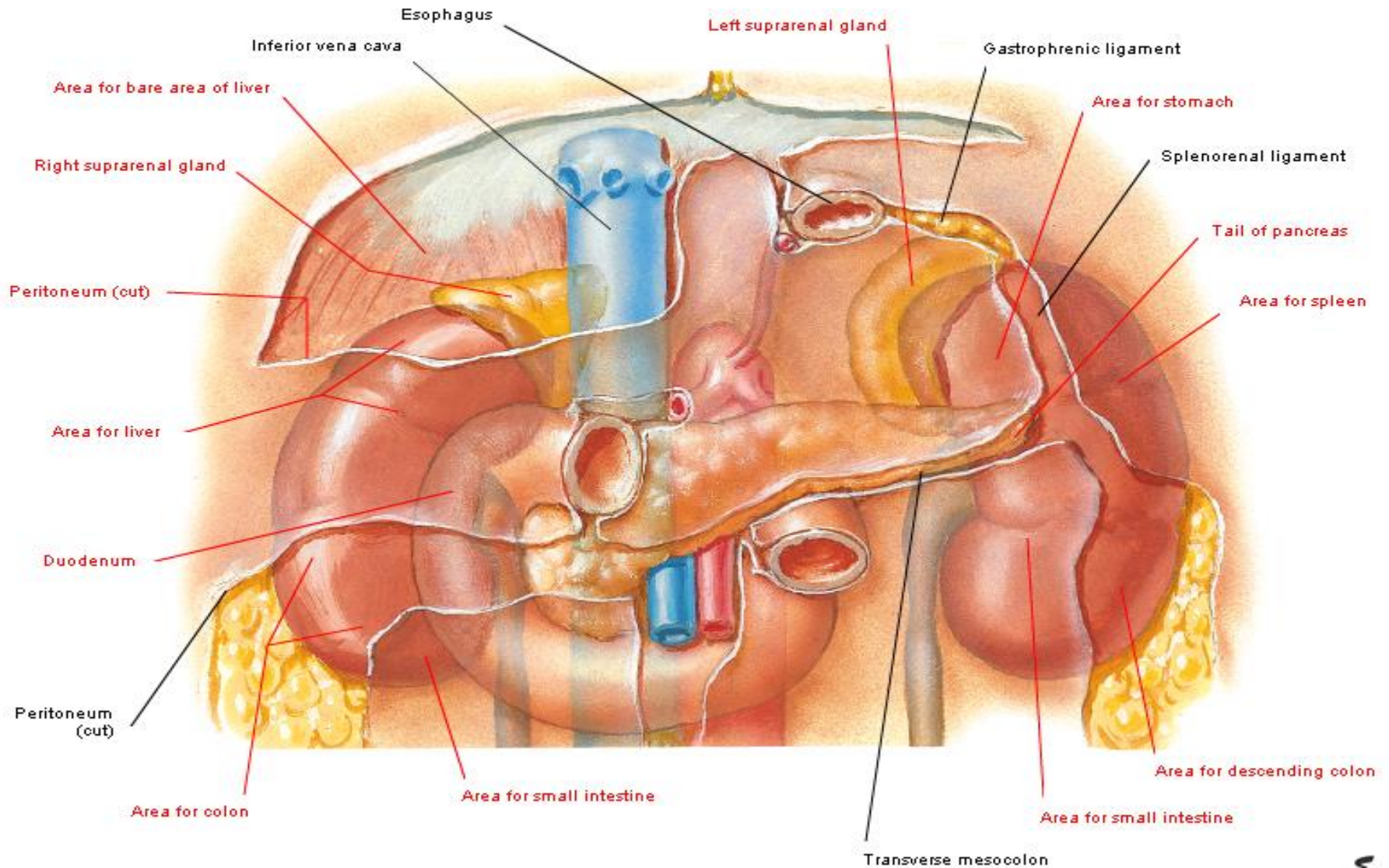


Duodenum In Situ

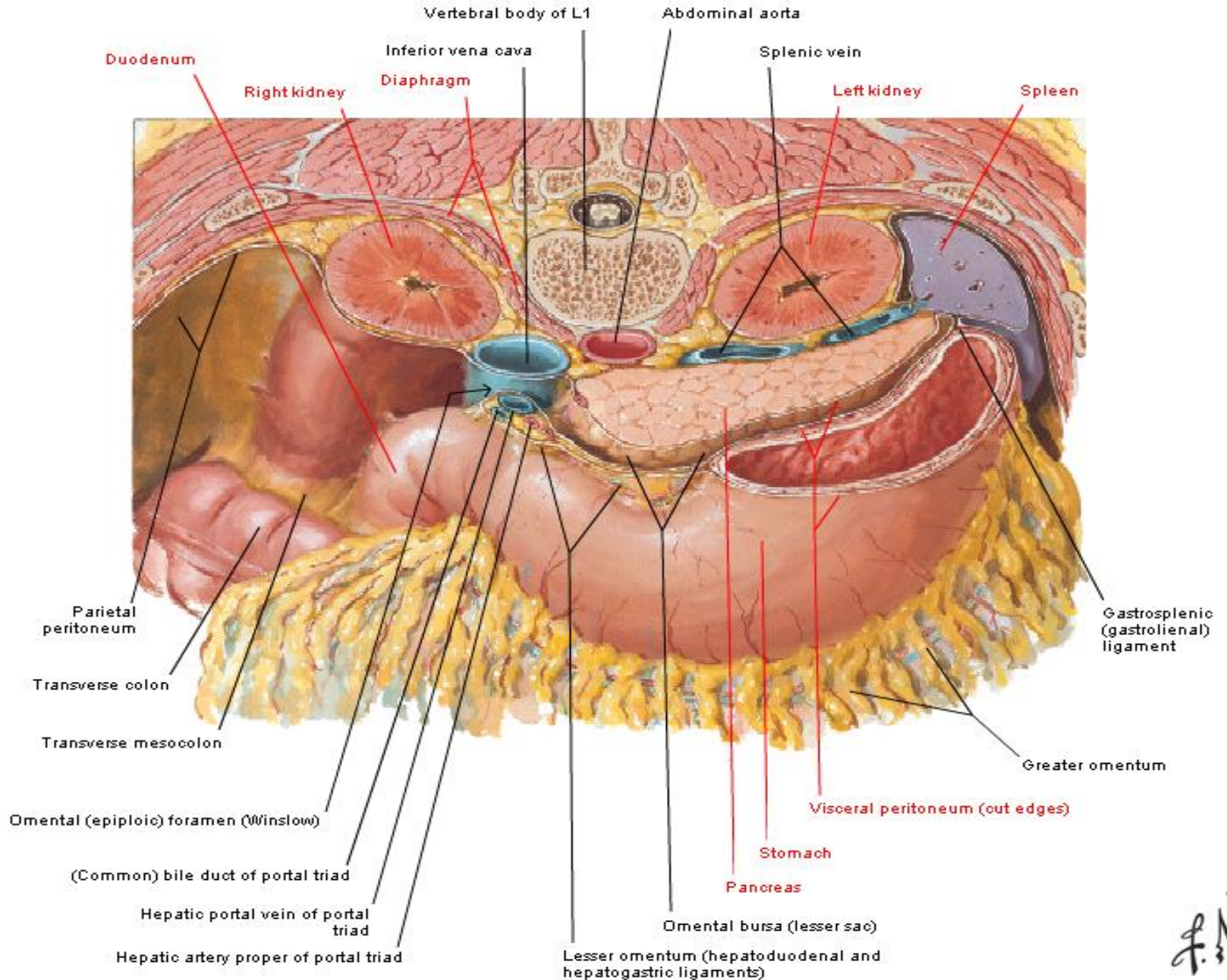


Kidneys In Situ

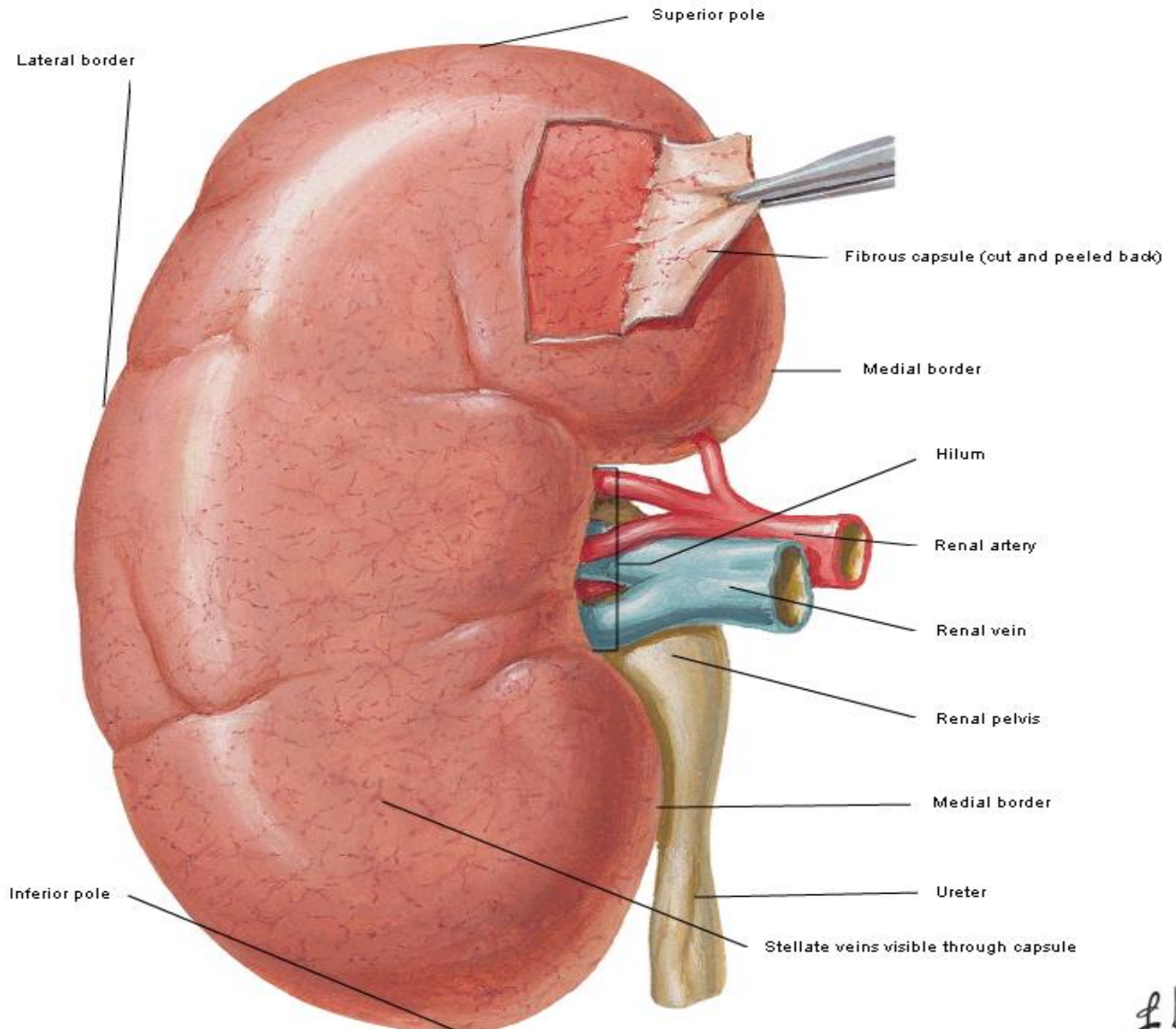
Anterior Relations of Kidneys



Omental Bursa Cross Section

