## **32nd Annual Internal Medicine Board Review**

Hilton Rochester Mayo Clinic Area Hotel Program Schedule – Live and Livestream June 5-9, 2023

Monday, June 5, 2023	
7:00 a.m.	Welcome and Course Overview
	Christopher A. Aakre, M.D., April R. Christensen, M.D., MS and Hannah C. Nordhues, M.D.
7:15 a.m.	Geriatrics
	Brandon P. Verdoorn, M.D.
	<ul> <li>Recall evidence-based fall prevention strategies and use this information to effectively manage patients</li> <li>Diagnose and manage patients with mild cognitive impairment and dementia in the elderly</li> <li>Evaluate and manage urinary incontinence in the elderly</li> <li>Recognize high-risk medications in elderly patients and develop strategies for preventing medication related side effects</li> <li>Prevent and manage pressure injury in the elderly</li> </ul>
8:05 a.m.	Dermatology
	Hafsa M. Cantwell, M.D.
	<ul> <li>Diagnose and manage basal and squamous cell carcinoma</li> <li>Diagnose and develop initial management strategies for melanoma</li> <li>Identify the diagnosis and management of common primary care skin conditions, such as vitiligo, pityriasis rosea, rosacea, and scabies</li> <li>Recognize and manage acne vulgaris</li> <li>Recognize and treat psoriasis</li> <li>Recognize and treat drug eruptions</li> </ul>
8:55 a.m.	Allergy
	Gerald W. Volcheck, M.D.
	Recognize and treat anaphylaxis
	Diagnose and treat urticaria and angioedema
	Diagnose and treat allergic rhinosinusitis
9:50 a.m.	Break
10:10 a.m.	Nutrition/Nutritional Disorders
	Meera Shah, M.B., Ch.B.
	<ul> <li>Identify overweight and obese patients and identify their health risks</li> </ul>
	Review medical and surgical management of obesity

	Recognize and manage dietary factors in hypertension
	Recognize nutrition deficiencies
	Diagnose and manage malnutrition using oral, enteral, or parenteral therapies
10:55 a.m.	HEENT
	Luke T. Hafdahl, M.D.
	Evaluate and manage epistaxis
	<ul> <li>Identify the presentation, evaluation, and management of glaucoma</li> </ul>
	Diagnose and treat infectious pharyngitis
	<ul> <li>Develop initial evaluation and management strategies for the acute red eye</li> </ul>
	Diagnose and treat acute and chronic infectious sinusitis
11:40 a.m.	Lunch
12:25 p.m.	Men's Health
	Jason H. Szostek, M.D.
	Identify the screening strategies, diagnosis, and management of prostate cancer
	Describe an approach to diagnosing & treating benign prostatic hypertrophy (BPH)
	Recall the evaluation, diagnosis, and initial management strategies for erectile dysfunction
1:15 p.m.	Women's Health: Adolescence and Beyond
	Jill M. Huber, M.D.
	Outline the principles of contraception and contraceptive counseling
	Review the management of common medical conditions in pregnancy
	Recall the evaluation of abnormal uterine bleeding
	Outline the risks, benefits, and indications for hormone replacement therapy in women
2:10 p.m.	Hypertension and Hyperlipidemia
	Joel D. Beachey, M.D.
	Apply lipid lowering treatment based on patient characteristics/risk utilizing AHA/ACC
	guidelines
	<ul> <li>Identify, diagnose, and manage hypertension based on consideration of medical</li> </ul>
	comorbidities
2:55 p.m.	Break
3:10 p.m.	Neurology Part 1
	Rafid Mustafa, M.D.
	Diagnose and manage basic seizure disorders
	<ul> <li>Compare and contrast headache types and management strategies</li> </ul>
	Evaluate for and treat etiologies of stroke

