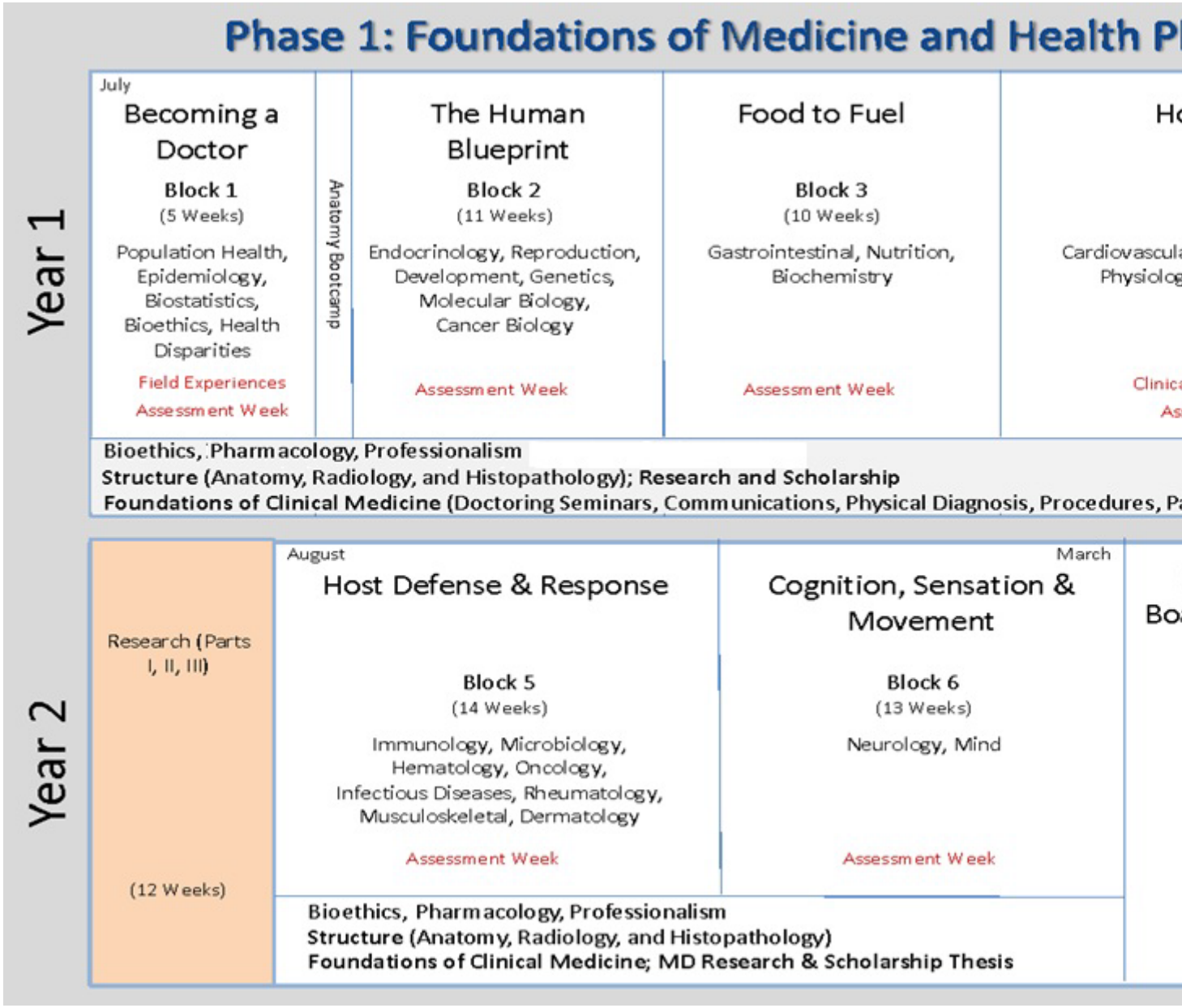
Case Western Reserve University – University Program Medical School Block 5:

Action Plan 2024-2025



1. Course Description:

   This Block 5 course combines basic principles of immunology, rheumatology including autoimmunity and immunosuppressive therapies, orthopedics, microbiology and infectious diseases; hematology- including anemia, thrombosis and hematologic malignancies; and dermatology with an emphasis on immune mediated skin disorders

