Rotation Goals and Objectives

Pulmonary/Critical Care Medicine Fellowship Program
University of Nebraska Medical Center
Revised: March 2016

I) Rotation Goals
A) To accrue clinical experience in the evaluation, diagnosis and management of patients with diseases related to allergy or immunology referred to an allergy specialist
B) To develop skills required of a good consultant
C) To gain medical knowledge in the fields of allergy, asthma and immunology

II) Instructional Methods
A) Clinical experience on this selective rotation
   1) The PCCM subspecialty resident on this rotation spends up to 15 days on the Allergy rotation at Nebraska Medicine, providing high quality and timely care to include:
      (a) Consultative care for outpatients in Allergy Clinic.
          (i) Patients will be seen in Allergy, Asthma and Immunology Clinic at the main campus and at Village Point.
B) Clinical Teaching
   1) Faculty will be expected to discuss each clinical presentation by the fellow and provide guidance as needed on diagnosis and treatment
   2) The fellow will be expected to gather appropriate data and present in a succinct, yet complete manner
C) Performance Feedback
   1) The faculty will provide feedback on a regular basis, at least weekly, on what the fellow has done well and what could be improved
D) Didactic Sessions
   1) Attend all scheduled conferences within the PCCM Section, especially the clinical case conference.
   2) Attend all internal medicine conferences as appropriate.
E) Self-Learning
   1) Review literature appropriate to care of patients in the Allergy, Asthma and Immunology clinics.
   2) Fellows will be expected to read the appropriate chapters in a Pulmonary Medicine textbook of their choice. Appropriate sections of eMedicine or Up-to-Date may be substituted.
   3) Complete the reading assignments for Allergy and Immunology as outlined below. Time not scheduled in clinic should be used for completing the readings.

III) Responsibilities
A) Fellow
1) These guidelines for the Allergy rotation will be made available to each fellow and must be read prior to starting the rotation
2) Participate in all patient care responsibilities expected in the clinic
3) Provide education to any residents or students who may be assigned to the clinic.
4) Complete an evaluation of the rotation and the attending.
5) Take at-home call as scheduled

B) Clinic Attending

1) These guidelines for the Allergy rotation will be made available to clinic attendings and the attending-specific goals and objectives must be reviewed with the fellow at the start of the rotation
2) The attending or fellow should review the clinic schedule prior to the day of clinic to provide reading assignments for the fellow regarding specific problems to be seen. This makes the interaction a greater learning experience for the fellow.
3) Supervise procedures performed by the fellow
4) Provide education to the fellow regarding management of patients
   (a) Education will include instructions on filling out the billing sheet for the attending’s clinic
   (b) Attendings are encouraged to arrange time to discuss topics or specific readings related to the patient problems typically seen in Allergy clinic or for chart-stimulated recall sessions.
5) Complete an evaluation of the fellow.

C) Rotation

1) Clinic Responsibility
   (a) Attend each assigned clinic unless excused by the attending for that clinic
   (b) Be in the clinic at the assigned start time and remain until excused by the attending
2) On Call Responsibility
   (a) Be available from 8:00 am to 5:00 PM except for officially sanctioned events, i.e. any section conferences
   (b) There is no after hours call unless assigned by the Clinic Director.
3) Vacation
   (a) Vacation time may be taken during this rotation.
   (b) Emergency leave may be requested after discussion with the Program Director or surrogate (Clinic attending for days to be missed)

IV) Methods of Evaluation

A) Focused Observation and Evaluation

1) The Clinic Attending should give immediate feedback after each patient presentation and a formal verbal evaluation should be given at the mid-point of the rotation. A mini-CEX form may be used to formalize observation of the fellow and their evaluation of the patient. These are available from Sheryl Latenser, the program coordinator. (559-8115)
B) Clinical Performance Ratings

1) Each clinic attending must prepare a written evaluation of the fellow at the conclusion of the rotation. This evaluation will assess each of the competencies as listed in the educational objectives.
2) The assessment should be reviewed personally by the fellow in the presence of the attending physician.

C) 360 degree Assessment

1) Evaluations will be sent to health care professionals in the clinic who interact with the fellow. They will include PA’s, Nurse Practitioners, Nurses, Respiratory Therapists and Clerks. These evaluations will focus on the fellow’s professionalism.

D) Fellow Evaluations of Attending(s) and Rotation

1) At the conclusion of the fellow’s service period, he/she should complete an evaluation form assessing the quality of the rotation; he/she should also address the teaching undertaken by the attending physician(s).

