

Case Western Reserve University – University Program Medical School

Block 1: Action Plan 2022-2023

Year 1 – July through May

Foundations of Medicine and Health					
Year 1	July	Anatomy Bookcamp	The Human Blueprint Block 2 (11 Weeks) Endocrinology, Reproduction, Development, Genetics, Molecular Biology, Cancer Biology Assessment Week	Food to Fuel Block 3 (10 Weeks) Gastrointestinal, Nutrition, Biochemistry Assessment Week	Homeostasis Block 4 (14 Weeks) Cardiovascular, Pulmonary, Renal, Cell Physiology, and Pharmacology Clinical Immersion Week Assessment Week
					May
Bioethics, Diversity in the Curriculum, Pharmacology, Professionalism Structure (Anatomy, Radiology, and Histopathology) Foundations of Clinical Medicine (Doctoring Seminars, Communications, Physical Diagnosis, Procedures, Patient Based Experiences)					
Year 2	Research & Scholarship (Parts I, II, III) (12 Weeks)	August	Host Defense & Response Block 5 (14 Weeks) Immunology, Microbiology, Hematology, Oncology, Infectious Diseases, Rheumatology, Musculoskeletal, Dermatology Assessment Week	Cognition, Sensation & Movement Block 6 (13 Weeks) Neurology, Mind Assessment Week	March
Bioethics, Diversity in the Curriculum, Pharmacology, Professionalism Structure (Anatomy, Radiology, and Histopathology) Foundations of Clinical Medicine					
Step 1 Board Study (6 weeks)					

1. Course Description:

Block 1, Becoming a Doctor, provides an understanding of population health and the role of the physician in society. At CWRU SOM, the first five weeks of the curriculum focus on how physicians act as advocates for patients in health care systems; how social and environmental factors impact health and the value and importance of population health. Students are introduced to the city of Cleveland as their first patient and provided with historical and social context for the epidemiological distribution of disease as well as examples of how community organizations contribute significantly to community health. Through a variety of experiential and longitudinal learning experiences, students are introduced to five core disciplines:

Epidemiology and Biostatistics, Bioethics, Population Health, Health Determinants and Health Systems Science. The block initiates students' life-long learning in medicine, developing competency in Research & Scholarship, Reflective Practice, Teamwork and Interprofessional Collaboration, Patient Care, Knowledge for Practice, Professionalism, Interpersonal & Communication Skills, Personal and Professional Development and Systems-Based Practice. During Block 1 students are also introduced to content from longitudinal Blocks 7 (Structure) and 8 (Foundations of Clinical Medicine). These sessions are addressed in separate block action reports.

2. Block Co-Leaders:

Block Co-Leader: Karen B. Mulloy, DO, MSCH

Block Co-Leader: Kimberly Gifford, MD

3. Section Leads

Epidemiology and Biostatistics Section Lead: Doug Einstadter, MD, MPH,

Bioethics Section: Aaron Goldenberg, PhD, MPH

Health Systems Science Section: Johnnie Rose, MD, PhD

4. Design Team:

Harithsa Asuri, MD

Farren Briggs, PhD

Scott Frank, MS, MD

Lydia Furman, MD

Prakash Ganesh, MD, MPH

Heidi Gullett, MD, MPH

Melissa Klein, MD

Lisa Ramirez, MD

Anastasia Rowland-Seymour, MD

Phillip Rowland-Seymour, MA

Pauline Terebuh, MD, MPH

Brook Watts, MD

Course Manager: Deidre Gruning

Field Experience Manager: Kurtis Hoffman

5. **Block Goals:** Please fill in the table below for your Block Goals.