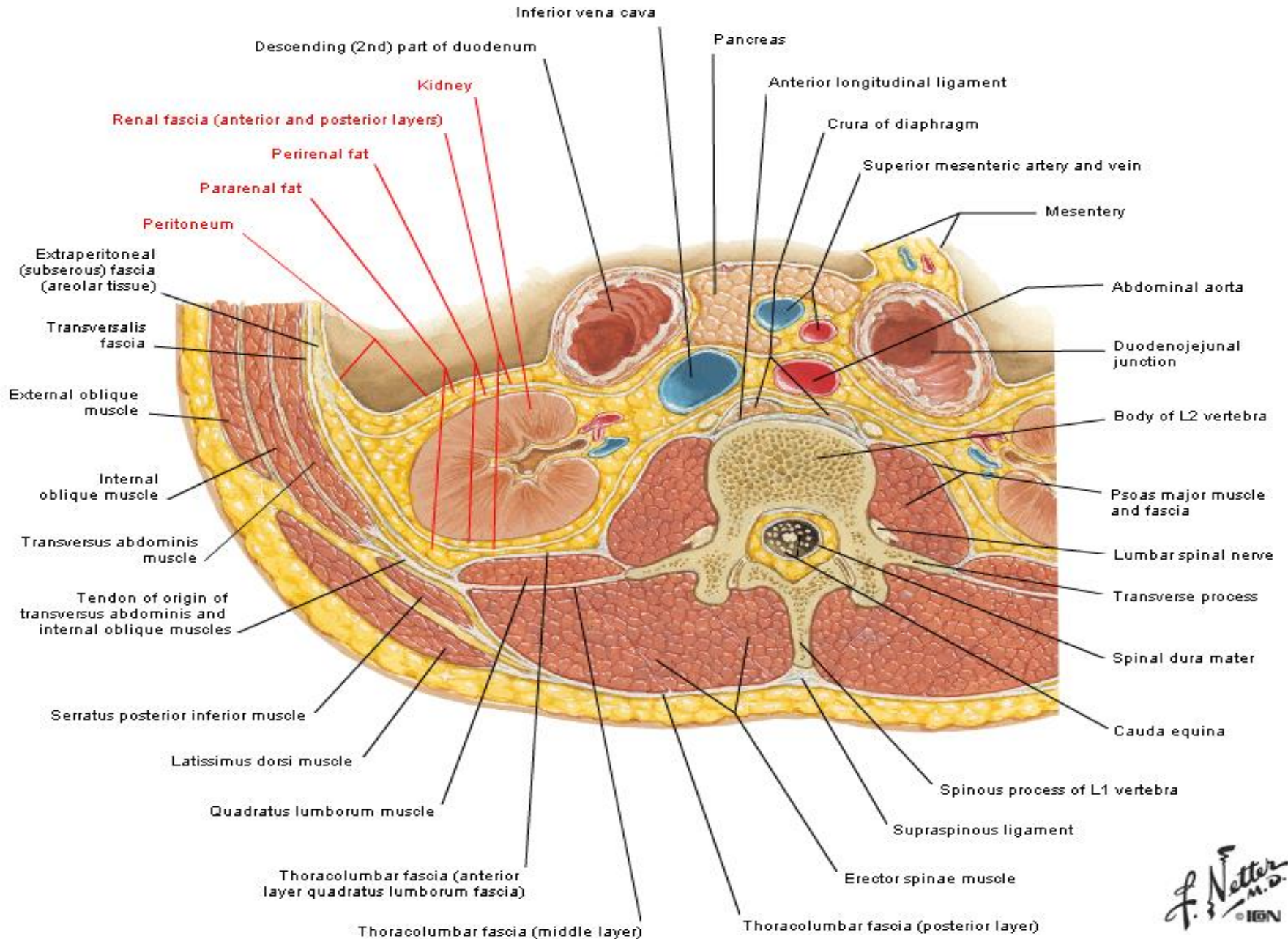


Anterior Surface of Right Kidney



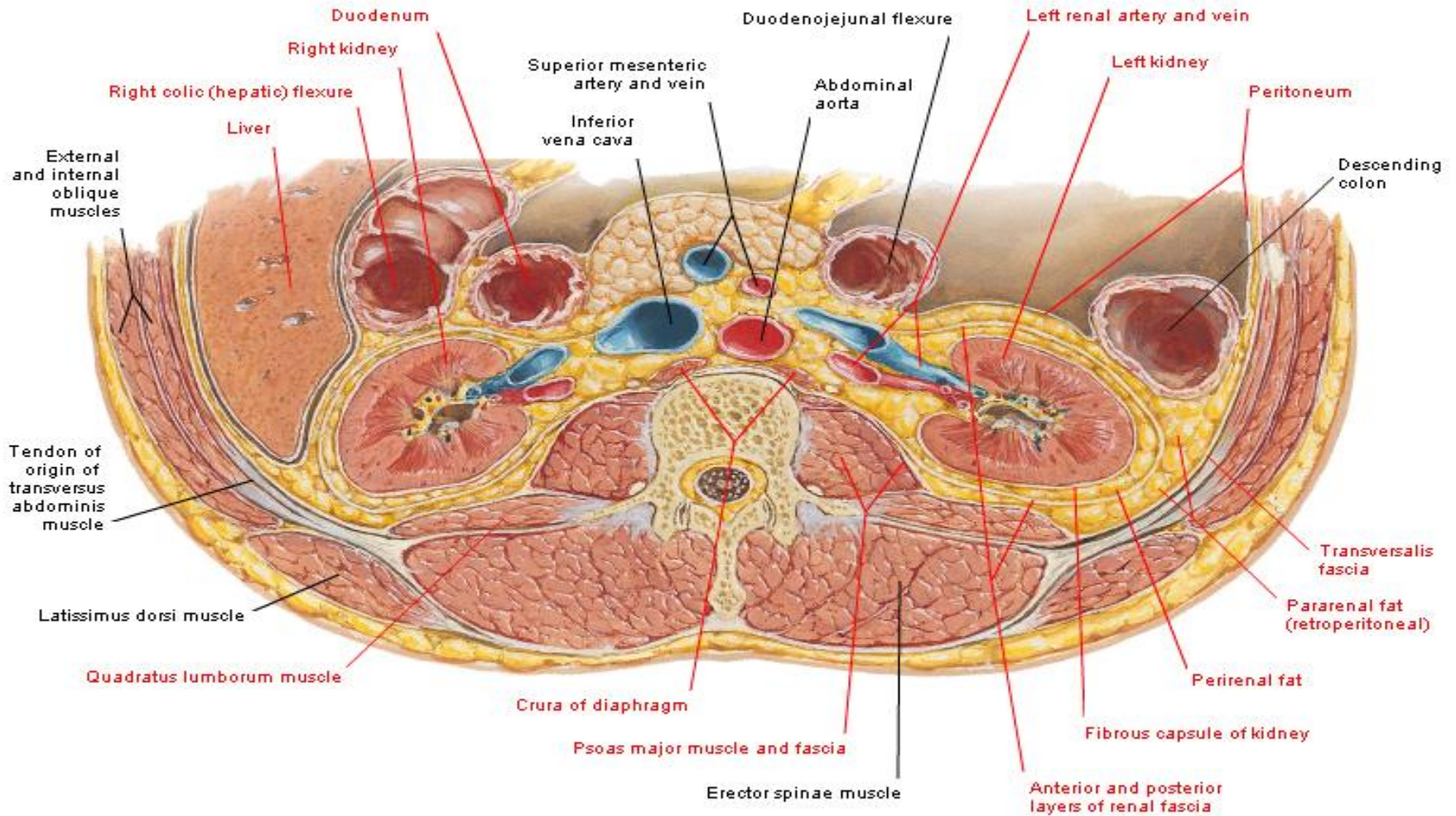
Lumbar Region of Back

Cross Section



Renal Fascia

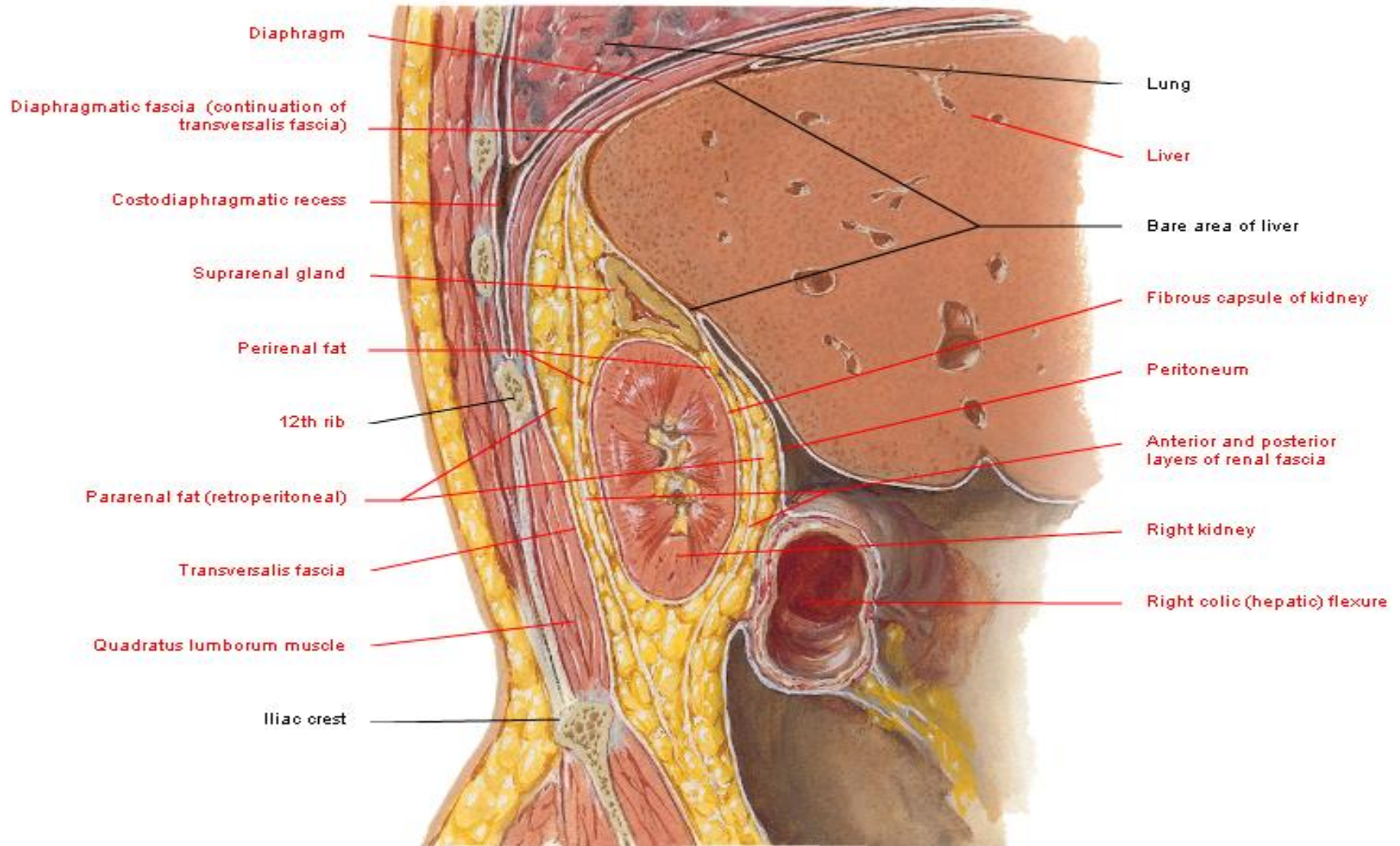
Transverse Section through 2nd Lumbar Vertebra