3:50 p.m.	Neurology Part 2
	Rafid Mustafa, M.D.
	<ul> <li>Identify, diagnose, and manage radiculopathies and spinal stenosis</li> <li>Recognize the presentation of and select appropriate testing for patients with restless leg syndrome</li> <li>Diagnose and treat common peripheral neuropathies</li> <li>Diagnose and treat movement disorders including essential tremor and Parkinson's</li> <li>Diagnose and select appropriate treatment for patients with myasthenia gravis</li> </ul>
4:30 p.m.	Psychiatry
	Scott A. Breitinger, M.D.
	<ul> <li>Review diagnosis and treatment of depression</li> <li>Recall the diagnosis and treatment of anxiety spectrum disorders</li> <li>Recognize the presentation and management of substance use disorder</li> <li>Diagnose and manage schizophrenia, including medication side effects</li> <li>Identify and treat bipolar disorder</li> </ul>
5:15 p.m.	Sprint Test
5:45 p.m.	Adjourn

Tuesday, June 6, 2023	
6:55 a.m.	Course Overview
7:00 a.m.	Endocrinology – Bone and Parathyroid
	Kurt A. Kennel, M.D.
	Use risk factors to diagnose and manage male and female osteoporosis
	<ul> <li>Distinguish osteomalacia from osteoporosis by listing its distinct clinical features</li> </ul>
	<ul> <li>List key aspects of the diagnosis, evaluation, and treatment decisions in Paget disease of the bone</li> </ul>
	<ul> <li>Recall the evaluation and management of primary hyperparathyroidism</li> </ul>
	Employ a stepwise approach to evaluate and treat hypercalcemia and hypocalcemia
7:55 a.m.	Endocrinology – Diabetes and Hypoglycemia Part 1
	Pankaj Shah, M.D.
	Diagnose and manage Type 1 and gestational diabetes mellitus
	Diagnose and manage Type 2 diabetes mellitus

	Identify strategies to prevent or delay the onset of Type 2 diabetes mellitus
8:40 a.m.	Endocrinology – Diabetes and Hypoglycemia Part 2
	Pankaj Shah, M.D.
	Diagnose and manage diabetic ketopeidesic
	<ul> <li>Diagnose and manage diabetic ketoacidosis</li> <li>Diagnose and manage diabetic hyperosmolar nonketotic state</li> </ul>
	Diagnose and manage hypoglycemia in the diabetic patient
0.25 a m	Break
9:35 a.m. 9:50 a.m.	
9.50 a.III.	Endocrinology – Thyroid  Omar El-Kawkgi, M.B., B.Ch., B.A.O.
	Omar Er-Nawkyr, Wr.B., B.Ch., B.A.O.
	Evaluate and manage hyperthyroidism and hypothyroidism, including subclinical disease
	Diagnose and manage thyroid medical emergencies
	Evaluate and manage thyroid nodules
	Describe and manage the different types of thyroid cancer
10:40 a.m.	Endocrinology – Pituitary, Gonadal, and Adrenal Disorders
	Irina Bancos, M.D.
	Evaluate and manage the adrenal incidentaloma     Diagnose and manage Cyching's Cyndrome and adrenal incyfficionsy.
	<ul> <li>Diagnose and manage Cushing's Syndrome and adrenal insufficiency</li> <li>Select appropriate evaluation and management strategies of pituitary tumors</li> </ul>
	Identify the appropriate evaluation of primary and secondary amenorrhea
	Identify the appropriate evaluation and management of male hypogonadism
11:25 a.m.	Rheumatology – Vasculitis
	Matthew J. Koster, M.D.
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	<ul> <li>Recognize the various forms of vasculitis</li> <li>Identify initial treatment strategies for vasculitis</li> </ul>
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12:15 p.m.	Lunch
1:00 p.m.	Rheumatology – Gout and Spondyloarthropathies
	Kerry Wright, M.B.B.S.
	List common causes of foot and ankle pain and their treatments
	Diagnose and treat crystalline induced disease
	Identify the diagnosis and treatment of spondyloarthropathies
1:55 p.m.	Rheumatology – Arthritis
1.55 μ.π.	Ashima Makol, M.D.
	Asimila Makely Mile.
	Diagnose and treat fibromyalgia