Competency and Definition	Education Program Objective (EPO)	Block Goals Block 1	Recommended Changes
<p>Systems-based Practice Demonstrates an understanding of and responsiveness to health care systems, as well as the ability to call effectively on resources to provide high value care.</p>	<p>Applies knowledge of health care systems to patient care discussions</p> <p>Demonstrates awareness of context of care, patients' values, and health care system resources in clinical decision-making.</p> <p>Applies principles of quality improvement and safety to patient care.</p>	<p>Health Systems Science: Link domains of Health Systems Science in health care structure, policy, value and economics, health systems improvement, and health informatics</p>	<p>Refined wording and better alignment with this competency</p>
<p>Knowledge for Practice 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>Population Health: Illustrate effective means to measure, understand, and affect the health of populations</p>	<p>none</p>

Competency and Definition	EPO	Block 1 Goals	Recommended Changes
<p>Knowledge for Practice 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>Health Determinants: Apply a framework for social, behavioral, structural, and environmental determinants of health to patient care and population health</p>	<p>Refined wording</p>
<p>Professionalism Demonstrates commitment to high standards of ethical, respectful, compassionate, reliable and responsible behaviors in all settings, and recognizes and addresses lapses in behavior</p>	<p>Commonly demonstrates compassion, respect, honesty and ethical practices</p> <p>Meets obligations in a reliable and timely manner</p> <p>Recognizes and addresses lapses in behavior</p>	<p>Bioethics: Utilize a framework for implementation of bioethical principles in the practice of public health, population health, health systems science and clinical medicine</p>	<p>Refined wording and better alignment with this competency</p>
<p>Research & Scholarship 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>Epidemiology and Biostatistics: Utilize principles of epidemiology and biostatistics to interpret scientific literature and clinical cases.</p>	<p>Refined wording and better alignment with this competency</p>

<p>Personal and Professional Development Demonstrates the qualities required to sustain lifelong personal and professional growth.</p>	<p>Critically reflects on personal values, priorities, and limitations to develop strategies that promote personal and professional growth</p> <p>Identifies challenges between personal and professional responsibilities and develops strategies to address them</p> <p>Recognizes when personal views and values differ from those of patients, colleagues, and other care givers and reflects on how these can affect patient care and research</p>	<p>Professional Identity Formation: Explore professional values and career paths to create a foundation for professional identity development.</p>	<p>New Block Goal</p>
<p>Competency and Definition</p>	<p>EPO</p>	<p>Block 1 Goals Common to All Blocks</p>	<p>Recommended Changes</p>
<p>Common to all Blocks</p>			
<p>Knowledge for Practice 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>Recognize and analyze ethical problems in clinical medicine, population health, and biomedical research using the principles of autonomy, beneficence, nonmaleficence and justice.</p>	<p>none</p>
<p>Teamwork & Interprofessional Collaboration Demonstrates knowledge and skills to promote effective teamwork and collaboration</p>	<p>Performs effectively as a member of a team</p>	<p>Develop and practice the knowledge and skills that promote effective teamwork across a variety of settings</p>	<p>none</p>

with health care professionals across a variety of settings			
Professionalism Demonstrates commitment to high standards of ethical, respectful, compassionate, reliable and responsible behaviors in all settings, and recognizes and addresses lapses in behavior	Commonly demonstrates compassion, respect, honesty and ethical practices Meets obligations in a reliable and timely manner Recognizes and addresses lapses in behavior	Understand and practice the behaviors of an ethical, respectful, compassionate, reliable, and responsible physician.	None
Interpersonal & Communication Skills 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	Uses effective written and oral communication in clinical, research, and classroom settings Demonstrates effective communication with patients using a patient-centered approach Effectively communicates knowledge as well as uncertainties	Understand and demonstrate effective communication skills for learning and clinical practice environments.	none
Research & Scholarship Demonstrates knowledge and skills required to interpret, critically evaluate, and conduct research	Analyses and effectively critiques a broad range of research papers Demonstrates ability to generate a research hypothesis and formulate questions to test the hypothesis Demonstrates ability to initiate, complete and explain his/her research	Analyze, critique and present research studies from the primary literature.	none