2. **Block Co-Leaders**: Nicholas Ziats, Ph.D., Timothy O'Brien, M.D.
3. **Design Team: Immunology**: Man-Sun Sy Ph.D., Pam Wearsch Ph.D., Tracey Bonfield, Ph.D.;

Microbiology/ID: Amy Ray M.D., Federico Perez M.D., Hematology/Oncology: Timothy O'Brien M.D., Howard Meyerson M.D.; Rheumatology: Angela Robinson M.D., Maya Mater M.D., Maria Antonelli M.D., Orthopedics: Christina Cheng M.D., Christina Hardesty M.D.; Dermatology: Katherine DeSano M.D.; Ethics Robert Guerin Ph.D.

4. **Course Objective:** Please fill in the table below for your Course Objectives.

Competency & Definition	Educational Program Objective (EPO)	Course Objective	Recommended Changes
Professionalism Demonstrates commitment to high standards of ethical, respectful, compassionate, reliable and responsible behaviors in all settings, and recognizes and addresses lapses in professional behavior.	1. Meets obligations in a reliable and timely manner. 2. Exhibits professional behavior or addresses lapses in professional behavior. 3. Consistently demonstrates compassion, respect, honesty and ethical practices.	• Recognize and analyze ethical problems in clinical medicine and biomedical research using the principles of autonomy, beneficence, nonmaleficence and justice. (3) • Understand and practice the behaviors of an ethical, respectful, compassionate, reliable, and responsible physician. (1, 2, 3)	No change recommended
Teamwork and Interprofessional Collaboration Demonstrates knowledge, skills and attitudes to promote effective teamwork and collaboration with health care professionals across a variety of settings.	1. Performs effectively as a member of a team. 2. Respects and supports the contributions of individuals on an Interprofessional health care team to deliver quality care.	• Develop and practice the knowledge and skills that promote effective teamwork across a variety of settings. (1,2)	No change recommended
Interpersonal and 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	1. Effectively communicates knowledge as well as uncertainties. 2. Uses effective written and oral communication in clinical, research, and classroom settings 3. Demonstrates effective communication with patients using a patient-centered approach	• Understand and demonstrate effective communication skills for learning and clinical practice environments. (1, 2, 3)	No change recommended

<u>Knowledge for Practice</u> Demonstrates knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences as well as the application of this knowledge to patient care	1. Demonstrates appropriate level of clinical, basic, and health systems science knowledge to be an effective starting resident physician. 2. Demonstrates ability to apply knowledge base to clinical and research questions	• Recognize and analyze ethical problems in clinical medicine and biomedical research using the principles of autonomy, beneficence, nonmaleficence and justice. (2) • Understand and practice the behaviors of an ethical, respectful, compassionate, reliable, and responsible physician. (2) • Achieve an understanding of the development of the skeleton and limbs, progress through the formation and maintenance of healthy bones and joints, proceed with an examination of soft tissues and spinal mechanisms responsible for creating and controlling movement and conclude with an understanding of the pathological, congenital and acquired processes which negatively impact musculoskeletal function. (1) • Students should describe how differences in host immunity alter the clinical diseases caused by infectious pathogens. (1) • Students should emphasize important fundamental concepts in immunology and their importance in human disease. (1)	No change recommended

		• Students should recognize the major clinical syndromes of infectious diseases including their microbiology and treatment. (1) • Students should understand normal and abnormal hematopoiesis and clotting. (1) • Students should understand the pathophysiology and clinical management of rheumatic and connective tissue. (1, 2) • Students should understand the structure of skin tissue, its interactions with microbes and the immunology of skin. (1)	
Research and Scholarship Demonstrates knowledge and skills required to interpret, critically evaluate, and conduct research	1. Analyses and effectively critiques a broad range of research papers. 2. Demonstrates ability to generate research questions and formulate methods to answer these questions. 3. Demonstrates ability to initiate, complete and explain his/her research.	• Analyze, critique and present research studies from the primary literature. (1)	No change recommended

