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I. INTRODUCTION
Welcome to the residency training program in the Division of Pediatric Pulmonary Medicine, Department of Pediatrics at UAB. We are excited to have you as a member of our residency team. Our residency environment will provide you with the clinical case experience, didactic information, and confidence to enter the practice of Pediatric Pulmonology as a competent board eligible physician.

Residency will be much different than any prior training. You will learn skills and didactic information that will enable you to diagnose and treat children and young adults with a wide variety of pulmonary disorders. The skills you learn here will become the foundation of your medical career.

It should be your goal to acquire as much clinical experience in all areas as possible. You should develop a concentrated study program to ensure the steady accumulation of knowledge required to care for your patients.

In the following pages you will find suggestions for accomplishing your goal of becoming a competent board certified pediatric pulmonologist. In addition to general program information, this manual provides you with goals and objectives for your rotations as well as policies and procedures for the residency. The manual is designed to be updated with new information, schedules, department rosters, etc., as they are made available. As always, we welcome your input, constructive criticism, and comments.
II. GENERAL PROGRAM INFORMATION

Pediatric Pulmonology Residency Program

The Pediatric Pulmonology Residency Program at the University of Alabama at Birmingham (UAB) is one of approximately 44 pediatric pulmonology residency programs accredited by the Residency Review Committee Accreditation Council for Graduate Medical Education. This rigorous accreditation process guarantees residents access to excellent training in both clinical care and research areas. The UAB Pediatric Pulmonology Residency Program was last accredited in 2003 with a reaccreditation site visit planned for spring 2008.

Our training program, as with all the accredited pulmonary training programs, is at least three years in length. This meets the primary eligibility criteria for the specialty sub-boards in pediatric pulmonology of “…three years of full-time subspecialty training in pediatric pulmonology”. Our training is structured to provide a balanced foundation of clinical and research training.

Residency Setting

Pediatric Pulmonary Medicine at UAB is a Division of the Department of Pediatrics. For many years, the Department of Pediatrics has had strong general pediatrics and combine medicine/pediatrics residency programs attracting excellent house staff from throughout the U.S., especially from the southeastern and southwestern U.S. The department presently has full-time faculty representing sub-specialists in all the disciplines of pediatrics (see brochure). Dr. Sergio Stagno serves as Departmental Chairman, Dr. Richard Whitley as Vice-Chairman for Research, Dr. Raymond Lyrene as Vice-Chairman for Clinical Services, and Dr. Roger Berkow as Vice-Chairman for Education.

The Department of Pediatrics is located primarily at Children’s Hospital. This 240-bed acute care hospital is the principal pediatric referral center for most of Alabama. A separate 20-bed Pulmonary Care Unit and the adjacent Adolescent and Young Adult Unit are the inpatient areas most utilized by our service. Outpatient facilities are modern and cheerful. The Children’s Hospital’s location on the UAB campus facilitates interaction between the pediatric residents and faculty and other components of the medical center. The UAB Medical Center is one of the strongest in the southeast and is considered one of the up-and-coming complexes in the country.

Administrative Structure

The Pediatric Pulmonology Residency Program is directed by Dr. Hector Gutierrez with support from the Division Administrator, Cheryl Morton. Personnel and benefits questions should be addressed through these individuals (205-939-9583 or hgutierrez@peds.uab.edu). Other
employee related issues are handled through the UAB Office of Graduate Medical Education, headed by Ms. Donna Brown (205-934-4793).
III. Organizational Chart for the UAB Pediatric Pulmonology Residency Program

President UAB
Carol Garrison, Ph.D.

Office of Graduate Medical Education
Raymond Butler
Associate Executive Director

Dean, University of Alabama School of Medicine
William Deal, M.D.

Chairman, Department of Pediatrics
Sergio Stagno, M.D.

Division Director
Pediatric Pulmonary Medicine
J. P. Clancy, M.D.

Program Director
Pediatric Pulmonology
Hector Gutierrez, M.D.

