Allergy/Immunology Fellowship Curriculum Development

Christopher Chang, MD, PhD, MBA, FAAAAI
Memorial Healthcare System
Program Director, A/I Fellowship

1

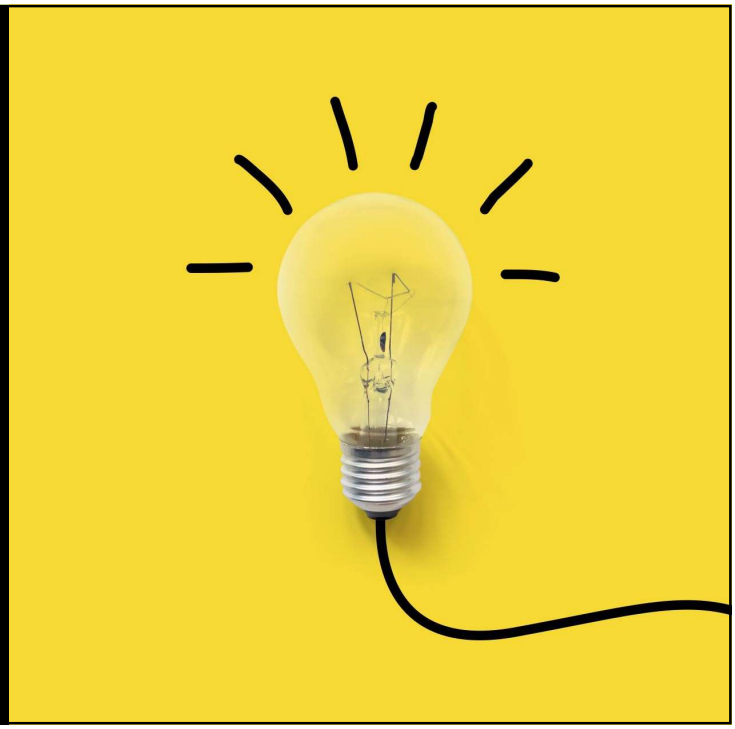
DISCLOSURES

No financial conflicts of interest
I am an A/I fellowship program director

2

OBJECTIVES

- Describe effective curriculum development, including needs assessment, learning objectives, and selecting appropriate teaching methods
- Understand how to assess learner outcomes
- Address incorporating feedback from learners and faculty for continuing improvement
- Incorporating health disparities int an allergy and immunology curriculum



3

ARS 1: WHO ARE YOU?

A. Program director
B. Associate program director
C. Core faculty
D. Other faculty
E. Program administrator/coordinator
F. Other

4

ARS2: HOW DID YOU DEVELOP YOUR CURRICULUM?

When you started as program director, how did you develop your curriculum?

A. From scratch (I am a new program director in a new program and there was no existing curriculum)
B. There was a curriculum already being used, and no changes were made
C. There was a curriculum, but significant changes were made right from the outset when I started
D. There was a curriculum, and changes were made gradually during my term as program director

5

ARS 3: DEVELOPING YOUR CURRICULUM

What is your primary objective when developing or modifying your curriculum?

A. Providing as much A/I knowledge as possible
B. Developing excellent A/I clinicians
C. Setting the stage for lifelong learning
D. Ensure that your fellows pass the boards
E. Cultivating professionalism and interactive skills
F. Creating a favorable learning environment

6

THINGS TO CONSIDER

- ACGME requirements
  - ACGME common program requirements for fellowship
  - ACGME specialty-specific progra requirements
  - ACGME program requi
- ACGME milestones
- Preparing the fellow for independent practice
- Board preparation and the ABAI blueprint
- Other requirements such as wellness, health disparities, supervision policies, faculty responsibilities, goals and objectives, etc

- Milestones
  - Patient care and procedural skills (PCPS)
  - Medical (A/I) knowledge (MK)
  - Professionalism (Prof)
  - Systems-based practice (SBP)
  - Problem-based learning & improvement (PBLI)
  - Interpersonal skills and communication (ISC)
- Procedural competencies

7

CRITICAL – UNDERSTANDING THE ACGME REQUIREMENTS

- Educational program 24 months
- Clinical or patient care activities
- Research and "other" requirement
- Core versus specialty specific requirements
- Program leadership
- Faculty
- Milestones as measure of core competencies
- Wellness
- SDOH
- Duty hours
- Procedure logs

8

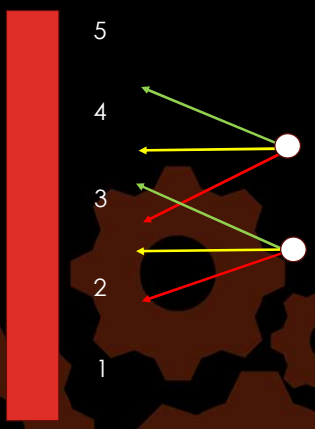
MILESTONES

- What do the milestones mean?
- What are the allergy/immunology milestones?

What are the milestones?

Milestones are rated from 1-5

- PCPS
- MK
- PBL
- SBP
- Prof
- ISC



Where does/should a fellow start?
Where does/should a fellow finish?

9

Allergy Immunology Milestones

PC-1	Medical Interview and Physical Examination of Adult Allergy and Immunology Patients
PC-2	Medical Interview and Physical Examination of Pediatric Allergy and Immunology Patients
PC-3	Diagnostic Tests and Procedures for Allergy and Immunology Patients
PC-4	Management Plan for Allergy and Immunology Patients
MK-1	Basic Science of Allergy and Immunology
MK-2	Clinical Science of Allergy and Immunology
MK-3	Research and Scholarly Activity
SBP-1	Patient Safety and Quality Improvement
SBP-2	System Navigator for Patient-Centered Care
SBP-3	Physical Role in Health Care Systems
SBP-4	Community and Population Health
PBLI-1	Evidence-Based and Informed Practice
PBLI-2	Reflective Practice and Commitment to Personal Growth
Prof-1	Professional Behavior and Ethical Principles
Prof-2	Accountability/Conscientiousness
Prof-3	Self-Awareness and Help-Seeking
ICS-1	Patient and Family-Centered Communication
ICS-2	Interprofessional and Team Communications
ICS-3	Communication within Health Care Systems

