Histology and Pathology of the Pancreas

- Begin by holding the slide up to the light, look at the section and note large vessels and gross tissue architecture
- Put slide on the stage and turn on the light. Put the 4x objective in and scan around (the "10,000 ft. view")
- Zoom in by changing the objective.
- Compare the normal pancreas section to the pathologic specimen from a mouse model of Insulin-Dependent Diabetes Mellitus (non-obese diabetic or NOD mouse)

Normal Pancreas
- Most of the pancreas is exocrine acini. Small intralobular ducts are scattered throughout. Larger interlobular ducts are surrounded by dense connective tissue. Endocrine Islets of Langerhans are the lighter staining areas. The islets contain alpha cells secreting glucagon, beta cells secreting insulin, and delta cells secreting somatostatin.

Pancreas with Insulitis from Insulin-Dependent Diabetes Mellitus
- This is an insulitis of an islet of Langerhans in a patient who either has or will develop type I diabetes. The presence of the lymphocytic infiltrates in this islet is characteristic of certain types of autoimmune disease processes.

References
Link: http://www-medlib.med.utah.edu/WebPath/webpath.html
• Other Useful Resources

  o [http://www.path.uiowa.edu/virtualslidebox/](http://www.path.uiowa.edu/virtualslidebox/) (Great resource for pathology slides!)