Pulmonary Faculty Attending
(while on clinical service)

Pulmonology Resident
IV. NEW RESIDENT ORIENTATION

Introduction

WELCOME to the UAB Division of Pediatric Pulmonary Medicine! Starting a residency program is an anxiety-filled time in a physician’s career. One is thrown into unfamiliar surroundings and clinical scenarios. There are expectations among attending physicians and patients that are often unrealistic. You are supposed to be “the expert” now, or at least have the ability to appear as if you know what you are doing. In some specialties, one can appear quite confident from the inception of training (especially in primary care fields). The field of pediatric pulmonology is quite different. There are thousands of facts, techniques, and skills to acquire over the three years of training.

The purpose of this handbook is to help you embark on an exciting career. It is not a cookbook, nor is it a textbook (there are plenty of those). Hopefully, it will point you in the right direction.

Duties and Responsibilities

General responsibilities and expectations of all residents are as follows:

1. Professional Conduct

Residents should conduct themselves in a professional and caring manner. This applies not only to patients, but to support staff, colleagues, families, etc. Residents are expected to dress professionally.

2. Reliability

Residents should reliably appear for work on time each working day and should be available during assigned call coverage. No other activity supersedes this requirement unless permission for absence is obtained from the division chief of the applicable service. Residents should wear their pagers during duty hours so they can be contacted if necessary.

3. Conference Meeting Attendance

Residents are expected to attend all educational sessions. Only through attendance will maximal educational benefit be realized.
How to Learn in a Residency

Learning in a residency is different than in any other time in your career. Read the section on this topic later in this manual for details. You should begin a regular study program early. Pick a subspecialty textbook and begin a routine reading schedule. Popular texts include Kendig’s Disorders of the Respiratory Tract in Children and Taussig and Landau’s Pediatric Respiratory Medicine.

Utilization of the Preceptor

Your preceptor is an attending physician who will “show you the ropes” of how to be a Pediatric Pulmonary Subspecialty Resident. This is a valuable time to learn day-to-day routines in the inpatient and outpatient setting. Extract as much information as you can from your preceptor. It will make your transition much easier.

Problems or Difficulties – What to do

Each resident will frequently encounter situations or problems in the clinical, as well as personal, realm that are difficult to handle. These are usually due to lack of adequate experience or situations beyond one’s control. If you have any problems whatsoever, please ask for help and advice from your resident colleagues, attending physicians, or the director. The director maintains an open door policy toward all residents. We are here to assist you with any problem that arises. It is important to notify us so that we can help.

Vacation, Sick Leave, Call, Availability

Each resident in the program is allowed 15 working days and 5 meeting days annual leave. Leave requests should be coordinated through Dr. Lyrene, the Program Director. A particular time slot for vacations or meetings is not guaranteed! Vacations are given on a first-come, first-served basis. Meeting time takes priority over vacation. Seniority is also used for granting meeting time should conflicts arise.

Sick leave is handled by standard university policy (explained during orientation). As a responsible physician, you should make an utmost attempt to be present every working day. However, if sick time is used, both the attending faculty and the program director should be notified.

An annual clinical service schedule is available to each resident outlining monthly responsibilities. Additionally, each month the attending faculty and resident develop a call schedule that is distributed to administrative personnel, interdisciplinary team members, and hospital operators. The attending faculty is always available for backup.
Evaluation: A Two-Way Street

You will receive feedback on your performance as a resident by several mechanisms. The faculty is responsible for evaluating you, and you have a duty to evaluate the faculty. A detailed description of our evaluation process is contained in the section on evaluation in this manual. The best way to know how you are progressing is to ask faculty to frequently give you feedback on the day’s performance. You will be able to discuss in this fashion any strengths or weaknesses noted. Evaluation is very important to all in the program. Utilize it maximally!

When to Call for Help! Chain-of-Command

Any time you are unsure about a decision you make, you should ask for advice. The old adage, “call me if you need me, but if you do it’s a sign of weakness!” does not apply in this residency. We will be immediately available to help you in patient care situations. If personal problems arise, please feel free to discuss those with the faculty and/or your colleagues. We maintain an open door policy for any problems.

Each resident is responsible directly to his assigned attending physician. If you need assistance in any clinical situation, you should call your assigned attending physician directly for aid. If you are unable to contact your assigned attending, do not hesitate to contact one of the other faculty members for assistance.