Demonstrates horizontal disposition of renal fascia

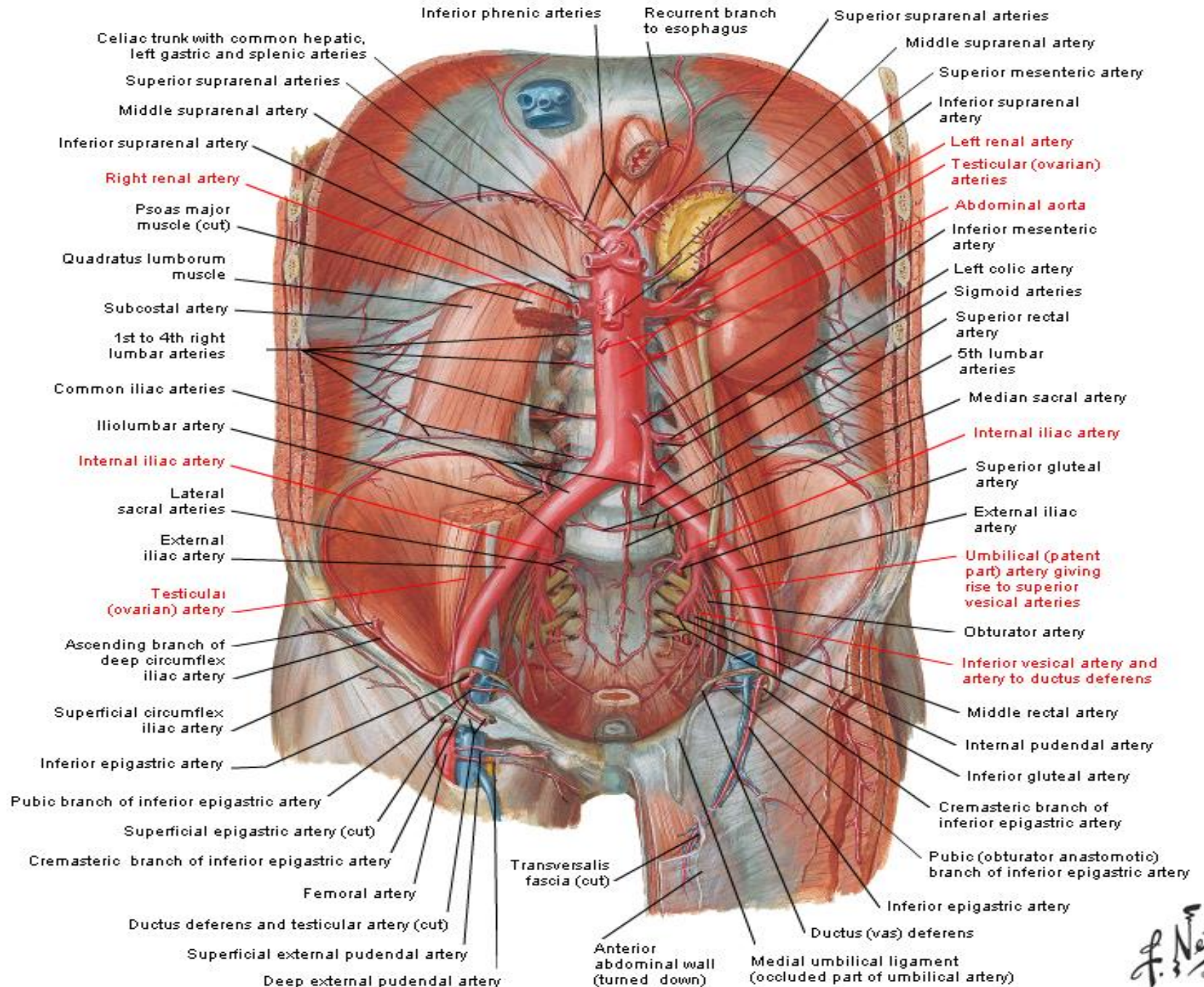
Renal Fascia

Sagittal Section through Right Kidney

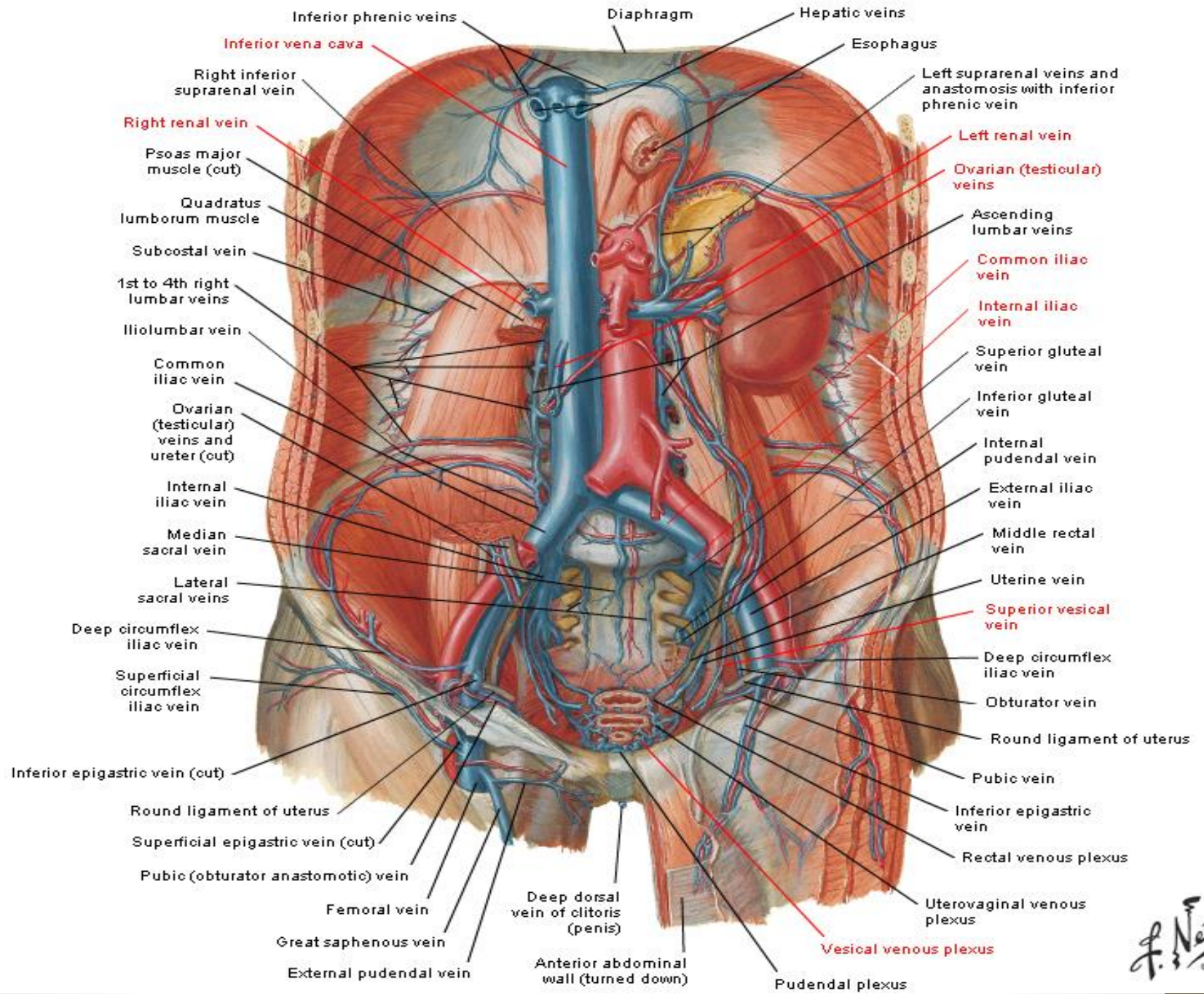


Demonstrates vertical disposition of renal fascia

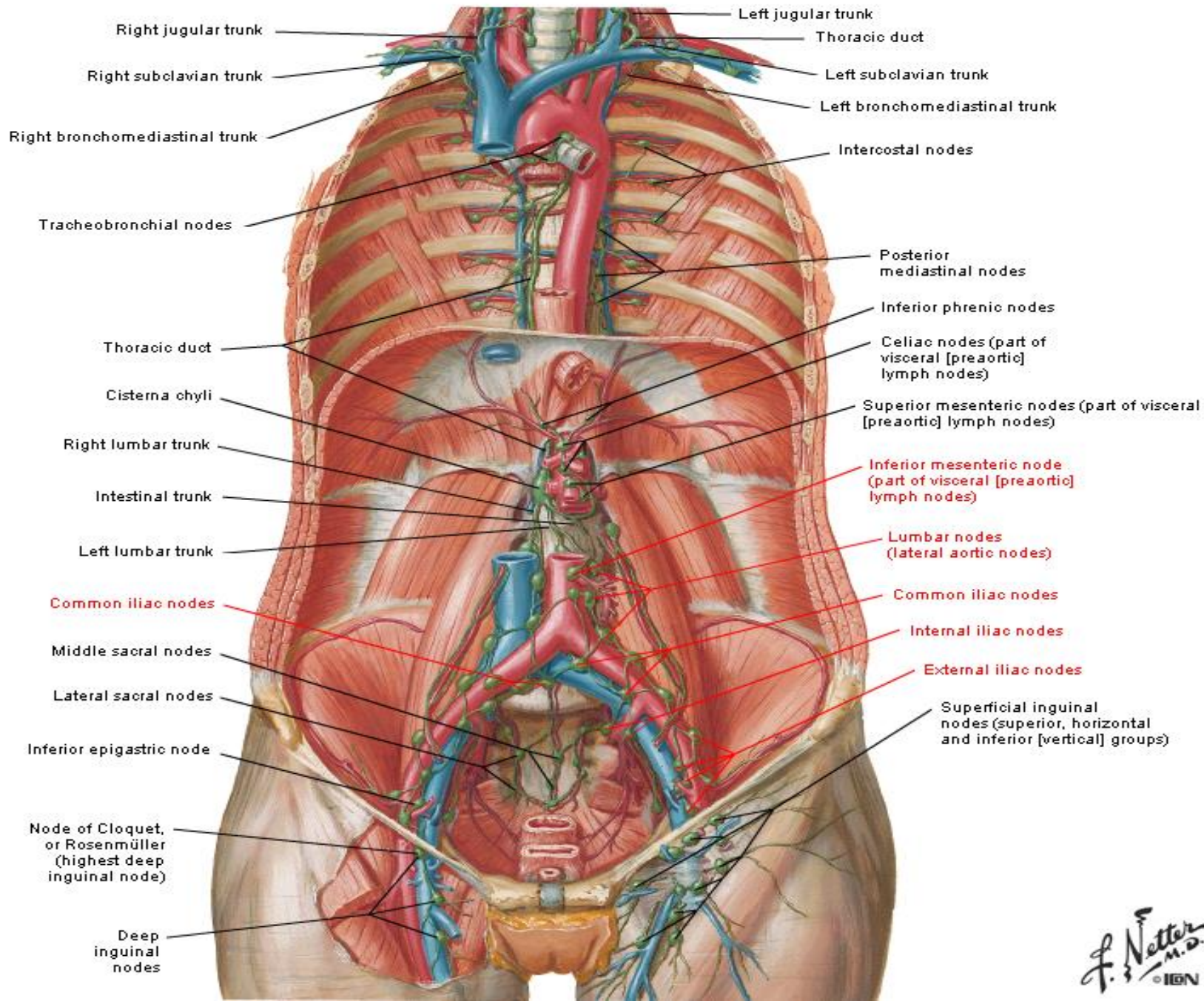
Arteries of Posterior Abdominal Wall



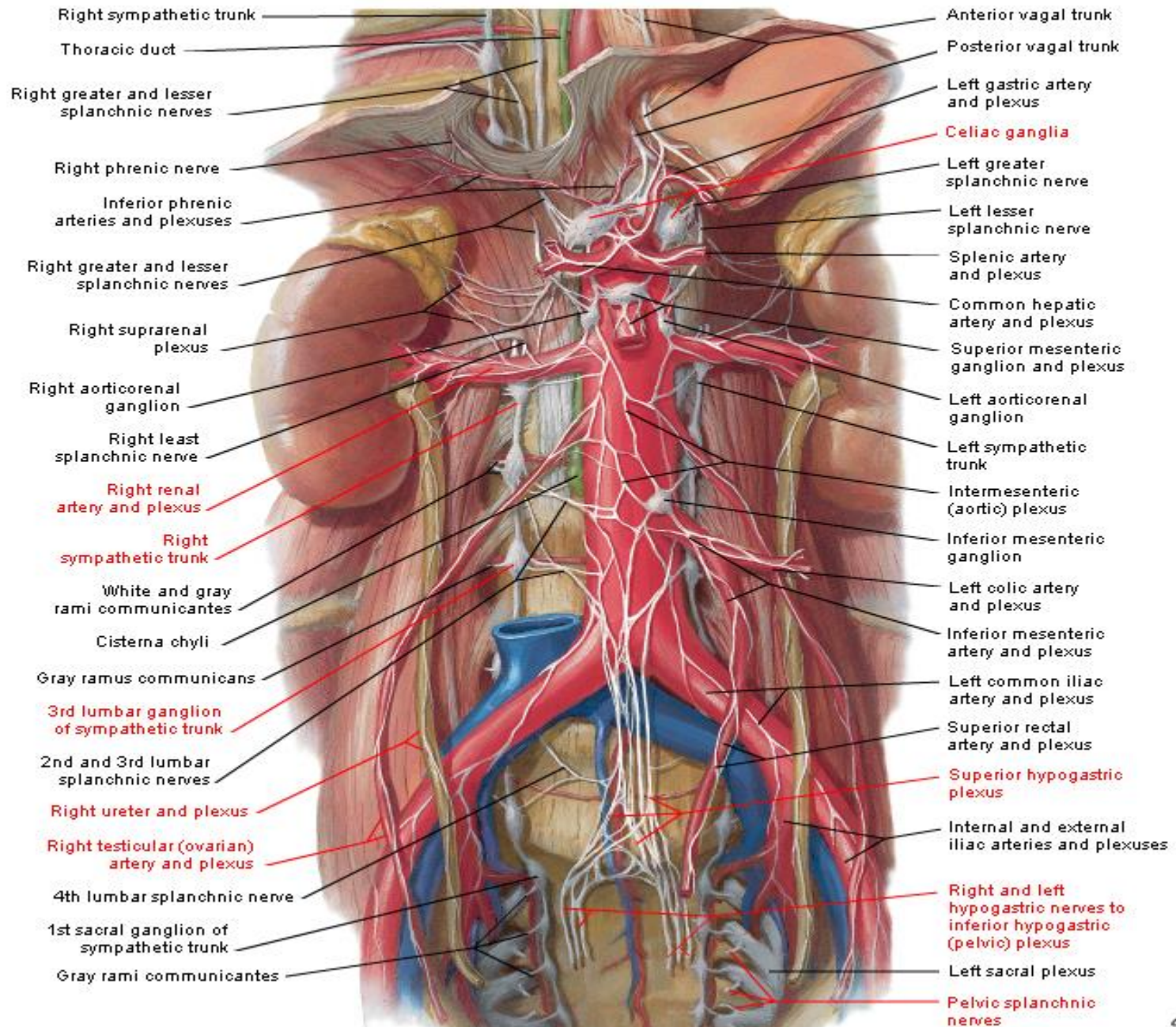
Veins of Posterior Abdominal Wall



