Case Western Reserve University – University Program Medical School

Block 1: Action Plan 2021-2022

Year 1 – July through May

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

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

also 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: Vanessa Maier, MD, MPH
   Block Co-Leader: Karen B. Mulloy, DO, MSCH

3. **Design Team:**

   Epidemiology and Biostatistics Section: Doug Einstadter, MD, MPH, Farren Briggs, PhD
   Bioethics Section: Aaron Goldenberg, PhD, MPH
   Population Health Section: Vanessa Maier, MD, MPH,
   Health Determinants Section: Karen B. Mulloy, DO, MSCH
   Health Systems Science Section: Johnnie Rose, MD, PhD, Monica Yepes-Rios, MD, Anastasia Rowland-Seymour, MD
   TTE/TBL Leads: Pauline Terebuh, MD, MPH, Karen Mulloy, DO, MSCH, Johnnie Rose, MD, PhD, Lydia Furman, MD
   Field Experiences: Ellen Luebbers, MD
   Panel Discussion Leads: Joseph Williams, MPA, Lisa Ramirez, PhD, Heidi Gullett, MD, MPH
   Book Discussion: Karen B. Mulloy, DO, MSCH

   Course Manager: Deidre Gruning
   Field Experience Manager: Kurtis Hoffman

4. **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
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	Demonstrates ability to apply knowledge base to clinical questions Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician	Provide a strong epidemiology and biostatistics foundation to support effective application in clinical practice and interpretation of the scientific literature.	none
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	Demonstrates ability to apply knowledge base to clinical questions Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician	Illustrate effective means to measure, understand, and affect the health of populations.	none

Competency and Definition	EPO	Block 1 Goals	Recommended Changes
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	Demonstrates ability to apply knowledge base to clinical questions Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician	Provide a basis for understanding social, behavioral, structural, and environmental determinants of health	none
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	Demonstrates ability to apply knowledge base to clinical questions Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician	Provide a broad understanding of health system science.	none
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	Demonstrates ability to apply knowledge base to clinical and research questions Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician	Provide a framework for understanding the implementation of bioethical principles in the practice of public health, population health, health systems science and clinical medicine	None

Competency and Definition	EPO	Block 1 Goals	Recommended Changes
Common to all Blocks			
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	Demonstrates ability to apply knowledge base to clinical and research questions Demonstrates appropriate level of clinical and basic science knowledge to be an effective starting resident physician	Recognize and analyze ethical problems in clinical medicine and biomedical research using the principles of autonomy, beneficence, nonmaleficence and justice.	none
Teamwork & Interprofessional Collaboration Demonstrates knowledge and skills to promote effective teamwork and collaboration with health care professionals across a variety of settings	Performs effectively as a member of a team	Develop and practice the knowledge and skills that promote effective teamwork across a variety of settings	none
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

Competency and Definition	EPO	Block 1 Goals	Recommended Changes
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

5. **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?**
The Block was transitioned from an on-line delivery because of Covid-19 pandemic to in-person with the development of the COVID vaccine.	Use of the HEC building space for all the teaching situations with maintaining social distancing and wearing masks worked very well. The ability for lecturers to be able to remove their masks to lecture based on pedagogical reasons and also keeping distance from the audience and behind Plexiglas was helpful in delivering the content appropriately. However, there were limitations in using mobile mics due to COVID concerns that limited some teaching techniques such as during the TBL sessions.	If there is control of the pandemic then being able to drop all restrictions however continue with the format with social distancing and mask wearing if still indicated. If appropriate return to use of all A/V equipment in all teaching scenarios.
A med school initiative to give all incoming students 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.	This helped to institute a green initiative and eliminated vast amounts of paper used during the Block.	Work with leadership in evaluation of the IPAD use and other initiatives that help to make the med school Greener.
IQ Cases: Recruitment of Timica Campbell, MD and an M3 student led to a major update of the 1st IQ case with more emphasis on the issues of population health, bioethics and reproductive justice.	Well received with good feedback from students and facilitators.	Continue to update and evaluate all IQ cases.