Conclusion

The faculty looks forward to working with you and fostering your development as a specialist in Pediatric Pulmonology. The resources in this training program are focused on supporting your clinical and research training. Remember that this is the time you learn how to practice medicine in your chosen field. Make the most of it!
V. PROGRAM OVERVIEW

This section provides an overview of the UAB Pediatric Pulmonology Residency Program.

Residency Training

The objectives of the accredited programs in pediatric pulmonary medicine are reviewed under Program Goals and Objectives of this manual. These include both clinical and research goals. However, considerable individualization of the training format is allowed by the Accreditation Council for Graduate Medical Education. Included is a representative block diagram of the three years of training. The emphasis of the first year is clinical training, and the second and third years, research training.

Pediatric Pulmonary Program Outline

<table>
<thead>
<tr>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulmonary</td>
<td>Research*</td>
<td>Research</td>
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<tr>
<td>PICU</td>
<td>Research</td>
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<tr>
<td>Pulmonary</td>
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<td>Pulmonary</td>
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<tr>
<td>Pulmonary</td>
<td>Research</td>
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<tr>
<td>Sleep Disorders</td>
<td>Research</td>
<td>Research</td>
</tr>
<tr>
<td>Pulmonary</td>
<td>Pulmonary</td>
<td>Research</td>
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<td>Pulmonary</td>
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<tr>
<td>PICU</td>
<td>Research</td>
<td>Pulmonary</td>
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<tr>
<td>Pulmonary</td>
<td>Pulmonary</td>
<td>Research</td>
</tr>
<tr>
<td>Allergy (or other elective)</td>
<td>Research</td>
<td>Research</td>
</tr>
</tbody>
</table>

* Pediatric pulmonology resident may choose either a basic or clinical research experience.

A description of the pediatric pulmonary program follows:

Inpatient

Year 1
During the first year, the Pediatric Pulmonology faculty closely supervises the pulmonology resident. The trainee functions as a co-attending with the assigned faculty and participates in discussing patient diagnosis and management, in instructing and directing house staff care, and in educating medical students assigned to the service. Most consultations for the Pulmonology
Service are first answered by the subspecialty resident and presented to the attending. Approximately 10 hours per week are devoted to rounds. There are 10-25 patients on the service at any one time representing a broad spectrum of acute and chronic pulmonary diseases. Rotations are required in Pediatric Critical Care Medicine, Anesthesia, and Sleep Disorder Medicine.

**Year 2**
Two months of the second year are assigned to the inpatient service. The trainee is allowed more independence at this point and functions as the primary attending making diagnostic and management decisions and directing the care provided by pediatric residents and medical students. The faculty are available at all times to discuss case management.

**Year 3**
During the third year, the trainee is allowed even more freedom in decision-making as he nears the completion of his training. The subspecialty resident functions independently in directing the inpatient service and uses the faculty as a resource for managing difficult problems. The trainee is allowed to answer consultations independently, as well, and to field telephone consultations from private practitioners.

This training scheme provides 16 months of clinical and 20 months of research. Variations are allowed to meet the needs of each individual resident.

**Bronchoscopy Program**
Our Bronchoscopy Program is designed to provide experience in flexible bronchoscopy throughout the three years of training. Most of this experience is concentrated in the months of clinical training. Bronchoscopy is generally performed in a fully equipped, state of the art, monitored suite or operating room with the assistance of a nurse and respiratory therapist. Emergency bronchoscopy may be performed in the PICU. Video equipment is available to enhance instruction. All new Olympus flexible bronchoscopy and monitoring equipment is available as of 2004. Cases are reviewed with the supervising faculty physician. Additionally, trainees are encouraged to attend the Bronchoscopy Course taught by Dr. Robert Wood when possible. Our program reviews competency after fifty supervised bronchoscopies. If competency is judged to be acceptable, the subspecialty resident is allowed to perform flexible bronchoscopy independently.

**Sleep Laboratory**
The Division of Pediatric Pulmonary Medicine supervises a fully equipped and accredited six bed Sleep Disorders Center designed to study patients with suspected sleep disorders. Thirty-two channel computerized recorders plus audio and video equipment provide high quality diagnostics for patient management and instruction. All trainees gain valuable experience in this specialty center during their clinical months. Nearly 1000 sleep studies are performed annually. Dr. Chris Makris, the Director of the Sleep Disorders Center, is board certified in Sleep Disorders.
Medicine and conducts a weekly, Pediatric Sleep Disorders Clinic. This clinic provides another valuable venue for the subspecialty resident to gain experience in sleep medicine.