10

ACGME COMMON FELLOWSHIP PROGRAM REQUIREMENTS

II.A.4.a).(2)	design and conduct the program in a fashion consistent with the needs of the community, the mission(s) of the Sponsoring Institution, and the mission(s) of the program; (Core)
II.A.4.a).(3)	administer and maintain a learning environment conducive to educating the residents in each of the ACGME Competency domains; (Core)
II.A.4.a).(7)	provide a learning and working environment in which residents have the opportunity to raise concerns, report mistreatment, and provide feedback in a confidential manner as appropriate, without fear of intimidation or retaliation; (Core)
II.A.4.a).(8)	ensure the program's compliance with the Sponsoring Institution's policies and procedures related to grievances and due process, including when action is taken to suspend or dismiss, or not to promote or renew the appointment of a resident; (Core)

11

THE CURRICULUM

Didactics

IV.A. Educational Components

The curriculum must contain the following educational components:

IV.A.1. a set of program aims consistent with mission, the needs of the community distinctive capabilities of its graduate available to program applicants, resic (Core)

IV.A.2. competency-based goals and objecti experience designed to promote proc autonomous practice. These must be available to residents and faculty mer

Background and Intent: The trajectory to autonomous pr Milestones evaluations. Milestones are considered forma identify learning needs. Milestones data may lead to focu revision in any given program or to individualized learnir resident.

IV.A.3. delineation of resident responsibilitie responsibility for patient managemen

IV.A.4. a broad range of structured didactic activities; and, (Core)

IV.A.4.a) Residents must be provided with protected time to participate in core didactic activities. (Core)

Background and Intent: It is intended that residents will participate in structured didactic activities. It is recognized that there may be circumstances in which this is not possible. Programs should define core didactic activities for which time is protected and the circumstances in which residents may be excused from these didactic activities. Didactic activities may include, but are not limited to, lectures, conferences, courses, labs, asynchronous learning, simulations, drills, case discussions, grand rounds, didactic teaching, and education in critical appraisal of medical evidence.

IV.A.5. formal educational activities that promote patient safety-related goals, tools, and techniques. (Core)

IV.B. ACGME Competencies

Background and Intent: The Competencies provide a conceptual framework describing the required domains for a trusted physician to enter autonomous practice. These Competencies are core to the practice of all physicians, although the specifics are further defined by each specialty. The developmental trajectories in each of the Competencies are articulated through the Milestones for each specialty.

12

CORE DIDACTICS

13

CORE DIDACTICS

- What the ACGME says
- IV.C.3 There must be a structured curriculum in the core didactic topics, including pathophysiology, diagnosis, differential diagnosis, complications and treatment of disorders of innate and adaptive immunity including hypersensitivity (IgE and non-IgE-dependent), immunodeficiency, and autoimmunity; and disorders of mast cells, basophils, eosinophils; and contact-system-related angioedema.

- What the ABAI says
- NEW ABAI BLUEPRINT

Are board scores important?
Pass rate aggregated over 3-years must be >80% or
not less than the fifth percentile compared to all A/I programs

14

THE A/I CORE COMPETENCIES - PCPS

IV.B.1.b).(1).(a) Residents must demonstrate

IV.B.1.b).(1).(a).(i) conducting compreher medical interviews witl who present with susp immunologic disorders

IV.B.1.b).(1).(a).(ii) performing a physical appropriate to age anc

IV.B.1.b).(1).(a).(iii) assessing the risks an and immunologic diso including environmenta immunotherapy, pharm immunomodulatory the consideration for cost (Core)

IV.B.1.b).(1).(a).(iv) selecting, performing, and interpreting the results of diagnostic tests and studies with consideration for cost. (Core)

IV.B.1.b).(1).(b) Residents must, to the satisfaction of the program director or designated faculty member, demonstrate proficiency in performing and evaluating results for the following: (Core)

IV.B.1.b).(1).(b).(i) allergen immunotherapy; (Core)

IV.B.1.b).(1).(b).(ii) contact or delayed hypersensitivity testing; (Core)

IV.B.1.b).(1).(b).(iii) drug hypersensitivity diagnosis and treatment; (Core)

IV.B.1.b).(1).(b).(iv) food hypersensitivity diagnosis and treatment; (Core)

IV.B.1.b).(1).(b).(v) immediate hypersensitivity skin testing; (Core)

IV.B.1.b).(1).(b).(vi) immunoglobulin treatment and/or other immunomodulator therapies; and, (Core)

IV.B.1.b).(1).(b).(vii) pulmonary function testing. (Core)

IV.B.1.b).(1).(c) Residents must enter all required procedures into the ACGME Resident Case Log System. (Core)

IV.B.1.b).(2) **Residents must be able to perform all medical, diagnostic, and surgical procedures considered essential for the area of practice.** (Core)

For the other core competencies, not that much outside the common program requirements

15

IV.C.5. Resident experiences in direct patient care must include:

IV.C.5.a) continuing care of pediatric and adult patients with allergic disorders, asthma, immunodeficiency diseases, and immunologic disorders; and, (Core)

IV.C.5.b) direct patient contact with pediatric and adult patients with the following diagnoses: (Core)

IV.C.5.b).(1) anaphylaxis; (Core)

IV.C.5.b).(2) asthma; (Core)

IV.C.5.b).(3) atopic dermatitis; (Core)

IV.C.5.b).(4) contact dermatitis; (Core)

IV.C.5.b).(5) drug, vaccine, or immunomodulator allergy, or adverse drug reaction allergy to drugs and other biological agents; (Core)

IV.C.5.b).(6) food allergy; (Core)

IV.C.5.b).(7) ocular allergies; (Core)

IV.C.5.b).(8) primary and acquired immunodeficiency; (Core)

IV.C.5.b).(9) rhinitis; (Core)

IV.C.5.b).(10) sinusitis; (Core)

IV.C.5.b).(11) stinging insect allergy; and, (Core)

IV.C.5.b).(12) urticaria and angioedema. (Core)

16

Certification Blueprint

ABAI's Certification Blueprint illustrates the expected coverage of top
examination. The percentages (shown below) are to be used as a gui
examination content. These percentages are regularly monitored by
the examination content will reflect the breadth of medical knowledg
immunology.