	<ul> <li>Utilize physical exam and laboratory studies to diagnose and manage rheumatoid arthritis</li> <li>Diagnose and manage symptomatic osteoarthritis</li> </ul>
2:50 p.m.	Rheumatology - Systemic Lupus Erythematosus and Anti-Phospholipid Antibody Syndrome Alicia M. Hinze, M.D.
	<ul> <li>Diagnose and develop initial management of systemic lupus erythematosus (SLE)</li> <li>Review complications of SLE</li> <li>Assess and manage antiphospholipid antibody syndrome</li> </ul>
3:35 p.m.	Break
3:50 p.m.	<ul> <li>Rheumatology - Raynaud's, Scleroderma, Inflammatory Myopathies, and Sjogren's Syndrome         Alicia M. Hinze, M.D.     </li> <li>Diagnose and manage secondary Raynaud phenomenon</li> <li>Review the laboratory evaluation and diagnosis of common rheumatologic diseases including: Sjogren's syndrome, scleroderma (diffuse and limited), polymyositis, dermatomyositis, and mixed connective tissue disease</li> </ul>
4:35 p.m.	<ul> <li>Critical Care  Jeremy M. Clain, M.D.</li> <li>Recall the diagnosis and management of hypovolemic, distributive, cardiogenic shock and tamponade</li> <li>Recall the etiology and pathophysiology of respiratory failure and select appropriate testing and management strategies</li> <li>Select appropriate tests and management strategies for sepsis based on pathophysiology</li> <li>Diagnose and manage transfusion-related reactions</li> </ul>
5:25 p.m.	Sprint Test
5:45 p.m.	Adjourn
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	Wednesday, June 7, 2023	
7:00 a.m.	Cardiology – ECG's, Atrial Fibrillation, and Other Arrhythmias	
	Abhishek J. Deshmukh, M.B.B.S.	
	Use the fundamentals of EKG to recognize common arrhythmias	

	<ul> <li>Design appropriate evaluation and management strategies for patients with atrial fibrillation</li> </ul>
	Recognize and manage common arrythmias (excluding a fib)
	<ul> <li>Assess the risks and benefits of anti-coagulation therapies to design appropriate</li> </ul>
	management strategies
7:50 a.m.	Cardiology – Coronary Artery Disease
	Benjamin D. Nordhues, M.D.
	<ul> <li>Determine appropriate method for evaluating for coronary artery disease based on pre-test probability of disease</li> </ul>
	<ul> <li>Evaluate and manage perioperative testing and medications in patients with known, or at risk for CVD</li> </ul>
	<ul> <li>Select appropriate management of an acute myocardial infarction, including management of NSTEMI</li> </ul>
	Recognize Right Ventricular Infarction and select appropriate management strategies
	Select the appropriate timing of elective operations in patients after coronary stenting
8:40 a.m.	Cardiology – Heart Failure Part 1
	Michael W. Cullen, M.D.
	Discuss the diagnosis and evaluation of heart failure with reduced ejection fraction
	and heart failure with preserved ejection fraction
	Manage acute and chronic heart failure with lifestyle, pharmacological, and device
	therapies
9:25 a.m.	Break
9:40 a.m.	Cardiology – Heart Failure Part 2 and Pericardial Disease
	Michael W. Cullen, M.D.
	Diagnose, classify, and manage common cardiomyopathies
	Recognize the presentation and select appropriate management for patients with
	pericardial disease, including acute pericarditis, constrictive pericarditis, and cardiac
	tamponade
10:05 a.m.	Cardiology – Valvular Disease
	Jeffrey B. Geske, M.D.
	<ul> <li>Identify risk factors for and presentation of congenital valve abnormalities, and</li> </ul>
	choose appropriate management
	Outline risk factors for and recall the diagnosis and presentation of management
	aortic stenosis and hypertrophic cardiomyopathy
	Recognize the pathophysiology and presentation of mitral stenosis, select      Appropriate testing, and interpret the findings accurately.
	appropriate testing, and interpret the findings accurately