**Pulmonary Function Laboratory**

Our PFT Laboratory is a full-service laboratory capable of measuring lung volumes (including body plethysmography), flows, gas exchange, and provocation studies. The principles of pulmonary function measurement and interpretation are covered in our basic physiology conferences and are put to practical use during the clinical months.

**Home Ventilator Program**

Our Home Ventilator Program provides experience in dealing with technology assisted children with chronic, stable respiratory failure. Family assessment and training is structured in a way that should be adaptable to any pulmonologist’s practice, supported by an interdisciplinary team.

**Outpatient Clinical Activities**

**Year 1**
During the first year, the subspecialty resident attends a weekly afternoon outpatient clinic. While on the inpatient service, additional outpatient responsibility may be assigned to assess new referrals or acutely ill patients. Patients are seen and assessed by the subspecialty resident and presented to the clinic’s attending physician as needed. Both visit the patient and family as needed and arrive at a treatment plan. The subspecialty resident develops continuity of care with patients and families in this setting.

**Year 2**
During the second year, the subspecialty resident attends one afternoon outpatient clinic per week. When assigned to the inpatient service, subspecialty residents attend two clinics weekly. In the second year, the subspecialty resident is independently allowed to see continuity patients but still presents new patients to the attending physician. The attending physician is available at all times in the outpatient clinic to review patient management, x-rays, pulmonary functions, etc.

**Year 3**
During the third year, the subspecialty resident functions independently in the outpatient clinic and is involved in supervising pediatric resident care. The cornerstone of the outpatient experience is the weekly afternoon continuity clinic. An attending physician is available in the clinic and functions as a resource for the subspecialty resident.
VI. PROGRAM GOALS AND OBJECTIVES

This section outlines the broad educational goals and objectives of the program as well as specific clinical rotation goals and objectives.

**Goal:** The overall goal of this Pediatric Pulmonology Residency Program is to train highly qualified pediatric pulmonologists who will contribute substantially to this field through exemplary patient care, original research, and teaching.

The trainee will achieve this goal through the following objectives:

a. Become proficient in the clinical diagnosis and medical treatment of acute and chronic respiratory diseases including those that are life-threatening in infants, children, adolescents, and young adults.


c. Develop a comprehensive knowledge of the pathophysiology of pediatric respiratory disorders through self-study and formal course work, lectures, and seminars offered as part of the training program.

d. Acquire effective teaching and communicating skills in pediatric pulmonology.

e. Understand the psychosocial aspects of respiratory diseases, develop skills in counseling, and become knowledgeable of the ethical issues related to respiratory diseases.

f. Develop the administrative skills necessary to operate a pediatric pulmonology facility including knowledge of staffing needs, unit management, program development, and grant proposals.

g. Acquire the necessary research skills to design, conduct, evaluate, and prepare for publication a clinical or laboratory research project through experience, mentoring, and formal courses in research design, biostatistics, and epidemiology.
VII. REQUIRED CLINICAL RESPONSIBILITIES, GOALS, AND OBJECTIVES

Pulmonary Inpatient Service/Consultant Service

a. Develop competency in the skills and knowledge necessary to provide excellent care for infants, children, and young adults with respiratory disorders.
b. Learn the indications/contraindication for diagnostic testing relevant to this population.
c. Develop an understanding of the psychosocial issues related to acute and chronic respiratory disorders.
d. Develop effective leadership and communication skills.
e. Learn to utilize the consultative process for diagnosis and management of acute and chronic respiratory disorders.
f. Practice cost effective care.

Pulmonary Outpatient Service

a. Develop expertise in the management of outpatient acute and chronic respiratory disorders.
b. Learn to utilize available diagnostic testing.
c. Develop team leadership skills.
d. Develop an understanding of the psychosocial issues related to acute and chronic respiratory disorders and their impact on the patient and family.
e. Learn to apply preventive strategies to pediatric respiratory disorders.

