

Clinic Name: Allergy and Immunology
Clinic Education Site Leader: Dr. Basil Kahwash
Updated by: Dr. Basil Kahwash / Gautam Babu
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Goal:

The purpose of this educational clinic block is to immerse residents in the clinical practice of allergy and immunology, which will allow residents to develop knowledge and skills relevant to this field.

Objectives:

Patient Care

1. Assess, work-up, and manage diagnoses related to the field of Allergy and Immunology (A&I)
2. Learn to perform a history & physical relevant to food, drug, and environmental allergies, and asthma

Medical Knowledge

1. Asthma: describe asthma pathogenesis, endotypes, diagnostic testing, and management
2. Rhinitis/Conjunctivitis: describe the differential diagnosis, natural history, triggers, and appropriate guideline-based treatment for these conditions
3. Immunodeficiency: learn clinical signs and symptoms suggestive of an immunodeficient state, basic immune laboratory workup, and treatment options
4. Anaphylaxis: define anaphylaxis and biphasic reactions; be able to identify common causes, diagnosis, and management of anaphylactic reactions
5. Food & Drug Allergy: demonstrate understanding of the most common food & drug allergens, immunopathology of allergen reactions, types of allergy testing, desensitization, and management options
6. A&I Dermatology: identify distinctive features, testing, and treatment of various A&I skin disorders such as atopic dermatitis, urticaria/angioedema, contact dermatitis, and pruritis

Interpersonal and Communication Skills

1. Effectively communicate plan of care to patients in clinic
2. Learn how to appropriately counsel patients about allergen avoidance and action plans for anaphylactic reactions and asthma exacerbations

Professionalism

1. Actively engage in A&I clinic
2. Interact with A&I faculty, staff, and patients in a respectful manner

Systems based practice

1. For a given clinical presentation, select the appropriate initial diagnostic testing and targeted workup to contain healthcare costs

Practice-based learning and improvement

1. Seek feedback from each clinic half-day attending
2. Incorporate primary literature discussed at conference and in the rotation reading list when providing care for patients

Educational Strategies:

Educational Strategy	Skills (taught and/or assessed)
Clinic	<ul style="list-style-type: none">- History taking and presentation skills- Interpretation of PFTs and allergy tests- Clinical decision making
Allergy and Immunology Zoom Conference (Fridays at noon)	<ul style="list-style-type: none">- Review and assessment of emerging A&I primary literature- Didactic teaching of core A&I topics
Supplemental Reading	<ul style="list-style-type: none">- Increase A&I fund of knowledge- Incorporate evidence into practice

Required Reading:

1. Review article on penicillin allergy:

Castells M, Khan DA, Phillips EJ. Penicillin Allergy. *N Engl J Med*. 2019;381(24):2338-2351. doi:10.1056/NEJMra1807761

2. Global Initiative in Asthma (GINA) 2021 Guidelines:

Reddel HK, Bacharier LB, Bateman ED, Brightling CE, Brusselle GG, Buhl R, Cruz AA, Duijts L, Drazen JM, FitzGerald JM, Fleming LJ, Inoue H, Ko FW, Krishnan JA, Levy ML, Lin J, Mortimer K, Pitrez PM, Sheikh A, Yorgancioglu AA, Boulet LP. Global Initiative for Asthma Strategy 2021: Executive Summary and Rationale for Key Changes. *Am J Respir Crit Care Med*. 2022 Jan 1;205(1):17-35. doi: 10.1164/rccm.202109-2205PP. PMID: 34658302.

3. Fahrenholz and Drug Allergy Clinic Guides for Residents:

<https://www.dropbox.com/sh/4n1e5jceh9ro6w7/AABomvs66YxxBr8kJK9m8slGa?dl=0>

(link will be sent out via email at the start of the rotation)

Suggested Reading and/or Resources:

1. Uptodate: Immediate cephalosporin hypersensitivity: Allergy evaluation, skin testing, and cross-reactivity with other beta-lactam antibiotics

2. Lancet article on antibiotic allergy:

Blumenthal KG, Peter JG, Trubiano JA, Phillips EJ. Antibiotic allergy. *Lancet*. 2019;393(10167):183-198. doi:10.1016/S0140-6736(18)32218-9

3. PFT Interpretation (Chapter 32) in *Nadel's Textbook of Respiratory Medicine*:

Broaddus VC, Ernst JD, King TE, et al. Pulmonary Function Testing: Interpretation and Applications. In: Murray & Nadel's Textbook of Respiratory Medicine. Philadelphia, PA: Elsevier; 2022.

