

## **PEDIATRIC PULMONOLOGY FELLOWSHIP**

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# Policy Manual

## Pediatric Pulmonology Fellowship

### Mission

#### Academic Excellence Social Commitment

The purpose of this three-year training program is to educate the Pediatric Pulmonary sub-specialty resident in the entire breadth of the discipline of pediatric pulmonology and to foster a lifelong commitment to the promotion of children's health care. The Pediatric Pulmonary sub-specialty resident will acquire cognitive knowledge, technical skills, and interpersonal skills through didactic lectures, small group conferences, audiovisual media, individual instruction, independent reading, and direct patient care.

Upon successful completion of the training program, the Pediatric Pulmonary sub-specialty resident will be fully prepared for the subspecialty practice of pediatric pulmonology. The department of pediatrics and the division of Pediatric Pulmonology are firmly committed to helping each Pediatric Pulmonary sub-specialty resident recognize her/his full academic, clinical, and personal potential within an intellectually stimulating and emotionally supportive environment.

### Introduction

This Pediatric Pulmonary sub-specialty Resident Policy Manual is designed to improve the quality of patient care, minimize conflicts, equalize burdens, and allow you to spend more time and energy on your basic goal—that of learning the art and science of Pediatric Pulmonology. That is why both you and we are here. "Training begins with a task, and learning begins with a question." In this program, you will find both in abundance.

We are available day and night, and we will be happy to talk with each of you about anything at any time. As Chairman and Director of the Pediatric Pulmonary sub-specialty Residency Program, it is our responsibility to provide the opportunities for your education and to finally place the stamp of completion on your residency documents. We look forward to the coming year.

**Scott Rivkees, MD**

**Mutasim Abu-Hasan, MD**

# Goals and Objectives

The goal of the Pediatric Pulmonary sub-specialty residency program in Pediatrics is to “provide educational experiences in the diversified field of Pediatric Pulmonology in an intellectual environment conducive to learning the exemplary practice of Pediatric Pulmonology”. This is accomplished by providing an organized, progressive educational experience with increasing patient care responsibilities over a three year period in a setting which has a diverse patient population and a teaching staff with professional ability, enthusiasm and a commitment to teaching. We strive to have an appropriate balance between structured educational activities including didactic lectures and clinical learning and patient care responsibilities. The teaching staff also serves as role models for the Pediatric Pulmonary sub-specialty resident to develop his/her interpersonal skills and to participate in ethical decision making. Faculty and sub-specialty residents are expected to display attitudes and behaviors that demonstrate commitment to patients, their families, and the highest level of care. Working with the health care team, which includes Nursing, Social Service, Child Life, Physical Therapy, Respiratory Therapy, Psychology and Nutritional Service is emphasized. The curriculum of the Pediatric Pulmonary subspecialty residency program meets the guidelines of and is fully accredited by the Accreditation Council of Graduate Medical Education.

## Pediatric-Pediatric Pulmonology General Competencies

### Patient Care

Pediatric Pulmonary sub-specialty residents must be able to provide family centered patient care that is developmentally and age appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.

#### Elements May Include:

1. Gather essential and accurate information about the patient
2. Organize and prioritize responsibilities to provide patient care that is safe, effective, and efficient
3. Provide transfer of care that ensures seamless transitions
4. Interview patients and families about the particulars of the medical condition for which they seek care - with specific attention to behavioral, psychosocial, environmental, and family unit correlates of disease
5. Perform complete and accurate physical examinations
6. Make informed diagnostic and therapeutic decisions that result in optimal clinical judgment
7. Develop and carry out management plans
8. Prescribe and perform all medical procedures
9. Counsel patients and families
10. Provide effective health maintenance and anticipatory guidance
11. Use information technology to optimize patient care (combined with Practice-based Learning and Improvement)
12. Provide appropriate role modeling
13. Provide appropriate supervision

## Medical Knowledge

Pediatric Pulmonary sub-specialty residents must demonstrate knowledge about established and evolving biomedical, clinical, epidemiological and social-behavioral science, and the application of this knowledge to patient care.

### The Competent Physician is Expected to:

1. Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics and his/her Pediatric Pulmonary sub-specialty
2. Critically evaluate and apply current medical information and scientific evidence for patient care - combined with Practice-based Learning and Improvement

## Interpersonal and Communication Skills

Pediatric Pulmonary sub-specialty residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and professional associates

### Elements May Include:

1. Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
2. Demonstrate the insight and understanding into emotion and human response to emotion that allow one to appropriately develop and manage human interactions
3. Communicate effectively with physicians, other health professionals, and health related agencies
4. Work effectively as a member or leader of a health care team or other professional group
5. Act in a consultative role to other physicians and health professionals
6. Maintain comprehensive, timely, and legible medical records, if applicable

## Practice-based Learning and Improvement

Pediatric Pulmonary sub-specialty residents must be able to use scientific methods and evidence to investigate, evaluate, and improve their patient care practices

### Elements May Include:

1. Identify strengths, deficiencies, and limits in one's knowledge and expertise
2. Set learning and improvement goals
3. Identify and perform appropriate learning activities to guide personal and professional development
4. Systematically analyze practice using quality improvement methods with the goal of practice improvement
5. Incorporate formative evaluation feedback into daily practice
6. Locate, appraise, and assimilate evidence from scientific studies related to their patient's health problems
7. Use information technology to optimize learning and care delivery
8. Develop the necessary skills to be an effective teacher\*
9. Participate in the education, of patients, families, students, residents, and other health professionals
10. Take primary responsibility for lifelong learning to improve knowledge, skills, and practice performance through familiarity with general and experience-specific goals and objectives and attendance at conferences

## Professionalism

Pediatric Pulmonary sub-specialty residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity

### Elements May Include:

1. Demonstrate humanism, compassion, integrity, and respect for others based on the characteristics of an empathetic practitioner
2. Show responsiveness to patient needs that supersedes self-interest
3. Show respect for patient privacy and autonomy
4. Demonstrate a sense of duty and accountability to patients, society and the profession
5. Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities and sexual orientation

## Systems-based Practice

Pediatric Pulmonary sub-specialty residents must practice quality health care and advocate for patients in the health care system

### Elements May Include:

1. Work effectively in various health care delivery settings and systems relevant to their clinical specialty
2. Coordinate patient care within the health system relevant to their clinical specialty
3. Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate
4. Advocate for quality patient care and optimal care systems
5. Work in interprofessional teams to enhance patient safety and improve patient care quality
6. Participate in identifying system errors and implementing potential system solutions
7. Know how to advocate for the promotion of health and the prevention of disease and injury in populations

*Source: American Board of Pediatrics, Milestone Project – 03/2012*

## Educational Objectives for Pediatric Pulmonary Sub-specialty Resident Rotations

Subspecialty resident rotations are done in blocks that vary in length from 1 to 4 weeks. Some rotations are mandatory (Inpatient service, Outpatient clinics, research, PFT lab, Sleep medicine, etc) others are elective (PICU, allergy, chest radiology, etc). For each rotation there are learning objectives, educational resources, and evaluations. As you complete each rotation, you should make sure you have had the opportunity to have a face to face evaluation with your preceptor.

## Feedback

Feedback will be given at every level of interaction. It may be formal or informal. It should be timely, objective, and given with the objective of reinforcing strengths and correcting deficiencies. Pediatric Pulmonary sub-specialty residents at all levels are responsible to receive and to give feedback.

## **Pediatric Pulmonary sub-specialty Resident Teaching Responsibilities**

Medical student and pediatric resident teaching are one of the most important Pediatric Pulmonary sub-specialty resident activities. Student responsibilities will vary with the service.

Because of the leadership qualities this subspecialty residency is designed to foster, student/resident teaching will continue to be expected, and excellence in this area will be noted. The opposite is also true. Those who fail to use common courtesy in dealing with students or pediatric residents, who neglect their role as leaders and who deal with learners in an antagonistic, counter-productive manner will be similarly evaluated and open to faculty criticism. Chronic behavior of this nature will not be tolerated.

At the end of each third year learner's rotation with Pediatric Pulmonology, you will be expected to contribute to the learner's evaluation and make comments on each learner's progress.

## **Procedure Documentation**

Throughout the three years of training, Pediatric Pulmonary sub-specialty residents are expected to keep an accurate record of their clinical experience. All procedures must be entered into the New Innovations Case Log system. They will be reviewed by the faculty preceptor and Program Director and included in your permanent personnel file for your future credentialing needs.

## **American Board of Pediatric In-Training Examination**

Each year, all Pediatric Pulmonary sub-specialty residents are required to take the ABP In-training examination in the spring. The examination feedback provides a method to determine individual strengths and weaknesses in cognitive knowledge. Examination scores are one measure of the resident's clinical performance.

## **Educational Programs**

Formal learning does not end with medical school and pediatric residency. Many aspects of pediatric pulmonology require additional didactic instruction before they can be integrated into the sub-specialty resident's fund of working knowledge. A scholastic series of lectures for Pediatric Pulmonary sub-specialty residents has been developed to include the broad range of issues of importance to Pediatric Pulmonology.

## **Pediatric Pulmonary sub-specialty Resident Educational Conference Schedule**

All Pediatric Pulmonary sub-specialty residents are expected to attend scheduled conferences unless specifically excused. Please advise the program director ahead of time if you must miss a conference.

Pediatric Pulmonology Core Curriculum – These conferences are on topics developed from a number of sources including the “Pediatrics in Review” Pulmonology Education program, a case-based program developed by the American Board of Pediatrics. The topics are spread out over a rotating three-year period so that each resident is exposed to teaching on these topics at least once during their residency. Core Conference occurs on Friday, at 2:00. Attendance is required and monitored.

Case Conference – These conferences are discussion of interesting/puzzling/illustrative patients once a month at 11:00 a.m. Mondays. Attendance is required and monitored.

Journal Club – One or two articles are presented by Subspecialty residents or a faculty member. Articles are chosen and distributed before the meeting, which is monthly at 11 a.m. on Mondays. Attendance is required and monitored.

QI Meeting – This conference reviews current procedures/processes to provide a forum for discussion with the goal of improving care/safety. There may be participation of quality assurance/quality improvement when appropriate. This conference is monthly and PRN, 11a.m. Monday. Attendance is required and monitored.

Bronchoscopy/procedure Review - This teaching conference reviews selected bronchoscopies and other procedures performed by Pediatric Pulmonary fellows/faculty that can illustrate problems, teaching points, challenges. Cases are selected by fellows and or faculty. It is held monthly and PRN on Friday, after Core Curriculum (about 3:30 p.m.). Attendance is required and monitored.

Pediatric Grand Rounds – These conferences are generally an update on new developments in an area of broad pediatric interest. Visiting professors, faculty, and residents may present. Conferences vary from primarily clinical to mostly research. Grand Rounds conference is scheduled for Friday, at 8:00am. Attendance at  $\geq 50\%$  is required and self-reported.

## Institutional Policies

The Department of Pediatrics and Pediatric Pulmonary Division come under the institutional policies in the following areas. Specifics of the policy may be obtained through the Fellowship Training Director, the Dept. Chairman, or the GME Director or their offices.

The candidate for Pediatric Pulmonary sub-specialty Residency must possess skills in the following areas.

# Selection of Pediatric Pulmonary sub-specialty Residents

**Intent:** The Accreditation Council for Graduate Medical Education Institutional Requirement (I. B. 3. e.) and (II. A.) require written policies on the recruitment and appointment of residents and subspecialty residents.

**Statement:** Only Pediatric Pulmonary sub-specialty residents eligible by ACGME requirements will be recruited and appointed.

## **Description: Pediatric Pulmonary sub-specialty Resident Eligibility**

Applicants with one of the following qualifications are eligible for appointment to University of Florida accredited residency programs:

1. Graduates of medical schools in the United States and Canada accredited by the Liaison Committee on Medical Education (LCME).
2. Graduates of colleges of osteopathic medicine in the United States accredited by the American Osteopathic Association (AOA).
3. Graduates of medical schools outside the United States and Canada who meet one of the following qualifications:
  - Have a currently valid certificate from the Educational Commission for Foreign Medical Graduates or
  - Have a full and unrestricted license to practice medicine in an U.S. Licensing jurisdiction.
  - Graduates of medical schools outside the United States who have completed a Fifth Pathway program provided by an LCME-accredited medical school.