Worked with Dr. Croniger and the medical students to participate in the IQ Diversity project that added robust, randomly assigned patient identities to all IQ patients in Block 1.	This helped students and facilitators to frame a social and structural context in these cases and helped to start the dialogue on personal biases. However it was not clear if the students or facilitators were addressing the specifics of the zip code in each case.	Need to add an official LO to the Jack Lee case on LGBTQ+ issues for preventive care. Review the instructions for facilitators in each case be sure there are some probing questions about the meaning of the zip code- where the patient lives.
Review of all IQ cases to incorporate more diversity into IQ cases in partnership with student group	Additional resources added to the IQ cases.	Continue to participate in the IQ diversity project.
Discussion of the field site visits that had been in sub-IQ groups during the virtual sessions last year were returned to being discussed on Friday during the IQ sessions.	Feedback indicated that the discussions on Friday were very helpful in enriching the LOs for the week.	Continue with the format of discussing the field site visits in the IQ session on Friday.
Specific instructions on EBIQ process during orientation was coordinated the peer leaders and facilitator training was added.	EBIQ sections of the IQ cases went smoothly.	Continue with specific instructions during peer handoff and facilitator training.
Lectures: All lectures transitioned to in-person. Lectures were recorded and made available to students on Canvas	Lectures rated well by students. However, for the first time we had a decrease in the number of students present at lecture at the mid-4th week and the 5th week of the Block.	Continue to update content to reflect current events and changes within disciplines. Work with lecturers to use polling and other forms of audience participation at least twice in an hour lecture.
In partnership with a student group didactic lectures reviewed in incorporate more diversity.	This effort was discussed with section leaders in an effort to incorporate more diversity into didactic sessions.	Design team will continue to work on bringing more diversity into the lectures including more content on Native American, AA/PI, Latinx and LBGTQ+ health issues and the SDH.

Recruited Dr. Arthur James to deliver the health equity lecture and to be a part of the community solutions panel.	Well received lecturer.	Dr. James has decided not to continue with his work in Cleveland but we will continue to recruit lecturers from diverse communities.
Discussion with Drs. Dr. Darcy Freedman of the CWRU Swetland Center and Will Bush of PQHS department on aligning their environmental health lecture with other parts of the curriculum.	Lecture improvement on environmental health	Will continue to work on bringing in more examples on how environmental health is a SDH.
TTE & TBL: All sessions in person. Going green - Able to transfer some of the technology from being virtual – such as attendance taken by URL codes and the IRAT/GRAT completed on Canvas – eliminating paper.	A great improvement from the virtual platform.	. Continue to work on using electronic devices in a variety of applications.
Norming exercise included in orientation.	Completed during peer handoff.	Continue with norming exercise during orientation.
The modified Climate Change TBL based on working with a concept map and applying solutions to the concept map with a gallery walk was used for the first time in person.	Students were highly engaged and created maps that were very detailed with many thoughtful solutions. However, the maps were all placed on the windows for the gallery walk and that did not allow for enough room for the groups to view and talk about the maps.	Will reassess if the gallery walk is the best technique for in depth discussions within groups. Will explore other methods for the TBL conclusion.
Recruited Dr. Lydia Furman on integrating the First Year Cleveland perspective into the Population Health TBL to focus on content regarding racial disparities and to update the lead case.	Excellent discussion on both cases. There was some student feedback that the “consensus” answer did not align with what was previously taught in lectures.	Will work with Dr. Furman on the answers and discussion points.

Recruited Drs. Pauline Terebuh and Steven Gordon to rewrite the pandemic exercise with a new virus – a novel non-polio enterovirus.	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.	Continue to update the pandemic exercise including the pre-reading and the role descriptions.
Panel Discussions Although the students and the panel moderators were in person, many of the community members were reluctant to be in the HEC in person. The panel members were zoomed in for the sessions.	With the help of UTECH we were able to bring in the panelists remotely with all appearing on the screen. However, student feedback showed a disappointment about not being able to interact in person with the community members 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.	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. Continue to evaluate how to add and improve the panel discussions.
Book Discussion: Continued with two books this year – a public health/population health book and a book discussing the issues of race and society. In discussion with design team and the population health lecturer on the first day, Dr. Murray, “What the Eyes Don't See: A Story of Crisis, Resistance, and Hope” was again chosen for the first book. In discussion with the design team and the Student National Medical Association and the Latino Medical Student Association	Student feedback -The first book discussions were rated positive but the second book had mixed ratings. The mixed ratings were based on the discussion was in the week of final exams, many people did not read the book, the discussion that was need for the content could not be covered in just 50 minutes and that the book had content that they thought was not as helpful in discussing caste, class and race.	Will discuss with design team about going back to one book. We will continue to engage the Student National Medical Association and the Latino Medical Student Association leadership at CWRU in planning the book discussion for 21-22.

leadership at CWRU, the book "Caste, The Origins of out Discontent" by Isabel Wilkerson was chosen as the second book. Discussions were supported by student facilitators.		
Field Experiences: Although the med school was in person the community groups were not ready to host students in person and so all field site visits were virtual. There were 3 field sites that could accommodate a small number of students in person. Since the number was small students who wanted to be considered for an in person experience were placed in a lottery. Dr. Maier re-recorded the Field Experience introductory video to reflect the change to discussion of the field site experience during the Friday IQ session.	The virtual site visits worked and the students rated this experience as one of the best in the Block. New sites were added, such as HOLA Ohio and Catholic Charities, that brought experience for the students with diverse populations (i.e. Hispanic/Latinx and refugees)	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. Plan to be in-person next year if possible. Continue to reach out to other community groups to provide diverse experiences for the students.

