

**Case Western Reserve University – University Program Medical School**

**Block 3: Action Plan 2020-2021**

Year 1 (July – May) 2020-2021

<p><b>Becoming A Doctor</b></p> <p>Block 1 (5 Weeks)</p> <p>Population Health, Epidemiology, Biostatistics, Health Disparities</p> <p>Field Experiences Assessment Week</p>	<p>2 Weeks Steps2Success</p>	<p><b>The Human Blueprint</b></p> <p>Block 2 (11 Weeks)</p> <p>Endocrinology, Reproduction, Development, Genetics, Molecular Biology, Cancer Biology</p> <p><u>Integrative Week</u> Assessment Week</p>	<p><b>Food to Fuel</b></p> <p>Block 3 (9 Weeks)</p> <p>Gastroenterology, Nutrition, Biochemistry</p> <p>Assessment Week</p>	<p><b>Homeostasis</b></p> <p>Block 4 (14 Weeks)</p> <p>Cardiovascular, Pulmonary, Renal, Cell Physiology and Pharmacology</p> <p><u>Clinical Immersion Week</u> Assessment Week</p>
<p><b>Structure</b> (Anatomy, Radiology and Histopathology)</p> <p><u>Foundations of Clinical Medicine</u> (Tuesday Seminars, Communications, Physical Diagnosis, Patient Based Experiences)</p>				

**1. Course Description:**

There are three topics in our block: nutrition, the gastrointestinal system, and biochemistry. These three topics are related and we emphasize the connections between the topics. At the same time, they are independent subjects with their own principles and language; it is important that you learn them as both related and independent disciplines. In addition, biochemistry and nutrition are basic sciences; these disciplines provide a vocabulary for other parts of the curriculum.

The **nutrition** section discusses the micronutrients (vitamins and minerals) and macronutrients (carbohydrates, proteins and lipids) required for human health. The vitamins and minerals are cofactors for many of the biochemical processes that are discussed in the biochemistry section. We discuss the digestion and absorption of micronutrients. Students also learn how the overall energy balance of macronutrients is necessary for growth and the maintenance of weight. We discuss the diseases and the metabolic consequences of malnutrition and obesity. *Note that the important themes of the nutrition section appear throughout the block, not just in the core sessions.*

The **biochemistry** component has two major threads. The first of these is protein structure and function. Students learn about proteins, both as structural components of cells and tissues and as enzymes. This information is important for understanding proteins as the targets of most drugs. The second thread is metabolism--the transformations of small molecules. We discuss both catabolism (the breakdown of fuels for energy) and anabolism (the synthesis of the body's building blocks). Key features of our discussion of metabolism are: i) the roles of individual

Competency and Definition	Educational Program Objective (EPO)	Block Goals Block 3	Recommended Changes
<p><b>Knowledge for Practice</b> Demonstrates knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences as well as the application of this knowledge to patient care</p>	<p>Demonstrates ability to apply knowledge base to clinical and research questions</p> <p>Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician</p>	<p><b>Understand the importance of nutrition and its impact on metabolism for the maintenance of health and its effects on human disease.</b></p>	<p>NC</p>
<p><b>Knowledge for Practice</b> Demonstrates knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences as well as the application of this knowledge to patient care</p>	<p>Demonstrates ability to apply knowledge base to clinical and research questions</p> <p>Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician</p>	<p><b>Understand normal GI physiology and major diseases of the GI organs and the liver.</b></p>	<p>NC</p>
<p><b>Knowledge for Practice</b> Demonstrates knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences as well as the application of this knowledge to patient care</p>	<p>Demonstrates ability to apply knowledge base to clinical and research questions</p> <p>Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician</p>	<p><b>Understand the anatomy of the GI tract.</b></p>	<p>NC</p>
<p><b>Common to all Blocks:</b></p>			