V) Education Objectives

A) Patient Care

1) Gathers and synthesizes essential and accurate information to define each patient’s clinical problem(s). (PC1)
2) Develops and achieves comprehensive management plan for each patient. (PC2)
3) Manages patients with progressive responsibility and independence. (PC3)
4) Skill in performing and interpreting invasive procedures. (PC4a)
5) Skill in performing and interpreting non-invasive procedures and/or testing. (PC4b)
6) Requests and provides consultative care. (PC5)
7) Evaluation methods for this competency
   (a) Attending evaluation
   (b) Clinic nurses and the PFT Lab staff evaluations
   (c) Mini-CEX (to be arranged with attending)

B) Medical Knowledge

1) Clinical knowledge (MK1)
   (a) Demonstrate an investigatory and analytic thinking approach to clinical situations by applying an evidence-based medicine principles
   (b) Understand the indication(s) for allergy immunotherapy in patients with allergic rhinitis and asthma.
   (c) Understand the role of aspirin-induced respiratory disease including association with nasal polyposis and alternative aspirin desensitization therapies.
   (d) Understand the differential diagnosis for bronchiectasis and be able to initiate an immune deficiency evaluation.
   (e) Understand and recognize vocal cord dysfunction and its diagnosis and treatment.
   (f) To read any seminal literature covering topics in allergy, asthma and immunology
2) Knowledge of diagnostic testing and procedures. (MK2)
   (a) Demonstrate a fundamental knowledge of the indications for skin testing, methacholine challenge testing and rhinolaryngoscopy and recognize its limitations
3) Scholarship
   (a) Demonstrate teaching of students and other health care professionals
4) Evaluation methods for this competency
   (a) Attending evaluation
   (b) Chart-stimulated recall sessions

C) System-based Practice
   1) Works effectively within an interprofessional team (e.g. peers, consultants, nursing, ancillary professionals and other support personnel). (SBP1)
      (a) Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society
   2) Recognizes system error and advocates for system improvement. (SPB2)
      (a) Advocate for quality patient care and assist patients in dealing with system complexities
   3) Identifies forces that impact the cost of health care, and advocates for, and practices cost-effective care. (SBP3)
      (a) Practice cost-effective health care and resource allocation that does not compromise quality of care
      (b) Advocate for quality patient care and assist patients in dealing with system complexities.
   4) Transitions patients effectively within and across health delivery systems. (SBP4)

5) Evaluation methods for this competency
   (a) Attending evaluation
   (b) Evaluations from key consultants
   (c) Evaluations from clinic nurses and the PFT Lab staff

D) Practice-based Learning and Improvement
   1) Monitors practice with a goal for improvement. (PBLI1)
   2) Learns and improves via performance audit. (PBLI2)
   3) Learns and improves via feedback. (PBLI3)
   4) Learns and improves at the point of care. (PBLI4)
      (a) Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
      (b) Use information technology to manage information, access on-line medical information and support their own education
      (c) Demonstrate an ability to locate and apply scientific evidence to the care of patients including the use of the Cochrane Database and other online sources
      (d) Demonstrate an ability to read and critically appraise at least one clinical study applicable to a patient seen in clinic

5) Evaluation methods for this competency
   (a) Attending evaluation
   (b) Chart-stimulated recall sessions

E) Professionalism
   1) Has professional and respectful interactions with patients, caregivers and members of the interprofessional team (e.g. peers, consultants, nursing, ancillary professionals and support personnel). (PROF1)
      (a) Demonstrate respect, compassion, and integrity
   2) Accepts responsibility and follows through on tasks. (PROF2)
      (a) Demonstrates accountability to patients, society and the profession
   3) Responds to each patient’s unique characteristics and needs. (PROF3)
   4) Exhibits integrity and ethical behavior in professional conduct. (PROF4)
      (a) Demonstrate a responsiveness to the needs of patients and society that supercedes self-interest
(b) Demonstrates a commitment to excellence and on-going professional development
(c) Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent
(d) Demonstrate sensitivity and responsiveness to patients’ culture, age gender and disabilities
(e) Create and sustain a therapeutic and ethically sound relationship with patients

5) Evaluation methods for this competency
   (a) Attending evaluation
   (b) Evaluations from key consultants
   (c) Evaluations from clinic nurses and the PFT Lab staff
   (d) Mini-CEX

F) Interpersonal & Communication Skills
   1) Communicates effectively with patients and caregivers. (ICS1)
      (a) Demonstrate effective listening skills
      (b) Elicit and provide information using effective nonverbal, explanatory, questioning and writing skills
      (c) Demonstrate an ability to develop a therapeutic relationship with patients and their families
   2) Communicates effectively in interprofessional teams (e.g. peers, consultants, nursing, ancillary professionals and other support personnel). (ICS2)
      (a) Demonstrate effective listening skills
      (b) Elicit and provide information using effective nonverbal, explanatory, questioning and writing skills
      (c) Appropriate utilization and completion of health records. (ICS3)
   3) Evaluation methods for this competency
      (a) Attending evaluation
      (b) Evaluations from clinic nurses and the PFT Lab staff
      (c) Mini-CEX

VI) Readings
   A) Readings are from the ATS Reading List (unless otherwise noted) found at: http://www.thoracic.org/professionals/career-development/residents-medical-students/ats-reading-list/index.php
   B) Severe Asthma – Jill A. Poole, MD

