**Items to Identify: Cell Structure II**

**Slides to Identify**

* Slide 109: Skin, hand, monkey
	+ Observe artifacts
* Slide 118: Liver & spleen with colloidal carbon, rat
	+ Colloidal carbon, Kupffer cells
* Slide 156: Pancreas (toluidine blue)
	+ Identify structures based on shape, size, and intensity of staining
	+ Acinus, acinar cell, and nucleus
	+ Nucleolus- heterochromatin (dark, inactive), euchromatin (pale, active)
	+ Nuclear envelope- 2-membrane system
	+ Zymogen granules – apical
* Slide 158: Pancreas
	+ Pancreatic acinar cell- pyramid shape, arranged in cluster
	+ Basal end of pancreatic acinar cell toward periphery (basophilic-RER); apical end toward lumen (acidophilic-zymogen granules)
	+ Lumen and nucleus of pancreatic acinar cell
	+ Artifacts- large clear spaces between acini
* Slide 421: Tibia, fetal
	+ Artifacts
* Slide 426: Renal artery and vein with nerves
	+ Artifacts
* Slide 447: Duodenum, monkey (toluidine blue)
	+ Artifacts
* Slide 454: Liver
	+ Note size, shape, and location between blood sinuses of hepatocytes

* Slide 472: Fallopian tube
	+ Artifacts
* Slide 475: Uterus, late proliferative endometrium
	+ Artifacts

**EM’s to Identify**

* EM 1: Pancreas
	+ Nucleus, nucleolus, euchromatin, heterochromatin, nuclear envelope
	+ Basal and apical end, lumen, intercellular space
	+ Ribosomes, mitochondria, rough endoplasmic reticulum, zymogen granules
	+ Golgi apparatus
* EM 2: Liver
	+ Plasma membrane, intercellular spaces
	+ Mitochondria (few cristae, short), rough endoplasmic reticulum, free ribosomes, polyribosomes (grouped via common mRNA strand), bound ribosomes
	+ Autophagic vacuoles (contain acid phosphatase, lysosomes)
* EM 4c: Intestinal absorptive cell, super nuclear region
	+ Rough endoplasmic reticulum, budding
	+ Coated vesicles in Golgi region
* EM 5: Liver
	+ Nucleus, euchromatin, heterochromatin, nuclear envelope, nuclear pore
	+ Mitochondria
* EM 7: Ascites fluid cell & EM 4c: Intestinal absorptive cell, super nuclear region
	+ Golgi apparatus, Golgi vesicles
* EM 8h: Macrophage in testis
	+ Observe artifacts
* EM 10b: Cardiac muscle
	+ Mitochondria- lots of long cristae
* EM 10f: Arteriolar wall & EM 4c: Intestinal absorptive cell, super nuclear region
	+ Ribosomes
	+ Observe artifacts
* EM 20: Leydig cell
	+ Mitochondria- tubular, associated with steroid production
	+ Extensive smooth endoplasmic reticulum
* EM 21: Ductus deferens
	+ Golgi
	+ Stereocilia of ductus deferens
	+ Microbodies (peroxisomes)