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 2024-2025?	How did the changes work?	What would you like to change next year 2025-2026?
Leadership change, Dr. Timothy O'Brien as Co-Leader of Block 5	Excellent, see student feedback and PEAC report comments	Continuation
Leadership change in Infectious Disease, Dr. Amy Ray and Dr. Federico Perez as Co-Leader of the Infection portion in Block 5	Excellent, see student feedback and PEAC report comments	Continuation
Flipped classroom format for some Hematology Lectures with mandatory attendance	Improve student interaction/engagement	Additional sessions to add
Use of Poll Everywhere	Improve student interaction/engagement	Continuation
Revised Introduction to ID lecture (25 min) and a new two-hour lecture on approach to infections in the immunocompromised host	The additional didactic on the approach to infections in immunocompromised host populations worked well because it allowed for reiteration of infectious syndromes and introduced opportunistic infections prior to the medium-sized group dedicated to the topic	Continuation
Addition to medium-sized group sessions (3) which are case-based in the ID section. This year, a 4th session was added specific to skin and skin structure infections. In addition, all of the medium-sized group cases were updated to include a series of questions guiding students through the cases to direct their attention to symptoms of infection, syndrome recognition, diagnostic evaluation, and therapeutic decision-making. These sessions were timed in coordination with lecture material.	The updated and new medium-sized group sessions were well-received by the students. Many students expressed appreciation of the tempo and content of these sessions.	Continuation

What changes were made 2024-2025?	How did the changes work?	What would you like to change next year 2025-2026?
Change IQ case on COVID19 to Malaria/Sickle Cell Disease case	Student feedback request to add Sickle Cell anemia to case IQ content	Continuation
Change IQ case on Tuberculosis, remove HIV basic science case	Student feedback request to delete basic science HIV case. However, Feedback from Block 4th year facilitators indicated to dd back case or revise case	Need to reconsider TB case vs. HIV case
Added PathPresenter Virtual Images	More robust system, more slides in system	Continuation
Revision of Histopathology Quizzes due to switch to Elentra	Variable and time consuming due to glitches in Elentra	Continuation

6. What additional changes do you anticipate making to the Block next year (lectures, TBL, IQ cases, other) (AY 2025-2026)?

See below

Changes anticipated for next year	**Reason for changes (evidence)**
Immunology lectures revision	May need a replacement for Dr. Sy, 20 hours of lecture
Additional flipped classroom format for some Hematology Lectures	Improve student interaction/engagement, had encouraging results in 2024-2025
Use of Poll Everywhere in more lectures	Improve student interaction/engagement, problems in some
Expand/revise Malaria/Sickle Cell Disease case	Student feedback request to add Sickle Cell anemia to case IQ content in 2024, will need to revise case
Revision/replacement of other cases, infection, orthopedics	Infection cases on tuberculosis, Kawasaki, and fractures. Feedback from Block retreat from Pediatrics suggested revision
Revision/addition of new IQ on HIV	Student feedback and M4 facilitator feedback

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

a. Mandatory Large group interactive sessions with a patient, Heme/Onc

b. Mandatory Case based Medium Group Discussions, ID, added more sessions

8. Please review your Course objectives. Have you added or deleted major concept areas to your Block? NO

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

There are no formal faculty development activities specific to Block 5 other than that which is offered by the SOM curriculum leadership as a whole. Students added comments on outstanding faculty including Dr. O'Brien, Ray, Perez Sy as lecturer's and Dr. Marino, Danielpour, and Ziats as IQ facilitators.

12. What changes have you have made, or you anticipate in making to better prepare students to care for diverse population.

This year	Next Year
Increase ID MSG to 4	Continuation
Large group patient interactions (Heme/Onc)	Continuation and perhaps addition

13. Acknowledgement: Stephanie Johnson was new Block administrator and course coordinator, provided exceptional support; Nivo Hanson, Patti Quallich, Kathy Dilliplane, Celinda Miller, Minoo Darvish and Dr. Croninger for their dependable and consistent support.

14. Response to Program Evaluation Committee (PEC) Report: See PEAC Summary Report below, received on 2/4/25, not enough time for leaders to review these responses, but they are consistent with Block 5 Feedback Report.