	Delineate risk factors for and recall the diagnosis and management of aortic regurgitation, mitral regurgitation, and tricuspid regurgitation
10:55 a.m.	Cardiology – Vascular Disease
	Ana I. Casanegra, M.D.
	<ul> <li>Identify the initial method for evaluating and managing peripheral vascular disease</li> <li>Describe the risk factors for, and the evaluation and management of aortic dissection</li> <li>Describe the risk factors for, and the evaluation and management of aortic aneurysm</li> </ul>
11:45 a.m.	Lunch
12:30 p.m.	Pulmonary – Pulmonary Tests
	Darlene R. Nelson, M.D.
	<ul> <li>Use an algorithm to correctly interpret spirometry and direct management</li> <li>Recall diseases with a restrictive, obstructive, or mixed picture on spirometry</li> <li>Evaluate and interpret pleural fluid tests</li> </ul>
1:20 p.m.	Pulmonary – COPD, Asthma, and OSA
	Darlene R. Nelson, M.D.
	<ul> <li>Recall the differential diagnosis and management of pneumothorax</li> <li>Describe the classification schemes for asthma and use this information to effectively diagnose and manage patients</li> <li>Recognize features of obstructive sleep apnea and select appropriate testing for diagnosis</li> <li>Recall the diagnosis and management of chronic obstructive pulmonary disease</li> </ul>
2:00 p.m.	Pulmonary – ILD, Pulmonary Hypertension
	Cassandra M. Braun, M.D.
	<ul> <li>Identify and recall the different causes of diffuse alveolar hemorrhage</li> <li>Identify the cause and select treatment for interstitial lung disease</li> <li>Describe the causes, presentation, and basic treatment of pulmonary hypertension</li> </ul>
2:40 p.m.	Break
2:55 p.m.	Oncology – Breast/Gynecology
	Andrea E. Wahner Hendrickson, M.D.
	<ul> <li>Identify appropriate breast cancer screening techniques for women</li> <li>Describe the diagnostic evaluation of findings worrisome for breast cancer</li> <li>Recall the adjuvant treatments indicated to reduce breast cancer recurrence</li> <li>Identify risk factors for cervical cancer and know appropriate screening and management principles</li> </ul>

	<ul> <li>Identify the presentation of uterine cancer and review basic management principles</li> </ul>
	Identify risk factors and know basic management principles of ovarian cancer
3:45 p.m.	Oncology – Pulmonary
	Konstantinos Leventakos, M.D.
	Evaluate and manage a solitary pulmonary nodule
	<ul> <li>Identify the most common forms of lung cancer, their staging, and respective treatments</li> </ul>
	Integrate smoking cessation options into treatment plans
	Diagnose paraneoplastic syndromes associated with lung cancer
	Identify risk factors for lung cancer
	Recognize indications for lung cancer screening
	Recall the clinical presentation and diagnosis of lung cancer
4:30 p.m.	Oncology – Gastrointestinal Cancers
	Zhaohui Jin, M.D.
	Stage and treat colon cancer (not including screening: covered elsewhere)
	Diagnose and stage pancreatic cancer
	Evaluate and diagnose esophageal cancer
	Diagnose and treat gastric cancer, including MALT lymphoma
5:15 p.m.	Sprint Test
5:35 p.m.	Adjourn

Thursday, June 8, 2023	
7:00 a.m.	Gastroenterology – Hepatology, Gall Bladder, and Biliary
	William Sanchez, M.D.
	<ul> <li>Interpret abnormal liver function tests to diagnose common patterns of liver injury</li> <li>Identify risk factors and appropriate screening intervals for hepatocellular carcinoma</li> <li>Diagnose and manage major complications of chronic liver disease (e.g. Ascites, variceal bleeding and hepatocellular carcinoma)</li> <li>Diagnose and manage Hepatitis A, B and C infections</li> <li>Interpret ascites fluid chemistries</li> <li>Diagnose and manage common biliary disease</li> </ul>
8:00 a.m.	Gastroenterology – Esophageal and Gastric
	Karthik Ravi, M.D.