Lymph Vessels and Nodes of Posterior Abdominal Wall

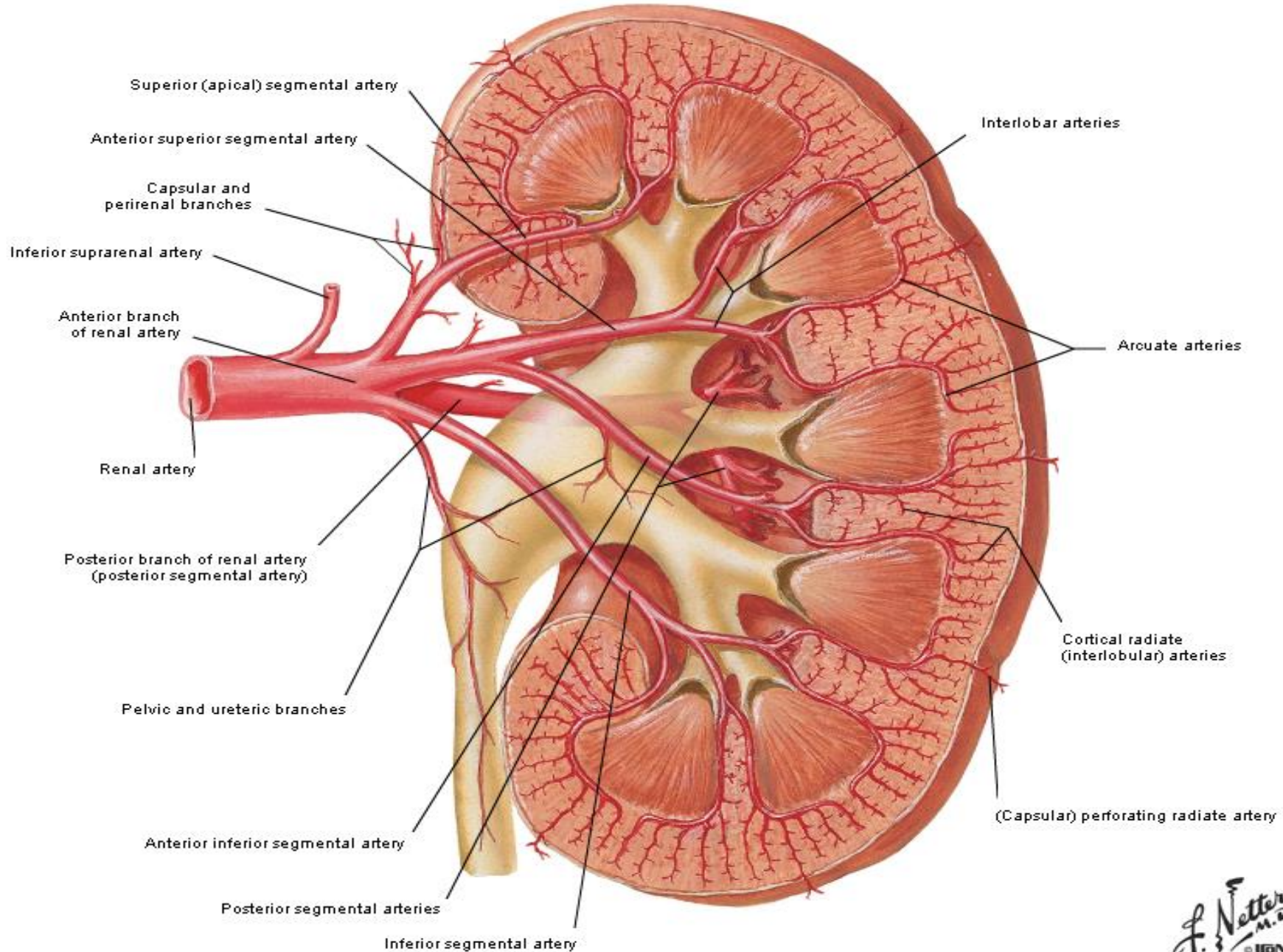


Autonomic Nerves and Ganglia of Abdomen

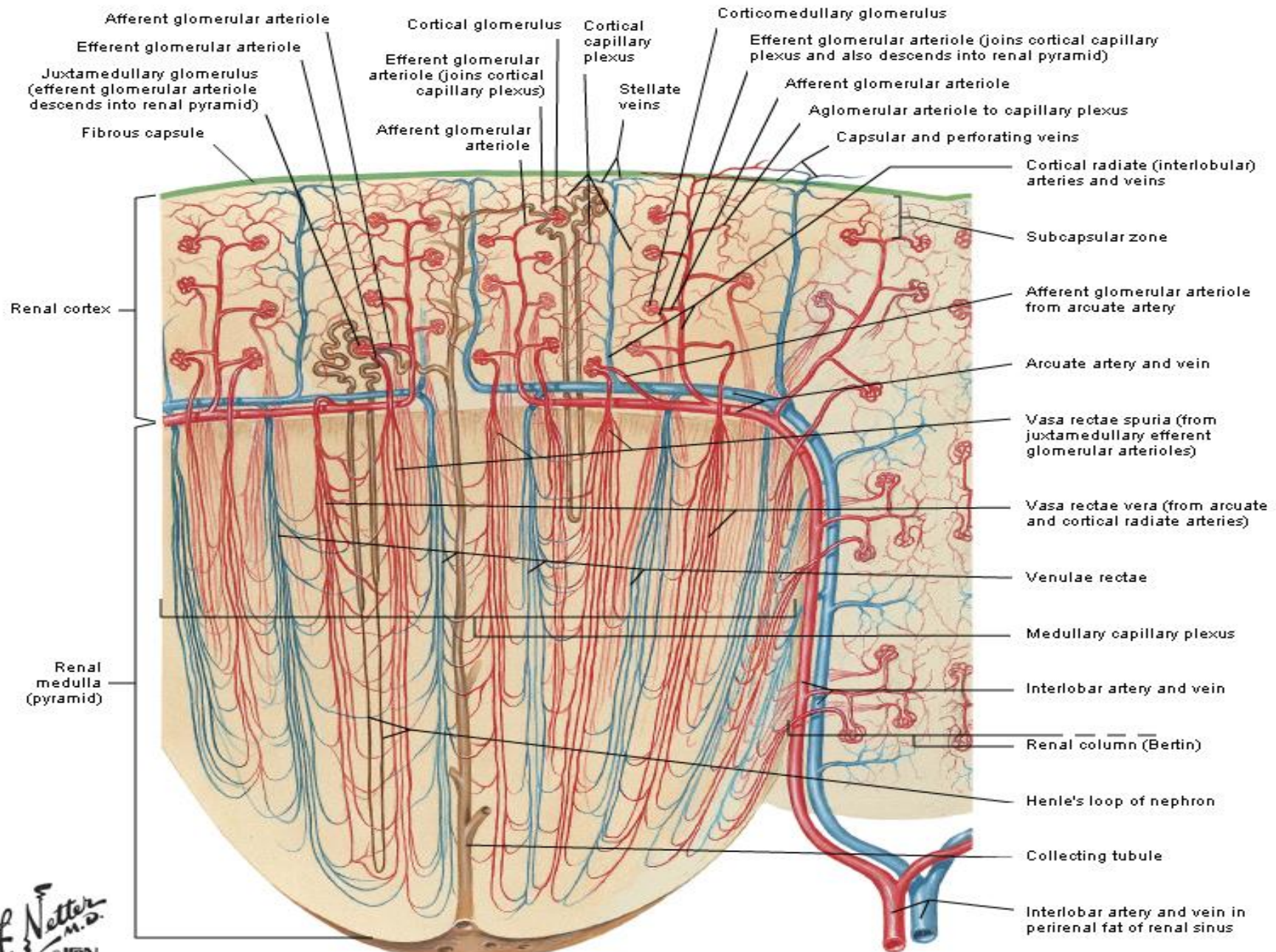


Intrarenal Arteries

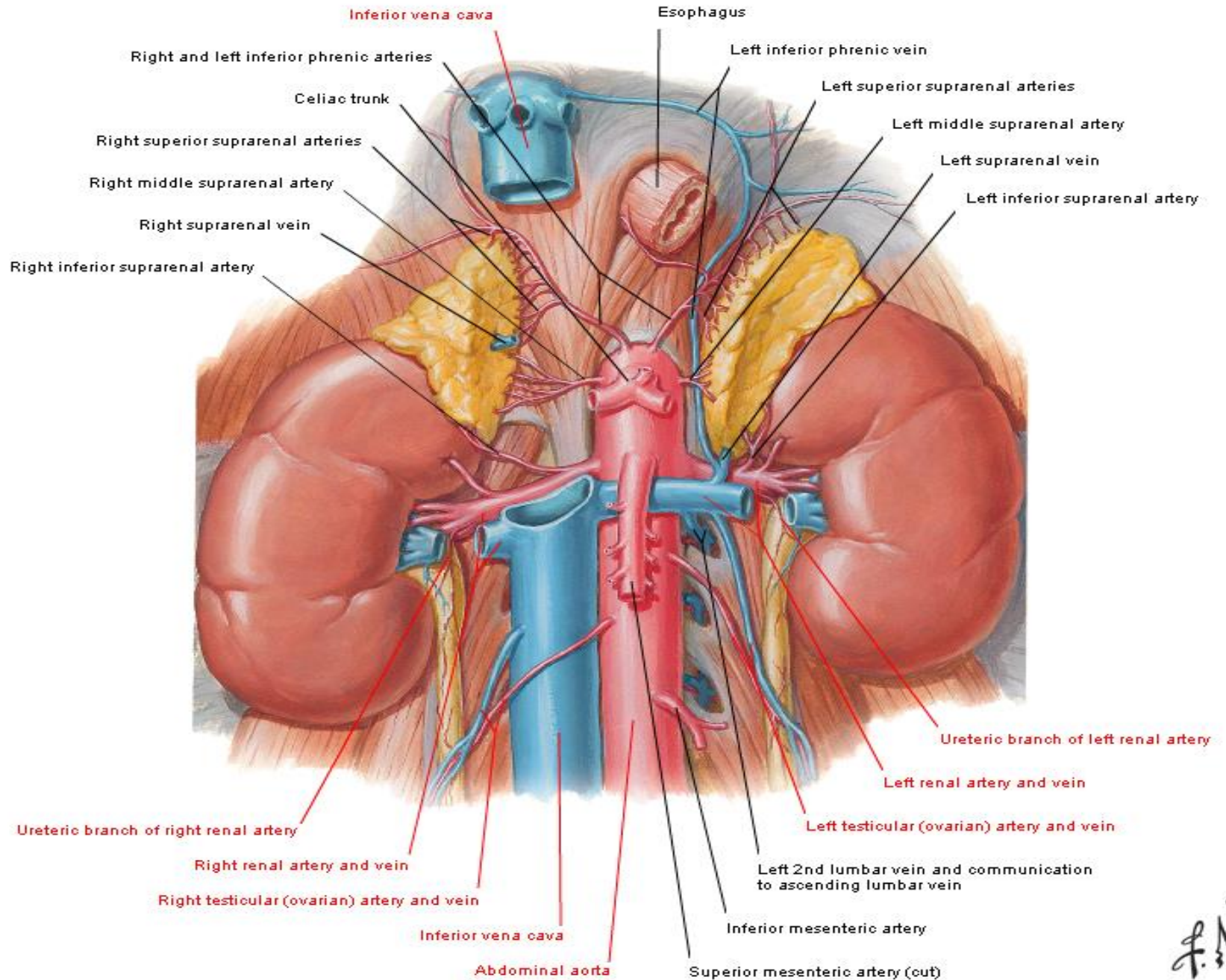
Frontal Section of Left Kidney - Anterior View



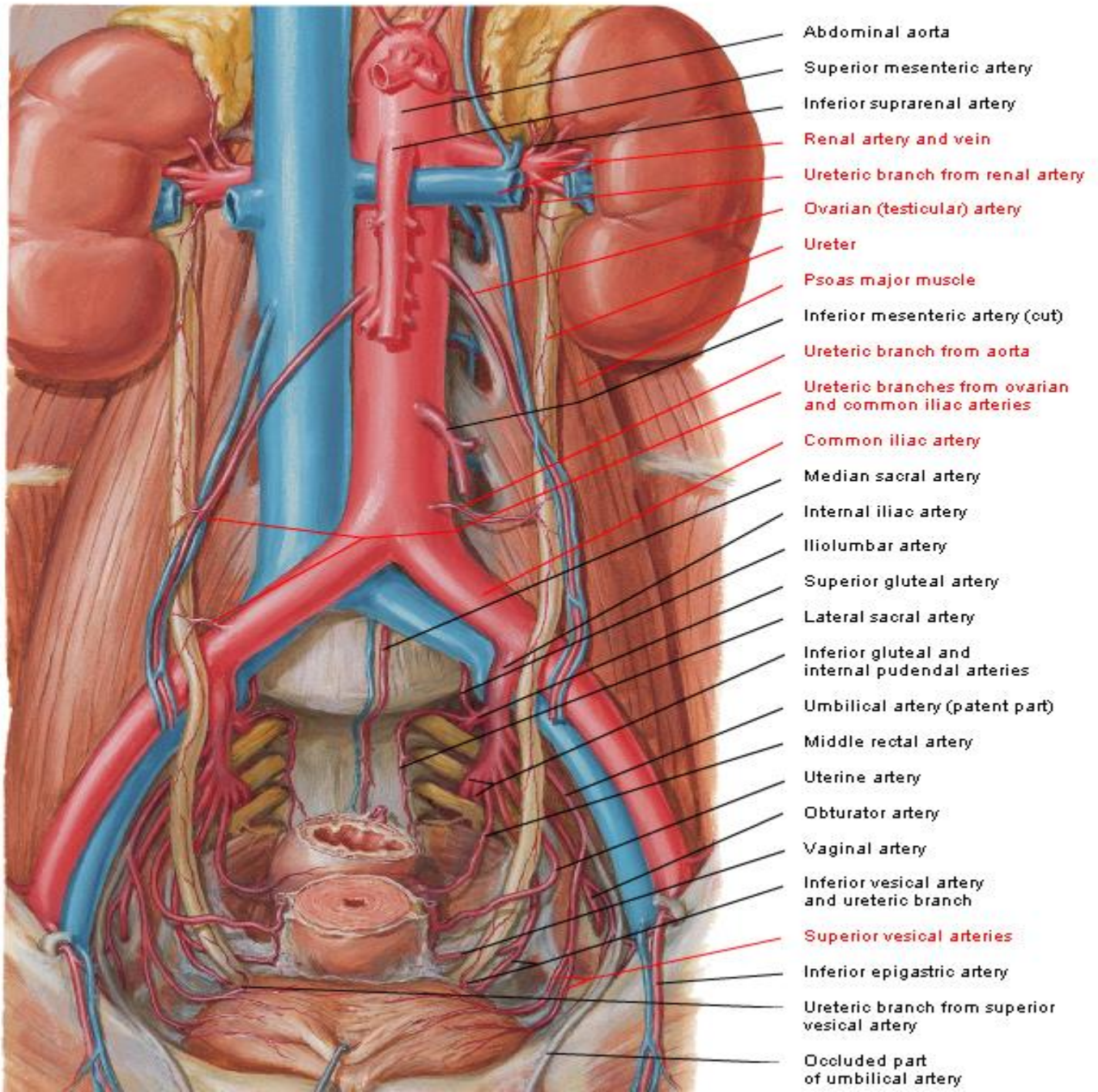
Blood Vessels in Parenchyma of Kidney Schema