A. Allergy and Hypersensitivity Principles and Disorders (epide presentation, diagnosis and differential diagnosis, treatment/ physiology/pathophysiology)	
1. Head and neck	
A.1.a. Nasal (allergic and non-allergic rhinitis)	
A.1.b.Sinus (acute and chronic, NP, allergic fungal sinusitis)	
A.1.c. Ocular	
A.1.d. Anatomy, physiology & pathology	
A.1.e. Diagnostics – Nasal/conjunctival provocation, mucociliary t	
A.1.f. Cough	
2. Dermatologic	
A.2.a. Eczema	
A.2.b. Atopic Dermatitis	
A.2.c. Contact Hypersensitivity	
A.2.d. Urticaria	
A.2.e. Angioedema (hereditary and acquired)	
A.2.f. Anatomy, physiology & pathology	
3. Lung	**11%**
A.3.a. Asthma and related disorders	
A.3.b. Occupational diseases	
A.3.c. ABPA	
A.3.d. Hypersensitivity pneumonitis	
A.3.e. Eosinophilic granulomatous polyangiitis (CSS)	
A.3.f. COPD	
A.3.g. ILD	
A.3.h. Anatomy, physiology & pathology	
A.3.i. Pulmonary diagnostic testing: e.g., spirometry, bronchoprovocation, body plethysmography, FeNO, IOS, Mucociliary function)	
4. Food and Drug Allergy/Hypersensitivity Reactions (not including eosinophilic GI disease)	**11%**
A.4.a. Adverse Reactions to Foods	
A.4.b. Allergens	
A.4.c. Adverse Reactions to Drugs & Biologicals (epidemiology, mechanism & management principles)	
5. Anaphylaxis and Mast Cell Activation Disorders (not food or drug-related)	**10%**
A.5.a. Idiopathic	
A.5.b. Exercise	
A.5.c. Latex	
A.5.d. Stinging insect	
A.5.e. Mastocytosis	
A.5.f. Other mast cell disorders	

17

B. Immunological Disorders (epidemiology, risk factors, pathogenesis, clinical presentation, diagnosis and differential diagnosis, treatment/management)	45
1. Immune Inflammatory Disorders	10
B.1.a. Immune complex disorders	
B.1.b. Autoimmune disorders	
B.1.c. Autoinflammatory (febrile) disorders	
B.1.d. Vaccination & immunomodulatory therapeutics	
B.1.e. Other aspects of immune-mediated inflammation	
2. Immunodeficiencies	16
B.2.a. SCID	
B.2.b. Combined Immunodeficiency	
B.2.c. T cell disorders	
B.2.d. B cell disorders (hypogammaglobulinemia, antibody deficiencies)	
B.2.e. Phagocytic disorders	
B.2.f. Complement disorders	
B.2.g. TLR signaling pathways	
B.2.h. IL-12/IFN-gamma pathways	
B.2.i. Secondary immune deficiency	
B.2.j. Other immune dysregulation and immunodeficiencies	
3. Eosinophilic and Gastrointestinal Disorders	6
B.3.a. Eosinophilic gastrointestinal disorders (includes Eosinophilic esophagitis)	
B.3.b. Hypereosinophilic syndromes	
B.3.c. Inflammatory bowel disease	
B.3.d. Celiac disease	
B.3.e. Anatomy, physiology & pathology	
4. Immune system & Research Principles	**9%**
B.4.a. Immune system development/normal immune system	
B.4.a. Antigens including superantigens, determinants	
B.4.a. Antigen presentation & histocompatibility	
B.4.a. Immunoregulation / Tolerance	
B.4.a. Immunogenetics / Molecular Biology	
B.4.a. Immunoglobulin structure and function	
B.4.a. T & B Cell Ligand-Receptor Interactions & Signal Transduction / Cell Activation / Anergy	
B.4.a. Cytokines / Chemokines & Their Receptors	
B.4.a. Adhesion Molecules	
B.4.a. Complement, coagulation, fibrinolytic & kallikrein–kinin immune system	
B.4.a. Immediate Hypersensitivity (IgE-Mediated)	
B.4.a. IgG/IgA/IgM/FcR-Mediated Reactions (e.g. ADCC, immune complex, opsonization)	
B.4.a. Delayed type hypersensitivity / Cell-mediated immunity	
B.4.a. Innate Immunity	
B.4.b. Cellular mechanisms of immune responses including cytokines and mediators	
B.4.b. Lymphocytes	
B.4.b. T cells & receptors	
B.4.b. B cells & receptors	
B.4.b. Other lymphocytes (e.g. NK, NK-T)	
B.4.b. Antigen-Presenting Cells (e.g., Monocytes, Macrophages, Dendritic Cells)	
B.4.b. Mast Cells / Basophils	
B.4.b. Eosinophils	
B.4.b. Neutrophils	
B.4.b. Other cells (e.g. endothelial, epithelial, smooth muscle, fibroblasts, platelets)	
B.4.c. Research Principles	
B.4.c. Experimental Design	
B.4.c. Data Analysis & Biostatistics	
B.4.c. Epidemiology	
B.4.c. Human subject protection & adverse event reporting	

18

5. Non-disease specific pharmacology/therapeutics (e.g. mechanism of action, pharmacokinetics, classes of therapeutics)	**2%**
6. Allergens, Antigens and Extracts (non-disease specific properties, measurement & avoidance)	**2%**
B.6.a. Aerobiology (e.g. pollens & measurement)	
B.6.b. Molds & Fungi	
B.6.c. Indoor Allergens	
B.6.d. Animal, insect & arthropod allergens	
B.6.e. Pollutants	
B.6.f. Allergen extract standardization & stability	
B.6.g. Specific Diagnostic Modalities	
C. Emerging Health Priorities (e.g. disparities of care, opioid crisis, wellness, burnout, pandemic)	**1%**
Total:	**100%**

