

## Chapter 1

Hours	Category	Minutes	Lecture Title	Speaker
.75	Principles of Practice/Philosophy	45	<b>Intro to Functional Medicine: Redefining Disease Applied Systems Medicine Part 2</b> Functional Medicine is more than an alternative set of treatments for chronic disease: It is a philosophic and methodologic approach to medicine. Using tools that have been developed by IFM, we will discuss and outline the methodologic rationale for the Functional Medicine approach that sets us on the road to making real changes in our patients with chronic disease.	Patrick Hanaway, MD
2.0	Exam Procedures/Diagnosis	120	<b>Mapping the Territory: Using the Functional Medicine Matrix Model</b> Participants will be guided through a variety of exercises to help build an understanding of how to use the Functional Medicine Timeline and Matrix as well as solidify the concepts of Antecedents, Triggers, and Mediators. Participants will also focus on the “Assimilation Node” of the Functional Medicine Matrix in the introduction to the first educational case in which participants will explore irritable bowel syndrome (IBS) from a functional perspective.	Kristi Hughes, ND
1.75	Exam Procedures/Diagnosis	105	<b>DIGIN to Root Causes of Gut Dysfunction</b> The digestive system is a critical component of human health with numerous complex functions and interactions with other physiologic systems. The Digestion, Intestinal Permeability, Gut Microbiota, Inflammation, and Nervous System (DIGIN) framework provides an anchor not only for understanding the functions of the gastrointestinal (GI) system, but also for the dysfunction to which this system is susceptible and can subsequently contribute to chronic disease. Participants will leverage insights gained from the case in the previous session to identify and explore the common etiologies of GI dysfunction.	Patrick Hanaway, MD
2.0	Exam Procedures/Diagnosis	120	<b>Treatment of GI Dysfunction in the Context of the Functional Medicine Matrix</b> Building on participants understanding of the etiologies of gastrointestinal dysfunction, the presentation will set forth a framework for developing therapeutic approaches to GI dysfunction utilizing the “5R” approach of Remove, Replace, Reinoculate, Repair, and Rebalance. Specific treatment approaches for the case study will be described and discussed. The final segment of the day will focus on the integration of evaluation methods, decision points for determining etiology, and treatment strategies for GI dysfunction.	Tom Sult, MD



# Applying Functional Medicine In Clinical Practice 2024 Outline

.5	Principles of practice/philosophy	30	<b>Social Determinants of Health</b> This session will explain how social determinants and social needs of health are associated with risks for chronic diseases, and how social determinants and needs of health represent antecedents and mediators of risk for chronic disease and worse outcomes.	James Carter, MD
	<b>Chapter 1</b>	<b>7 hours</b>		

Chapter 2				
Hours	Category	Minutes	Lecture Title	Speaker
1.5	Exam Procedures/ Diagnosis	90	<b>Immune Dysfunction and Inflammation: A Primary Mechanism of Illness</b> The inflammatory response plays a critical role in human health and disease. Just as a healthy inflammatory response is necessary for life, a dysfunctional inflammatory response can lead to a variety of chronic health problems that can affect multiple systems of the body.	Robert Rountree, MD
1.5	Nutrition	90	<b>Food Allergies, Sensitivities, and Intolerances: Diagnosis and Treatment</b> The presenter will discuss the important differences between food allergy, intolerance, and sensitivity and how to clinically use this information.	Dan Lukaczer, ND
1.25	Nutrition	75	<b>Prescribing an Elimination Diet</b> The elimination diet is a valuable tool both diagnostically and for treating conditions that may have a food-reaction component. Participants will learn when and how to prescribe this dietary approach. She will then lead participants through role-playing exercises to not only understand the elimination diet and its application, but also to develop practical skills to prescribe this intervention to patients.	Elizabeth Boham, MD, MS, RD
1.25	Nutrition	75	<b>Anthropometrics, Biomarkers, Clinical Assessment, and Diet Evaluation: The ABCDs of Nutritional Evaluation: Part 1</b> Participants will be lead in exercises to build practical skills to identify findings that can point toward nutritional deficiency.	Michael Stone, MD, MS Elizabeth Boham, MD, MS, RD
1.25	Principles of practice/Philosophy	75	<b>Shifting the Therapeutic Encounter</b> Chronic disease develops over the course of a patient's life and must be understood in context. Developing the ability to understand a patient's life story and illness is essential	Monique Class, MS, APRN, BC



			when gathering nuanced information about how a given patient relates to health and disease. This class will review the science and facilitate exercises intended to develop practical skills in eliciting and understanding a patient's story.	
	<b>Chapter 2</b>	<b>6.75</b>		

