**Academic Half Day Objectives – November 19, 2019**

**Diabetes:**

1. Create short comparisons of the pathophysiology/causes of idiopathic DM, type 1, type 2, MODY, neonatal diabetes, “type A insulin resistance”, and gestational diabetes.
2. Describe the ADA goals for control regarding glycemic control, BP, and lipids.

**Complications of Diabetes:**

1. List the macrovascular and microvascular complications of diabetes.
2. Classify diabetic retinopathy, and list key features of both types.
3. What is the treatment of diabetic nephropathy in patients with and without concomitant hypertension?
4. List the different types of diabetic neuropathies.
5. What are the practice recommendations for screening of microalbuminuria, retinopathy, and polyneuropathy in type 1 and type 2 diabetics?
6. Make a table and list the following drug classes, mechanism(s) of action, side effects and contraindications: Biguanides, Thiazolidinediones, Sulfonylureas, DPP-4 inhibitors, GLP-1 receptor antagonists, and Alpha-glucosidase inhibitors. Know an example of each drug class.

**Osteoporosis:**

1. Know the definition of osteoporosis clinically and by the DEXA score.
2. Describe the patients that should be screened for osteoporosis based on the USPSTF guidelines and the National Osteoporosis Foundation (NOF) Guidelines (including men).
3. Describe the difference between primary and secondary osteoporosis. Know which patients should be evaluated for secondary osteoporosis. List a differential diagnosis for secondary osteoporosis and what the work up entails.
4. Describe the indications for treatment of osteoporosis according to the NOF.   Understand how the FRAX tool can be used to help determine who needs to be treated.
5. Describe the non-pharmacologic treatment to prevent osteoporotic fractures.
6. Make a table and and describe the pharmacologic therapies for osteoporosis, (including bisphosphonates, selective estrogen receptor modulators (SERMS), calcitonin, teraperatide, and denosumab), their mechanism of action, contraindications, and side effects.
7. Know the recommended doses of calcium and vitamin D and the goal 25-OH vitamin D value.