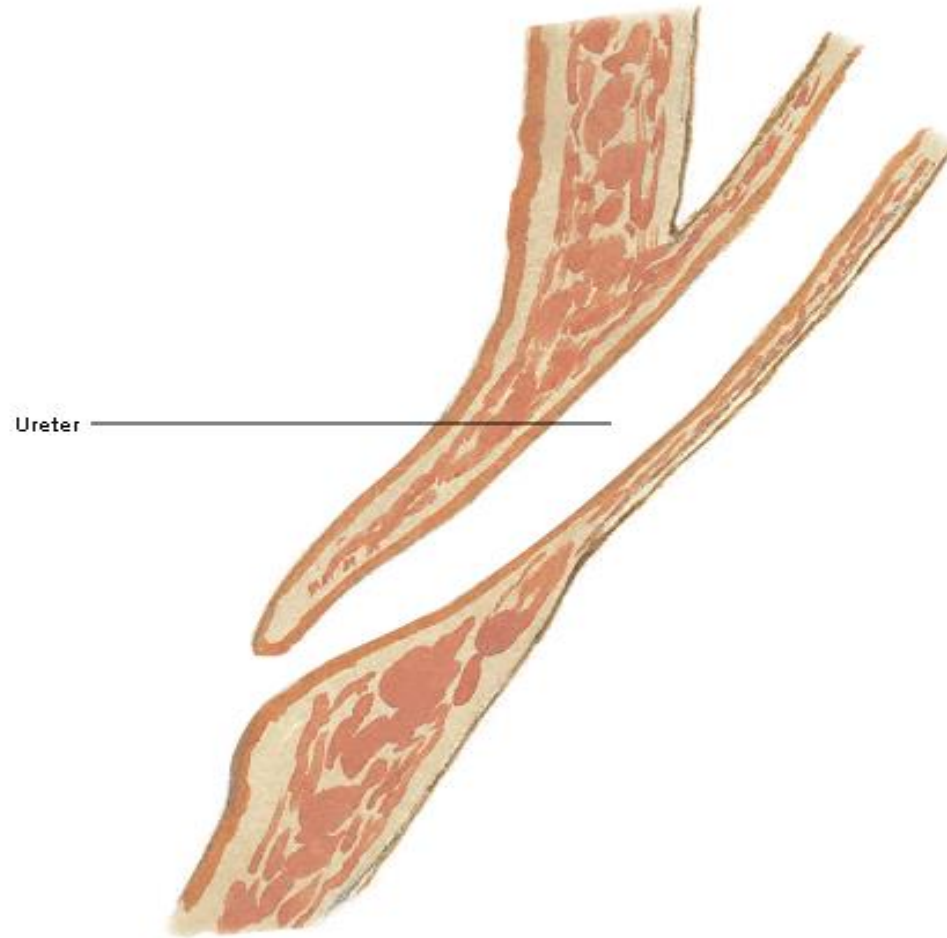
Renal Artery and Vein In Situ



Arteries of Ureters and Urinary Bladder

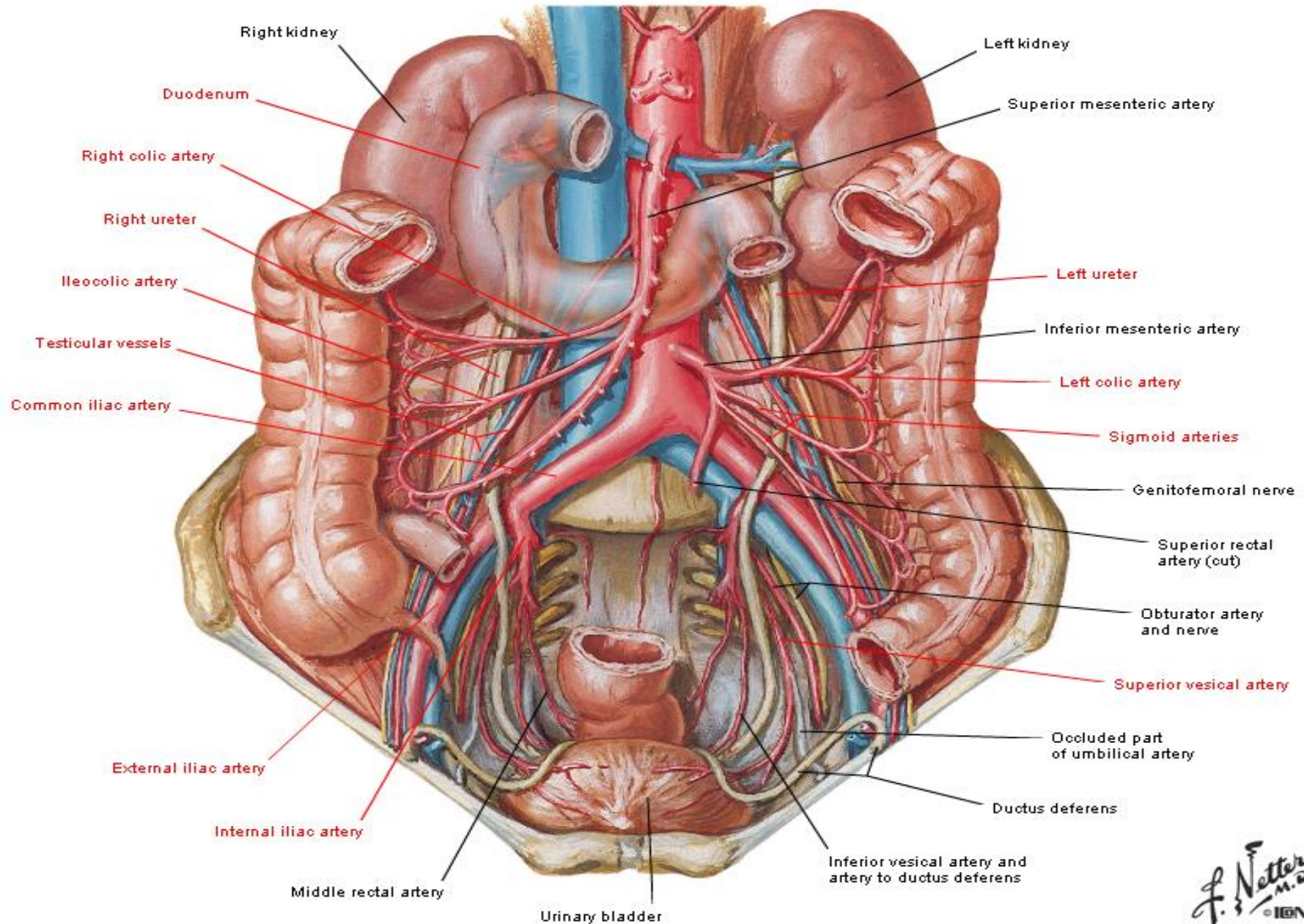


Diagonal Course of Ureter through Bladder Wall



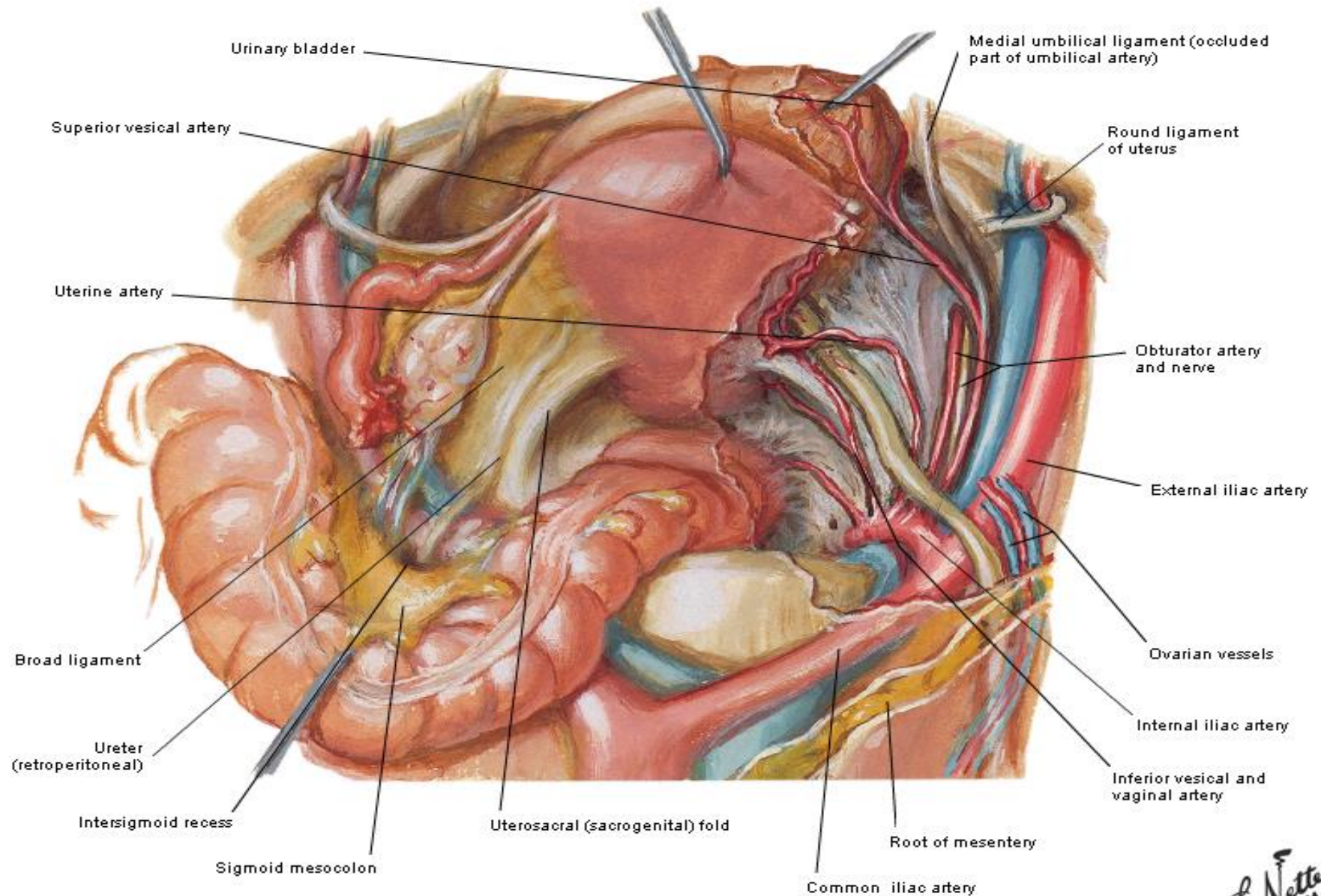
Ureters in Male

Anterior View



Ureters in Female

Superior View



Lymph Vessels and Nodes of Kidneys and Urinary Bladder

Subcapsular lymphatic plexus
Cortical lymph vessels along cortical radiate (interlobular) arteries
Lymph vessels along arcuate arteries
Lymph vessels along interlobar arteries
Medullary lymph vessels

Note: Arrows indicate direction of flow

Lumbar lymph trunks to cisterna chyli and thoracic duct

Lateral aortic (lumbar), precaval and postcaval nodes

Common iliac nodes

Promontorial (middle sacral) node

Internal iliac nodes

External iliac nodes

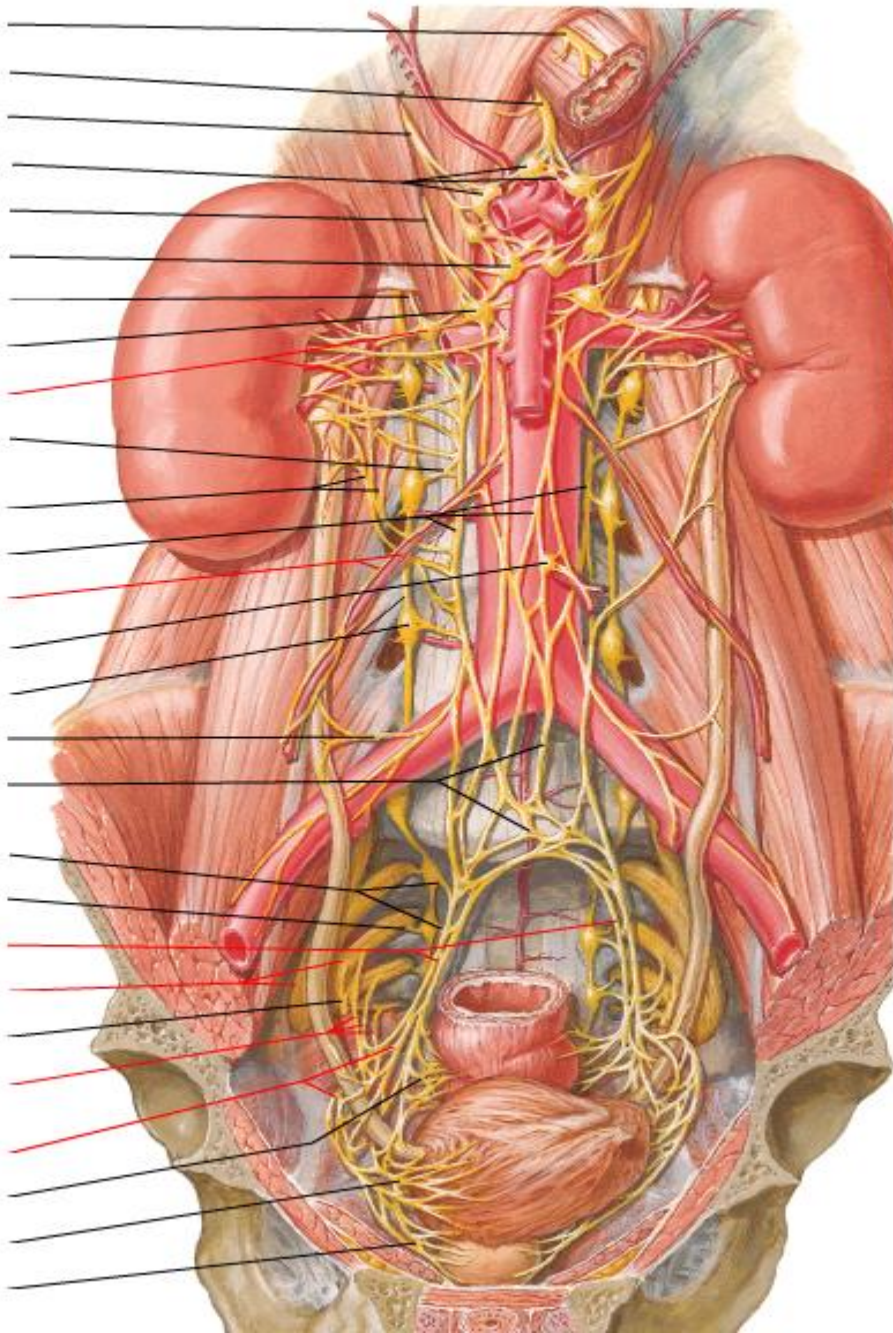
Lymph vessels from dorsal part and trigone of bladder

Lymph vessels from superior and anterior parts of bladder

Lateral vesical and prevesical nodes

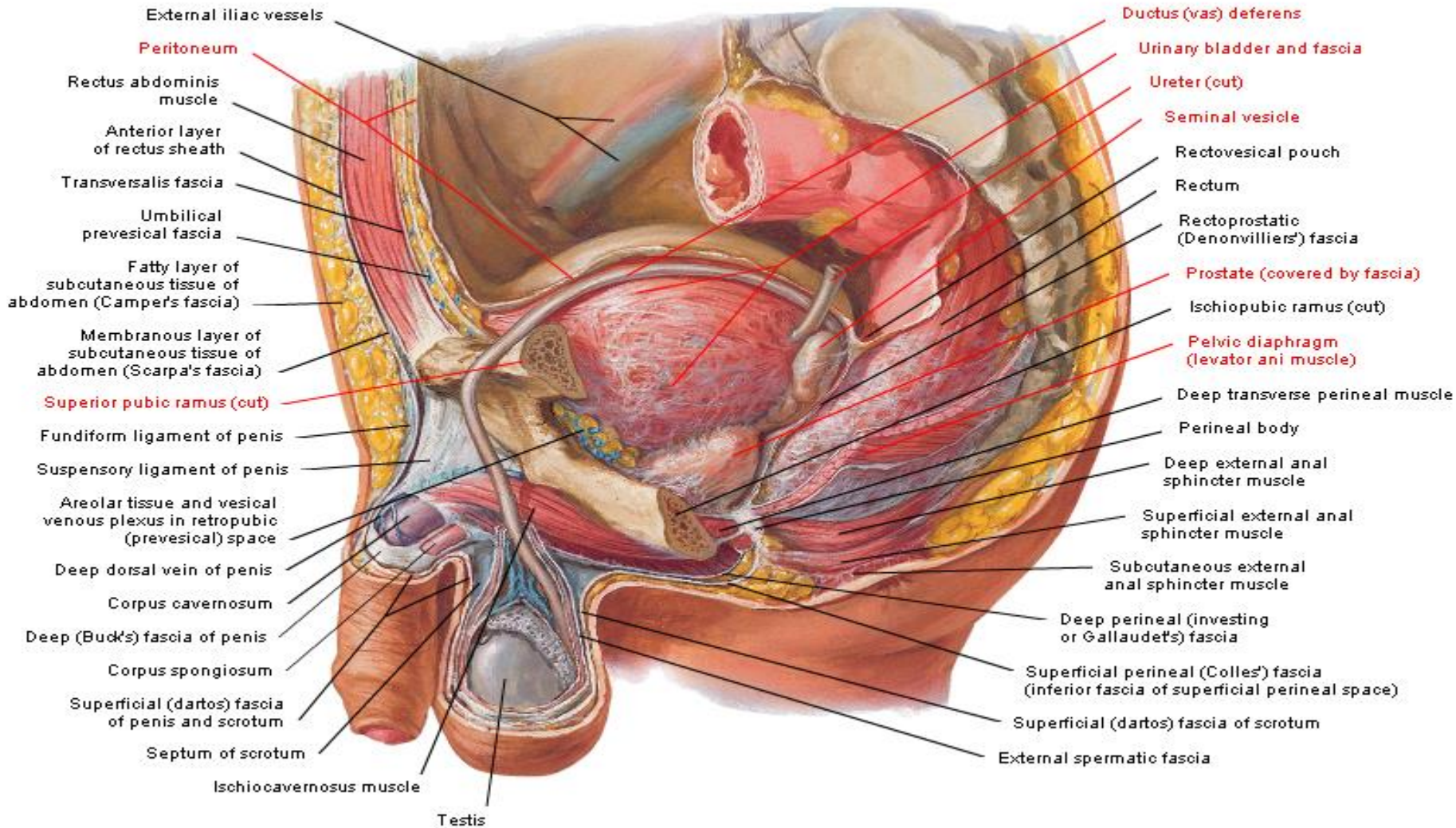
Nerves of Kidneys, Ureters and Urinary Bladder

- Anterior vagal trunk
- Posterior vagal trunk
- Greater splanchnic nerve
- Celiac ganglia and plexus
- Lesser splanchnic nerve
- Superior mesenteric ganglion
- Least splanchnic nerve
- Aorticorenal ganglion
- Renal plexus and ganglion**
- 2nd lumbar splanchnic nerve
- Renal and upper ureteric branches from intermesenteric plexus
- Intermesenteric (aortic) plexus
- Testicular (ovarian) artery and plexus**
- Inferior mesenteric ganglion
- Sympathetic trunk and ganglion
- Middle ureteric branch
- Superior hypogastric plexus
- Sacral splanchnic nerves (branches from upper sacral sympathetic ganglia to hypogastric plexus)
- Gray ramus communicans
- Hypogastric nerves**
- Sacral plexus**
- Pudendal nerve
- Pelvic splanchnic nerves**
- Inferior hypogastric (pelvic) plexus with periureteric loops and branches to lower ureter**
- Rectal plexus
- Vesical plexus
- Prostatic plexus