Pediatric Intensive Care Unit

a. Develop respiratory support skills including noninvasive ventilation, invasive mechanical ventilation, high frequency ventilation, ECMO, and nitric oxide therapy.
b. Develop knowledge base regarding the pathophysiology of acute and chronic respiratory failure.
c. Develop knowledge base regarding the interaction and monitoring of various organ systems especially the cardiovascular and pulmonary system.
d. Develop skills in crisis family support.
e. Enhance teamwork and consultative skills.
VIII. ELECTIVE ROTATION RESPONSIBILITIES, GOALS, AND OBJECTIVES

Anesthesia
a. Recognize developmental differences in anatomy and function of the airway from infancy to adulthood.
b. Learn practical aspects of intubation and airway management.
c. Become familiar with equipment used in airway management.
d. Learn techniques of sedation and neuromuscular blockade in preparation for intubation.
e. Learn assessment techniques to determine airway stability.
f. Know the advantages/disadvantages of different types of general anesthesia and how to monitor a patient during anesthesia.

Allergy/Immunology
a. Develop the skills to manage complex acute and chronic asthmatics.
b. Review asthma medications and their indications.
c. Become familiar with medication administration and monitoring devices, i.e., MDIs, spacers, nebulizers, peak flow meters.
d. Review basic allergy evaluation.
e. Review immunologic disorders and their role in the pathogenesis of respiratory diseases.
f. Perform basic immunologic evaluation.
g. Review the role of environmental factors in asthma and develop an approach to preventive counseling.

Sleep Disorders
a. Review classification of sleep disorders and sleep disorders terminology.
b. Become familiar with the clinical presentations of sleep disorders especially in children.
c. Recognize the electrophysiologic criteria of various sleep stages.
d. Differentiate obstructive vs. central apnea.
e. Read and score a complete sleep study.

Radiologic Imaging
a. Review the fine points of reading a chest x-ray.
b. Study the role of various diagnostic tests in evaluating the respiratory system, i.e., barium swallow, radionuclide scans, V/Q scans, ultrasound.
c. Become familiar with chest CT and its interpretation and learn the role of MRI in evaluating chest diseases.
d. Develop a slide teaching file of common chest x-ray and CT findings in pediatric pulmonary disease.

**Education**

The pulmonology resident participates in a weekly subspecialty resident seminar series jointly sponsored by the Division of Pediatric Pulmonary Medicine, Critical Care Medicine, and Neonatology. A variety of subjects are reviewed including respiratory and cardiovascular physiology, pulmonary functions, cell and molecular biology of the respiratory system, pharmacology, and statistics/research design. The pulmonology residents also participate in a weekly pulmonary text chapter review. Other conferences of interest include the Child Health Investigative Forum, Cystic Fibrosis Research Seminars, Pediatric Grand Rounds, Pulmonary Grand Rounds (Internal Medicine).

Formal training in statistics, study design, epidemiology, scientific writing and lecture preparation and presentation is offered through the School of Medicine.

From the beginning, the pulmonary resident is given teaching responsibilities for pediatric residents and medical students. Informal and formal discussions, seminars, and conferences are assigned at each level of training. During the second and third years of training, the residents participate in department-wide teaching functions such as Pediatric Grand Rounds and other continuing education functions. Fellows are encouraged to participate in outreach education by speaking before medical staffs, lay groups, etc.

Psychosocial aspects of medicine and ethical issues are taught in a multidisciplinary team setting. This setting is conducive to the exploration of such areas as family dynamics, the psychological implications of chronic illness, school problems, funding, employment for the disabled, patient advocacy, death and dying, and a host of other issues.

The subject matter noted above is learned through self-study, practical experience, and formal coursework including lectures, seminars, and workshops. Over the three years of residency training, the material outlined on the subsequent page is presented in systematic fashion.