19

CAP Blueprint

A. Hypersensitivity Disorders (epidemiology, risk factors, pathogenesis, clinical presentation, diagnosis and differential diagnosis, treatment/management)

1. Head and neck – Nasal (allergic and non-allergic rhinitis) /sinus (acute and chronic, NP, allergic fungal sinusitis) / ocular

2. Dermatologic – Eczema / Atopic Dermatitis / Contact Hypersensitivity / Urticaria / Angioedema (hereditary and acquired)

3. Lung – Asthma and related disorders (occupational diseases, ABPA, hypersensitivity pneumonitis, eosinophilic granulomatous polyangiitis (CSS), COPD, ILD)

4. Food and Drug Allergy/Hypersensitivity Reactions (not including eosinophilic GI disease)

5. Anaphylaxis (not food or drug-related) – Idiopathic, exercise, latex, stinging insect / Mastocytosis / Mast cell disorders

B. Immunological Disorders (epidemiology, risk factors, pathogenesis, clinical presentation, diagnosis and differential diagnosis, treatment/management)

1. Immune Hypersensitivity Disorders – includes immune complex, autoimmune, and autoinflammatory (febrile) disorders; other aspects of immune-mediated inflammation (e.g., vaccination, immunotherapies for neoplasia)

2. Immunodeficiencies – including SCID, CID, T cell disorders, Humoral – B cell disorders (hypogammaglobulinemia, antibody deficiencies), phagocytic disorders, complement disorders, and secondary immunodeficiencies

3. Eosinophilic and Gastrointestinal Disorders – (Eosinophilic gastrointestinal disorders, HES, others)

C1. Emerging National Health Priorities - Current high interest topics that cross multiple specialties and impact clinical practice. (Examples include, but are not limited to: COVID-19, opioid crisis, physician burnout, disparities of care and implicit and explicit bias, etc.)

20

CASE LOGS AND PROCEDURE LOGS

- Case logs – Not required

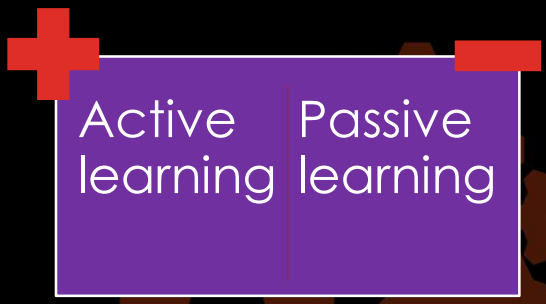
- Procedure logs – Required, fellows can input directly into the ACGME Case Log System

- Minimum number of procedures:
  - Written allergen immunotherapy prescriptions 10
  - Drug desensitization or incremental challenge 10
  - Immediate hypersensitivity skin testing 30
  - Writing an immunoglobulin prescription 5
  - Interpretation of pulmonary function testing 30
  - Food challenge testing 5

21

LEARNING TOOLS AND ARTIFICIAL INTELLIGENCE

- Teaching tools
  - Interactive sessions
  - Flash cards
  - Repetition
  - Activity based sessions
  - Simulators
  - Mock drills
  - Board review
  - Practice questions
  - Developing reasoning skills (PBL)
  - Algorithms
  - Apps



22


VARIATIONS IN LEARNING
Small group teaching
Teaching in the clinical environment
Meaningful and effective evaluations

23


RESEARCH AND SCHOLARLY WORK

24

ARS 4: THE RESEARCH REQUIREMENT

How do you incorporate research time into your curriculum?

A. Research only blocks (rotations/months) (no clinical duties)
B. 1st year mostly clinical, 2nd year mostly research
C. Research time distributed within each rotation
D. Some other method

25

ARS 5: DO YOU HAVE A SPECIFIC RESEARCH REQUIREMENT?

Do you require for graduation?

A. Peer reviewed papers
B. Original research papers
C. Case reports, abstracts or presentations
D. A point system, rubric, or other method of accounting that includes a combination of some or all of the above

26

NOW WHAT?
PUTTING IT ALL TOGETHER

27

PROGRAM FORMAT REQUIREMENTS

IV.C.4.	The program format must be as follows:
IV.C.4.a)	50 percent of the program (12-month equivalent) must be devoted to direct patient care activities, clinical case conferences, and record reviews; (Core)
IV.C.4.a).(1)	At least 20 percent of the required minimum 12-month equivalent direct patient care activity must focus on patients from birth to 18 years. (Detail)
IV.C.4.a).(2)	At least 20 percent of the required minimum twelve-month equivalent direct patient care activity must focus on patients over the age of 18 years. (Detail)
IV.C.4.b)	25 percent of the program must be devoted to scholarly activities and research; and, (Detail)
IV.C.4.c)	25 percent of the program must be devoted to other educational activities. (Detail)

28

WHAT CONSTITUTES "OTHER EDUCATIONAL ACTIVITIES"?

- Any activity determined by the program to be useful or important
- Depends on characteristics of the program or needs of the resident

- Examples
  - Additional research time
  - Additional clinic time
  - Attending medical meetings
  - Manuscript preparation
  - Presentation at teaching conferences
  - Case presentations
  - Meeting abstracts
  - Electives in other disciplines
  - Attending a didactic course
  - Teaching medical students and residents
  - QI or safety projects

29

PROGRAM FORMAT REQUIREMENTS

How does the Review Committee assess that residents have at least 20 percent direct patient care activity in both pediatric and adult patients? *[Program Requirements: IV.C.4.a).(1)-(2)]*	The Review Committee reviews the distribution of time reported on the block diagram, where this must be indicated. In the course of 24 months of education, at least 12 months will be clinical, per the 50-25-25 rule (50 percent of time devoted to direct patient care activities; 25 percent of time devoted to scholarly activities; 25 percent of time devoted to other educational activities). Considered on a weekly basis over the course of two years, 20 percent would constitute one full day per week of cross-training or half a day weekly over the course of 24 months.