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

What changes were made 2020-2021?	How did the changes work?	What would you like to change next year 2021-2022?
<p>General: Dr. Kimberly Gifford became the co-leader for Block 1.</p> <p>The Block was all in-person with continued format of mask wearing in the classrooms due to the COVID pandemic.</p> <p>There was a return to the use of all A/V equipment in all teaching scenarios.</p> <p>All incoming students were given an IPAD to use during IQ and TTE/ TBLs. IQ cases formatted into a book form for easier use and IRAT/GRAT all completed electronically. The use of QR codes for attendance was standardized.</p>	<p>Her leadership and new ideas helped to add content and strength the curriculum</p> <p>Use of the HEC building space for all the teaching situations wearing masks worked very well with the ability for lecturers to be able to remove their masks to lecture based on pedagogical reasons</p> <p>The use of mobile mics allowed for more dynamic teaching during the team based and pandemic sessions.</p> <p>This green initiative eliminated vast amounts of paper used during the Block.</p>	<p>Continue to expand on Dr. Gifford's ideas</p> <p>If there is control of the pandemic then being able to drop all restrictions however continue with the format with mask wearing if still indicated.</p> <p>Continue to use of all A/V equipment in all teaching scenarios and explore other technologies.</p> <p>Continue to work with leadership in evaluation of the IPAD use and other initiatives that help to make the med school Greener.</p>
<p>IQ Cases: An official LO to the Jack Lee case on LGBTQ+ issues for preventive care was added.</p> <p>Discussed with IQ facilitators to explore about the meaning of the zip codes in the patient identity cards to bring up during the IQ case discussions.</p>	<p>Well received with good feedback from students and facilitators on the need for updated resources.</p> <p>Since there was not a specific LO in each case there was a wide variety of discussion in the groups.</p>	<p>Update resources for the LGBTQ+ Los and better integrate into case</p> <p>Work with the Diversity in the Curriculum Design Team on the integration of SES issues in the curriculum.</p>

<p>The Obesity Medicine Education Collaborative (OMEC) completed an in-depth audit of the materials of Block 1 (including lectures, IQ, TBL) according to the relevant competencies developed by the OMEC.</p> <p>Continued to participate in the IQ diversity project</p> <p>Discussion of the field site visits were returned to being discussed on Friday during the IQ sessions.</p> <p>Specific instructions on EBIQ process during orientation was coordinated the peer leaders and facilitator training.</p>	<p>These competencies were developed to better assess and improve obesity education in all medical trainees. There was an improvement in the discussion around obesity and nutrition and as it related to chronic disease.</p> <p>Additional resources added to the IQ cases.</p> <p>Feedback indicated that the discussions on Friday were very helpful in enriching the LOs for the week.</p> <p>EBIQ sections of the IQ cases went smoothly.</p>	<p>Continue to evaluate any new lectures or references as it related to obesity.</p> <p>Review of all IQ cases to evaluate diversity in IQ cases in partnership with the Diversity in the Curriculum Design Team.</p> <p>Update prompting questions for student discussions at the field sites and for the written reflections. Highlight importance of student preparation for site visits.</p> <p>Continue with specific instructions during peer handoff and facilitator training.</p>
<p>Lectures: Updated content to reflect current events and changes within disciplines. Worked with lecturers to use polling and other forms of audience participation at least twice in an hour lecture.</p> <p>Asked each lecturer to introduce themselves and spend a few minutes describing the journey of how they chose medicine and their specialty as a part of helping students in their own professionalism identity formation.</p> <p>Design team worked to bring more diversity into the lectures including more content on</p>	<p>Lectures rated well by students. Had consistent attendance throughout the Block – an improvement from last year.</p> <p>85.6 % of the students rated this aspect in the end of Block survey as good - excellent.</p> <p>This effort was discussed with section leaders in an effort to incorporate more diversity into didactic sessions.</p>	<p>A major evaluation of content presented by lecture to be completed this next year. Continue to work with lecturers about active learning techniques to incorporate in the lectures.</p> <p>As professional identity formation is an important part of the medical school curriculum we will continue to introduce the faculty in this manner and help guide students early on in the curriculum.</p> <p>Design team will continue to work on bringing more diversity into the lectures</p>