Also, the content specifications for Pediatric Pulmonology Subspecialty Boards may be found on the American Board of Pediatrics web site. A copy is also kept in the Program Director’s office. This document may be used to guide self-learning.
IX. PULMONARY RESIDENCY CURRICULUM REQUIREMENTS

I. General requirements
   A. Research design
   B. Biostatistics
   C. Epidemiology

II. Pediatric Pulmonary Basic Science
   A. Embryology
   B. Psychosocial (pulmonary and cardiovascular)
   C. Pulmonary Function Testing
   D. Pharmacology
   E. Pathology
   F. Allergy and Immunology
   G. Genetics
   H. Cell and Molecular Biology

III. Psychosocial Aspects of Chronic Pulmonary Disease
   A. Psychosocial Aspects of Chronic Pulmonary Disease
   B. Counseling Techniques
   C. Ethics
   D. Death and Dying

IV. Teaching/Communication Skills Requirements
   A. Organizing Teaching Programs
   B. Medical Writing
   C. Oral lectures
      1. Lectures
      2. Seminars
      3. Clinical Conferences
      4. Written Reports and Teaching Material
   D. Grant Proposals

V. Administrative Requirement
   A. Operational Aspects of Pediatric Pulmonary Facility
   B. Staffing Needs
   C. Unit Management
   D. Program Development
   E. Socioeconomics and Medicine/Cost Containment
   F. Medicolegal Aspects of Medicine
   G. Professionalism
Research

Research opportunities are a major strength of this training program. Approximately 20 months of training will be devoted to the acquisition of research skills. We have encouraged the pairing of our subspecialty residents with a strong basic science mentor or clinical research mentor. Opportunities for such collaboration abound in the areas of physiology, cell biology, molecular biology, biochemistry, and microbiology. UAB is home to one of the world’s premiere Cystic Fibrosis Research Centers. Additionally, there are scientists interested in the mechanisms of both acute and chronic lung injury, respiratory infections, pulmonary host defense, and gene therapy. Numerous opportunities for clinical research exist as well. We encourage those subspecialty residents interested in clinical research to pursue master’s level training in statistics or epidemiology.

Goals and Objectives of the Research Training

1. Identify a research area of interest either clinical or basic science.
2. Identify, with the assistance of the Program Director, a research mentor.
3. Together with the research mentor identify a focused area of research.
4. Review the pertinent scientific literature.
5. Develop a research hypothesis and proposal to test that hypothesis. Determine the feasibility of testing that hypothesis.
6. Learn the techniques necessary to test the hypothesis.
7. Complete applicable regulatory and safety requirements including human and animal use requirement.
8. Collect and analyze data using appropriate statistical tests.
9. Develop an abstract and manuscript for presentation or peer review.
10. Submit paper for peer review and respond to reviews’ comments.

Training Summary

The goals of our training program are to develop well-rounded competitive academic pulmonologists capable of thriving in an environment of complex patient care, teaching, and research.
X. COMPETENCIES, RECORD-KEEPING, AND EVALUATIONS

A. Competencies: The Accreditation Council for Graduate Medical Education (ACGME) is currently (2002) developing formal guidelines for competencies, both general and specialty-specific, as well as acceptable methods for evaluating these in-training programs across the U.S. A list of the critical information can be obtained directly from the ACGME web site (http://www.ACGME.org). These competencies should serve as a guide for the skills that you should be striving to develop as you progress in your subspecialty education.

1 Educational Competencies

General competencies (the six “Core Competencies” Residents must demonstrate the following general competencies to begin the independent practice of this specialty.)

a. Patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

b. Medical knowledge about established and evolving biomedical, clinical, and cognate (epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

c. Practice-based learning and improvement that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care.

d. Interpersonal and communication skills that result in effective information exchange and learning with patients, their families, and other health professionals.

e. Professionalism, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

f. Systems-based practice, as manifested by actions that demonstrate awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value to the patient.

2 Pulmonary-specific competencies

Residents must be able to expertly and appropriately demonstrate the following pulmonary-specific competencies to begin the independent practice of this specialty:

a. Conduct a comprehensive and detailed medical interview with children and adults who present with suspected acute or chronic pulmonary disorders.

b. Perform a physical examination appropriate to the specialty.

c. Select, perform, and interpret diagnostic tests or studies.

d. Assess the risks and benefits of therapies for pulmonary disorders.

e. Counsel and educate patients about diagnosis, prognosis, and treatment.
f Consult with and educate other physicians and health care providers.
g Apply basic and clinical science to the clinical care of patients.
h Coordinate the care of patients, including the use of consultation.
i Analyze medical and other scientific literature.
j Design, conduct, write, and present research in either laboratory-based or clinical investigation in allergy and/or immunology.