30

BUILDING A CURRICULUM

Things to consider

- 4 week versus 1-month blocks
- Shorter rotations? (Rotations can be a day long)
- 2 year's worth of rotations
- Clinical time
- 25% Research time
- Adult/pediatric component (minimum 20% each)
- Other time
- Didactic time
- Board review
- Time for conferences
- Electives
- Where do you put vacation?

IV.C.1.a)	Assignment of rotations must be of sufficient length to provide a quality educational experience, defined by continuity of patient care, ongoing supervision, and meaningful assessment with constructive feedback. (Core)
IV.C.1.b)	Clinical experiences should be structured to facilitate learning in a manner that allows the residents to function as part of an effective interprofessional team that works together towards the shared goals of patient safety and quality improvement. (Core)

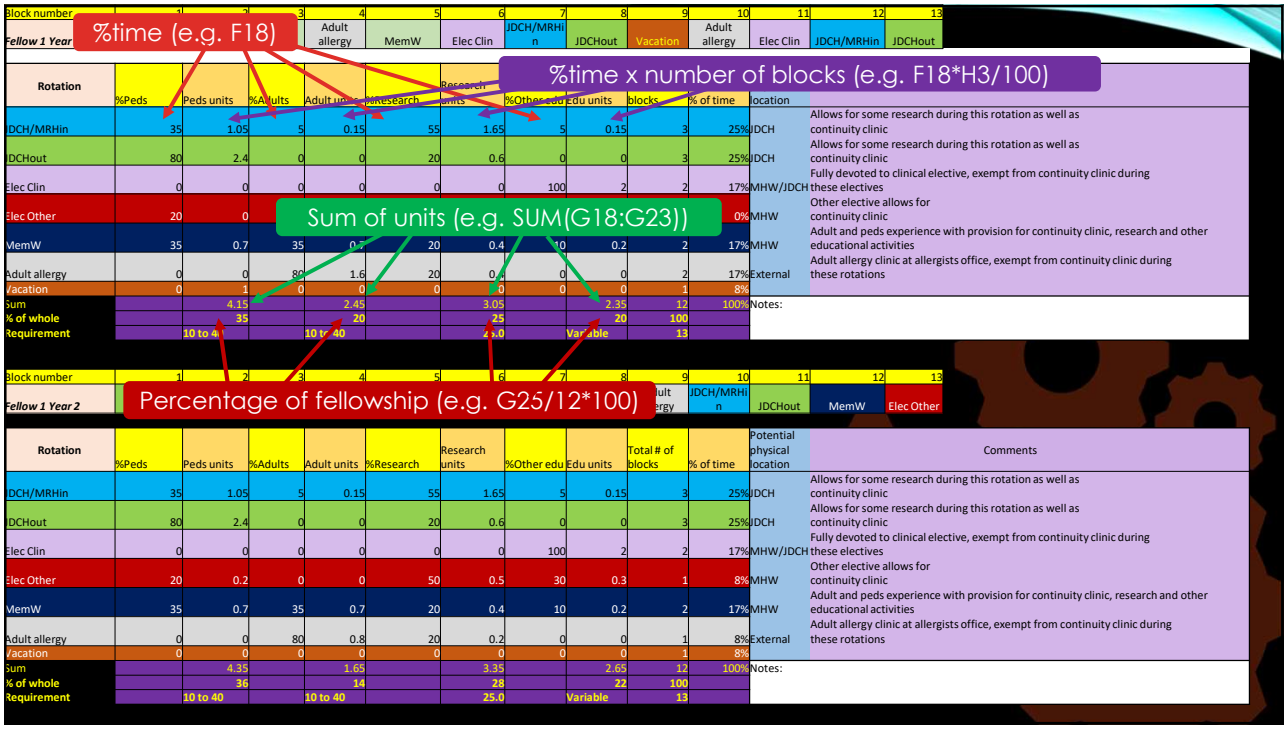
31

Overall block assignments

H3

Types of rotations	Description	Location	Blocks	Year 1 Fellow 1	Year 1 Fellow 2	Year 2 Fellow 1	Year 2 Fellow 2
JDCH/MRHin	Joe DiMaggio Children's Hospital inpatient	JDCH/MRH	6	3	3	3	3
JDCHout	Joe DiMaggio Children's Hospital outpatient	JDCH	6	3	3	3	3
Elec Clin	Other educational	JDCH/MHW (50/50)	4	2	2	2	2
Elec Other	Other educational	MHW	1	0	0	1	1
MemW	Adult/Ped allergy at Memorial West	MHW	4	2	2	2	2
Adult allergy	Adult allergy with private practice	External	3	2	2	1	1
Vacation	Vacation	N/A	2	1	1	1	1
Total			**26**	**13**	**13**	**13**	**13**

32



33

ARS 6. HOW MUCH TIME SHOULD BE DEDICATED TO STRUCTURED DIDACTICS?

A. 2 hours per week
B. 4 hours per week (1/2 day)
C. 8 hours per week (1 full day)
D. More than 8 hours per week

34

ARS 7. ARE STRUCTURED DIDACTICS IN PERSON, VIRTUAL OR A HYBRID?