Program Evaluation Committee Summary Report

Block/Clerkship: Block 5 Date Prepared: 1/6/2025

Evaluation Data		
	AY23-24	**AY24-25**
Percentage of students who rated the Block/Clerkship as good or excellent	86%	94%
Instructional methods with student ratings below <80% good/excellent	Lectures 77%	N/A
Integration of block concepts with student ratings <80% good or excellent	Infectious Diseases 65% Rheumatology 75% Dermatology 68% Bioethics 62% Pharmacology 66%	Pharmacology 75% Rheumatology 75% Bioethics 56%
Percentage of students who agreed “assessments accurately represented the content of the block.”	90%	94%
Percentage of students who agreed “faculty provided effective teaching”	88%	97%
Percentage of students who agreed “faculty treated me with respect”	97%	100%
Percentage of students who agreed “the overall workload during the block was manageable"	77%	93%

Summary of Recent Trends in Longitudinal Quantitative Data

- Overall block quality has increased 8% to 94%
- Pharmacology and Bioethics has considerable increases from last year; dermatology and infectious diseases increased to about 80%
- Bioethics was the only discipline that decreased
- Satisfaction with workload increased 15% and overall the learning environment were positive

Summary of Block/Clerkship Strengths

- Overall, the faculty for Block 5 were highly praised for their engaging and effective teaching. In particular, Drs. Ray, O'Brien, and Sy stood out as role models, inspiring interest in their respective fields while providing high-yield, clinically relevant instruction. Students expressed gratitude for the faculty's dedication to making challenging topics understandable and their consistent support throughout the block. Dr. Amy Ray received widespread praise as an exceptional lecturer and block leader for Infectious Diseases (ID). Students admired her clarity, succinctness, and ability to make complex topics approachable, as well as her dedication to ensuring the block's content aligned with students' needs. Her involvement, including attending lectures she didn't deliver, inspired many students to consider ID as a specialty. Dr. Timothy O'Brien was also highly regarded for his teaching in hematology and oncology, with students commending his clear explanations, engaging clinical examples, and focus on the practical application of knowledge. His warmth and dedication left a lasting impression, fostering interest in hematology and helping students feel prepared for exams and clinical practice. Dr. Man-Sun Sy stood out for his ability to make immunology enjoyable and accessible. His enthusiasm, humor, and talent for breaking down complex concepts into digestible pieces were consistently appreciated. Dr. Federico Perez was recognized for his impactful interactive sessions in ID, where his detailed explanations of treatment algorithms enhanced students' understanding of infectious disease management. Other faculty members, including Dr. Nicholas Ziats, Dr. John Marino III, and Dr. David Danielpour, were celebrated for their roles as IQ facilitators, providing supportive environments, actionable feedback, and clinical insights that enhanced both learning and reflection.

- Organization and Structure
    - The block was consistently praised for its logical organization and clear sequencing of topics. Starting with immunology provided a strong foundation for infectious disease, hematology, and oncology.
    - Many students appreciated the alignment of lectures with IQ cases, which reinforced key concepts and created a cohesive learning experience.
    - The end-of-block review sessions were highlighted as particularly helpful for consolidating knowledge and preparing for exams.
- Integration of Topics
    - Students commended the block for integrating diverse topics such as immunology, infectious disease, hematology, and musculoskeletal/dermatology in a holistic manner.
    - Lectures and IQ cases were noted for complementing one another, tying together seemingly disparate subjects into a unified framework.

- Interactive Sessions
    - Interactive sessions, particularly for infectious diseases and hematology, were highly valued for their practical application of knowledge.
    - These sessions were seen as well-timed, engaging, and helpful for understanding complex clinical syndromes and reinforcing lecture content.
- Faculty and Lecturers
    - The quality of teaching in the block was frequently highlighted, with lecturers such as Dr. Sy, Dr. O'Brien, and Dr. Ray receiving particular praise for their clarity, clinical relevance, and engaging styles.
    - Students appreciated having continuity in teaching, where one professor led multiple lectures in a content area, fostering familiarity and cohesion.
- Focus on Clinical Reasoning
    - The block was recognized for its emphasis on clinical reasoning, particularly through IQ cases and interactive sessions.
    - Students felt better equipped to develop differential diagnoses, analyze clinical features, and apply knowledge to patient care scenarios.
- Review Resources and Expectations
    - Resources like the "key objectives" document and the focused review sessions were commended for clearly outlining expectations and helping students prioritize learning.
- Content
    - The block was praised for focusing on clinically and Step 1-relevant material, particularly in immunology, hematology, and infectious diseases.
    - Students felt that the curriculum emphasized foundational concepts critical for both exams and clinical practice.
    - Despite the large volume of material, students appreciated the block's ability to cover a wide array of topics in a manageable and effective manner.
    - Many noted that the block provided a solid foundation for future learning while reinforcing concepts from earlier blocks.
- Engagement and Practicality
    - Students found the IQ cases and interactive sessions practical, engaging, and relevant.
    - The block's ability to simulate real-world clinical problem-solving was a frequently mentioned highlight.