	Recognize common clinical situations requiring endoscopic evaluation
	Recall the diagnosis, management, and complications of gastroesophageal reflux
	disease
	Diagnose and manage candida esophagitis
	Diagnose and manage gastric polyps
	Diagnose and manage Helicobacter pylori infection
	Diagnose and manage peptic ulcer disease
8:55 a.m.	Gastroenterology – Small Bowel
	Seth R. Sweetser, M.D.
	Evaluate GI bleeding
	Evaluate and manage acute and chronic diarrhea
	Diagnose and manage celiac disease
	Diagnose and manage bowel ischemia, including colon ischemia
10:00 a.m.	Break
10:15 a.m.	Gastroenterology – Colon and Pancreas
	Xiao Jing (Iris) Wang, M.D. (virtual)
	Recall when to initiate colon cancer screening given patient and family history
	<ul> <li>Identify the appropriate management and follow up of colon polyps</li> </ul>
	<ul> <li>Recognize the cause, diagnosis, and management of acute pancreatitis</li> </ul>
	Select appropriate management options for the patient with inflammatory bowel disease
11:05 a.m.	Infectious Diseases – Endocarditis and CNS Infections
	Matthew J. Thoendel, M.D., Ph.D.
	Review the indications for and management of infective endocarditis (IE) prophylaxis
	Review the evaluation, diagnosis, and treatment of infective endocarditis
	Diagnose and treat bacterial meningitis
	Identify the diagnosis and management of viral meningitis/encephalitis
11:55 a.m.	Infectious Diseases – Pneumonia and Travel
	Douglas Challener, M.D., M.S.
	<ul> <li>Identify the diagnosis and management of community acquired pneumonia in the</li> </ul>
	outpatient and inpatient setting
	Diagnose and treat hospital-acquired pneumonia
	Identify infectious control strategy for hospitalized patients
	Review indications for prophylactic antimicrobials in international travel
12:40 a.m.	Lunch

1:25 p.m.	Infectious Diseases - GI and GU					
	Pritish Tosh, M.D.					
	<ul> <li>Identify the differences in treating non- severe, severe, and recurrent Clostridium difficile infection</li> <li>Diagnosis and manage patients with urinary tract infections</li> <li>Screen for and treat localized and systemic STI</li> </ul>					
2:05 p.m.	Infectious Diseases – Vaccine-Preventable Diseases, Zoonoses, and ID Buzz Words					
	Pritish Tosh, M.D.					
	<ul> <li>Identify the indications for varicella-zoster testing, vaccination and treatment</li> <li>Select vaccines that can be safely given in pregnancy</li> <li>Prevent and treat measles</li> <li>Identify, diagnose, and manage toxoplasmosis</li> <li>Diagnose and manage complications of rheumatic fever</li> <li>Review evaluation and management of common tick-borne diseases</li> <li>Review evaluation and management of common fungal infections throughout the US</li> </ul>					
3:00 p.m.	Break					
3:15 p.m.	Infectious Diseases – Skin and Bone Infections					
	Matthew J. Thoendel, M.D., Ph.D.					
	Identify pathogen specific treatment of skin and soft tissue infections					
	<ul> <li>Identify, diagnose, and treat lower extremity cellulitis, and gas gangrene</li> </ul>					
	Discuss prophylactic antimicrobial therapy in patients with prosthetic joints					
	Diagnose and treat osteomyelitis					
	Diagnose and treat septic bursitis					
4:10 p.m.	Infectious Diseases – HIV/TB					
	Mary J. Kasten, M.D.					
	<ul> <li>Review appropriate screening, diagnosis, and initial management of HIV/AIDS</li> <li>Review prophylaxis and screening for opportunistic cancers and infections during HIV infection</li> <li>Diagnose and treat tuberculosis</li> <li>Identify the most common adverse reactions with tuberculosis treatment</li> </ul>					
5:10 p.m.	Sprint Test					
5:30 p.m.	Adjourn					