A. In-person
B. Virtual only
C. Hybrid

35

DIDACTICS

- Primary allocated time – 3 hours
- Basic immunology – Abbas
- 2nd hour
  - Case discussion
  - Board review
  - Practice parameter review
- Faculty lecture – based on blueprint

- Other didactic activities
  - Understanding Healthcare Series
  - Journal Clubs
  - Other regional webinars and/or meetings
  - COLA lectures

Boot camp on essential information at the beginning of the academic year

36

OUR RESEARCH RUBRIC

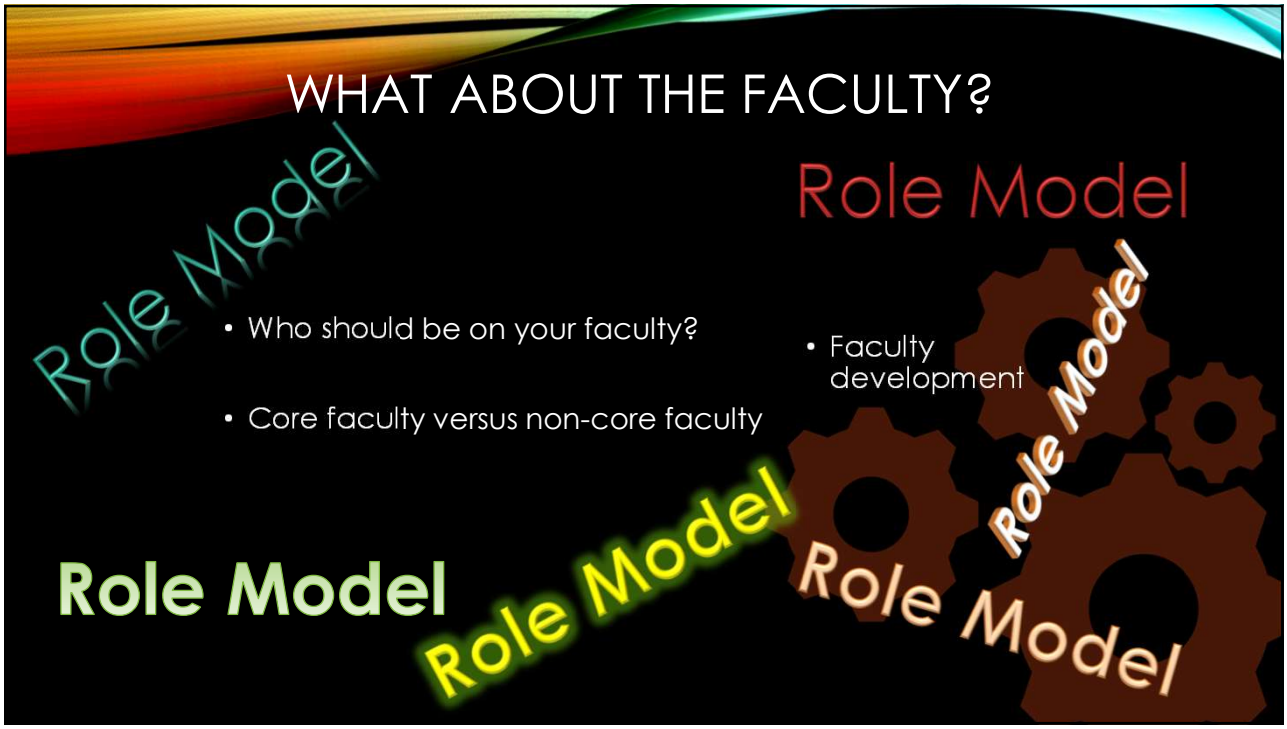
Research/scholarly work requirements for graduation

Item*	Points
Original research paper published/accepted	10
Review paper published/accepted	5
Book chapter published/accepted	5
Case report in journal published/accepted	5
Presentation at national meeting	5
Presentation at regional/local meeting	3
Poster at national meeting	5
Poster at local/regional meeting (includes MHS research day)	3
Oral abstract at national meeting	5
Oral abstract at regional/local meeting	3
Needed for graduation	20

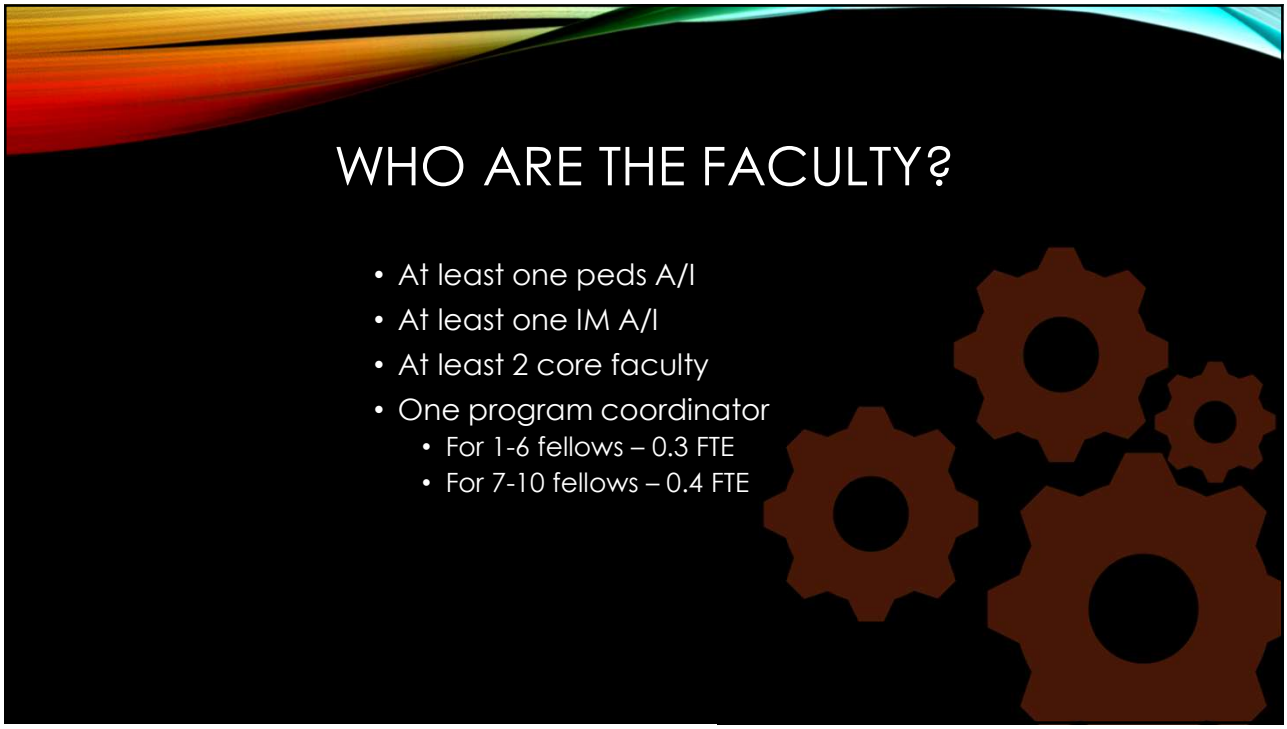
37

FACULTY

38


WHAT ABOUT THE FACULTY?
Role Model
Role Model
• Who should be on your faculty?
• Core faculty versus non-core faculty
• Faculty development
Role Model
Role Model
Role Model
Role Model
Role Model