## **Pediatric Pulmonary sub-specialty Resident Selection**

1. The sponsoring institution must ensure that programs select from among eligible applicants on the basis of their preparedness, ability, aptitude, academic credentials, communication skills, and personal qualities such as motivation and integrity. Programs must not discriminate with regard to sex, race, age, religion, color, national origin, disability, or veteran status. In selecting from among qualified applicants, it is strongly suggested that all programs participate in the National Resident Matching Program (NRMP). For programs that are not involved in the Match, program directors are encouraged to participate in “match” programs of the appropriate specialty societies.
2. Programs participating in the NRMP must abide by all rules applicable.
3. Programs’ compliance with residency eligibility selection rules will be confirmed in the periodic Internal Reviews.

# Procedure for Grievance, Suspension, Non-renewal or Dismissal

**Intent:** Each training program is responsible for the conduct of that training program and for the policy on defining satisfactory performance of the sub-specialty resident as a student. The sponsoring institution wishes to ensure that the application of such policies is not arbitrarily illegal, unjust or create unnecessary



hardship. Therefore, a policy and procedure for addressing sub-specialty resident dissatisfaction is established (I.R. I. B. 3. e.) and (I.R. I. B. f. 4).

## **Policy**

**Statement:** Context of the institutional and program requirements. Each program must develop fair and consistent standards for the residents/sub-specialty residents (both hereafter referred to as “residents”). If a resident feels that a decision by the program violates standards of fairness then the resident is afforded a process whereby individuals outside the program may review such decisions.

**Description:** The position of the resident presents the dual aspect of a student in graduate training while participating in the delivery of patient care.

The University of Florida College of Medicine is committed to the maintenance of a supportive educational environment in which residents are given the opportunity to learn and grow. Inappropriate behavior in any form in this professional setting is not permissible. A resident’s continuation in the training program is dependent upon satisfactory performance as a student, including the maintenance of satisfactory professional standards in the care of patients and interactions with others on the health care team. The resident’s academic evaluation will include assessment of behavioral components, including conduct that reflects poorly on professional standards, ethics, and collegiality. Disqualification of a resident as a student or as a member of the health care team from patient care duties disqualifies the resident from further continuation in the program.

**Grievances:** A grievance is defined as dissatisfaction when a resident believes that any decision, act or condition affecting his or her program of study is arbitrary, illegal, and unjust or creates unnecessary hardship. Such grievance may concern, but is not limited to, the following: academic progress, mistreatment by any University employee or student, wrongful assessment of fees, records and registration errors, discipline (other than nonrenewal or dismissal) and discrimination because of race, national origin, gender, marital status, religion, age or disability, subject to the exception that complaints of sexual harassment will be reviewed by the Chair of the Sexual Harassment Committee. (as contained in the Housestaff Policy & Procedure Manual).

Prior to invoking the grievance procedures described herein, the resident is strongly encouraged to discuss his or her grievance with the person(s) alleged to have caused the grievance. The discussion should be held as soon as the resident becomes aware of the act or condition that is the basis for the grievance. In addition, or alternatively, the resident may wish to present his or her grievance in writing to the person(s) alleged to have caused the grievance. In either situation, the person(s) alleged to have caused the grievance may respond orally or in writing to the resident.

If a resident decides against discussing the grievance with the person(s) alleged to have caused such, or if the resident is not satisfied with the response, he or she may present the grievance to the Program Director, Division Chief or Department Chair. If, after discussion, the grievances cannot be resolved, the resident may contact the Associate Dean of Graduate Medical Education (ADGME). The ADGME will meet with the resident and will review the grievance. The decision of the ADGME will be communicated in writing to the resident and constitute the final action of the University.

**Suspension:** The Chief of Staff of a participating and/or affiliated hospital where the resident is assigned, the Dean, the President of the Hospital, the Chair, or Program Director may at any time suspend a resident from patient care responsibilities. The resident will be informed of the reasons for the suspension and will be given an opportunity to provide information in response.

The resident suspended from patient care may be assigned to other duties as determined and approved by the Chair. The resident will either be reinstated (with or without the imposition of academic probation or other conditions) or dismissal proceedings will commence by the University against the resident within thirty (30) days of the date of suspension.

Any suspension and reassignment of the resident to other duties may continue until final conclusion of the decision-making or appeal process. The resident will be afforded due process and may appeal to the ADGME for resolution, as set forth below.

**Nonrenewal:** In the event that the Program Director decides not to renew a resident's appointment, the resident will be provided written notice which will include a statement specifying the reason(s) for nonrenewal.

If requested in writing by the resident, the Chair will meet with the resident; this meeting should occur within 10 working days of the written request. The resident may present relevant information regarding the proposed nonrenewal decision. The resident may be accompanied by an advisor during any meeting held pursuant to these procedures, but the advisor may not speak on behalf of the resident. If the Chair determines that nonrenewal is appropriate, he or she will use their best efforts to present the decision in writing to the resident within 10 working days of the meeting. The resident will be informed of the right to appeal to the ADGME as described below.

**Dismissal:** In the event the Program Director of a training program concludes a resident should be dismissed prior to completion of the program, the Program Director will inform the Chair in writing of this decision and the reason(s) for the decision. The resident will be notified and provided a copy of the letter of proposed dismissal; and, upon request, will be provided previous evaluations, complaints, counseling, letters and other documents that relate to the decision to dismiss the resident.

If requested in writing by the resident, the Chair will meet with the resident; this meeting should occur within 10 working days of the written request. The resident may present relevant information regarding the proposed dismissal. The resident may be accompanied by an advisor during any meeting held pursuant to these procedures, but the advisor may not speak on behalf of the resident. If the Chair determines that dismissal is appropriate, he or she will use their best efforts to present the decision in writing to the resident within 10 working days of the meeting. The resident will be informed of the right to appeal to the ADGME as described below.

**Appeal:** If the resident appeals a decision for suspension, nonrenewal or dismissal, this appeal must be made in writing to the ADGME within 10 working days from the resident's receipt of the decision of the person suspending the resident or the Chair. Failure to file such an appeal within 10 working days will render the decision of the person suspending the resident or the Chair the final agency action of the University.

The ADGME will conduct a review of the action and may review documents or any other information relevant to the decision. The resident will be notified of the date of the meeting with the ADGME; it should occur within 15 working days of the ADGME's receipt of the appeal. The ADGME may conduct an investigation and uphold, modify or reverse the recommendation for suspension, nonrenewal or dismissal. The ADGME will notify the resident in writing of the ADGME's decision. If the decision is to uphold a suspension, the decision of the ADGME is the final agency action of the University. If the decision is to uphold the nonrenewal or dismissal, the resident may file within 10 working days a written appeal to the Dean of the College of Medicine. Failure to file such an appeal within 10 working days will render the decision of the ADGME the final action of the University.

The Dean will inform the ADGME of the appeal. The ADGME will provide the Dean a copy of the decision and accompanying documents and any other material submitted by the resident or considered in the appeal process. The Dean will use his or her best efforts to render a decision within 15 working days, but failure to do so is not grounds for reversal of the decision under appeal. The Dean will notify in writing the Chair, the ADGME, the Program Director and resident of the decision. The decision of the Dean will be the final agency action of the University. The resident will be informed of the steps necessary for the resident to further challenge the action of the University.

# Guidelines for Technical Standards for Residency Training

**Intent:** The sponsoring institution supports the concept of reasonable accommodations to individuals with disabilities accepted to graduate medical education programs.

## Policy

**Statement:** Each program is responsible for the development of technical standards necessary to complete their graduate medical education program. In general, individuals must have abilities and skills in five categories: observations, communication, motor, intellectual, behavioral and social. Individuals applying to a residency are encouraged to discuss disabilities with the program director during the interview process.

**Description:** Although each program may have specialized skills necessary to complete the program, (i.e. motor skills in surgery) the College of Medicine has adopted the following technical standards for medical school admissions and these should form guidelines for each program to develop specialty specific technical standards.

1. **Observation:** The candidate must be able to observe demonstrations and experiments in the basic sciences, including but not limited to physiologic and pharmacologic demonstrations in animals, microbiologic cultures, and microscopic studies of microorganisms and tissues in normal and pathologic states. A candidate must be able to observe a patient accurately at a distance and close at hand. In detail, observation necessitates the functional use of the sense of vision and other sensory modalities.
2. **Communications:** A candidate must be able to speak, to hear, and to observe patients in order to elicit information, describe changes in mood, activity, and posture, and perceive nonverbal communications. A candidate must be able to communicate effectively and sensitively with patients. Communication includes not only speech but reading and writing. The candidate must be able to communicate rapidly, effectively and efficiently in oral and written form with all members of the healthcare team.
3. **Motor:** Candidates must have sufficient motor function to elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers. A candidate must be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required of physicians are: The administration of intravenous medication, the application of pressure to stop bleeding and the opening of obstructed airways. Such actions require coordination of both gross and fine muscular movements equilibrium, and functional use of the senses of touch and vision. As mandated by the ACGME program requirements, Pediatric Pulmonary sub-specialty residents must achieve competence with certain procedures. Therefore a candidate must be able to execute motor movements required to perform those procedures required by general pediatric training that include: basic and advanced life support, endotracheal intubation, placement of intraosseous lines, placement of intravenous lines, venipuncture, arterial puncture, umbilical artery and vein catheterization, lumbar puncture, bladder catheterization, gynecologic evaluation, wound care, suturing, reduction and splinting of simple dislocations/fractures, subcutaneous, intradermal, and intramuscular injections. In addition the Pediatric Pulmonary sub-specialty resident must be able to execute motor movements required to perform those procedures required by Pediatric Pulmonology training that include: fiberoptic

bronchoscopy, bronchoalveolar lavage, fiberoptic laryngoscopy, transbronchial biopsy, thoracentesis and mucosal brush biopsies for ciliary motion analysis.

4. **Intellectual-Conceptual, Integrative, and Quantitative Abilities:** These abilities include measurement, calculation, reasoning, analysis and synthesis of complex information.
5. **Behavioral and Social Attributes:** A candidate must possess the emotional health required for full utilization of his or her intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients, and the development of mature, sensitive, and effective relationships with patients. Candidates must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, interpersonal skills, interest and motivation are all personal qualities that are assessed during the admission and education processes.

## Impaired Physician

**Intent:** The sponsoring institution and each program is responsible for monitoring residents for signs of psychological and substance abuse problems and for initiating appropriate interventions.

### Policy

**Statement:** The University of Florida College of Medicine will fully participate in the provisions of the Florida Medical Practice Act (F.S.458), the rules of the Board of Medicine, and Department of Professional Regulation. The College of Medicine supports the Florida Impaired Practitioners Program.

### Description:

1. Faculty, staff, peers, family or other individuals who suspect that a resident is suffering from a psychological or substance abuse problem are obligated to report such problems. Individuals suspecting such impairment can either report directly to the Physician's Recovery Network (PRN) or can discuss their concerns with the Program Director, Chairman, or Associate Dean of Graduate Medical Education.
1. It is the intent of the sponsoring institution that all appropriate rules that govern the practice of medicine be strictly enforced.
2. All referrals to the PRN are confidential and are evaluated by the professionals of the PRN. Decisions about intervention, treatment and after care are determined by the PRN.
3. As long as the practitioner satisfactorily participates in the PRN program no regulatory action would normally be anticipated by the Board of Medicine.
4. Resumption of clinical activity and residency program will be contingent upon the continued successful participation in the PRN and continuation of the resident in the program will be determined in consultation between the program director and the professionals at the PRN.
5. Information on the Physician's Recovery Network (PRN) and its program can be obtained by calling 1-800-888- 8PRN or by writing to the PRN at P.O. Box 1881, Fernandina Beach, Florida 32034.
2. Each program will provide an educational program to their residents regarding substance abuse.