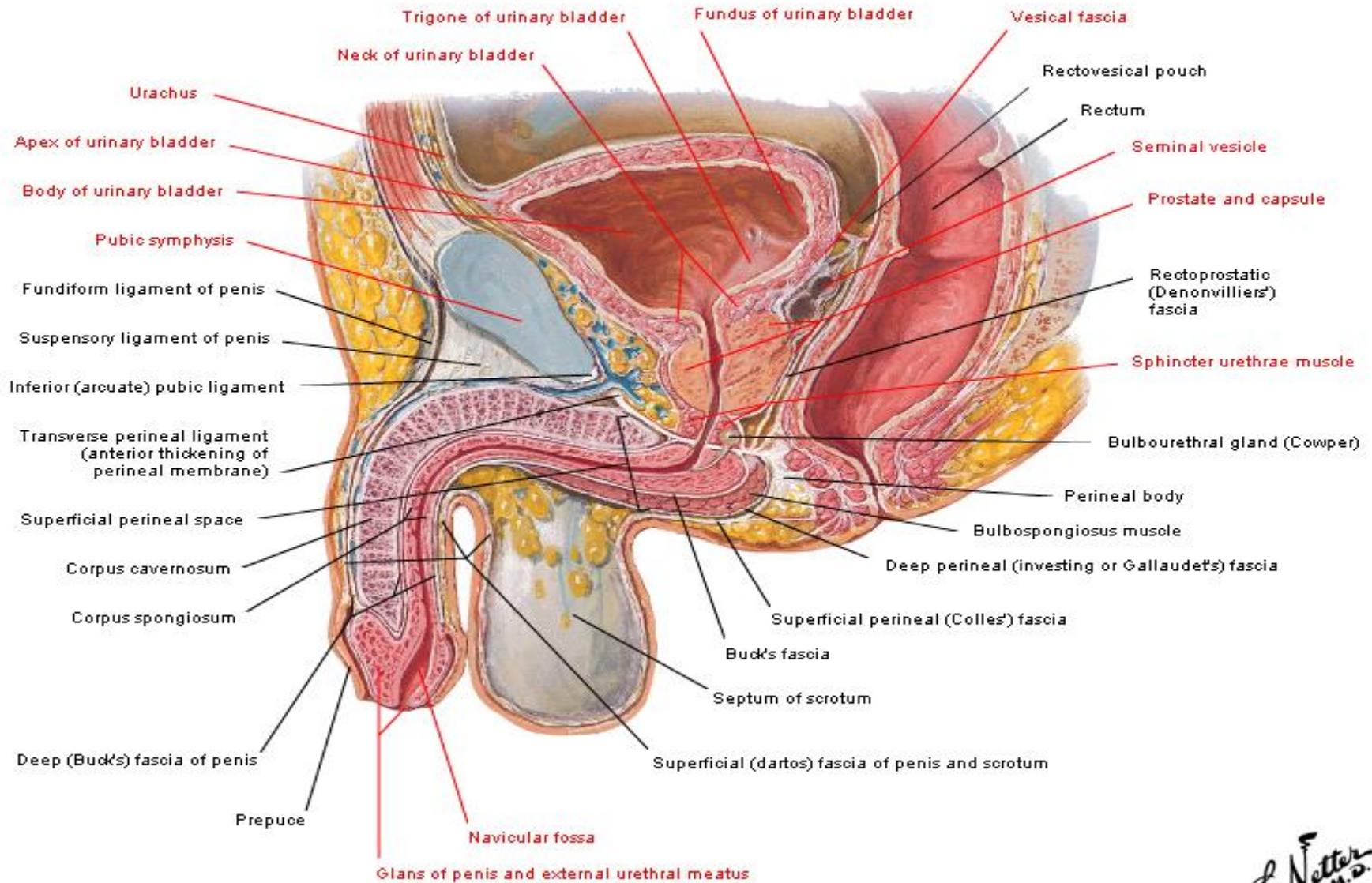
Pelvic Viscera and Perineum of Male

Paramedian (Sagittal) Section



Pelvic Viscera and Perineum of Male

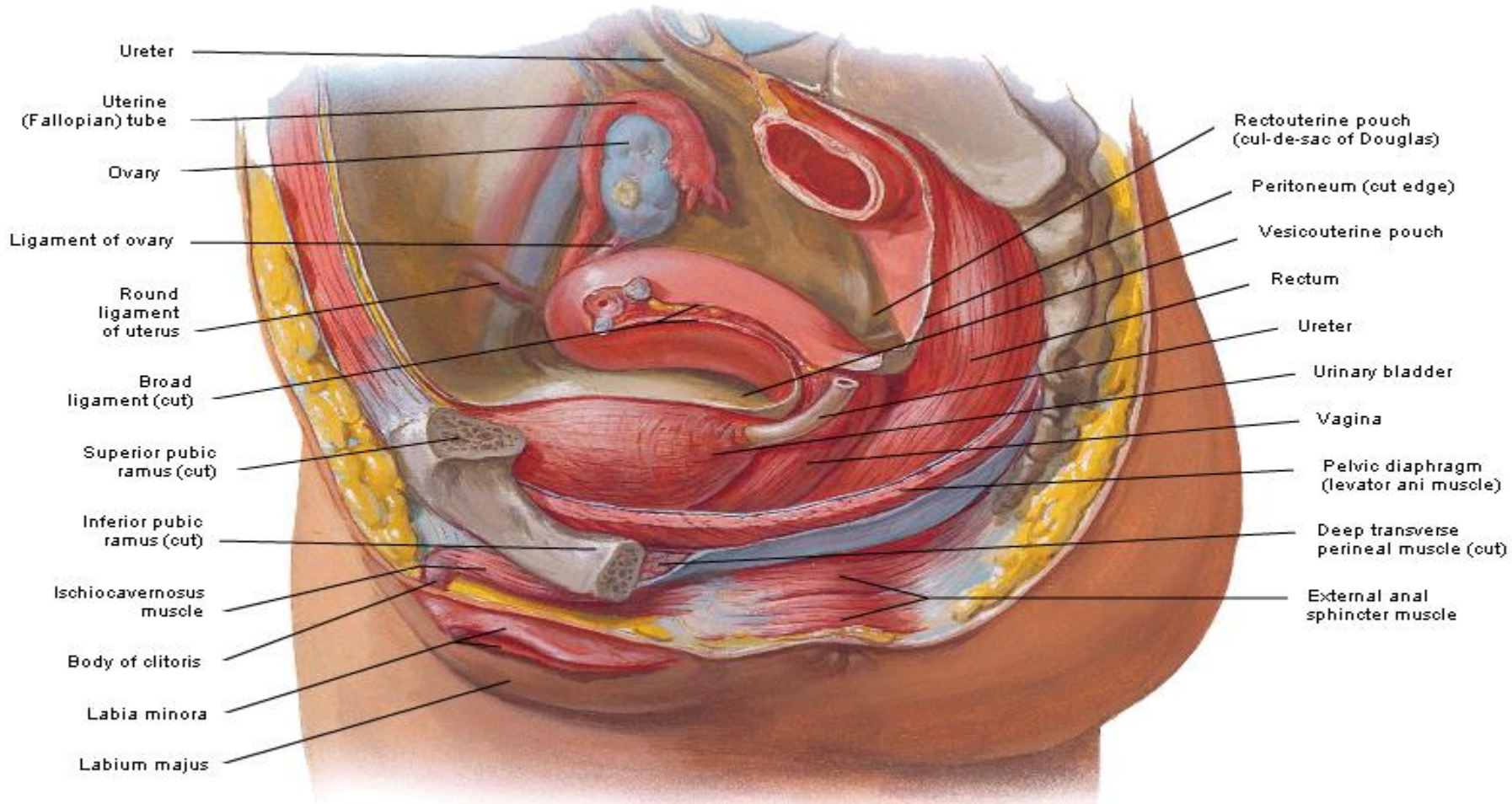
Median (Sagittal) Section



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C. Machado M.D.

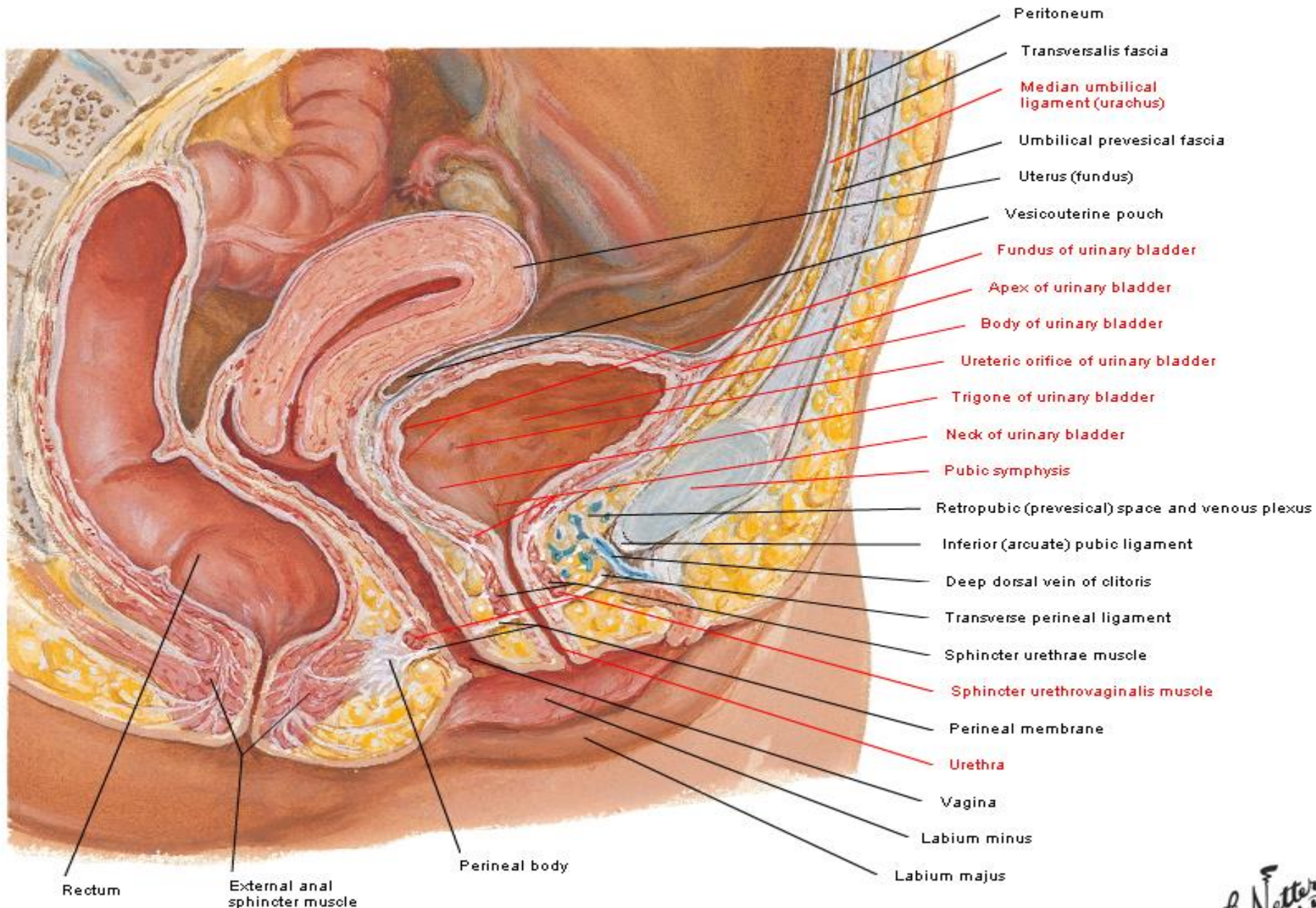
Pelvic Viscera and Perineum of Female

Paramedian Sagittal Dissection



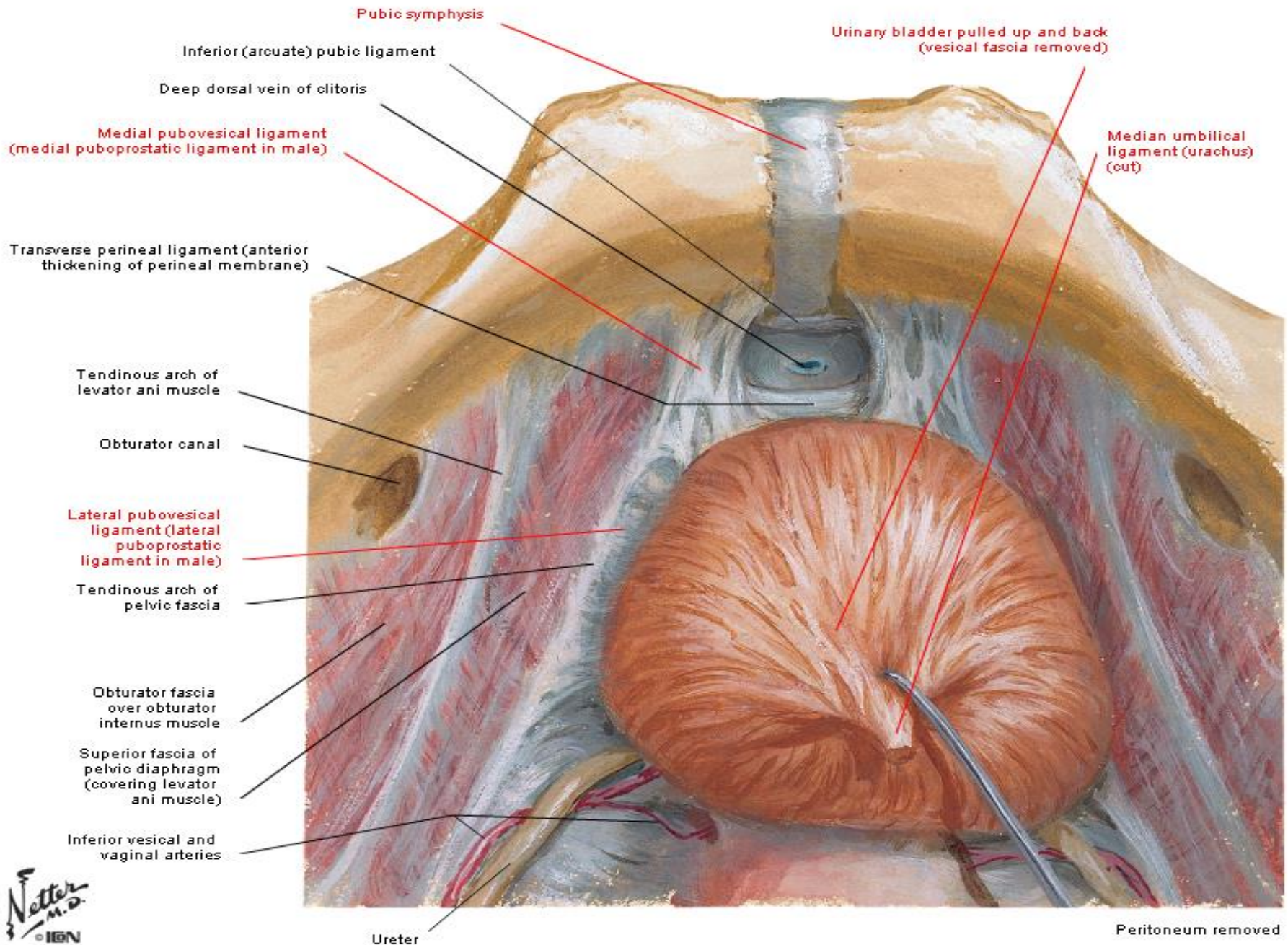
Urinary Bladder - Orientation and Supports