39


WHO ARE THE FACULTY?
• At least one peds A/I
• At least one IM A/I
• At least 2 core faculty
• One program coordinator
• For 1-6 fellows – 0.3 FTE
• For 7-10 fellows – 0.4 FTE

40

FACULTY PARTICIPATION

- Participation in grand rounds
- Posters
- Workshops
- QI presentations
- Podium presentations
- Grant leadership
- Non-peer reviewed print/electronic resources
- Articles or publications
- Book chapters
- Textbooks
- Webinars
- Service on professional committees
- Serving as a journal reviewer, journal editorial board member or editor

41

PROGRAM SCHOLARLY WORK

- Research in basic science, education, translational science, patient care, or population health
- Peer-reviewed grants
- Quality improvement and/or patient safety initiatives
- Systematic reviews, meta-analyses, review articles, chapters in medical textbooks, or case reports
- Creation of curricula, evaluation tools, didactic educational activities, or electronic educational materials
- Contributions to professional committees, educational organizations, or editorial boards
- Innovations in education

Must demonstrate accomplishments in 3 of the domains listed above

42

FACULTY DEVELOPMENT

- Examples of Faculty Development Sessions
  - Milestones
  - How to write exam questions
  - Wellness
  - DEI
  - Artificial intelligence in the classroom and at the bedside
  - Advanced teaching methods
  - Problem based learning
  - How to teach the new generation of learners
  - Leadership development

43

THE LEARNING ENVIRONMENT

- Section VI of the Program Requirements
- Includes
  - Patient safety
  - Quality improvement
  - Supervision
  - Accountability

- Supervision
  - Direct supervision
  - Indirect supervision
  - Oversight

44

EVALUATIONS

45

V.A.1. Feedback and Evaluation

Background and Intent: Feedback is ongoing information provided regarding aspects of one's performance, knowledge, or understanding. The faculty empower residents to provide much of that feedback themselves in a spirit of continuous learning and self-reflection. Feedback from faculty members in the context of routine clinical care should be frequent, and need not always be formally documented.

Formative and summative evaluation have distinct definitions. Formative evaluation is *monitoring resident learning* and providing ongoing feedback that can be used by residents to improve their learning in the context of provision of patient care or other educational opportunities. More specifically, formative evaluations help:

- **residents identify their strengths and weaknesses and target areas that need work**
- **program directors and faculty members recognize where residents are struggling and address problems immediately**

Summative evaluation is *evaluating a resident's learning* by comparing the residents against the goals and objectives of the rotation and program, respectively. Summative evaluation is utilized to make decisions about promotion to the next level of training, or program completion.

End-of-rotation and end-of-year evaluations have both summative and formative components. Information from a summative evaluation can be used formatively when residents or faculty members use it to guide their efforts and activities in subsequent rotations and to successfully complete the residency program.

Feedback, formative evaluation, and summative evaluation compare intentions with accomplishments, enabling the transformation of a neophyte physician to one with growing expertise.

46

EVALUATIONS

- Direct observation with timely verbal feedback
- Written evaluations in your GME software (med-hub)
- Clinical competency committee
- Scholarly/research oversight committee

- ACGME says
  - Base performance evaluations on milestones
  - Use multiple evaluators (faculty, peers, patients, self, other staff)
  - Provide information to CCC for synthesis of progressive resident performance and improvement towards unsupervised practice

- Types of evaluations
  - Formative
  - Summative

- Timing of evaluations
  - End-of-rotation
  - Semi-annual evaluations
  - End-of-year
  - Final

- Block rotations greater than 3 months
  - Evaluation documented every 3 months
- Longitudinal experiences (continuity clinic)
  - Evaluations at least every 3 months and at completion

47

EVALUATIONS

- Meet and review with each resident documented semi-annual evaluations of performance, progress along milestones
- Assist residents in developing individualized learning plans to capitalize on strengths and identify areas for growth
- Develop plans for residents failing to progress, following institutional policies and procedures

- Annual summative evaluation determines readiness to progress to the next year of the program
- Evaluations must be accessible for review by the resident
- Final evaluation using specialty specific milestones and procedure logs to ensure residents are able to engage in autonomous practice upon completion of program

48

THE CLINICAL COMPETENCY COMMITTEE

- Who should be on it?
- How many members?
- Who should chair the committee?
- How often should it meet?

- See the ACGME Guidebook

I.B.3.	The program must monitor the clinical learning and working environment at all participating sites. (Core)

II.A.4.a).(3)	administer and maintain a learning environment conducive to educating the residents in each of the ACGME Competency domains; (Core)

49

FACULTY AND PROGRAM EVALUATIONS

- Evaluation of the Faculty
  - Faculty evaluations by fellow
  - Faculty evaluations by program director
  - Scholarly work
- Evaluation of program
  - Faculty survey
  - Resident survey
  - Program evaluation committee (PEC)

50

THE PROGRAM EVALUATION COMMITTEE

V.C. Program Evaluation and Improvement

V.C.1. The program director must appoint Committee to conduct and docume Evaluation as part of the program's process. (Core)

V.C.1.a) The Program Evaluation Con least two program faculty me core faculty member, and at

V.C.1.b) Program Evaluation Commit

V.C.1.b).(1) review of the program progress toward meet

V.C.1.b).(2) guiding ongoing prog development of new g and, (Core)

V.C.1.b).(3) review of the current strengths, challenges related to the program

V.C.1.c) The Program Evaluation Committee should consider the outcomes from prior Annual Program Evaluation(s), aggregate resident and faculty written evaluations of the program, and other relevant data in its assessment of the program. (Core)