Friday, June 9, 2023						
7:00 a.m.	Hematology - Abnormal CBC					
	Carrie A. Thompson, M.D.					
	<ul> <li>Summarize the evaluation of abnormal red blood cell counts</li> <li>Describe the evaluation of abnormal white blood cell count</li> <li>Identify and evaluate pancytopenia</li> <li>Review the evaluation of elevated platelet counts</li> <li>Recall the diagnosis and treatment of thrombotic thrombocytopenic purpura (TTP)</li> </ul>					
7:45 a.m.	Hematology – Lymphoid Malignancies					
	Carrie A. Thompson, M.D.					
	<ul> <li>Recall the evaluation and initial management of chronic lymphoproliferative disorders</li> <li>Describe the differences between HL and NHL with respect to diagnosis and treatment</li> <li>Diagnose and treat acute lymphocytic leukemia</li> </ul>					
8:25 a.m.	Hematology – Plasma Cell Disorders					
	Mustaqeem A. Siddiqui, M.D., M.B.A.					
	<ul> <li>Recall the clinical presentation, diagnosis, and management of amyloidosis</li> <li>Recognize the presentation of and select management strategies for patients with Waldenstrom macroglobulinemia</li> <li>Compare and contrast monoclonal gammopathy of undetermined significance (MGUS), smoldering myeloma and multiple myeloma according to presentation, evaluation, and management</li> </ul>					
9:10 a.m.	Break					
9:25 a.m.	Hematology - Myeloid Malignancies  Mithun V. Shah, M.D.					
	<ul> <li>Recall the presentation, diagnosis, and management of myelodysplastic neoplasms</li> <li>Identify the presentation, diagnosis, and management of myeloproliferative neoplasms</li> <li>Diagnose and treat acute myeloid leukemia</li> <li>Diagnose and manage acute blast crisis</li> </ul>					
10:25 a.m.	Hematology – Bleeding and Coagulation					
	Aneel A. Ashrani, M.D., M.S.					
	<ul> <li>Recall the diagnosis and management of congenital and acquired bleeding disorders</li> <li>Identify and manage coagulation factor deficiencies and dysfunction</li> <li>Evaluate and manage thrombocytopenia</li> <li>Recall the evaluation and management of superficial and deep venous thrombosis</li> <li>Diagnose and manage pulmonary embolism</li> </ul>					

	Diagnose and manage heparin-induced thrombocytopenia (HIT)					
11:25 a.m.	Lunch					
12:10 p.m.	Nephrology – Electrolyte and Acid-base Cases  Ladan Zand, M.D.					
	<ul> <li>Recall the diagnosis and management of inappropriate antidiuretic hormone secretion (SIADH)</li> <li>Identify, evaluate, and manage hypo- and hypernatremia</li> <li>List appropriate treatment strategies for hypo- and hyperkalemia</li> </ul>					
	Nephrology – Acid-Based Cases (combined)  Ladan Zand, M.D.					
	Apply an algorithm to diagnose acid-base disorders					
1:40 p.m.	Break					
1:55 p.m.	Nephrology – Nephrolithiasis and Acute Kidney Injury Part 1  Michael A. Mao, M.D.					
	<ul> <li>Describe the diagnosis and evaluation of acute renal injury</li> <li>Define indications for acute dialysis</li> <li>Manage pre and post renal injury</li> <li>Diagnose and manage nephrolithiasis</li> <li>Diagnose and manage acute tubular necrosis</li> </ul>					
2:45 p.m.	Nephrology – Acute Kidney Injury Part 2  Michael A. Mao, M.D.  Identify indications for renal biopsy Diagnose and manage acute interstitial nephritis Describe the diagnosis, evaluation, and management of glomerular disorders Prevent, recognize, and manage contrast-induced nephropathy					
3:35 p.m.	Nephrology – Chronic Kidney Disease  Virginia (Ginny) A. Dines, M.D.  Identify risk factors and recognize the presentation of nephrogenic systemic fibrosis Identify causes of chronic kidney disease and strategies to prevent progression of chronic kidney disease					
	<ul> <li>kidney disease</li> <li>Manage calcium-phosphorous homeostasis, anemia &amp; other issues in chronic kidney disease</li> </ul>					
4:25 p.m.	Sprint Test					
4:45 p.m.	Adjourn					