3. Compliance with the above will be monitored in the internal review process.

Impaired Practitioners Program of Florida  
The Physicians Recovery Network (PRN)  
P.O. Box 1020  
Fernandina Beach, FL 32035-1020  
1-800-888-8PRN  
1-904-277-8004

Physicians or osteopaths with a past or current history of drug or alcohol addiction must contact the PRN as soon as possible on or before arriving at your training program in Gainesville, FL. This is a confidential and professional organization that will help you stay clean and sober while maintaining your ability to practice medicine in our State.

The purpose of the PRN Program is to ensure the public health and safety by assisting the ill practitioners who may suffer from one or more of the following:

- Chemical dependency
- Psychiatric illness
- Psychosexual illness, including boundary violations
- Neurological/cognitive impairment
- Physical illness
- HIV infections/AIDS
- Behavioral disorders

By supporting ill practitioners in regaining their health, PRN attempts to maintain the integrity of the healthcare team in its role in serving the public.

You are treated with respect, confidentiality, and without discrimination. Recommendations by the PRN for any type of follow-up, counseling, testing, assessment, etc. is the privacy of you and the PRN in their Advocacy/Monitoring Contract.

For further confidential information, resources, intervention, referral or treatment, feel free to contact Sharron Wallace at 265-0787, or Dr. Scott Teitelbaum, Director of the Vista Professionals Recovery & Treatment Program at 338-0097, Ext. 7189.

## Administrative Policies & Fringe Benefits

### Current Policies

Current fringe benefits that are provided to residents (and sub-specialty residents) of the Department of Pediatrics are detailed in your contract.

In addition, the Department of Pediatrics or the Pediatric Pulmonary Division currently:

1. Pays your fee annually for admission to the American Board of Pediatrics In-Training examination.

For more information access the [College of Medicine website](#)

The Housestaff Group Insurance Plan is provided to residents by the University of Florida. As you begin your residency with the Pediatric Pulmonary Division in the Department of Pediatrics, you will receive a booklet which summarizes the benefits and limitations provided under this group policy for Employee Basic Life, Accidental Death and Dismemberment, Employee Major Medical, and Dependent Major Medical Insurance. Please refer to this booklet for all information and any questions you may have regarding your insurance coverage. Our Fringe Benefit Office is located in Room G1-003A in the Health Center. Information can also be found on the [Fringe Benefit website](#)

## Disability Insurance

The Department provides a comprehensive disability insurance policy for each resident. Coverage includes compensation for an occupational injury that results in HIV infection. The approximate monthly compensation is \$1500. Prior to completion of the program, you will have an opportunity to convert this group policy to an individual policy that provides compensation of up to \$4500 per month (approximately \$7000 per month for catastrophic illness or injury). Residents are strongly advised to make this conversion as soon as their financial status permits. For details contact the [Fringe Benefit Office](#) at 273-5077.

## Malpractice Insurance

Malpractice insurance is provided for residents by the J. Hillis Miller Health Center Self-Insurance Trust Fund. This protection is operative only as long as the resident is working under the auspices of the University of Florida College of Medicine in an activity formally approved by the Department. The office phone is 352-265-8028.

## Resident and Fellow Loan Deferment Requests

The Association of American Medical Colleges (AAMC) and the Council of Deans have established the policy that no loan deferment on National Direct Student Loans and Guaranteed Student Loans for any resident or fellow past PGY II will be certified. Loan deferment requests for other types of loans will be processed on an individual basis by the Housestaff Affairs Office room 6234 Shands Hospital (phone 265-0787).

## Meal Tickets

Each resident will be issued meal tickets for each night of in house call, valued at \$1 each, at the beginning of the academic year. These tickets are expected to last for the entire year. Please budget your expenditures accordingly.

## Resident Professional Development Academic Fund

Each Pediatric Pulmonology sub-specialty resident is allotted \$1000 each year of the fellowship period. There is no carryover, so you should spend your allotment each year. Funds may be used for dues, subscriptions, books, and meetings. Meeting expenditures require the approval of the Program Director.

## Sub-specialty Resident Recruitment

All Pediatric Pulmonary sub-specialty residents will be chosen through the NRMP except at the direction of the Program Director, Division Chief and Department Chairman. A divisional recruitment committee shall serve as an oversight committee of the recruitment procedures. The committee shall include the Training Program Director, Division Chief and selected faculty, staff and fellows. They will jointly determine days to interview, number of applicants, applicant scheduling, etc.

## Pediatric Pulmonology Sub-specialty Resident Selection

The Department of Pediatrics follows the institutional guidelines for interviewing and selecting residents.

At the end of the interview process the recruitment committee will consider all potential applicants and reach a consensus regarding the order of their ranking. The Department Chairman shall have the final decision if consensus cannot be reached. The ranking will be submitted to the NRMP.

## Living Quarters

There are no departmental provisions for living quarters. Pediatric Pulmonary sub-specialty Residents who do rotations at outside institutions must provide for their own living quarters and expenses.

## Quality Assurance

The Department of Pediatrics quarterly morbidity and mortality conferences will include a report from the QA/QI Committee from its resident member. Pediatric Pulmonary sub-specialty residents will be encouraged to bring QA/QI issues to the committee and to participate in the process.



# Shands Hospital Office of Housestaff Affairs

The Office of Housestaff Affairs offers support and a voice for housestaff and serves as a clearinghouse for information. Call Sharron Wallace at 265-0787 anytime. Ongoing services include Monthly Newsletter, The Housestaff Lounge – stocked daily with snacks and drinks, the lounge is a good place to have a moment of time-out. The room is equipped with a television, a VCR, computers for online access to Medline, WordPerfect, Microsoft Word, Excel and the Hospital Information System. Also available is the Housestaff Gym in Room 11-529 which is equipped with shower facilities created by the Medical Alumni Association.

## Annual Leave / Sick Leave

1. All residents and fellows will have 15 working days of vacation per year. Weekends are not included as working days. Leave slips must be filled out prior to vacation. If vacation is not requested, vacation will be included in your schedule.
2. Residents must submit a vacation request at least 1 month ahead of the requested date. If vacations are requested later than that they may not be approved because of difficulty rescheduling continuity care patients. All vacation requests must be approved by the Program Director. If the schedule for that rotation has already been written, then the resident is responsible for covering any backup or weekend assignments.
3. Vacation cannot be taken during the inpatient consultation rotations. Vacations are allowed the last week of June under special circumstances only. This must be approved by the program director.
4. Vacation may be carried from one year to the next to a maximum of twenty-five days (5 weeks).
5. Each resident is allowed 10 days of paid sick leave annually. The Program Director must be contacted when a resident is sick and a leave slip must be filled out upon return.
6. Sick Leave may be carried from one year to the next to a maximum of fifteen days (3 weeks).
7. Residents arranging a change in the schedule must email your request to the Program Director and his/her designee. All switches must be approved by the Program Director.

## Maternity/Paternity Leave Policy for Residents/Subspecialty Residents

1. The duration of maternity leave before and/or after delivery will be determined by the resident and her physician. Requests for leave in excess of three months must be approved by the Program Director and Department Chairman.
2. It is an option for the resident to use vacation time prior to being placed on leave without pay. Any illness caused by or contributed to by pregnancy, miscarriage, abortion, childbirth, and recovery from (including uncomplicated pregnancy), shall be treated as a temporary disability, and the resident shall be allowed to use sick leave. Beyond available annual and sick leave, leave will be unpaid.
3. While on unpaid leave, the resident's insurance benefits will be maintained by the department for two months.
4. Annual leave may be advanced to a resident proportionate to expected service, not to exceed the amount of his or her leave earning rate. The amount of advanced leave cannot exceed that which can be earned during the remainder of the academic year. Caution: Annual leave which has been granted and which has not been earned by the postgraduate trainee at the time of separation from the department will require an appropriate reduction for the value thereof in the final stipend payment.
5. The total time allowed away from the program in any given year or for the duration of the residency program will be determined by the requirements of the American Board of Pediatrics. The current

requirement is completion of 33 months total training. Thus, if a total of more than three months is missed, an explanation to the ABP by the program director is required. Make-up training may be required by either the residency program or the ABP credentials committee.

6. The resident will be paid for make-up or extended time, and fringe benefits will be maintained during this period.
7. Changes in the rotation schedule may be made for a resident who is pregnant if these changes are approved by the Program Director, Division Chief and Department Chairman.
8. Paternity leave of two weeks can be granted with the same provisions as maternity leave (see #2, #3). Residents who will want to take paternity leave must notify the Program Director as early as possible.
9. Maternity and Paternity leave policies also apply to adoptions and foster care.
10. Domestic Violence Leave: Residents are eligible up to 3 days leave in a twelve-month period if the resident or a family or household member is a victim of domestic violence. The fiscal year of July 1 to June 30 will be considered the 12 month period. Except in case of imminent danger to the health or safety of a resident, or the health or safety of a family or household member, a resident seeking leave from work under this section must provide his or her program director advanced notice of the leave. The resident is required to use accrued sick or annual leave. In the event that the employee does not have sufficient leave hours to cover the event, the leave that is not covered will be unpaid.
11. Bereavement Leave: Residents shall be granted, upon request to the program director, up to 5 days off for funeral of an immediate family member. Residents are granted 2 days of bereavement pay and for the other 3 days, the resident may use their sick or annual leave time. Immediate family shall include spouse, cohabiters, registered same sex domestic partners, children, step children, parents, parents of spouse, and the stepparents, grandparents, grandchildren, brothers, and sisters.
12. Military Leave: Absences for temporary military duty (e.g. two-week annual training) will not be taken from sick or annual leave but will be considered leave with pay for up to 17 days. If activated from reserve to active duty status, the resident will receive thirty (30) days full pay before going on leave without pay. Insurance policies will remain in effect for dependents during the period of active duty for one year. Additional extensions require special approval from the Dean of the College of Medicine.
13. Jury Duty Leave: Residents who are summoned to jury duty will be granted paid leave for all hours required for such duty. If jury duty does not require absence for the entire workday, the employee should return to work immediately upon release by the court. The university will not reimburse the employee for meals, lodging, and travel expense while as a juror. This type of leave must be approved by program director in advance. Any absences must be made up in accordance with specialty board policy. The resident will be paid for makeup or extended time.
14. Educational Assignment: Resident shall be eligible for absence pertaining to educational and training provided it is allowed by the appropriate board and agreed to, in writing, by the program director. This should not be charged as either annual or sick leave.
15. Licensure Examination Leave: Residents taking American specialty board and state licensure examinations will be authorized leave at the discretion of the program director. The amount of absence authorized will not exceed the time actually required for taking the examination and for travel to and from the place of examinations. Only one licensure exam shall be authorized per resident member (Two Days for USMLE III). Any additional absence will be charged to annual leave or leave without pay if annual leave is not available.
16. Holidays: Residents shall be entitled to observe all official holidays designated by the Department of Administration for state employees except when they are on call for clinical responsibilities. Please refer to the [UF College of Medicine Leave policy](#) for residents for further questions.

# Patient Care Policies & Procedures

## Consultation Policy

The Chief Resident is responsible during weekdays for receiving and responding to requests for consultation submitted by other services. On weeknights and weekends, the senior resident is responsible for general pediatrics consults. They should be discussed with and signed off by the general attending. Pediatric subspecialty consults should be directed to the appropriate subspecialty attending or fellow. When a request for consultation is received, it must be responded too as soon as possible.

A note must be written in the chart at the **time of consultation**. All consultations should then be presented to the appropriate staff member who may choose to write an additional note in the chart.

It is not appropriate to expect other services to “do their own septic work ups” or “handle simple problems” themselves. A consultation is a request for help. Whether the nature of that help is simple and basic, or complex and tertiary, is irrelevant. The speed, courtesy and accuracy of our consultation service determine the reputation of this Department within the medical complex. Let us make it a well-deserved reputation of excellence.

## Pediatric Patient Care and Rotation Policies

(Level of Responsibility)

### 1. Inpatient Consultation Service

All patients are to be pre-rounded on prior to making rounds with the attending pulmonologist on call. Every patient must have a daily physical exam, progress note, and specific plan. The general pediatric residents are primarily responsible for scheduling all necessary procedures – EXCEPT bronchoscopy, and exercise physiology studies. (These will be scheduled by the Pediatric Pulmonary fellow or attending physician.) The intern is also primarily responsible for all non-routine phlebotomy draws that cannot be scheduled with Shands phlebotomy team. The attending physician must be notified immediately of any changes in a patient's condition, transfer to another service or unit (PICU), or impending discharge.