Summary of Block/Clerkship Areas for Improvement

- Overreliance on Third-Party Resources
    - Students expressed frustration with the expectation to rely heavily on external resources like Sketchy Micro for microbiology and infectious disease content.
- Need for More Comprehensive IQ Cases
    - Students felt some IQ cases were insufficiently representative of high-yield topics (e.g., lack of cases on HIV and bone tumors).
    - Cases like Kawasaki disease were perceived as less relevant compared to more common or clinically significant conditions.
- Suggestions for Better Distribution of Content

    - Immunology, infectious diseases, and hematology were identified as requiring better pacing or redistribution across blocks.
    - Some students recommended front-loading microbiology and infectious disease content with mandatory preparatory resources during the summer.
- Overlap and Redundancy
    - Topics like derm, MSK, and ortho were felt to overlap in content, leading to inefficiencies.
    - Students suggested consolidating overlapping material and better integrating related subjects.
- Resource Suggestions
    - Students asked for additional focused resources to help with memorization-heavy topics, such as curated antibiotic charts and structured clinical syndrome videos.
    - Providing access to lecture powerpoints and review materials earlier in the block was also requested.
- Improving Rheumatology and Microbiology
    - Rheumatology was flagged as needing better integration with immunology and clearer expectations for assessments.
    - Microbiology was noted as challenging due to a perceived lack of foundational teaching, with suggestions to include more basic bacteriology/virology content.

***Common Contradictions in Feedback**

- Organization and Integration
    - Strengths:
        - The block was widely praised for being well-organized, with clear sequencing of topics and strong integration between lectures, IQ cases, and assessments.
        - Many students felt the block followed a natural progression, particularly the immunology-to-infectious diseases-to-hematology sequence.
    - Contradictions:
        - Some students found the block disorganized, particularly in the latter weeks, where MSK, rheumatology, and dermatology were crammed together.
        - Others noted redundancies in teaching (e.g., psoriasis covered by rheumatology and dermatology) and mismatched sequencing (e.g., orthopedics too close to exams).
- Alignment of IQ Cases, and Lecture Content
    - Strengths:
        - Many students highlighted strong alignment between IQ cases, lectures, and assessments as a hallmark of Block 5.
        - IQ cases were commended for covering comprehensive and clinically relevant material, helping to integrate topics across disciplines.
    - Contradictions:
        - IQ cases were also flagged for not consistently representing high-yield topics, with requests for cases on HIV, bone tumors, and other clinically significant conditions.

- Breadth of Content and Pacing
    - Strengths:
        - Many students appreciated the comprehensive nature of the block, covering a wide array of material in a cohesive and efficient manner.
        - The block's ability to tackle challenging disciplines within a short time frame was seen as a testament to its overall success.
    - Contradictions:
        - Others found the block overwhelming, with too much material condensed into a single block.
        - There were repeated requests to redistribute content (e.g., moving immunology to an earlier block or separating MSK, rheumatology, and dermatology into different blocks).
- Use of Third-Party Resources
    - Strengths:
        - Some students felt that third-party resources like Sketchy Micro complemented the block's curriculum effectively.
        - The combination of IQ, lectures, and external resources was noted as helping prepare for exams and Step 1.
    - Contradictions:
        - Many students felt an overreliance on third-party resources like Sketchy Micro was problematic, especially when foundational microbiology content was not adequately covered in lectures.

Additional Information and Block Evaluation Data

Feedback from Prior Years:

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

Block 5: Host Defense and Host Response				
General Block Aspects				
Block Components	**2020-21 %**	**2021-22 %**	**2022-23 %**	**2023-24 %**
Lectures	--	47	75	77
IQ cases	65	74	85	85
Overall quality of this block	71	69	92	86
Block Concepts/Integration of Block Concepts and Longitudinal Themes				
Immunology	79	87	92	81
Hematology/Oncology	81	86	95	93
Infectious Diseases	60	54	70	65
Rheumatology	60	52	75	75
Dermatology	42	35	62	68
Orthopedics	57	55	80	82
Bioethics	43	43	71	62
Pharmacology	--	--	71	66