3 Personal and professional competencies
Residents should demonstrate the following personal and professional characteristics:

a Caring, altruistic, and compassionate behavior
b Honesty, integrity, and professionalism in relating to patients and other healthcare providers.
c Acceptance of the need for a lifelong pursuit of excellence, self-directed learning, and continuing education
d Ethical management of real and perceived conflicts of interest.

B. Record-Keeping: Maintain a log of procedures including flexible bronchoscopy, thoracentesis, chest tube placement.

C. Evaluations: You will be evaluated semiannually by the faculty, and you will be asked to provide a confidential assessment of the faculty and the program which will be for the eyes of the Program Director only. We are interested in any suggestions that may improve the quality of the training you are receiving, and you should feel free to openly provide your ideas for making changes that may enrich the learning experience for yourself and those who will follow you. You will meet personally with the Program Director to discuss your progress to date and any issues or concerns you may have.

XI. DISPUTES WITH PERSONNEL

In the event of interpersonal conflict that cannot be mutually and adequately resolved, the dispute should be brought to the attention of the attending faculty. All parties involved will be assembled to resolve any disagreement. In the event that the dispute cannot be so resolved, the matter should be presented to the Program Director, Dr. Lyrene, who will then act as arbitrator.

XII. CHAIN OF COMMAND STATEMENT

Anytime you are unsure about a decision you make (especially with regard to patient management), you should ask for advice. The old adage, “Call me if you need me, but if you do, it’s a sign of weakness!” does not apply in this residency. We will be immediately available to
help you with patient care situations. If personal problems arise, please feel free to discuss those with the faculty and/or your colleagues. We maintain an open door policy for any problem.

Each resident is responsible directly to his assigned attending physician. If you need assistance in any clinical situation, you should call your assigned attending physician directly for aid. However, the attending physician must be notified of any clinical problem.
XIII. STUDY PROGRAM

Overview

Unlike prior educational endeavors, a residency is an apprenticeship for a particular profession. No longer would one strive to “memorize and forget” a group of facts in order to pass a test. Your primary objective is to commit to memory the appropriate amount of information and technical skills required to safely and adequately care for patients. The specialist in Pediatric Pulmonology should possess a large database of information that can be retrieved in split second fashion when the need arises. The Pediatric Pulmonologist should be readily able to handle all common problems, be familiar with most uncommon problems, and know where and how to find necessary information rapidly for those situations that are rare. The resident should develop a study habit that will carry over throughout the entire career. The information explosion in medicine will only worsen over time. One must develop a plan to keep abreast of changes in the specialty.

At the start of training, one is usually overwhelmed with the technical aspects of the specialty. Once daily routines and setups are learned through practice, concentration on establishing a sound database should be of primary importance. A regular reading program will help to ensure a methodical accumulation of information. There are several texts available today, as noted earlier in this document.

Techniques for rapid learning should be utilized as much as possible because of limited study time during a residency. Pre-scan a text chapter for introductory statement, bold and italicized text, figures and captions, and finally chapter summaries and key points (if available). Next, rapidly scan the chapter. Finally, repeat the first step. You will leave with more information in long term memory than if you had read the chapter slowly from the start to the finish.

I do not recommend reading extensively in the current literature until you establish a foundation. Review articles are the exception to that rule. Review articles can be obtained through appropriate Internet search engines from the Lister Hill Library for the Health Sciences or from faculty.

The Lister Hill Library is an outstanding source of information. The library has all the latest texts and journals in the specialty as well as computer search capabilities and other learning tools.

Teaching in the clinic seems to be a universal complaint in programs across the U.S. As a resident, you can take the initiative to get as much as possible from faculty, preceptors, and senior residents. All you have to do is be enthusiastic and ask questions. You will be surprised at the response and the information obtained in this fashion. Conference attendance is also of great importance. There should be little excuse for missing conferences. Lack of attendance will be recognized and examined by the Director, especially when any resident falters academically in the program.
XIV. CONCLUSION

It is hoped that your education will be a wonderful experience and that you will be prepared for a career in the subspecialty of Pediatric Pulmonology.