Each Saturday and Sunday, progress notes must be written in EPIC by the Pediatric Pulmonary subspecialty resident on each patient assigned to the Pulmonary service. These will be co-signed by the attending on call with the resident.

2. **Electives:** See subspecialty specific objectives.
3. **Continuity Care Clinic (CC):** Morning clinic starts at 8:00 am and afternoon clinic at 1:00 pm. Friday morning clinic starts at 9:00 am. Residents are expected to remain at clinic until all patients are seen and have left clinic. Continuity clinics cannot be cancelled with less than 1 month notice. If this is absolutely necessary, it must be discussed with the Program Director. Fellows cannot ask other fellows to cover their CC without permission from the Program Director.

# Medical Records

The medical record is an essential ingredient for good medical care. The record serves many purposes and proper documentation, chart completion and respect for the medical record are expected of all residents/fellows. The medical record is, and always will be, an important part of your medical career, so the time to develop good habits is now!

You are referred to Physician Orientation to Health Information and Record Management, Shands Hospital, for a full description of medical record documentation and department services. Key highlights are listed below:

## Documentation – now almost entirely by EMR (Epic) rather than dictation

- Indicate patient's full name and medical record number in the upper right corner of all forms.
- Write your note immediately after treating the patient. The longer you wait, the less you will retain about the patient.
- Be specific.
- **Sign, date and time all entries.**
- Do not use abbreviations unless they are listed in the approved abbreviation list published by Health Information and Record Management.
- **Abbreviations** are not acceptable for diagnoses and **are not to be used on informed consent forms.**
- Choose your words carefully. The medical record is not the place to vehemently disagree with a policy or a colleague.
- Make alterations carefully, avoid obliterations or creating the appearance of tampering. Cross off errors with a single line, ensuring the entry is still legible. Date and initial the correction.
- Write in **black ink.**
- Write neatly so that another healthcare provider can read your entry in the record.

## Chart Completion

By law, the medical record must be complete within thirty days of a patient's discharge. *In order to accomplish this, all physicians need to complete their medical records while the patient is in house or visit the Physicians' Workroom minimally once per week. Residents should sign in to document compliance.*

Although it varies by service, most residents are responsible for signing their own progress notes, verbal orders, and dictating operative reports and discharge summaries.

Your attention to the completion of medical records is reported biweekly to the Department Chairman, the Chief of Staff, and the Department Representative to Health Information and Record Management.

**Failure to complete medical records in a timely manner may jeopardize your clinical privileges.**

The Physicians' Workroom is open Sunday through Thursday from 8 a.m. to midnight and on Friday and Saturday from 8 a.m. to 4 p.m. Calling the Workroom (5-3124) two hours before your expected arrival will expedite the retrieval of records. When you enter the Workroom, sign in at the desk so your medical records can be retrieved. When you have completed the records, sign the sheet that lists your pending medical records.

## Coding

Definition for Reporting Diagnoses and Procedures:

**Principal Diagnosis:** The condition established, after study, to be chiefly responsible for the admission of the patient to the hospital.

**Secondary Diagnosis:** All conditions that coexist at the time of admission, that develop subsequently, or that affect the treatment received and/or length of stay. Diagnoses that relate to an earlier episode, which have no bearing on the current hospital stay should be excluded.

**Principal Procedure:** The procedure that was performed for definitive treatment rather than one performed for diagnostic or exploratory purposes or for management of a complication. If there appear to be two major procedures, the one most related to the principal diagnosis should be selected as the principal procedure.

**Secondary Procedures:** These procedures are listed in order of significance using the following criteria:

1. Surgical in nature
2. Carries a procedural risk
3. Carries an anesthetic risk
4. Requires specialized training

## Coding Guidelines for Reporting Other (Additional) Diagnoses

General Rule: For reporting purposes, the definition of "other diagnoses" is interpreted as additional conditions that affect patient care by requiring:

1. Clinical evaluation
2. Therapeutic treatment
3. Diagnostic procedures, or
4. Extended length of hospital stay, or
5. Increased nursing care and/or monitoring

## Medical Transcription

Transcription is staffed 24 hours a day except Saturday and Sunday. "STAT" transcription is available for patient transfer during non-business hours and on holidays by calling 5-0131. Written instructions for using the dictation system are provided by Health Information and Record Management.

## Discharge Summaries

Discharge summaries should be entered into EPIC **on the day of discharge** by the first, second or third year resident directly responsible for the case. Timely dictation is an essential part of training, since pediatric privileges at future hospitals will be curtailed in the event that medical records are not completed promptly.

All medical records must have a handwritten or dictated discharge summary (under 48 hours, dictated summary is not required). A final progress note may be substituted for a discharge summary in the case of patients with problems of a minor nature who require less than a 48-hour period of hospitalization. A dictated discharge summary is required on the pediatric service for any patient with hospital stay greater than 48 hours.

The discharge summary concisely summarizes the reason for hospitalization, significant findings, procedures performed, treatment rendered, condition of the patient upon discharge, and any specific instructions given to the patient and family. For the majority of patients, the discharge summary should be no more than 1-2 pages in length. Be sure to include the full name and address of the referring physician so a copy of the discharge summary can be sent to that individual.

## Operative Report

**All operative reports must be entered into EPIC immediately after surgery.** Operative reports entered immediately are considered delinquent and reported daily to the Operating Room scheduling office and the Chief of Staff.

## Health Information and Record Management

A Shands Hospital Committee coordinates Health Information and Record Management activities and physician, patient and administrative needs. Do not hesitate to contact the department's representative if you have any questions or suggestions.

# Dictation (rarely used now with EPIC, emr)

## Tips For would-be Dictators

### Dont's

- **Do not** hold the microphone so close to your mouth that your voice is muffled.
- **Do not** speak too loudly, too softly, or too hurriedly.
- **Do not** speak too soon after pushing the pause button.
- **Do not** dictate when chewing gum, eating food, or drinking.
- **Do not** attempt to dictate in a crowded, noisy area.
- **Do not** attempt to carry on other conversations when dictating.
- **Do not** be resistant to constructive suggestions from secretaries or transcriptionists.
- **Do not** dictate over another letter.
- **Do not** use unconventional abbreviations (e.g., FOB, NKA).

### Do's

- Dictate or enter into EPIC discharge summaries at the time the patient is released from the hospital.
- When an operative report or discharge summary should be mailed to a referring physician, provide that individual's full name and address.
- Enunciate words clearly.
- Spell difficult words, such as the names of drugs, unusual medical disorders, or complicated surgical procedures.
- When appropriate, provide precise drug dosages and dosage intervals.
- Indicate in your dictation when punctuation is necessary.
- Indicate when a new paragraph should begin.
- Use only conventional, widely accepted abbreviations.
- Be brief, concise, and coherent. Avoid unnecessary verbiage. Try to limit letters to one page and discharge summary to a maximum of two pages.
- When an operative report or discharge summary must be transcribed immediately, be certain to press the priority button when you dictate (6, then #). After dictating, please call Medical Records so that the transcriptionist is aware you are waiting for the text (5-3128). The only time when transcriptionists are not routinely available is 1:00-6:30 a.m. on Monday. On weekends, a transcriptionist is either immediately present or on call for rush dictations.

## Discharge Summary Format

- Dictator's name and service
- Attending physician's name and position
- Referring physician's name and address
- Patient's name and medical record number
- Date of admission
- Date of discharge
- Chief complaint
- History of present illness
- Past medical history
- Family history
- Social history
- Review of systems if appropriate

- Physical examination
- Initial laboratory assessment
- Hospital course—include subsequent laboratory studies and diagnostic and therapeutic procedures by systems
- Final diagnoses
- Summary of procedures
- Condition on discharge
- Disposition and instructions to patient and family members

## Dictation Instructions From A Touch Tone Telephone

1. Dial 265-0385 from outside the hospital or 5-0385 from inside the hospital (55-0385 from Health Science Center). Listen for ID prompt.
2. Enter your physician ID number followed by the pound (#) key. Listen for password prompt.
3. Enter your password followed by the pound (#) key.
4. The system will take you immediately into DICTATION SERVICE.
5. When prompted for a work type, press 1 # for a discharge summary, 2 # for an operative report, etc. (See work types below)
6. When prompted for the subject number, enter the patient's medical record number, followed by the pound (#) key.
7. Press 2 to begin recording. There should be no tones at this time, just complete silence. If you wish to pause your dictation, press 2 to pause. To begin recording again, press the 2 again. Again, be sure to listen for any tones. A short beep every 2-3 seconds indicates you are still in pause mode and you need to press 2 to record.
8. When dictation is completed, press 8 to begin a new report or the DISCONNECT key to exit from the system. If you press 8 to begin a new report, you will be prompted for a new work type and subject number.
9. **\*\* Note:** To mark a dictation as a STAT, press the 6 on the Connexions dictate station any time after beginning to dictate and before doing step 8. Work Types:
  1. Discharge Summary
  2. **Operative Report**
  3. Clinic Note
  4. PT Note
  5. OT Note
  6. History & Physical
  7. **Consultation**



# Rotation Goals & Objectives

## OUTPATIENT Rotations - Pediatric Pulmonary Fellows

### Competency-based Goals and Objectives:

#### Overall Goal of the Pediatric Pulmonology Subspecialty Training Program:

Fellows will learn to provide multidisciplinary patient care that is compassionate, appropriate and effective for the treatment of pediatric outpatients with respiratory disorders, including those who are technology dependent.

Pulmonary Disorders with which the Pediatric Pulmonary Fellow is expected to become competent in the physiology, pathophysiology, diagnosis, evaluation and treatment include but are not limited to:

- Asthma
- Chronic cough
- Wheeze
- Dyspnea
- Hypoxia
- Pulmonary manifestations of systemic diseases
- Cystic fibrosis
- Bronchopulmonary dysplasia (chronic lung disease of infancy)
- Lower respiratory tract infections of the airways, airspaces and pleural space
- Newborn respiratory distress
- Pulmonary infections in immunocompromised hosts
- Sleep disordered breathing
- Chronic ventilatory assistance, including home mechanical ventilation such as, bi-level positive airway pressure ventilation (BiPAP), and tracheostomy management.
- Aspiration syndromes
- Hemoptysis
- Congenital anomalies of the respiratory system (*TEF, Vascular ring, CAM, Sequestration, Lung agenesis/hypoplasia, Diaphragmatic hernia, bronchogenic cyst, tracheomalacia, laryngomalacia*)
- Acquired upper airway obstruction (*vocal cord dysfunction, Subglottic stenosis*)
- Chronic suppurative lung disease (*bronchiectasis {exclude CF}, chronic bronchitis*)
- Other diseases such as pulmonary hypertension, interstitial lung disease, hemosiderosis and acute lung injuries
- Pre-operative and post-operative management of children with respiratory disorders (*scoliosis, muscular weakness, upper airway obstruction*)

## Competencies

**A. In order to provide Patient Care** that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Fellows will:

1. Gather essential and accurate information about the patient
2. Organize and prioritize responsibilities to provide patient care that is safe, effective, and efficient
3. Provide transfer of care that ensures seamless transitions
4. Interview patients and families about the particulars of the medical condition for which they seek care, with specific attention to behavioral, psychosocial, environmental, and family unit correlates of disease
5. Perform complete and accurate physical examinations
6. Make informed diagnostic and therapeutic decisions that result in optimal clinical judgment
7. Develop and carry out management plans
8. Prescribe and perform all medical procedures
9. Counsel patients and families
10. Provide effective health maintenance and anticipatory guidance
11. Use information technology to optimize patient care (combined with Practice-based Learning and Improvement)
12. Provide appropriate role modeling
13. Provide appropriate supervision

Specifically, the Pediatric Pulmonary Fellow will:

Accurately assess the nature, acuity and severity of the clinical problems  
Obtain a thorough respiratory history  
Perform a thorough respiratory system examination  
Critically analyze laboratory results  
Accurately Interpret chest X-rays  
Accurately Interpret chest CTs  
Interpret/analyze spirometry  
Interpret/analyze airway challenge study  
Interpret lung volumes  
Interpret cardiopulmonary exercise studies  
Interpret infant pulmonary function tests  
Interperet exhaled nitric oxide test results  
Interpret airway oscillation study results  
Interpret neonatal oximetry studies  
Create a pertinent differential diagnosis based on the above knowledge/skills  
Design a well thought out plan of management for the most likely diagnosis  
Discuss/defend choices with supervising faculty  
Decide with all team members best plan of care  
Discuss and educate patient-family regarding diagnosis-plan  
Document-write timely and thorough note for EMR and referring physician  
Follow-up all pending and planned studies  
Coordinate indicated consultations and diagnostic studies with other services  
Demonstrate a basic understanding of home ventilator management

Coordinate patient care to optimize urgency, efficiency and clinical importance  
Present and discuss CF patients seen in clinic at multidisciplinary review

**B. Medical Knowledge:** about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Fellows will:

1. Demonstrate sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatric pulmonology
2. Critically evaluate and apply current medical information and scientific evidence for patient care (combined with Practice-based Learning and Improvement)

Specifically, the Pediatric Pulmonary Fellow will:

Understand and interpret adherence recordings from CPAP and home apnea-bradycardia monitors

Critically analyze laboratory results

Accurately Interpret chest X-rays

Accurately Interpret chest CTs

Interpret/analyze spirometry

Interpret/analyze airway challenge study

Interpret lung volumes

Interpret cardiopulmonary exercise studies

Interpret infant pulmonary function tests

Interpret exhaled nitric oxide test results

Interpret airway oscillation study results

Interpret neonatal oximetry studies

Create a pertinent differential diagnosis based on the above knowledge/skills

Design a well thought out plan of management for the most likely diagnosis

Demonstrate a basic understanding of home ventilator management

**C. Practice-Based Learning and Improvement** involves investigation and evaluation of one's own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care. Pediatric pulmonary fellows will:

1. Identify strengths, deficiencies, and limits in one's knowledge and expertise
2. Set learning and improvement goals
3. Identify and perform appropriate learning activities to guide personal and professional development
4. Systematically analyze practice using quality improvement methods with the goal of practice improvement
5. Incorporate formative evaluation feedback into daily practice
6. Locate, appraise, and assimilate evidence from scientific studies related to their patient's health problems
7. Use information technology to optimize learning and care delivery
8. Develop the necessary skills to be an effective teacher

9. Participate in the education, of patients, families, students, residents, and other health professionals
10. Take primary responsibility for lifelong learning to improve knowledge, skills, and practice performance through familiarity with general and experience-specific goals and objectives and attendance at conferences
11. Use scientific methods and evidence to investigate, evaluate, and improve one's patient care practice in the inpatient setting
12. Identify personal learning needs, systematically organize relevant information resources for future reference, and plan for continuing acquisition of knowledge and skills
13. Use knowledge and skills of evidence-based medicine to efficiently search for, appraise and utilize the best evidence

Specifically, the pediatric pulmonary sub-specialty resident will:

Critically analyze laboratory results and continually update understanding via medical literature  
 Accurately Interpret chest X-rays and continually update understanding via medical literature  
 Accurately Interpret chest CTs and continually update understanding via medical literature  
 Interpret/analyze spirometry and continually update understanding via medical literature  
 Interpret/analyze airway challenge study and continually update understanding via medical literature  
 Interpret lung volumes and continually update understanding via medical literature  
 Interpret cardiopulmonary exercise studies and continually update understanding via medical literature  
 Interpret infant pulmonary function tests and continually update understanding via medical literature  
 Interpret exhaled nitric oxide test results  
 Interpret airway oscillation study results and continually update understanding via medical literature  
 Interpret neonatal oximetry studies and continually update understanding via medical literature  
 Create a pertinent differential diagnosis based on the above knowledge/skills  
 Design a well thought out plan of management for the most likely diagnosis and continually update understanding via medical literature  
 Decide with all team members best plan of care and continually update understanding via medical literature  
 Demonstrate a basic understanding of home ventilator management and continually update understanding via medical literature  
 Present and discuss CF patients seen in clinic at multidisciplinary review and continually update understanding via medical literature  
 Locate, appraise and assimilate evidence from scientific studies related to patients' health problems  
 Demonstrate formative evaluation feedback in daily practice  
 Use information technology to optimize learning  
 Obtain at least 10 patient satisfaction surveys every six months and review with program director

**D. Interpersonal and Communication Skills** that result in effective information exchange and teaming with patients, their families, and other health professionals. Fellows will:

1. Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
2. Demonstrate the insight and understanding into emotion and human response to emotion that allow one to appropriately develop and manage human interactions
3. Communicate effectively with physicians, other health professionals, and health related agencies
4. Work effectively as a member or leader of a health care team or other professional group
5. Act in a consultative role to other physicians and health professionals
6. Maintain comprehensive, timely, and legible medical records, if applicable
7. Demonstrate effective teaching of students, pediatric residents, colleagues and other professionals

Specifically, the Pediatric Pulmonology Sub-specialty resident will:

Accurately assess the nature, acuity and severity of the clinical problems  
Obtain a thorough respiratory history  
Perform a thorough respiratory system examination  
Critically analyze laboratory results  
Accurately Interpret chest X-rays  
Accurately Interpret chest CTs  
Interpret/analyze spirometry  
Interpret/analyze airway challenge study  
Interpret lung volumes  
Interpret cardiopulmonary exercise studies  
Interpret infant pulmonary function tests  
Interpret exhaled nitric oxide test results  
Interpret airway oscillation study results  
Interpret neonatal oximetry studies  
Create a pertinent differential diagnosis based on the above knowledge/skills  
Design a well thought out plan of management for the most likely diagnosis  
Discuss/defend choices with supervising faculty  
Decide with all team members best plan of care  
Discuss and educate patient-family regarding diagnosis-plan  
Document-write timely and thorough note for EMR and referring physician  
Follow-up all pending and planned studies  
Coordinate indicated consultations and diagnostic studies with other services  
Demonstrate a basic understanding of home ventilator management  
Coordinate patient care to optimize urgency, efficiency and clinical importance  
Present and discuss CF patients seen in clinic at multidisciplinary review  
Demonstrate compassion, integrity and respect for others  
Demonstrate respect for patient privacy and autonomy  
Demonstrate sensitivity and responsiveness to the diverse families at Shands-UF including but not limited to diversity in gender, age, culture, race, religion, disabilities and sexual orientation

Communicate effectively with patients and families across a broad range of socioeconomic and cultural backgrounds

Communicate effectively with physicians, other health professionals, health related agencies and staff in clinic and division office

Use interpreter services when necessary

Write/dictate complete and timely clinic notes/letters

Deliver well-organized, clear, understandable lectures to residents, medical students and presentations within the division, department and outside UF

Demonstrate formative evaluation feedback in daily practice

**E. Professionalism**, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Fellows will:

1. Demonstrate humanism, compassion, integrity, and respect for others based on the characteristics of an empathetic practitioner
2. Show responsiveness to patient needs that supersedes self-interest
3. Show respect for patient privacy and autonomy
4. Demonstrate a sense of duty and accountability to patients, society and the profession
5. Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities and sexual orientation
6. Demonstrate personal accountability to the well being of patients (e.g., following-up on lab test results, writing comprehensive notes, and seeking answers to patient care questions)
7. Demonstrate a commitment to professional behavior in interactions with staff and professional colleagues

Specifically, the Pediatric Pulmonology Sub-specialty Resident will:

Demonstrate compassion, integrity and respect for others

Demonstrate responsiveness to patient needs that supersedes self-interest

Demonstrate respect for patient privacy and autonomy

Demonstrate sensitivity and responsiveness to the diverse families at Shands-UF including but not limited to diversity in gender, age, culture, race, religion, disabilities and sexual orientation

Communicate effectively with patients and families across a broad range of socioeconomic and cultural backgrounds

Communicate effectively with physicians, other health professionals, health related agencies and staff in clinic and division office

Use interpreter services when necessary

Write/dictate complete and timely clinic notes/letters

Demonstrate formative evaluation feedback in daily practice

**F. Systems-Based Practice**, as manifested by actions that demonstrate an 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. The pediatric pulmonary fellow will:

1. Work effectively in various health care delivery settings and systems relevant to their clinical specialty
2. Coordinate patient care within the health system relevant to their clinical specialty
3. Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate
4. Advocate for quality patient care and optimal care systems
5. Work in inter-professional teams to enhance patient safety and improve patient care quality
6. Participate in identifying system errors and implementing potential system solutions
7. Know how to advocate for the promotion of health and the prevention of disease and injury in populations
8. Demonstrate an understanding of health care systems, cost control, billing and reimbursement appropriate for level of training
9. When providing care, consider cost and resource allocation without compromising quality of care
10. Take steps to avoid medical errors by recognizing the limits of his/her knowledge and expertise
11. Work with the health care team to recognize and address systems errors

Specifically, the Pediatric Pulmonary Sub-specialty Resident will:

Communicate effectively with physicians, other health professionals, health related agencies and staff in clinic and division office

Complete medical records and New Innovations entries within 24 hours of clinic

Evaluate care for adverse/critical events and demonstrate understanding of a root cause analysis

Work with and develop leadership skills with multidisciplinary health care teams

## **INPATIENT Rotations - Pediatric Pulmonary Fellows**

**Competency-based Goals and Objectives: These include all of the above outpatient goals and objectives AND the following:**

Interpret arterial blood gas values

Fellows must arrive at Morning Report on time and dress appropriately for patient care

When requested, fellow will model-teach other students or pediatric residents

Understand the appropriate coding and billing

Become competent in diagnosing and treating the conditions listed below

Understand the physiology and pathophysiology, etiology, development, clinical course, and sequelae of the disorders listed below

Demonstrate understanding of ventilator management, CPAP and BiPAP indications and use

Deliver well-organized, clear, understandable lectures to residents and medical students when requested

Coordinate patient care to optimize urgency, efficiency and clinical importance

Present and discuss patients at sign-in conference with multidisciplinary team

**Thoracentesis:** understand indications, contraindications, consent, anxiolytic therapy, pre-procedure assessment, patient position, procedure itself (NEJM video), and which laboratory tests and imaging studies are indicated before and after procedure. Understand potential complications and how to treat if they occur. (See specific Procedural Goals and Objectives below.)

**Fiberoptic bronchoscopy:** understand the indications, contraindications, potential complications, urgency, consent, pre-operative assessment, procedure itself (simulator), when bronchoalveolar lavage is indicated and how to perform, which laboratory tests are indicated before and after the procedure and how to order.

Understand potential complications and treatment if they occur

Become familiar with transbronchial biopsy, understand indications, contraindications, potential complications, urgency, consent, pre-operative assessment, procedure itself,

Understand which laboratory tests are indicated on tissue samples and how to order.

Create a bronchoscopy procedure note using the PFT lab software immediately following completion of the procedure.

Record each procedure in the New Innovations system within 24 hours.

Understand potential complications and treatment if they occur. (See specific procedural goals and objectives below.)

Describe, identify etiology, and anticipate the common causes of acute deterioration in the critically ill pediatric patient.