Midsagittal Section



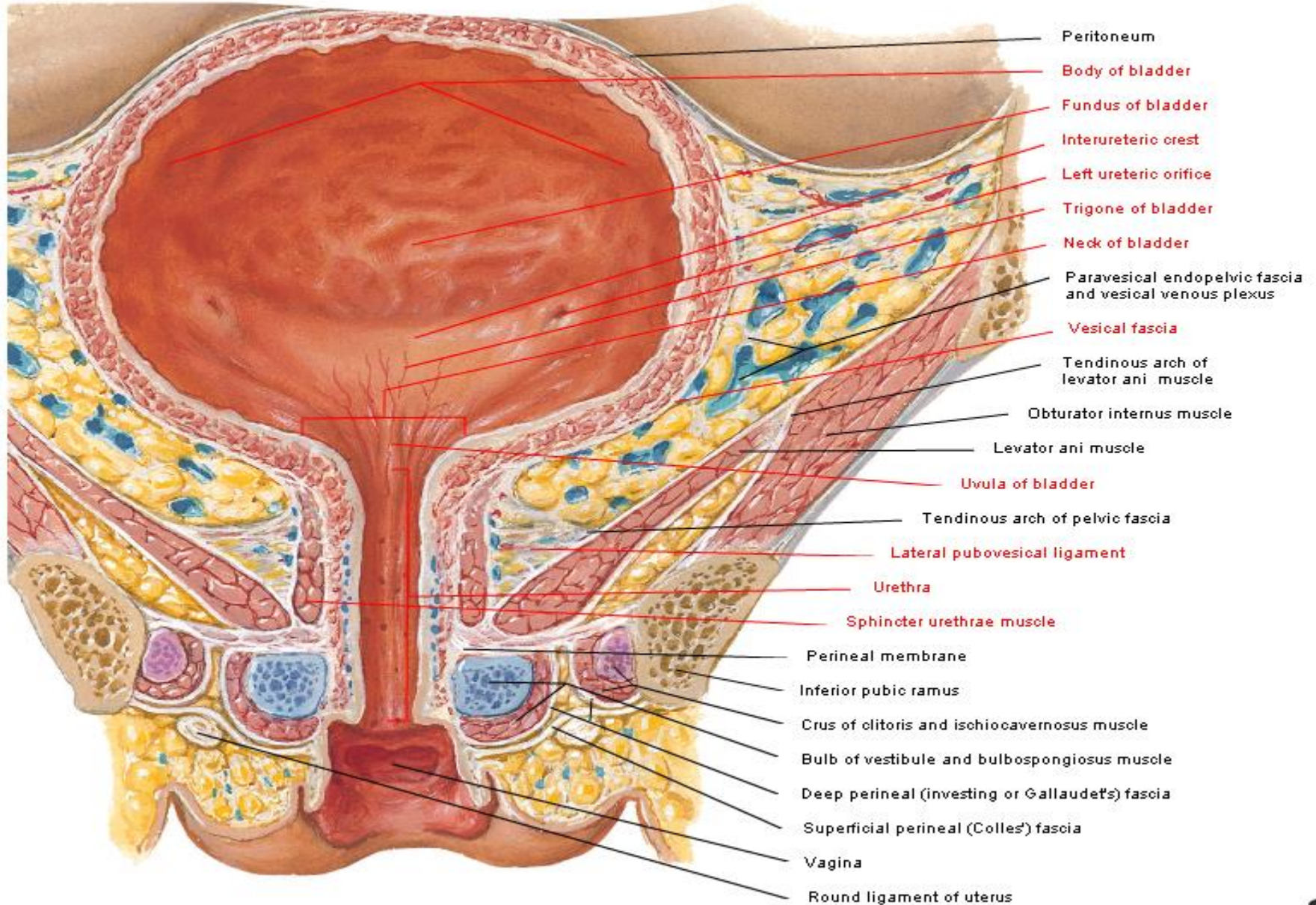
Urinary Bladder - Orientation and Supports

Superior View



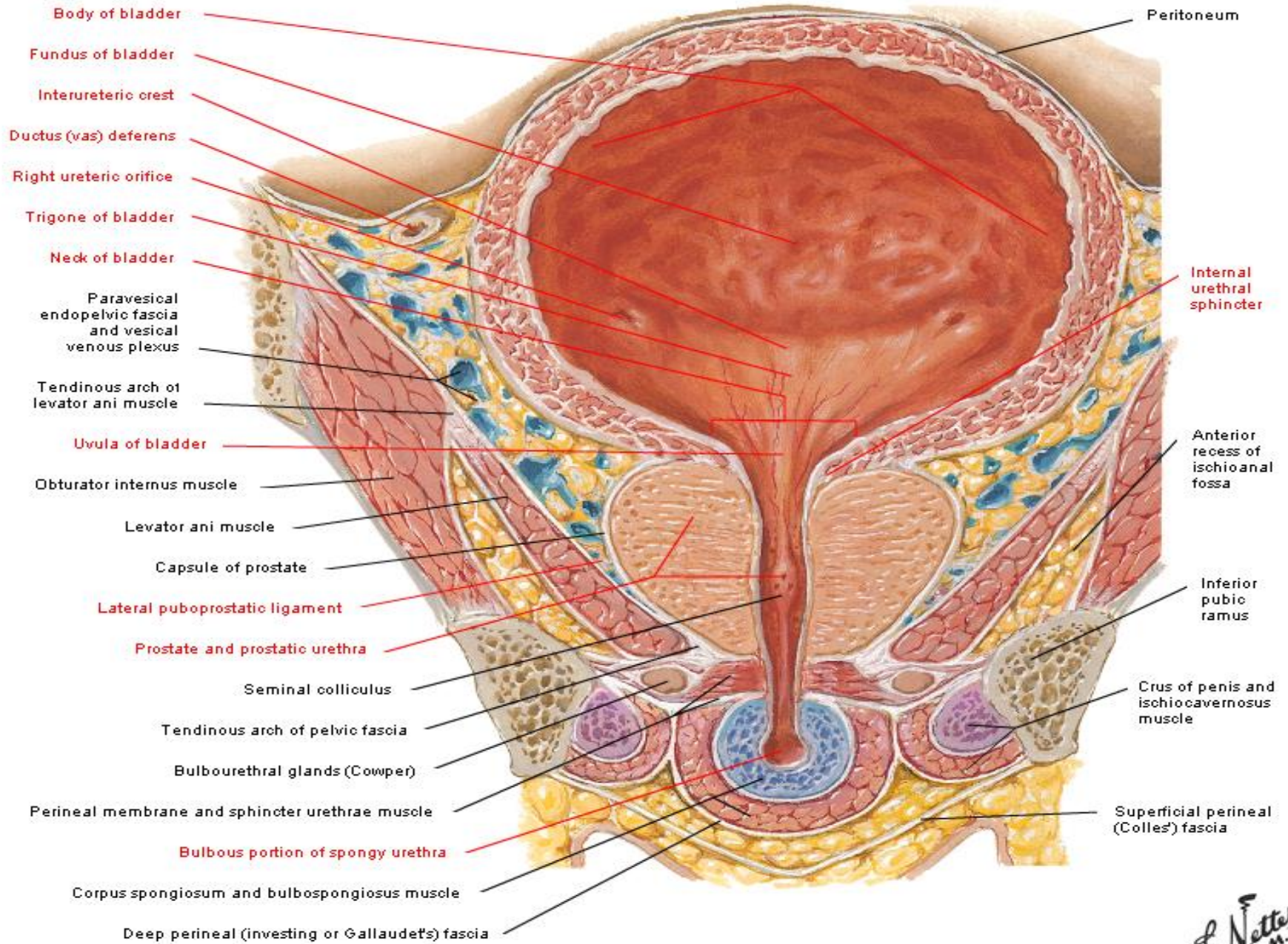
Urinary Bladder of Female

Frontal Section



Urinary Bladder of Male

Frontal Section



Body of bladder

Fundus of bladder

Interureteric crest

Ductus (vas) deferens

Right ureteric orifice

Trigone of bladder

Neck of bladder

Paravesical endopelvic fascia and vesical venous plexus

Tendinous arch of levator ani muscle

Uvula of bladder

Obturator internus muscle

Levator ani muscle

Capsule of prostate

Lateral puboprostatic ligament

Prostate and prostatic urethra

Seminal colliculus

Tendinous arch of pelvic fascia

Bulbourethral glands (Cowper)