4. Review article on cutaneous and systemic reactions to drugs:

Peter JG, Lehloenya R, Dlamini S, et al. Severe Delayed Cutaneous and Systemic Reactions to Drugs: A Global Perspective on the Science and Art of Current Practice. *J Allergy Clin Immunol Pract*. 2017;5(3):547-563. doi:10.1016/j.jaip.2017.01.025

Evaluation:

Background

- In the recent past, there has been no structured way for faculty to provide feedback on their observations or assessments of residents on the clinic block.
- Residents spend a third of their training time in the outpatient clinic setting.
- Collecting faculty observations and assessments in this setting is important for residents to get the feedback and coaching they need to continue to grow and improve their clinical skills.
- The goal for all our residents is excellence in clinical skills

Ask for faculty

- Offer to do direct observation of skills with a learner in clinic (consider history , physical exam, clinical reasoning skills in the clinic setting, especially those specific to your specialty)
- Ask the resident to send you a direct observation new innovations form that takes 2-3 minutes to complete
- Use the new innovations app on your phone to send an “on demand direct observation” assessment for any resident any time.

Ask for residents (currently this is for all interns, soon this will expand to all residents)

- When on clinic block, ask one faculty member a week to complete a direct observation assessment on a clinical skill that they observed you do in their clinic
- You can send them an email with the direct observation from new innovations, or you can show them how to use the new innovations app on their phone.

Two “How To” videos- for faculty and residents:

This video demonstrates how residents can request an on-demand evaluation be sent to a faculty member. It also describes who to sue this tool to assist in making this a coaching moment. (5 min video)

- <https://vumc.box.com/s/svwn5rtnlxhtgvneo858eg6kswjw6i0>

This video demonstrates how faculty can download the new innovations app on their phone. It also demonstrates how to complete and send in the on demand evaluation on their phone (3 min video).

- https://zoom.us/rec/share/Xa8oi6uSywhNAEnosCHmjcJ-X77nCHBmkyAJM7whH3O9sdljMZAK4WMXiUl4zX20.7CDOOcT8FLoi_unD
- **Passcode:** b@?=4dU2. (copy and paste this code in the zoom bar when the web page brings it up!)

**New Direct Observation Form – Entrustment Scale - THIS IS THE FORM THAT IS ON THE APP
Internal Medicine Clinic**

Date: _____
Resident Name: _____
Faculty Observer name: _____
What specific skill did you decide to observe? _____

1. What is the resident’s learning objective?
2. What did you observe the resident do well?

Skills to consider observing:
Information gather- Obtaining accurate and complete hx
Specific physical exam skill
Information transfer- patient education
Motivational interviewing (wt mgt, tob cessation)
Counseling
Breaking bad news
Goals of care/ Family meeting
Clinical reasoning

3. What deficiencies and/or errors did the resident commit?
What should they do differently? **How** should they do it differently?

3. Based on this single observation, how would you approach your supervision of this learner in this skill the next time?

1	2	3	4	5
Learner can be present but only as observer (i.e. The learner cannot perform this skill. Learner can be present, but only as observer)	Learner can practice skill with direct supervision (supervisor in room) (i.e. I need to watch the learner perform the skill in real time)	Learner can practice skill with indirect supervision (supervision available within minutes) (i.e. I don't need to watch the learner in the room, but I am going to reassess the patient/confirm findings with the patient)	Unsupervised practice allowed (the learner is ready to practice independently for this skill) (i.e. I don't need to watch the learner but I am available if the learner comes for help or to provide feedback)	Learner has mastered this skill, is an exemplar for other, and is ready to teach others this skill (i.e. learner is a role model for other, demonstrates best practice, able to teach)

4. What plans for change did you and the resident make going forward?