Describe, demonstrate knowledge of, and know the relevant pathophysiology of and pharmacology needed to treat acute deteriorations

Be able to recognize and manage: cardiopulmonary resuscitation, shock, respiratory failure, airway obstruction, the difficult airway

Maintain PALS certification

Develop an effective decision-making plan for further evaluation and management of the following problems/situations: hypoxia, hypercapnea, anxiety, agitation, pain, cardiovascular instability, tachypnea, bradypnea, apnea, increased work of breathing, wheezing, stridor, retractions, acute and chronic upper airway obstruction due to infection, trauma, congenital abnormalities, acquired obstructive lesions, foreign body, tracheobronchomalacia, obstructive sleep apnea, pulmonary hypertension, Respiratory mechanical support: Indications for initiation and cessation of mechanical support including non-invasive ventilation strategies (CPAP, BiPAP), Volume- or Pressure-control modes of ventilation, Interactive (SIMV) versus Assist control modes of ventilation, Pressure regulated-volume control (PRVC) mode high frequency oscillatory ventilation (HFOV). Common respiratory conditions in the critically ill infant/child/adolescent including but not limited to:

- Bronchiolitis
- Acute Lung Injury (ALI)/ARDS
- Pneumonia
- Atelectasis
- Status asthmaticus
- Pleural effusion/empyema
- Nosocomial or aspiration pneumonia



- Bronchopulmonary dysplasia
- Neuromuscular weakness
- drowning, immersion, submersion
- smoke inhalation
- Carbon monoxide poisoning
- Aspiration syndromes
- New post-operative lung transplantation
- End of life care

### **Objectives Pediatric Pulmonary Fellow in PICU**

#### **YEAR 1, 2 OR 3, ONE MONTH ROTATION**

Fellows must learn to provide patient care that is compassionate, appropriate, and effective for the treatment of respiratory tract disorders and for the promotion of respiratory health. The Pediatric Intensive Care Unit rotation provides the Pulmonary Fellow with the opportunity to care for children with common acute respiratory disorders.

1. **Medical Knowledge.** At the end of one month in the Pediatric Intensive Care Unit, pediatric pulmonary fellows are expected to be able to:
  - Define respiratory failure and describe different causes.
  - Summarize tests used to measure pulmonary mechanics and gas exchange.
  - Explain the role of ventilation in the acid buffering system and describe the concept of ventilation-perfusion matching and ways to assess this.
  - Describe basic modes of mechanical ventilation including NIPPV, CPAP, IMV, AC, dual modes and HFOV. Define barotrauma, volutrauma and describe the principle of permissive hypercapnia and lung-protective ventilation strategies.
  - List common microbial pathogens for both community acquired and hospital acquired respiratory infections common among pediatric intensive care patients, differentiating between immunocompetent and immunocompromised hosts.
  - Demonstrate knowledge and understanding regarding physiology, pathophysiology, diagnosis, and therapy of common conditions in pediatric intensive care patients including: acute lung injury, status asthmaticus, pulmonary infections, bronchiolitis, pneumothorax, pulmonary hypertension, congenital heart defects, hypertension, pulmonary edema and pulmonary embolus.
2. **Patient Care:** At the end of the one month Pediatric Intensive Care Unit rotation, fellows are expected to be able to:
  - Recognize respiratory failure, and manage patients on both non-invasive and noninvasive mechanical ventilatory support and apply the principles of lung-protective strategies.

- Apply the appropriate diagnostic and management strategies for common respiratory conditions in pediatric intensive care patients, including: acute lung injury, status asthmaticus, pulmonary infections, bronchiolitis, pneumothorax, pulmonary hypertension, pulmonary edema.

### **3. Interpersonal and communication skills:**

- Demonstrate effective communication skills, including communication with house staff, medical students, nursing staff, ancillary staff, and consultants, and written communication regarding patient care.
- Understand principles of adult learning theory and perform effective bedside teaching about basic PICU cases for medical students and residents. Create an organized formal lecture.

### **4. Professionalism:**

- Comply with guidelines regarding professional behavior and ethical conduct as outlined in institutional policies.
- Demonstrate ethical conduct and respect towards patients, colleagues and other individuals encountered in the work environment.
- Complete assigned tasks adequately in a timely manner.
- Demonstrate commitment to self-improvement and life-long learning, as evidenced by completion of a semi-annual self-assessment, an annual individual learning plan for competency-based learning of clinical skills and an individual development plan for scholarly work and career development.

### **5. Practice-based learning:**

- Summarize a clinical case in a concise and comprehensive manner; outline the issues in diagnostic process and clinical management that contributed to the outcome of the case and offer suggestions for improvement of care.
- Demonstrate awareness of complications of health care interventions and follow guidelines to prevent such complications.

### **6. Systems-based learning:**

- Demonstrate an awareness of the larger context and system of health care.
- Demonstrate awareness of quality of care and patient safety initiatives and implement related guidelines into practice.
- Advocate for quality of patient care and assist patients and their families in dealing with critical illness.

#### **Evaluation Tools:**

- **PICU Attending Evaluation**
- **Participation in Conferences and Rounds (including fellow presentation of cases/topics)**
- **Self Assessment**

## **Competency-Based Goals and Objectives for Procedures**

### **Fiberoptic Bronchoscopy and Thoracentesis**

#### **I. Overall educational goals for the program:**

The University of Florida Pediatric Pulmonary Fellowship program is designed to provide fellows (PGY4, 5 and 6) with extensive training and experience pertaining to the procedures of thoracentesis and fiberoptic flexible bronchoscopy, bronchoalveolar lavage, transbronchial biopsy and mucosal brushings for ciliary motion analysis. The program provides comprehensive training leading to a detailed understanding of the appropriate clinical utilization of these procedures including indications, contraindications, and alternatives. Extensive training in pre-procedural, peri-procedural, and post-procedural management of patients is emphasized. Closely supervised, hands-on, training in the performance of these procedures is provided by experienced faculty pediatric pulmonologists in order to provide fellows with broad, state-of-the-art technical skills needed to safely and effectively perform these procedures independently upon entering practice.

#### **II. Competency-based goals and objectives for each educational level:**

The educational goals of this curriculum contribute to the overarching goals of this program through the active participation of the trainee in all clinical aspects of the pediatric pulmonary service. The six categories of activities in which fellows participate lend themselves to the achievement of proficiency in the following ACGME core competencies:

##### **Patient Care:**

The first exposure to patients requiring these procedures will include an introduction to a variety of patient care skills and responsibilities. For example:

Receiving consultations and requests for thoracentesis and fiberoptic flexible bronchoscopy, bronchoalveolar lavage, transbronchial biopsy or mucosal brushings for ciliary motion analysis.

Evaluating the indications and appropriateness of requested procedures, including a consideration of alternative tests or procedures.

Pre-procedure patient evaluation including, but not limited to, an assessment of clinical lab values, procedural risk factors, medication allergies, anesthetic risk, and all other clinical factors relevant to the requested procedure.

Peri-procedural patient management, including assessment of vital signs, airway, mental status, intravenous access, etc. Performance of a targeted history and physical in assessing patients for an interventional procedure.

Post-procedural patient management, including assessment for complications, diagnosis and treatment of complications, confirming results of the procedure, etc.

### **Medical Knowledge:**

The first exposures of the fellow to these procedures (regardless of rotation) will allow acquisition of a basic fund of knowledge and experience pertaining to all clinical and procedural activities of the service.

Ability to interpret all relevant medical imaging studies and assess findings as they pertain to consideration of these pediatric pulmonary procedures, planning the procedure, and performing the procedure.

Learning the indications, alternatives, and contraindications for these procedures.

The fellow will acquire an understanding of basic pre-procedural, peri-procedural, and post-procedural patient management.

The trainee will acquire a basic set of technical skills in performing these procedures.

Read educational materials as recommended by the faculty.

Read journal articles from the peer-reviewed literature on topics related to current cases.

Read from pediatric pulmonology text books.

Participate in daily rounds when on service, at which all of the cases for the day are reviewed and discussed in detail with the attending faculty member.

Attend monthly case conferences and monthly bronchoscopy review meetings.

Develop a commitment to continuous learning and self-improvement.

### **Practice-based Learning and Improvement:**

The fellow, during his/her initial exposure to thoracentesis, fiberoptic bronchoscopy, bronchoalveolar lavage, transbronchial biopsy or mucosal biopsy for ciliary motion analysis will acquire knowledge and skills from active participation in all aspects of the pediatric pulmonary service.

Objectives include learning how to obtain a history, perform a targeted physical exam, prepare and maintain a sterile field, choose the appropriate instruments and devices for each procedure, plan the approach and steps of the procedure, and develop an understanding of how conscious sedation, monitored anesthesia, and general anesthesia can be appropriately utilized to facilitate safe and successful procedures.

Learn how to effectively and safely utilize fluoroscopy if necessary for the procedure

Understand the fundamentals of infection control, including routine washing of hands, appropriate use of masks or respirators, and appropriate handling/disposal of sharps.

Rounding on inpatients following procedures to assess their clinical status, evaluate for complications, and manage drainage catheters.

Closely supervised performance of interventional procedures

Prepare and deliver case presentations for Pediatric Pulmonary case conferences.

**Interpersonal and Communication Skills:**

During the PGY4 or first inpatient rotation or bronchoscopy procedures, the fellow will learn and practice a variety of skills involving effective and professional interaction with colleagues and patients, as well as skills related to written communication in the form of bronchoscopy reports using "Proventions" system in the lab and other written components of the EPIC electronic medical record.

Learning how to effectively interact and communicate with patients and family before, during and after a procedure.

Understanding the importance of compassion and integrity in all interactions with patients and family facing a stressful situation.

Learning the elements of a complete bronchoscopy procedure report.

Communicating and documenting communication of significant or unexpected findings or procedural outcomes.

Entering orders and writing complete notes in the patient EMR.

Interacting effectively with members of the healthcare team from other departments, including becoming an effective consultant.

Interacting effectively with all members of the Pediatric Pulmonary interdisciplinary healthcare team, including nurses, technologists, pharmacists, nutritionists, social workers, respiratory therapists, physicians, administrators, and clerical personnel.

**Professionalism:**

- The PGY4 pediatric pulmonary fellow will often have daily contact with other health professionals, staff, patients and families in clinical and non-clinical settings involving considerable patient contact and contact with many other healthcare teams and providers. During this time, the trainee will have extensive opportunities to refine skills, practices, and behaviors consistent with a high level of professionalism.
- Obtaining informed consent from patients and family effectively, openly, and with compassion. This includes a balanced and realistic presentation of the indications, alternatives, attendant risks, and potential complications/benefits of the procedure.
- Understanding the critical importance of a professional demeanor and professional conduct at all times in the hospital work environment.
- Understanding what constitutes appropriate discussions and conduct in the presence of a patient or patient's family, even if the patient is sedated.

- Requirement of professional attire and grooming in the hospital.
- Maintaining patient privacy and dignity and not discriminating based on religion, ethnic, sexual, or educational differences.
- Not compromising confidential patient information through public conversations, unsecure electronic communications, on-line social media, or other avenues.
- Recognizing ones limits as a member of the pediatric pulmonary team and knowing when to seek help or advice from faculty or other experienced members of the team.
- Demonstrating commitment to patient welfare, respect for colleagues and all support staff, dependability, punctuality, and adherence to all relevant policies/procedures.

#### **Systems-based Practice:**

The PGY4 or first inpatient or procedure rotation the pediatric pulmonary service will introduce the fellow to the use of many tools enabling a systems-based approach to our service.

The fellow will make extensive use of multiple information systems in the hospital including the EPIC based electronic medical record (EMR).

Other online tools are used for educational and research purposes.

Understand the rationale and importance of policies pertaining to confirming patient identity, appropriate procedure, and presence of appropriate personnel before performing an interventional procedure.

Understanding medicolegal considerations of a pediatric pulmonary practice, including the importance of complete and accurate documentation in the medical record and procedure reports.

Participating in and understanding the importance of quality assurance or morbidity/mortality rounds as a means to identify areas for improving patient care and outcomes.

Learn how to apply diagnostic and procedural codes for the various procedures performed in the section.

**PGY 4.5-5 / rotation 3 or 4.** The educational goals of this rotation build on all of the core competency goals and objectives outlined above.

#### **Patient Care:**

- The PGY 4.5-5 or 3-4th rotation on the pediatric pulmonary inpatient service will add additional experience and responsibility to the fellows' patient care education.
- Learning how to fully evaluate consultations and requests for procedures
- Making decisions regarding indications and appropriateness of requested procedures, including a consideration of alternative tests or procedures.
- Independently conducting pre-procedure patient evaluation and presenting impressions to the attending.
- Independent peri-procedural patient management, with assistance from attending as needed.
- Independent performance of a targeted history and physical in assessing patients for an interventional procedure and presenting results to attending.
- Increased responsibility in post-procedural patient management, with continued consultation with attending.