Competency and Definition	Educational Program Objective (EPO)	Block Goals Block 3	Recommended Changes
<p><b>Interpersonal &amp; Communication Skills</b> Demonstrates effective listening, written and oral communication skills with patients, peers, faculty and other health care professionals in the classroom, research and patient care settings</p>	<p>Uses effective written and oral communication in clinical, research, and classroom settings</p> <p>Demonstrates effective communication with patients using a patient-centered approach</p> <p>Effectively communicates knowledge as well as uncertainties</p>	<p><b>Understand and demonstrate effective communication skills for learning and clinical practice environments.</b></p>	<p>NC</p>
<p><b>Research &amp; Scholarship</b> Demonstrates knowledge and skills required to interpret, critically evaluate, and conduct research</p>	<p>Analyses and effectively critiques a broad range of research papers</p> <p>Demonstrates ability to generate a research hypothesis and formulate questions to test the hypothesis</p> <p>Demonstrates ability to initiate, complete and explain his/her research</p>	<p><b>Analyze, critique and present research studies from the primary literature.</b></p>	<p>NC</p>

**5. In the grid below, please list the specific course changes you made this year based on last year's report.**

We have changed some of our didactic lectures into large interactive sessions with student response (pair and share). We have encouraged our faculty to use the resources available in the HEC for interactive sessions once we are back in person.

**8. What specific changes (lectures, TBL, IQ cases, other) do you plan to make to the course next year?**

<b>Changes anticipated for next year</b>	<b>Reason for changes (evidence)</b>
Students requested to not have Clinical Correlations with required attendance in the last week of Block 3	We've used this schedule for many years without significant complaint. Because we believe that these clinical correlations have significant educational value, the leadership of Block 3 has placed these opportunities as a review of Block 3 material and we will keep some of this material in the last week. However we have decided to move some of these sessions to earlier times in the block to reduce the work load in the last week of Block 3
Adding a TBL on obesity management	In response to feedback, we are working with M1 students to develop a longitudinal thread on obesity and its management in the block.
Adjust the Science Behind Nutrition Hot Topics & Discussing them with patients to include pre-diabetes nutritional therapy and DASH diet	In response to feedback, students want more curriculum on nutritional science.

**9. Please review your Block objectives. Have you added or deleted major concept areas to your Block?**

No changes

**10. Response to PEAC Report**

The Block 3 design team appreciates the review and comments from the Program Evaluation and Assessment Committee on the curriculum in Block 3 of the WR2 curriculum. The design team reviews these reports as well as student feedback to implement necessary changes. Below is the response to the PEAC 2015 report that was discussed with PEAC members in January 2019.

**Review of PEAC Recommendations for Block 3**

**January, 2019**

**1. What changes or improvements were made in your program in response to specific PEAC recommendations?**

The Block Goals were updated. The MSGs were replaced by other activities, in

preparation for the move to the HEC that cannot accommodate MSGs. Many other smaller changes were also made. These are detailed in our responses to individual points in the PEAC report (vide infra).

**2. What PEAC recommendations were unable to be addressed? Explain the reasons.**

We believe that the major recommendations in the report have been addressed.

faculty development that is offered to train IQ facilitators, IQ+ facilitators and workshops for faculty to improve their lectures.

WR2 curriculum has some weaknesses. It is dependent on many facilitators for IQ, FCM sessions and IQ+. Fortunately, we have been able to have enough faculty to accomplish quality sessions. Another weakness is that for Block 3 immunology is not taught until Block 5 yet many of the GI cases have some concepts of immunology in them. We have addressed this by providing basic immunology framing lectures and videos as resources for IQ learning.

We have not been to other medical schools but when I discuss our EBIQ and our professionalism curriculum to others at national meetings, Case Western Reserve University is definitely ahead of many schools.

#### **14. Acknowledgements:**

We would like to thank Eva Orzag, Celinda Miller, Michele Mumaw, Yifei Zhu, Minoo Darvish and the entire Curricular Affairs staff for their excellent work. As usual, they were more organized than the faculty and did a better job of staying calm when things went wrong.