Chapter 3				
Hours	Category	Minutes	Lecture Title	Speaker
1.75	Nutrition	105	<b>Anthropometrics, Biomarkers, Clinical Assessment, and Diet Evaluation: The ABCDs of Nutritional Evaluation: Part 2</b> Participants will continue their discussion of nutrition with a review of the "C" of the ABCDs and lead participants through a nutritionally oriented physical examination.	Michael Stone, MD, MS Elizabeth Boham, MD, MS, RD
1.75	Nutrition	105	<b>Lowering the Toxic Body Burden Using Diet, Lifestyle, and Other Strategies</b> Participants will learn approaches to increasing toxin mobilization while preventing redistribution. Treatments such as supplementation, diet plans, and lifestyle modifications will be discussed with reference to a clinical case.	Robert Rountree, MD
2.0	Exam procedures/ Diagnosis	120	<b>Functional Approaches to Cardiometabolic Disease</b> Participants will evaluate and develop diet and lifestyle interventions aimed at treating insulin resistance and the practical skills to effectively instruct their patients in these interventions.	James Carter, MD
1.5	Principles of Practice/Philosophy	90	<b>Challenges in the Journey of Change</b> Participants will explore the stages of change from personal and professional standpoints. Discussion will involve how to work with patients to foster change, with an emphasis on the previously presented cases.	Monique Class, MS, APRN, BC
	<b>Chapter 3</b>	<b>7 Hours</b>		

## Chapter 4

Hours	Category	Minutes	Lecture Title	Speaker
1.25	Exam Procedures/ Diagnosis	75	<p><b>Understanding the HPATG Axis: From Biochemistry to Application</b></p> <p>The Hypothalamic–Pituitary–Adrenal–Thyroid–Gonadal axis represents one of the cornerstones of health. In this talk, participants will be guided on how to identify hormonal imbalances and symptoms and understand how genetic, physiologic, psychological, nutritional, and environmental challenges may contribute to these imbalances. General treatment strategies for hormone dysfunction and how to therapeutically intervene in those with chronic disease will be included in this presentation.</p>	Dan Lukaczer, ND
1.25	Exam Procedures/ Diagnosis	75	<p><b>Assessment and Treatment of Adrenal Dysfunction</b></p> <p>Adrenal dysfunction can manifest in a wide variety of patterns, and dysfunction commonly occurs on a spectrum. We will review the signs, symptoms, and patterns of adrenal response and identify HPA axis dysfunction. Several methods for evaluation of adrenal health will be discussed that will help to guide the clinician to more effective treatments with a focus on diet, lifestyle, and targeted nutrient interventions to modulate and balance the overall production, transport, sensitivity and detoxification in the HPA axis.</p>	Arti Chandra, MD
1.25	Exam procedures/ Diagnosis	75	<p><b>Assessment and Treatment of Thyroid Dysfunction</b></p> <p>In this talk we will develop a deeper understanding of how thyroid function affects and is affected by stress, diet, toxins, various other triggers. We will feature the necessary history, examination, and laboratory evaluations that should be conducted to better understand patterns of thyroid dysfunction. We will discuss the best treatment options—lifestyle modifications including diet and supplementation.</p>	Robert Luby, MD
1.25	Exam procedures/ Diagnosis	75	<p><b>Testosterone Deficiency in Men</b></p> <p>In this presentation, we will review the prevalence and etiologies of androgen decline, and the physiological impact of low testosterone levels on overall health and wellbeing. Physical examination and laboratory evaluations necessary to better understand the pattern of hormonal dysfunction will be discussed. From there, the best treatment options—lifestyle, nutrition, and supplementation will be described.</p>	Mark Holthouse, MD