#### Medical Knowledge:

- The PGY 4.5-5 or 3-4<sup>th</sup> rotation on the pediatric pulmonary inpatient service will allow for expanding the fellows fund of knowledge and experience pertaining to all clinical and procedural activities of the service.
- Improving skills in interpreting all relevant medical imaging studies and assessing findings as they pertain to consideration of a pediatric pulmonary invasive procedure, planning the procedure, and performing the procedure.
- Refining understanding of the indications, alternatives, and contraindications for the various procedures.
- The fellow will become more proficient in pre-procedural, peri-procedural, and post-procedural patient management.
- The fellow will improve on and learn new technical skills in performing pediatric pulmonary procedures.
- Continue to study educational materials including textbooks and peer-reviewed literature.
- Make a habit of reading journal articles from the peer-reviewed literature on topics related to current cases.
- Participate in daily rounds, when on service, at which all of the cases for the day are reviewed and discussed in detail with the faculty attending.
- Attend monthly case conferences and weekly didactic lectures/demonstrations.
- Develop a commitment to continuous learning and self-improvement.

#### Practice-based Learning and Improvement:

- The pediatric pulmonary fellow, during the PGY4.5-5 or 3-4<sup>th</sup> inpatient rotation, will acquire increasing knowledge and skills from active participation in all aspects of the pediatric pulmonary service.
- Objectives include becoming more proficient in obtaining a history, performing a targeted physical exam, preparing and maintaining a sterile field, choosing the appropriate instruments and devices for each procedure, planning the approach and steps of the procedure, and understanding of how conscious sedation, monitored anesthesia, and general anesthesia can be appropriately utilized to facilitate safe and successful procedures.
- Develop a critical understanding of the advantages and disadvantages of performing various interventional procedures.
- Optimize the effective and safe utilization imaging modalities in performing procedures.
- Follow strict fundamentals of infection control, including routine washing of hands, appropriate use of masks or respirators, and appropriate handling/disposal of sharps.
- Increasing hands-on performance of interventional procedures with supervision by the attending. The attending will intervene when in the best interest of the patient or to demonstrate a technique.
- Advancing the technical difficulty of procedures and techniques performed by the fellow.
- Responsibility to prepare and deliver case presentations for case conferences.

#### Interpersonal and Communication Skills:

- During the PGY4.5-5 or 3-4<sup>th</sup> inpatient rotation, the fellow will practice and improve on a variety of skills involving effective and professional interaction with colleagues and patients, as well as skills related to written communication in the form of radiology report dictations and other written components of the medical record.

- Gaining experience in effectively interacting and communicating with patients and family before, during and after a procedure.
- Prioritizing the importance of compassion and integrity in all interactions with patients and family facing a stressful situation.
- Mastering the elements of a complete radiology procedure report.
- Improving skills in dictating an accurate, concise, and complete procedure report.
- Consistently communicating and documenting communication of significant or unexpected imaging findings or procedural outcomes.
- Always writing complete notes in the patient EMR and Provisions.
- Taking on greater responsibility for interacting effectively with members of the healthcare team from other departments, including becoming an effective consultant.
- Consistently interacting effectively with all members of the Pediatric Pulmonary healthcare team, including nurses, technologists, physicians, administrators, and clerical personnel.

#### **Professionalism:**

- The PGY4.5-5 or 3-4 rotation on the inpatient service will continue to involve the fellow in considerable patient contact and contact with many other healthcare teams and providers. During this rotation the fellow will have extensive opportunities to refine skills, practices, and behaviors consistent with a high level of professionalism.
- Gaining experience in obtaining informed consent from patients and family effectively, openly, and with compassion. This includes a balanced and realistic presentation of the indications, alternatives, attendant risks, and potential complications/benefits of the procedure.
- Maintaining a commitment to a professional demeanor and professional conduct at all times in the hospital work environment.
- Beginning to develop an understanding of the leadership role played by physicians in the operation of a pediatric pulmonary service.
- Maintaining patient privacy and dignity and not discriminating based on religion, ethnic, sexual, or educational differences.
- Not compromising confidential patient information through public conversations, unsecure electronic communications, on-line social media, or other avenues.
- Continuing to recognize one's limits as a member of the pediatric pulmonary team and knowing when to seek help or advice from faculty or other experienced members of the team.
- Setting an example for junior fellows through commitment to patient welfare, respect for colleagues and all support staff, dependability, punctuality, and adherence to all relevant policies/procedures.

#### **Systems-based Practice:**

- The PGY4.5-5 or 3-4 rotation on the inpatient service will allow the fellow to master the use of many tools enabling a systems-based approach to our CSIR service.
- The fellow will continue to make extensive use of multiple information systems in the hospital including the EPIC electronic medical record (EMR) and Provisions. Other online tools are used for educational and research purposes.
- Understand the rationale and importance of hospital and accrediting body policies pertaining to confirming patient identity, appropriate procedure, correct organ and side, and presence of appropriate personnel before performing an interventional procedure.



- Improve understanding medicolegal considerations of a pediatric pulmonary practice. Learn the importance of establishing an effective doctor-patient relationship based on communication, compassion, and respect. Learn how to handle adverse events through honest communication with the patient and family and by seeking assistance from hospital risk-management services.
- Continued participation in and understanding the importance of quality assurance or morbidity/mortality rounds as a means to identify areas for improving patient care and outcomes.
- Become more proficient in applying diagnostic and procedural codes for the various procedures performed in the section.

**PGY 5-6 or beginning in Rotations 6-8.** The educational goals beginning in these later rotations build on all of the core competency goals and objectives outlined above and by the completion of the third rotation will lead to a strong level of competency in Pediatric Pulmonary procedures, sufficient for functioning as an effective and safe independent practitioner.

#### **Patient Care:**

- The PGY 5-6 or beginning in Rotations 6-8 on the pediatric pulmonary inpatient service will include and build on all previously mentioned objectives and goals.
- During the third rotation the fellow will assume greater responsibility and independence for the spectrum of competency-based activities and duties outlined above.
- For each of the competency-based goals and objectives listed under earlier levels of experience, the fellow now, and on subsequent rotations, will continue to develop and practice the skills and attributes listed above. There are no artificial divisions of objectives that can only be addressed on a particular rotation. The clinical situations and procedures presenting to the pediatric pulmonary service tend to require a complete, comprehensive approach to patient management. Within this context, however, instruction by the faculty is tailored to emphasize basic skills on the first rotation and increasingly advanced skills on subsequent rotations. Each of the competencies described above is addressed on a continuous basis, taking into account individual trainee strengths and weaknesses, aptitude, and performance.

#### **Medical Knowledge:**

- The PGY 5-6 or beginning in Rotations 6-8 on the pediatric pulmonary inpatient service will expand the fellow's fund of knowledge and experience pertaining to all clinical and procedural activities of the service.
- The trainee will increase his or her knowledge base in all of the competency goals and objectives outlined above.
- The importance of a life-long commitment to increasing medical knowledge will be stressed.

#### **Practice-based Learning and Improvement:**

- The fellow, during the PGY 5-6 or beginning in Rotations 6-8, will continue to acquire knowledge and skills from active participation in all aspects of the pediatric pulmonary service.
- Objectives include all of the competency based goals and objectives listed above, with increasing emphasis on decision making, clinical judgment, and independence.

- Many of the skills learned by the trainees are dictated by the challenges of the case at hand, more so than the level of training. In this regard, the high volume of bronchoscopies performed by the pediatric pulmonary service provides ample opportunity for the fellow to become facile with a broad range of clinical and procedural scenarios.
- The fellow will be allowed to progressively participate in and perform more difficult and more complex cases, always under the direct supervision of the attending faculty, and as appropriate for the fellow's level of competency.
- The fellow will begin to perform increasingly difficult or challenging cases

#### **Interpersonal and Communication Skills:**

- During the PGY 5-6 or beginning in Rotations 6-8, the fellow will practice and improve on a variety of skills involving effective and professional interaction with colleagues and patients, as well as skills related to written communication in the form of bronchoscopy reports and other written components of the medical record.
- All of the competency objectives listed for the first and second rotations continue to be addressed during the third rotation, with the addition of a greater emphasis on responsibility and independence of the trainee.

#### **Professionalism:**

- The PGY 5-6 or beginning in Rotations 6-8, the pediatric pulmonary fellow will again be in a clinical setting involving considerable patient contact and contact with many other healthcare teams and providers. During this rotation the fellow will have extensive opportunities to refine skills, practices, and behaviors consistent with a high level of professionalism.
- All of the objectives and goals under this core competency category, as listed for earlier rotations will continue to be addressed during the third and elective rotations.
- All of the competencies relating to professionalism will be refined in the context of increasing fellow responsibility and independence.

#### **Systems-based Practice:**

- The PGY 5-6 or beginning in Rotations 6-8 the pediatric pulmonary fellow will become very experienced and comfortable with the routine use of the many tools enabling a systems-based approach to our service and procedures.
- The fellow will improve on an understanding of and appreciation for the systems-based approach to healthcare, in the context of increasing trainee responsibility and independence. All of previously listed objectives pertaining to systems-based practice will continue to be addressed.
- The trainee on rotation 3 will assume primary responsibility for preparing and presenting cases at the Case conference and the bronchoscopy review conference.

- The fellow will assist in the orientation and education of more junior and less experienced fellows, residents and medical students their rotations on the pediatric pulmonary service.
- Opportunities for participating in research projects related to pediatric pulmonary questions are available to fellows at any point in their training.

### **III. Delineation of fellow responsibilities for patient care, progressive responsibility for patient management, and supervision of fellows over the continuum of the program:**

Fellows are encouraged to participate in all clinical aspects of the Pediatric Pulmonary service as their knowledge base and experience allow. During the first clinical rotations, the fellow will observe several procedures performed on the service, but also begin to actively participate under close supervision by the attending pediatric pulmonary physician. The fellow does begin to perform procedures even on the first rotation, but only with careful step-by-step guidance and instruction by the attending. Throughout the second and third years, the fellow develops a more detailed and comprehensive fund of knowledge and greater procedural experience allowing him/her to function more efficiently and effectively. Initially, fellows receive formative feedback and are evaluated by the attending at the completion of each procedure through a formal Bronchoscopy evaluation form that includes fields for comments. Evaluations take into account the trainees fund of knowledge, technical skills, quality of dictated reports, compassion and patient care, and other parameters. These formal evaluations and the day-to-day assessment by the faculty form the basis for allowing the fellow to ultimately perform all portions of a bronchoscopy, in progressively more complex situations. Fellows maintain a procedure log which documents their procedural experience. By the end of the third year, the fellow has achieved a high level of competence and is prepared to perform pediatric pulmonary procedures independently as a practicing pediatric pulmonologist.

## **Asthma Research Rotation For Pediatric Pulmonary Fellows**

Overall Goal: To gain an appreciation for clinical research on asthma pharmacotherapy

### Learning Objectives

While participating in asthma research studies, a Pediatric Pulmonary fellow will be able to:

#### **PATIENT CARE:**

1. Understand the ongoing research protocol
2. Determine whether a research subject qualifies for a study
3. Make decisions regarding stopping or continuing a study visit under different clinical circumstances
4. Perform and interpret spirometry based upon ATS guidelines
5. Perform and interpret methacholine challenges based upon ATS Guidelines

#### MEDICAL KNOWLEDGE:

1. Understand the ongoing research protocol
2. Determine whether a research subject qualifies for a study
3. Make decisions regarding stopping or continuing a study visit under different clinical circumstances
4. Perform and interpret spirometry based upon ATS guidelines
5. Perform and interpret methacholine challenges based upon ATS Guidelines

#### INTERPERSONAL AND COMMUNICATION SKILLS:

1. Understand the ongoing research protocol
2. Determine whether a research subject qualifies for a study
3. Make decisions regarding stopping or continuing a study visit under different clinical circumstances
4. Perform and interpret methacholine challenges based upon ATS Guidelines

#### PROFESSIONALISM:

1. Understand the ongoing research protocol
2. Determine whether a research subject qualifies for a study
3. Make decisions regarding stopping or continuing a study visit under different clinical circumstances
4. Perform and interpret spirometry based upon ATS guidelines
5. Perform and interpret methacholine challenges based upon ATS Guidelines

#### PRACTICE-BASED LEARNING AND IMPROVEMENT:

1. Understand the ongoing research protocol
2. Determine whether a research subject qualifies for a study
3. Make decisions regarding stopping or continuing a study visit under different clinical circumstances
4. Perform and interpret spirometry based upon ATS guidelines
5. Perform and interpret methacholine challenges based upon ATS Guidelines

#### Learning Activities

1. Read and learn study protocol
2. Meet with sponsors at site initiation visit
3. Function as a study physician
4. Review medical history and perform a physical on new subjects
5. On call to provide advice during methacholine challenges
6. Make decisions about treating subjects with prednisone and/or inhaled steroids
7. Read ATS Guidelines on spirometry and methacholine challenge
8. Perform several methacholine challenges
9. Interpret results of challenges
10. Make decisions regarding discharge medications when a subject completes a study

## Methods of Evaluation

1. The study sponsor's monitor will evaluate the case report forms completed by the fellow and provide written comment
2. The study coordinator or RT will give the fellow feedback during PFTs and methacholine challenge practices.