<p>Native American, AA/PI, Latinx and LBGTO+ health issues and the SDH.</p> <p>Added a lecture about environmental justice and health equity by Dr. Sadeer Al-Kindi</p>	<p>Helped to bring together many of the concepts about the social determinants of health and the environment.</p>	<p>Continue to incorporate the various aspects of SDH into lectures.</p>
<p>TTE & TBL: All sessions in person. Continued the use of electronic devices during the exercises to eliminate the use of paper.</p> <p>Modified Climate Change TBL based on working with a concept map and applying solutions to the concept map with discussion following a word cloud exercise as a way of students engaging in discussions of solutions.</p> <p>Worked with Dr. Lydia Furman on integrating the First Year Cleveland perspective into the Population Health TBL on infant mortality based on last year's feedback and feedback from colleagues at UH Rainbow Babies and Dr. Gifford's colleagues at Dartmouth.</p> <p>Population Health TBL on lead poisoning updated last year.</p> <p>The pandemic exercise used the novel non-polio enterovirus again this year.</p>	<p>The use of the IPADs is working well.</p> <p>Students were highly engaged and created maps that were very detailed with many thoughtful solutions. Student feedback was that the discussion following the word cloud was not as in depth as they thought it should have been.</p> <p>Excellent discussion this year with a better integration of what was covered in lectures, readings and field site experiences.</p> <p>The majority of the student groups picked the consensus answer and there was less discussion this year.</p> <p>Students who had thought they might understand everything about a pandemic were challenged to pivot from an air borne virus to one with an oral-fecal route.</p>	<p>Continue to work on using electronic devices in a variety of applications.</p> <p>Will continue to explore other methods for the Climate Change TBL conclusion.</p> <p>Will continue to work with Dr. Furman on the answers and discussion points.</p> <p>Update the lead poisoning application or possibly writing a new application on another population health issue.</p> <p>Continue to update the pandemic exercise including the pre-reading and the role descriptions – will pivot to another virus this coming year – probably influenza.</p>

<p>Another team learning session was added applying Epidemiology/Biostatistics concepts on sensitivity, specificity and screening exams. As designed did not include an IRAT/GRAT and was called Active Learning Teams (ALT) – a form used in Block 2.</p>	<p>The just-in-time student survey rated the exercise to meet the learning objectives as effective and very effective greater than 90%.</p>	<p>Use the students comments and faculty observations to improve the ALT.</p>
<p>Panel Discussions All but one panel discussion was in-person. Sessions were high impact</p>	<p>Many students listed the panel discussions as the highlight of the block and many suggested “have more panels” as a way to improve the block.</p>	<p>We will continue to engage high-impact community and faculty members on pertinent and timely topics pertaining to Health Determinants, Health Systems Science and Population Health.</p> <p>Continue to evaluate how to add and improve the panel discussions.</p>
<p>Book Discussion: Following last year’s feedback had one book for discussion this year. <i>Lifelines: A Doctor’s Journey in the Fight for Public Health</i> by Leana Wen, MD. Linked the lecture by Dr. Heidi Gullett on her career in public health the hour before the book discussion.</p>	<p>Feedback was positive on the themes in the book. Block 8, Tuesday Seminars, also had this book for the M2s to read at the beginning of the academic year.</p>	<p>Continue with one book. Work with design team to choose the book for next year.</p>
<p>Field Experiences: The field experience sites were able to return to in-person.</p> <p>Added new sites to list with Dr. Gifford’s help in recruiting more agencies and programs that involve pediatric issues.</p>	<p>Student feedback consistently points to the field experiences as an excellent learning experience. Feedback from one site noted poor student participation that was addressed before next student group went to that site. Student feedback from one site noted 3 hours of lectures and less interaction</p>	<p>We will continue to review individual student feedback on each field experience site and work directly with community partners to align the experience with stated goals and learning objectives. Work specifically with site where there was less interaction.</p>

6. What changes do you anticipate making to the Block next year (AY 2021-2022)

Review all major concepts, i.e. population health, SDH, and work with design team to choose graphics to be used by lecturers to provide a consistency in the concepts.