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

Dr. Vanessa Maier has accepted a new position with the School of Medicine to be the Director of the newly funded Advocacy Pathway. Dr. Maier has stepped down as the Block 1 Co-Leader. We have been extremely fortunate to recruit a new Block 1 Co-Leader, Dr. Kimberly Gifford. Dr. Gifford comes to us from Dartmouth and is a pediatrician at Cleveland Clinic.

Adding another TBL that will be an application of the Epidemiology/Biostatistics concepts on sensitivity, specificity and screening exams. Having an interactive session has been an idea of Doug Einstadter for a number of years and there is now room in the curriculum to support the idea.

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

Work with Block 4 to coordinate concepts on healthcare financial literacy with what is being introduced by Dr. Johnie Rose through lectures and TBL and plans in Block 4 IQ cases (Amanda Hennie case – pediatric asthma patient) as a learning objective. By expanding concepts of financial literacy will also bridge conversations on inequities and disparities in healthcare.

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

IQ groups, TBLs and Field Experiences continue to be successful at assisting students in integrating complex concepts. Last year we began an iterative process of aligning goals with learning objectives and elements of assessment. We felt the training we received from the evaluation team to ensure synthesis essay questions assessed analytical skill and aligned with goals and assessment team if they have not already.

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)**
Standard yearly updates for IQ case	Normal procedure to be sure that references are current
Climate Change TBL to be updated	Determine how the final exercise "the gallery walk" could be changed for better discussion among the students.
New Epi/Bio TBL to be written	An interactive application exercise on the issues of sensitivity/specificity/screening will be able to have students achieve higher learning objectives Bloom's taxonomy.
At least 2 interactive questions in each lecture (or other interactive technique, e.g., pair and share exercise).	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	none

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. Response to PEAC Report

No new recommendations from PEAC were received since the report referenced in the 2018 Block 1 Action Plan.

12. Academic Productivity

Dr. Mulloy is submitting a manuscript on the climate change TBL.

13. Acknowledgements:

We want to thank Dr. Vanessa Maier for her work as co-leader of Block 1. Her knowledge of population health and advocacy has been important in advancing the goals for Block 1.

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 evaluation of LGBTQ+ topics in 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 Sharon Callahan, Carol Chakley, Minoo Darvish, Kathy Dilliplane, Nivo Hansen, Kurtis Hoffman, Jennifer Lennon, Eva Orszag, Patti Qualich, Dawn Reid and Yifei Zhu. 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 for added assistance in updating the SEQs. We remain so grateful for the tremendous teamwork that is necessary for the students to have an optimized learning experience in Block 1.

Class of 2025 was asked questions of Block 1 components. Results are reported below as compared to results of previous three years. Responses/Expected: 178/184 (97%)

Percentage of Students who rated "Very Good" or "Excellent"

Block 1: Becoming a Doctor				
General Block Aspects				
Block Components	2018-19	2019-20	2020-21	**2021-22**
Case-based small group discussions (IQ)	76	87	89	**94**
Effectiveness of Lectures	61	47	50	**49**
Effectiveness of Team-based learning (TBL)	57	51	45	**54**
Effectiveness of Panel Discussion	--	--	45	**43**
Effectiveness of Book Discussion	--	--	35	**34**
Effectiveness of Field Experiences	--	--	49	**66**
Effectiveness of Tabletop Exercise (Pandemic)	--	--	18	**53**
Overall quality of this Block	72	67	57	**71**
Block Concepts/Integration of Block Concepts and Longitudinal Themes				
Epidemiology and Biostatistics	74	67	87	**75**
Population Health	87	84	65	**78**

Health Determinants	--	--	85	**90**
Health Systems Sciences	78	65	68	**73**
Gross Anatomy*	67	78	--	**--**
GARLA	--	--	55	**80**
Histopathology	70	91	70	**82**
Bioethics	76	80	71	**71**

*In AY 2019-20 Gross Anatomy/Radiology