1.0	Exam procedures/ Diagnosis	60	<b>Modulating a Woman's Hormones Part 1</b> We will begin the topic of hormone dysfunction in women by reviewing sex steroid hormone patterns and the factors that are necessary to maintain these processes at optimal levels. We will explore the role of environmental toxins on hormone production and metabolism. Appropriate laboratory tests and other assessments to investigate the degree and causes of hormonal imbalance will also be discussed. The Functional Medicine approach to disorders commonly seen in women, including PMS and other menstrual disorders, PCOS, and hormonal insufficiency will be highlighted. The clinician will learn how to design personalized interventions using diet, lifestyle, and nutraceutical interventions to reduce symptoms and improve clinical outcomes.	Wendy Warner, MD
1.0	Exam procedures/ Diagnosis	60	<b>Modulating a Woman's Hormones Part 2</b> We will begin the topic of hormone dysfunction in women by reviewing sex steroid hormone patterns and the factors that are necessary to maintain these processes at optimal levels. We will explore the role of environmental toxins on hormone production and metabolism. Appropriate laboratory tests and other assessments to investigate the degree and causes of hormonal imbalance will also be discussed. The Functional Medicine approach to disorders commonly seen in women, including PMS and other menstrual disorders, PCOS, and hormonal insufficiency will be highlighted. The clinician will learn how to design personalized interventions using diet, lifestyle, and nutraceutical interventions to reduce symptoms and improve clinical outcomes.	Joel Evans, MD
<b>Chapter 4</b>		<b>7 Hours</b>		

Chapter 5				
Hours	Category	Minutes	Lecture Title	Speaker
1.5	Exam procedures/ Diagnosis	90	<b>Mitochondria and Energy Dynamics</b> The presenter will discuss the role of the mitochondria in health and chronic disease. Participants will explore etiologies for fatigue, focusing on mitochondrial dysfunction and developing treatment approaches for a clinical case.	David Haase, MD
1.5	Exam procedures/ Diagnosis	90	<b>Clinical Integration of Functional Nutrition and Lifestyle Change</b> Although a systems biology approach can provide an excellent tool in gaining insight into chronic disease, it must also be understood that chronic diseases are entities as unique	Shilpa Saxena, MD



			and diverse as those whose lives they affect. What might be recognized as a single diagnosis may, in fact, be due to a multitude of different etiologies when seen across a population. Participants will explore the diagnosis of depression as an exercise in recognizing that a single diagnosis may have a variety of etiologies (e.g., psychological, genetic, biochemical, hormonal, nutritional).	
1.5	Exam procedures/ Diagnosis	90	<b>Clinical Integration and the Functional Medicine Matrix</b> A systems biology approach can provide an excellent tool in gaining insight into chronic disease. Within that framework, it must be understood that chronic diseases are entities as unique and diverse as those whose lives they affect. A single 'diagnosis' may, in fact, be due to a multitude of different etiologies, and those specific etiologies can vary from person to person. In this integration of the past 5 days, participants will explore the diagnosis of fatigue, how to frame that to the patient, and how to use the functional model in practical ways.	Robert Luby, MD
1.5	Principles of Practice/Phi losophy	90	<b>Insight, Intuition, and the Therapeutic Partnership</b> The presenter will share perspectives on evidence-based medicine, clinical intuition, and challenges faced by Functional Medicine practitioners. The importance of forging a therapeutic relationship with one's patients and other medical professionals is emphasized as a key to successfully guiding patient health.	David Jones, MD
	<b>Chapter 5</b>	<b>6 Hours</b>		
			<b>Total Lecture Time: 32.75</b>	
.75	Exam procedures/ Diagnosis	45	<b>Course Assessment</b> Each chapter contains a 5-question, multiple choice, chapter assessment. Learners must achieve 80% or greater on each assessment to advance to the next chapter. Chapter 5 contains an overall course evaluation in addition to the chapter assessment. Each assessment is estimated to take 9 minutes, bringing this online course to a total of 34.5 credit hours.	
			<b>Total Course Time: 33.5</b>	