Inhaled steroids vs. bronchodilators

1) Nelson HS, Weiss ST, Bleecker ER, Yancey SW, Dorinsky PM, SMART Study Group. The salmeterol multicenter asthma research trial. Chest 2006; 130:928. This randomized, double-blinded, placebo-controlled, observational study (N= 26,355) showed a small, but statistically significant increase in respiratory-related and asthma-related deaths for the population receiving salmeterol. It is uncertain whether poor outcomes were due to physiologic treatment effects, genetic factors, or patient behaviors.http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=ShowDetailView&TermToSearch=16424409&ordinalpos=2&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum

2) Haahntala T, Jarvinen M, Kava T, et al. Comparison of a beta-agonist, terbutaline, with an inhaled corticosteroid, budesonide, in newly detected asthma. New Engl J Med 1991; 325:388-92. This randomized, blinded comparison of the above two drugs was important in
establishing inhaled corticosteroids as the first line treatment for asthma.


3) Suissa S, Blais L, Ernst P. Patterns of increasing beta-agonist use and the risk of fatal or near-fatal asthma. Eur Respir J 1994;7:1602-9. Nested case control study found increased and escalating use of beta-agonists was associated with an increased risk of death from asthma. Findings suggest poorly controlled asthma should not be managed with increased dosage of beta-agonists alone.


Inhaled steroid vs. leukotrience receptor antagonists


Mild persistent asthma

7) O'Byrne PM, Barnes PJ, Rodriguez-Roisin R, et al. Low dose inhaled budesonide and formoterol in mild persistent asthma: the OPTIMA randomized trial. Am J Respir Crit Care Med 2001;164:1392-7. Large RCT found adding a long-acting beta-agonist in mild persistent asthmatics already on ICS was more efficacious than doubling the dose of ICS. Patients not already on an ICS had fewer severe exacerbations and better symptom control compared to placebo after addition of low dose ICS.


8) Pauwels RA, Pedersen S, Busse WW, et al. Early intervention with budesonide in mild persistent asthma: a randomized, double-blind trial. Lancet 2003;361:1071-6. Large RCT of steroid-naïve patients with asthma history of less than 2 years found use of ICS reduced risk of severe asthma exacerbation by 44% (about 6% vs. 3.4%) compared to placebo after 3 years of follow-up.

9) Boushey HA, Sorkness CA, King TS, et al. Daily versus as-needed corticosteroids for mild persistent asthma. New Engl J Med 2005; 352:1519-28. A smaller, year-long study of 225 adults randomized to prn corticosteroids based upon symptom-based action plan vs. daily treatment with ICS vs. daily leukotriene inhibitor found no difference in morning peak expiratory flow and the rate of asthma exacerbations despite the prn corticosteroid group using an average of only 0.5 week of steroid per year. The ICS group had superior asthma control scores and lower markers of airway inflammation. Some attribute this relatively modest benefit of regular ICS use to the lower exacerbation rate in this study compared to its predecessors, which speaks to the challenge of identifying mild persistent asthmatics. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15829533&query_hl=6&itool=pmed_docsum

Use of combination therapy for maintenance and rescue

10) O’Byrne PM, Bisgaard H, Godard PP, et al. Budesonide/formoterol combination therapy as both maintenance and reliever medication in asthma. Am J Respir Crit Care Med 2005; 171;129-36. This study included 2,760 asthmatics with a history of at least one exacerbation in the previous year and regular need for rescue bronchodilators despite baseline use of, on average, moderate doses of inhaled corticosteroid. Patients randomized to budesonide/formoterol (80/4.5) bid and prn had prolonged time to exacerbations requiring medical intervention compared to combination therapy with terbutaline prn or higher dose steroid (budesonide 320 bid) plus terbutaline prn. Subsequent RCTs have also shown favorable outcomes with this approach. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=15502112&query_hl=9&itool=pmed_DocSum

Anti-IgE therapy


Exercise-induced


Airway remodeling

C) Allergy, Asthma & Immunology Clinic Rotation - Jill A. Poole, MD

1) Required Reading List for Pulmonary Fellows:

   a) Allergic Rhinitis and its Impact on Asthma (ARIA) WHO

   b) Allergen Immunotherapy
      i) Poole JA. Washington Manual 2004; pg 141-146.
      ii) Allergy Immunotherapy: Pro/Con Editorials

   c) Prevention (PAT)-Study

   d) The Salmeterol Multicenter Asthma Research Trial & Editorial Comment

   e) Aspirin-induced asthma: Review

   f) Bronchiectasis: Causative Factors

   g) Allergic bronchopulmonary aspergillosis

   h) Vocal Cord Dysfunction

2) Optional Reading List for Pulmonary Fellows:


# Pulmonary, Critical Care, Sleep & Allergy Medicine Section
## Allergy and Immunology Clinic Schedule

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**Contact information**

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