Perineal membrane and sphincter urethrae muscle

Bulbous portion of spongy urethra

Corpus spongiosum and bulbospongiosus muscle

Deep perineal (investing or Gallaudet's) fascia

Peritoneum

Internal urethral sphincter

Anterior recess of ischioanal fossa

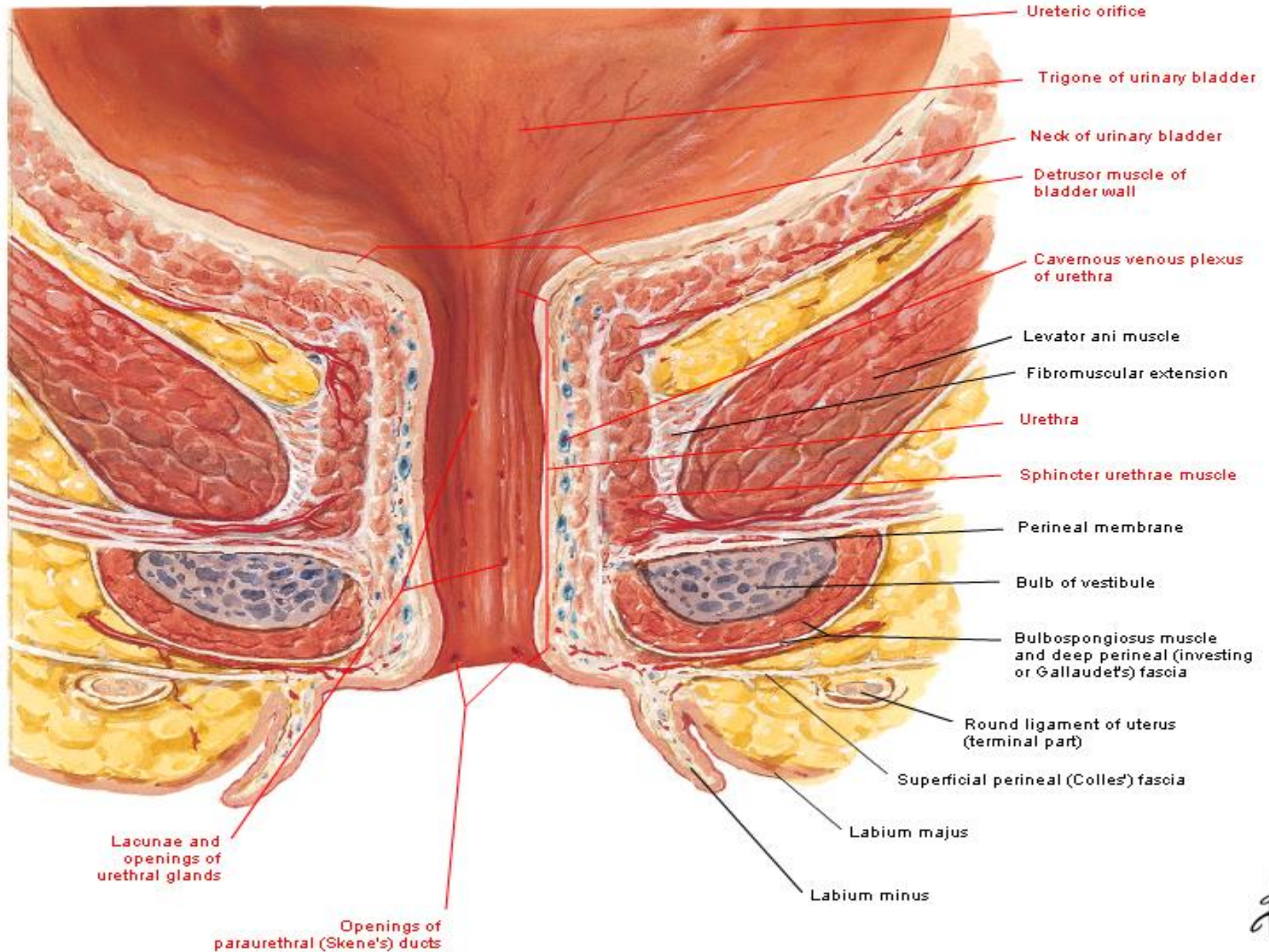
Inferior pubic ramus

Crus of penis and ischiocavernosus muscle

Superficial perineal (Colles') fascia

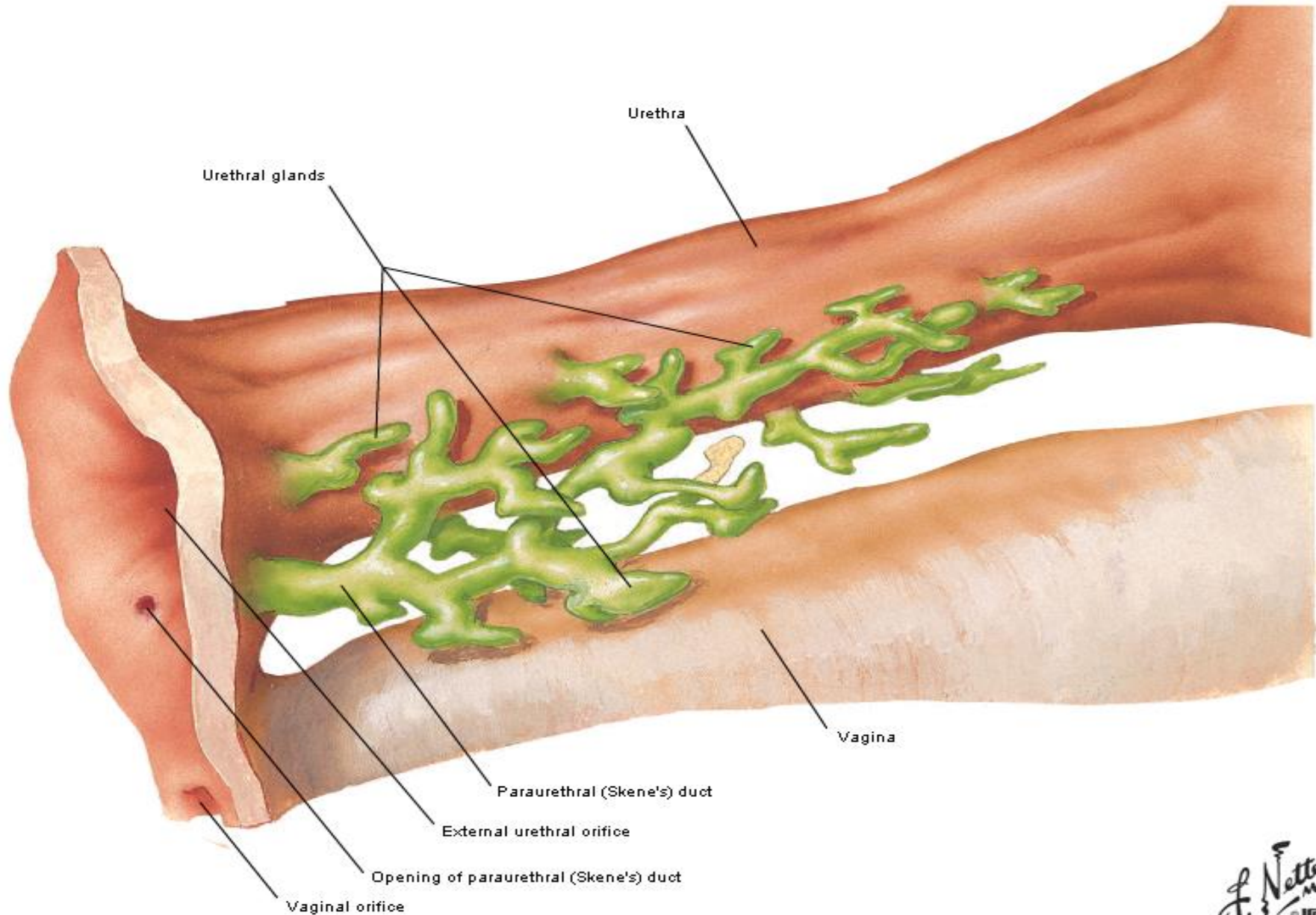
Urethra of Female

Frontal Section/Anterior View



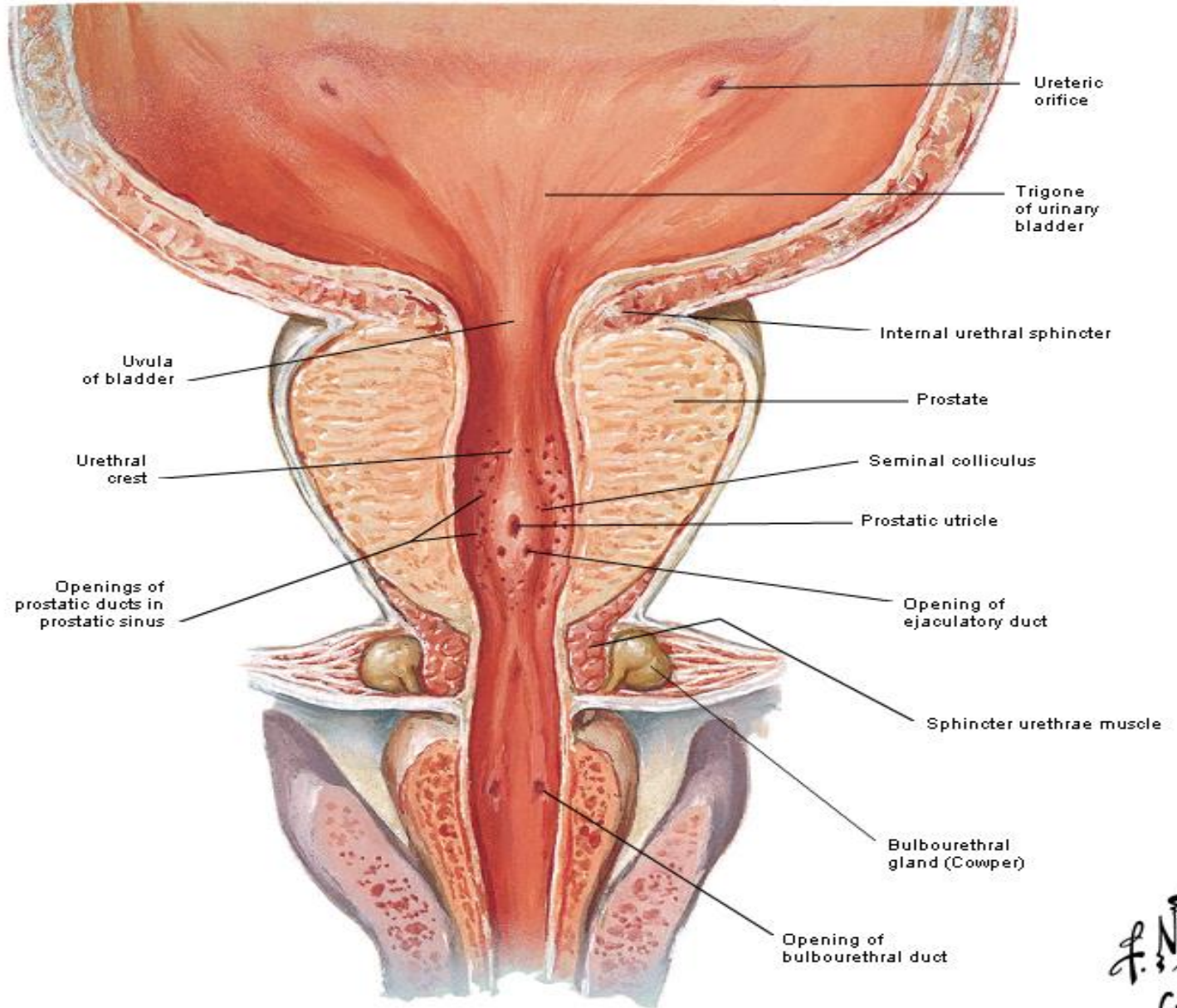
Urethra of Female

Schematic Reconstruction



Prostate and Seminal Vesicles

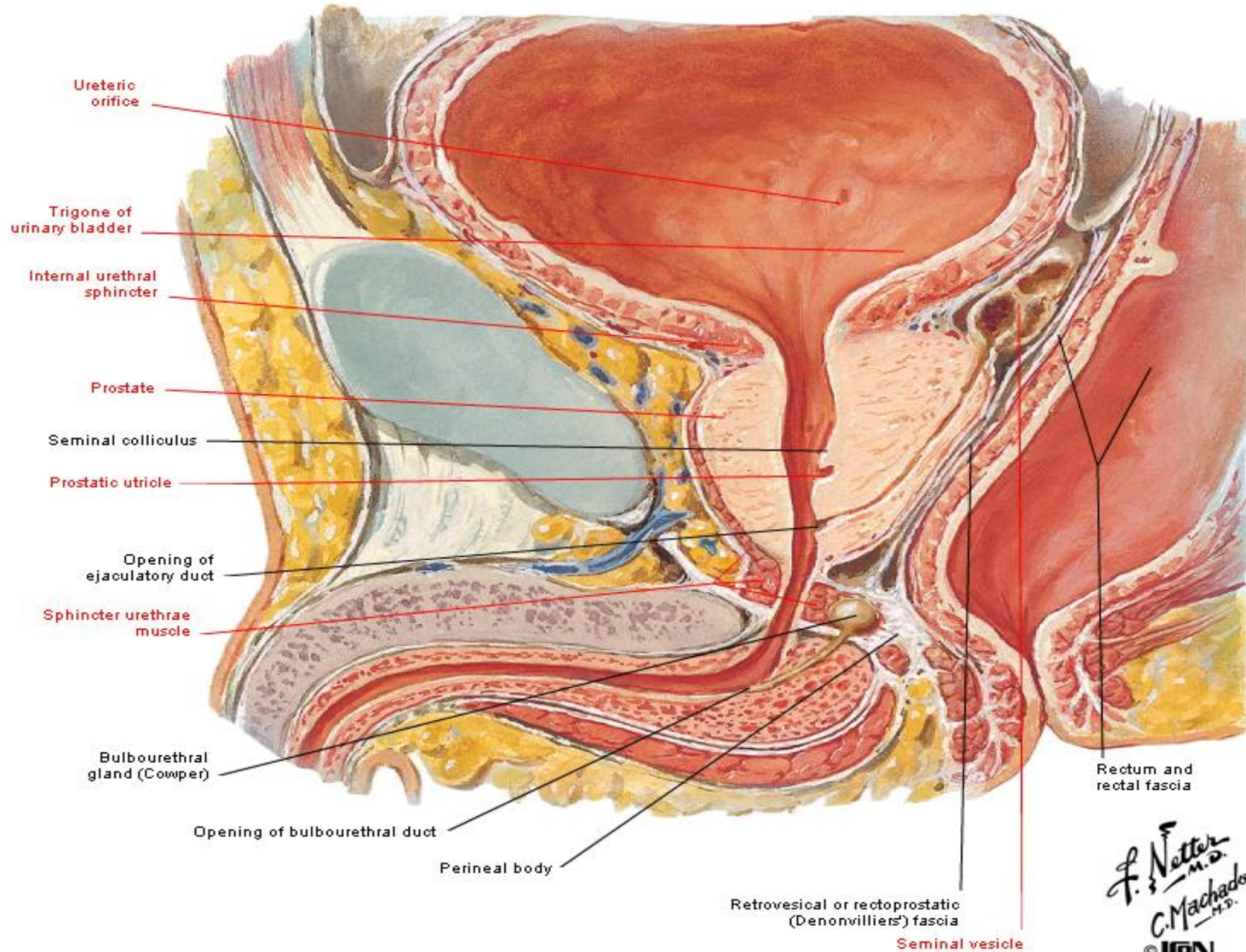
Frontal Section



Frontal section of bulbous portion of spongy urethra schematically extended

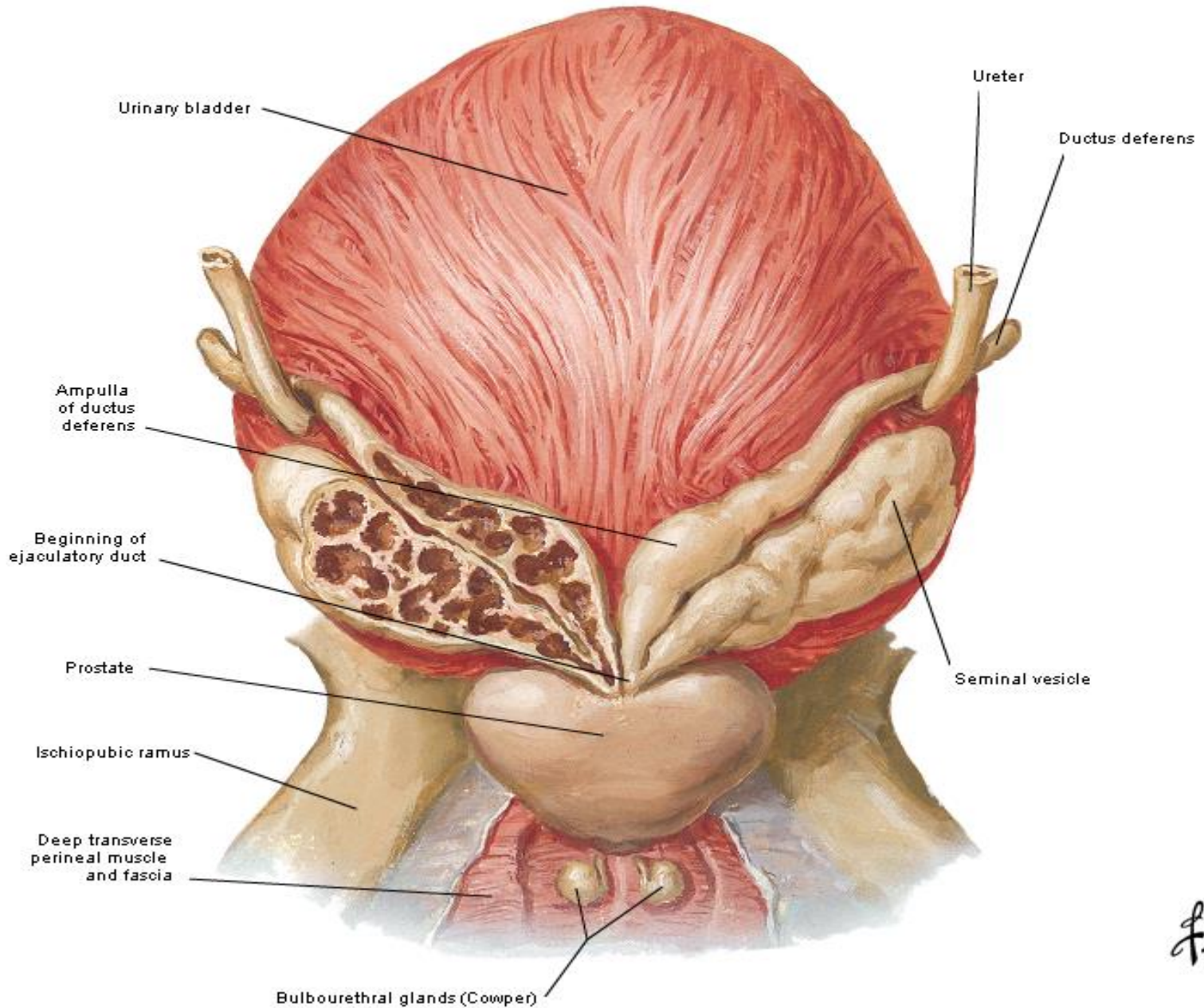
Prostate and Seminal Vesicles

Sagittal Section



Prostate and Seminal Vesicles

Posterior View



F. Netter
M.D.
C. Machado
M.D.

Urethra: Male