Background and Intent: Other data to be considered for assessment include:

- Curriculum
- ACGME letters of notification, including citations, Areas for Improvement, and comments
- Quality and safety of patient care
- Aggregate resident and faculty well-being; recruitment and retention; workforce diversity, including graduate medical education staff and other relevant academic community members; engagement in quality improvement and patient safety; and scholarly activity
- ACGME Resident and Faculty Survey results
- Aggregate resident Milestones evaluations, and achievement on in-training examinations (where applicable), board pass and certification rates, and graduate performance.
- Aggregate faculty evaluation and professional development

V.C.1.d) The Program Evaluation Committee must evaluate the program's mission and aims, strengths, areas for improvement, and threats. (Core)

V.C.1.e) The Annual Program Evaluation, including the action plan, must be distributed to and discussed with the residents and the members of the teaching faculty, and be submitted to the DIO. (Core)

V.C.2. The program must complete a Self-Study and submit it to the DIO. (Core)

51

Steps for Conducting the ACGME Program Self-Study

The suggested steps described here are intended to offer guidance to progr

The Self-Study is an objective, comprehensive evaluation of the residency or evaluation of the program and its learning environment, facilitated through s emphasis on program strengths and self-identified areas for improvement ("s improvement the Review Committee identifies during accreditation reviews;

To offer context for the Self-Study, there are two concepts: 1) an exploration regional environment. Both are discussed in detail below. The focus on aims a annual program evaluation, and support improvement that goes beyond com

- Assemble the Self-Study Group
- Engage Program Leader and Constituents in a Discussion of Program Aims
- Aggregate and Analyze Data from Your Annual Program Evaluations and the Self-Study to Create a Longitudinal Assessment of Program Strengths and Areas for Improvement
- Examine the Program's Environment for Opportunities and Threats
- Obtain Stakeholder Input on Strengths, Areas for Improvement, Opportunities, and T
- Interpret the Data and Aggregate the Self-Study Findings
- Discuss and Validate the Findings with Stakeholders

for Use in Further Program Improvement

of the Self-Study, Reassemble the Annual

ts of the Program's Strategic Assessment (

ACGME

Self-Study Summary
Department of Accreditation, Recognition, and Field Activities

Program Name: _____
Program Number: _____
Self-Study Date (Month, Year): _____

Program Description and Aims
Describe the program and its aims, using information gathered during the Self-Study.

Question 1: Program Description
Provide a brief description of the residency/fellowship program, as you would to an applicant or a prospective faculty member. Discuss any notable information about the program.

Question 2: Program Aims
Describe the program's aims.

Question 3: Program activities to advance the aims
Describe current activities that have been, or are being, initiated to promote or further these aims.

elf-Study

Environmental Context
Summarize the information on the program's environmental context that was gathered and discussed during the Self-Study.

Question 4: Opportunities for the program
Describe important opportunities for the program.

Question 5: Threats facing the program
Describe any real or potential significant threats facing the program.

Significant Changes and Plans for the Future
Question 6a: Describe significant changes and improvements made in the program over the past five years.

Self-Study (acgme.org)

52

WELLNESS IN THE CURRICULUM

Moonlighting

Graduate medical education occurs in clinical settings that establish the foundation for practice-based and lifelong learning. The professional development of the physician, begun in medical school, continues through faculty modeling of the effacement of self-interest in a humanistic environment that emphasizes joy in curiosity, problem-solving, academic rigor, and discovery. This transformation is often physically, emotionally, and intellectually demanding and occurs in a variety of clinical learning environments committed to graduate medical education and the well-being of patients, residents, fellows, faculty members, students, and all members of the health care team.

The 80-hour work week

One-day in 7

Wellness activities at MHS

- Resident (fellow) retreats
- Yoga on the beach
- Soccer
- Employee Assistance Program
- Wellness Days (4 half-days per academic year)
- Understand Healthcare Series

Employee Assistance Program (EAP)

Education in identifying

- Burnout
- Fatigue
- Sleep deprivation
- Depression
- Substance use disorders
- Suicidal ideation
- Potential for violence

53

ARS 8: WHAT WELLNESS ACTIVITIES HAVE YOU IMPLEMENTED AT YOUR ORGANIZATION?

54

WELLNESS ACTIVITIES RESPONSE SLIDE

55

HEALTH DISPARITIES

Background and Intent: The mission of institutions participating in graduate medical education is to improve the health of the public. Each community has health needs that vary based upon location and demographics. Programs must understand the structural and social determinants of health of the populations they serve and incorporate them in the design and implementation of the program curriculum, with the ultimate goal of addressing these needs and eliminating health disparities.

Program Director

ACGME competencies
Medical knowledge

IV.B.1.d).(1).(d)	systematically analyzing practice using quality improvement methods, including activities aimed at reducing health care disparities, and implementing changes with the goal of practice improvement; (Core)

ACGME competencies
Systems-based practice

IV.B.1.f)	**Systems-based Practice** Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, including the structural and social determinants of health, as well as the ability to call effectively on other resources to provide optimal health care. (Core)

56

FEEDBACK FROM OUR FELLOWS

- What they like
  - Balance between inpatient and clinic
  - Dedicated time for research and didactics built into weekly schedule
  - Open door policy between fellows and faculty
  - Continuity clinic
  - Private practice exposure
  - Reviewing practice parameters in didactics
- What they want
  - Dedicated procedure time or a procedure block
  - Dermatology elective
  - Better triaging of calls and messages
  - More adult electives
  - Practicing independently in continuity clinic

57

SUMMARY

- Curriculum alignment with organizational goals
- Consult ACGME for requirements
- Design a curriculum that fits with your program structure
- Include fellows in discussions – improves wellness, engagement
- Include faculty in planning the curriculum

58

WHAT DO YOU REALLY WANT?

THE AMERICAN BOARD OF ALLERGY & IMMUNOLOGY

ABAI SM

FOUNDED 1971

59