A major review of all the lectures to determine if some lectures could be replaced by more active learning sessions.

Using either the UCSF toolkit for medical educators or the SUNY toolkit to evaluate the diverse, equitable and inclusive content in Block 1.

Examine pre-reading and other resources to ensure all assignments are integrated with the in-person sessions (some students thought reading was too much although it met the CWRU requirements for maximum length). Consider other multi-media resources rather than reading (i.e. aquifer cases)

7. What successful, innovative components of your block are best practices that you would like to share with the other Blocks?

Presenters were asked to introduce themselves and spend a few minutes describing their journey as they developed their professional identity and practice. This provided students a wide variety of perspectives and was introduced to them as a way for them to start their professional identity journey. The other Blocks may consider including this strategy or others to encourage students to continue to explore and develop their professional identity

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

Changes anticipated for next year	Reason for changes (evidence)
Climate Change TBL to be updated	Determine how the final exercise can be formatted for better discussion among the student groups
Population Health TBL to be updated	Lead poisoning application exercise is outdated and need to have a population health question that will have greater discussion among the student groups
All lectures topics and content to be reviewed	A major review of lectures has not been done in several years and need to map all lecture content with the goal objectives
At least 2 interactive activities in each lecture (questions, pair and share exercise, etc).	Better faculty and student engagement during interactive sessions.

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

Deletions	Additions
none	Professional Identity Formation

10. Describe how faculty teaching quality was reviewed for your block. What faculty development opportunity was offered in response to student feedback?

Co-leaders attended all lectures to help in the evaluation of content. Content-specific Block 1 evaluations are reviewed by the Block 1 Design Team annually. Individual faculty evaluations are reviewed by the Block 1 Leaders who directly address specific concerns with individual faculty when necessary. We provide annual Team Based Learning training to Block 1 faculty and facilitators. Individual IQ facilitator training and feedback is handled separately by the IQ evaluation team. All Block 1 faculty are encouraged to participate in the Center for Advancement of Medical Learning professional development workshops.

11. Acknowledgements:

Block 1 core disciplines of Bioethics, Population Health, Health Determinants and Health Systems Science encompass continually evolving and developing fields of study, and we are tremendously grateful to the tireless commitment of our Block 1 design team and core faculty for continually updating and adjusting both content and delivery.

We would also like to thank the M2 students for their work on the Block 1 curriculum and suggestions for inclusions and improvement.

Deidre Gruning is the glue that holds us all together. Her knowledge and understanding of the complexities of the curriculum and her strong organizational and executive skills were essential in the delivery of Block 1 this year and we cannot thank her enough. In addition, all the staff that came in early for the pandemic exercise and the TBLs to make sure the rooms were set up appropriately and the make sure the faculty and community members knew what room they were going to. A special appreciation to Elizabeth Day, Kurtis Hoffman, Sharon Callahan, Nivo Hanson and Dawn Reid. We cannot thank you enough.

Huge thanks to Kurtis Hoffman who was instrumental in maintaining relationships with our community partners during the pandemic. Without his high level of organization and timely response to all our community partners with the utmost of professionalism and sensitivity, the field experiences, a critical component of Block 1, simply would not have been possible.

We also thank Celinda Miller for her tremendous work in coordinating the IQ experiences and helping to get a reduction in the amount of paper used. We are grateful for the help of all members of UTech and particularly Victor Guinto, Darin Johnson, Megan Slabach and Paul Salzgeber.

We would also like to thank Kelli Qua, Yifei Zhu, Kathy Dilliplane and Michelle Mumaw and the entire assessments team. We remain so grateful for the tremendous teamwork that is necessary for the students to have an optimized learning experience in Block 1.