A self-assessment exam will be given at the completion of the methacholine training

## **Goals and Objectives for Pediatric Pulmonary Fellows on Pediatric Sleep Medicine Rotation**

At the end of this two week rotation (**whether completed in the 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> year of training**), the Pediatric Pulmonary fellow will

### **Patient Care:**

Be able to discuss various aspects of pediatric polysomnography including –

Terminology (TST, sleep latency, REM latency, WASO, sleep stages, AHI, Arousal index, PLM index, hypnogram)

Event identification (central apneas, obstructive apneas, hypopneas, periodic leg movements, arousals, oxygen desaturation, hypoventilation)

Challenges in performing studies in children including age appropriate approach and observation of patient hook-up in the sleep lab

Differences in interpretation between adults and children

Discuss and demonstrate the evaluation and management of sleep disorders in children including

Obstructive sleep apnea syndrome

Parasomnias (sleep walking, confusional arousals, night terrors, nightmares, bruxism,

Rhythmic movement disorders (head banging, body rocking, head rolling)

Restless legs syndrome/periodic leg movements

Behavioral insomnias of childhood (limit setting disorder, sleep onset association disorder)

Delayed sleep phase disorder  
Central congenital hypoventilation syndrome

Understand and discuss normal changes in sleep in children including timing, duration, napping, and sleep architecture.

Understand and be able to discuss the various aspects of OSA in children including  
Differences between children and adult patterns of OSA  
Evaluation of OSA (sleep study, nap study, oximetry, sleep questionnaires)  
Approaches to treatment (surgery, medications, weight loss, CPAP/APAP/BiLevel, EPR)  
CPAP treatment specifics (mask fitting, appropriate pressure, adherence reports)

### **Medical Knowledge:**

Read Dr. Berry's book titled Sleep Medicine Pearls

Be able to discuss various aspects of pediatric polysomnography including –

Terminology (TST, sleep latency, REM latency, WASO, sleep stages, AHI, Arousal index, PLM index, hypnogram)  
Event identification (central apneas, obstructive apneas, hypopneas, periodic leg movements, arousals, oxygen desaturation, hypoventilation)  
Challenges in performing studies in children including age appropriate approach and observation of patient hook-up in the sleep lab  
Differences in interpretation between adults and children

Discuss and demonstrate the evaluation and management of sleep disorders in children including

Obstructive sleep apnea syndrome  
Parasomnias (sleep walking, confusional arousals, night terrors, nightmares, bruxism,  
Rhythmic movement disorders (head banging, body rocking, head rolling)  
Restless legs syndrome/periodic leg movements  
Behavioral insomnias of childhood (limit setting disorder, sleep onset association disorder)  
Delayed sleep phase disorder  
Central congenital hypoventilation syndrome

Understand and discuss normal changes in sleep in children including timing, duration, napping, and sleep architecture.

Understand and be able to discuss the various aspects of OSA in children including  
Differences between children and adult patterns of OSA  
Evaluation of OSA (sleep study, nap study, oximetry, sleep questionnaires)

Approaches to treatment (surgery, medications, weight loss,  
CPAP/APAP/BiLevel, EPR)  
CPAP treatment specifics (mask fitting, appropriate pressure, adherence reports)

### **Practice-based Learning and Improvement:**

Read Dr. Berry's book titled Sleep Medicine Pearls

Be able to discuss various aspects of pediatric polysomnography including –

Terminology (TST, sleep latency, REM latency, WASO, sleep stages, AHI, Arousal index, PLM index, hypnogram)

Event identification (central apneas, obstructive apneas, hypopneas, periodic leg movements, arousals, oxygen desaturation, hypoventilation)

Challenges in performing studies in children including age appropriate approach and observation of patient hook-up in the sleep lab

Differences in interpretation between adults and children

Understand and discuss normal changes in sleep in children including timing, duration, napping, and sleep architecture.

Understand and be able to discuss the various aspects of OSA in children including

Differences between children and adult patterns of OSA

Evaluation of OSA (sleep study, nap study, oximetry, sleep questionnaires)

Approaches to treatment (surgery, medications, weight loss,

CPAP/APAP/BiLevel, EPR)

CPAP treatment specifics (mask fitting, appropriate pressure, adherence reports)

### **Interpersonal and Communication Skills:**

Be able to discuss various aspects of pediatric polysomnography including –

Terminology (TST, sleep latency, REM latency, WASO, sleep stages, AHI, Arousal index, PLM index, hypnogram)

Event identification (central apneas, obstructive apneas, hypopneas, periodic leg movements, arousals, oxygen desaturation, hypoventilation)

Challenges in performing studies in children including age appropriate approach and observation of patient hook-up in the sleep lab

Differences in interpretation between adults and children

Discuss and demonstrate the evaluation and management of sleep disorders in children including

Obstructive sleep apnea syndrome

Parasomnias (sleep walking, confusional arousals, night terrors, nightmares, bruxism,

Rhythmic movement disorders (head banging, body rocking, head rolling)

Restless legs syndrome/periodic leg movements

- Behavioral insomnias of childhood (limit setting disorder, sleep onset association disorder)
- Delayed sleep phase disorder
- Central congenital hypoventilation syndrome

Understand and discuss normal changes in sleep in children including timing, duration, napping, and sleep architecture.

Understand and be able to discuss the various aspects of OSA in children including

- Differences between children and adult patterns of OSA
- Evaluation of OSA (sleep study, nap study, oximetry, sleep questionnaires)
- Approaches to treatment (surgery, medications, weight loss, CPAP/APAP/BiLevel, EPR)
- CPAP treatment specifics (mask fitting, appropriate pressure, adherence reports)

### **Professionalism:**

Read Dr. Berry's book titled Sleep Medicine Pearls

Be able to discuss various aspects of pediatric polysomnography including –

- Terminology (TST, sleep latency, REM latency, WASO, sleep stages, AHI, Arousal index, PLM index, hypnogram)
- Event identification (central apneas, obstructive apneas, hypopneas, periodic leg movements, arousals, oxygen desaturation, hypoventilation)
- Challenges in performing studies in children including age appropriate approach and observation of patient hook-up in the sleep lab
- Differences in interpretation between adults and children

Discuss and demonstrate the evaluation and management of sleep disorders in children including

- Obstructive sleep apnea syndrome
- Parasomnias (sleep walking, confusional arousals, night terrors, nightmares, bruxism,
- Rhythmic movement disorders (head banging, body rocking, head rolling)
- Restless legs syndrome/periodic leg movements
- Behavioral insomnias of childhood (limit setting disorder, sleep onset association disorder)
- Delayed sleep phase disorder
- Central congenital hypoventilation syndrome

Understand and discuss normal changes in sleep in children including timing, duration, napping, and sleep architecture.

Understand and be able to discuss the various aspects of OSA in children including

- Differences between children and adult patterns of OSA
- Evaluation of OSA (sleep study, nap study, oximetry, sleep questionnaires)



Approaches to treatment (surgery, medications, weight loss,  
CPAP/APAP/BiLevel, EPR)  
CPAP treatment specifics (mask fitting, appropriate pressure, adherence reports)

### **Systems-based Practice:**

Be able to discuss various aspects of pediatric polysomnography including –

Terminology (TST, sleep latency, REM latency, WASO, sleep stages, AHI, Arousal index, PLM index, hypnogram)  
Event identification (central apneas, obstructive apneas, hypopneas, periodic leg movements, arousals, oxygen desaturation, hypoventilation)  
Challenges in performing studies in children including age appropriate approach and observation of patient hook-up in the sleep lab  
Differences in interpretation between adults and children

Understand and be able to discuss the various aspects of OSA in children including  
Differences between children and adult patterns of OSA  
Evaluation of OSA (sleep study, nap study, oximetry, sleep questionnaires)  
Approaches to treatment (surgery, medications, weight loss, CPAP/APAP/BiLevel, EPR)  
CPAP treatment specifics (mask fitting, appropriate pressure, adherence reports)

Discuss and demonstrate the evaluation and management of sleep disorders in children including

Obstructive sleep apnea syndrome  
Parasomnias (sleep walking, confusional arousals, night terrors, nightmares, bruxism,  
Rhythmic movement disorders (head banging, body rocking, head rolling)  
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Behavioral insomnias of childhood (limit setting disorder, sleep onset association disorder)  
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Restless legs syndrome/periodic leg movements  
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Delayed sleep phase disorder  
Central congenital hypoventilation syndrome

Understand and be able to discuss the various aspects of OSA in children including  
Differences between children and adult patterns of OSA  
Evaluation of OSA (sleep study, nap study, oximetry, sleep questionnaires)  
Approaches to treatment (surgery, medications, weight loss,  
CPAP/APAP/BiLevel, EPR)  
CPAP treatment specifics (mask fitting, appropriate pressure, adherence reports)

## Goals and Objectives: Pediatric Pulmonary Fellow

### PFT Lab Rotation

#### Competencies-Based Learning Objectives and Assessment Methods

<p><b>PG Year: 1</b></p> <p><b>Rotation: PFT</b></p> <p><b>Location: Shands Hospital at the University of Florida</b></p>	<p>How Topic or Skill is taught</p> <p><b>Examples:</b></p> <ol style="list-style-type: none"> <li>1. Didactic, reading</li> <li>2. Hands-on experience with test</li> </ol>	<p><b>Assessment Method(s) or Evaluation Tool</b></p> <p>(A) Direct observation (B) Evaluation by non-faculty (C) Global faculty evaluation (D) Skills checklist (SA)Self-assessment form (T) In-Training exam</p>	<p><b>What Constitutes Acceptable Performance Rating</b></p> <p><b>Examples:</b></p> <ol style="list-style-type: none"> <li>1. Clear explanation of test and testing procedure</li> <li>2. Completing steps in proper sequence</li> <li>3. Listing specific possibilities in a differential diagnosis</li> </ol>
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<p><b>Rotation objectives:</b></p> <p><b>1) Medical Knowledge (topics to be covered – must cover and assess)</b></p> <p><b>a. SPIROMETRY:</b>  Demonstrate the ability to explain what is considered the normal range of spirometry values</p> <p>Describe the flow volume loop and changes with airway obstruction</p> <p>Demonstrate how to perform the measurement of spirometry on an adult and child</p> <p><b>b. HELIUM DILUTION:</b> Recognize the principles and limitations of helium dilution measurement of lung volume. Demonstrate the ability to perform a measurement of FRC using helium dilution</p> <p>Demonstrate the ability to calculate FRC from helium dilution data.</p> <p><b>c. NITROGEN WASHOUT:</b>  Recognize the principle and limitations of nitrogen washout measurement of lung volume.</p> <p><b>d. BODY PLETHYSMOGRAPHY:</b>  Recognize the principles of pressure and volume plethysmography. Demonstrate proper technique of performing test</p> <p><b>e. RESPIRATORY MUSCLE TESTING:</b> Recognize and demonstrate how to measure inspiratory and expiratory muscle strength and the indications for when to measure them</p>	<p>1,2,</p>	<p>A, B, C, D, SA, T</p>	<p>1,2,3</p>
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<p><b>f. DIFFUSION CAPACITY:</b> Explain the methods of measuring diffusion capacity. Recognize the indications for measuring DLCO. Calculate the correction of DLCO for lung volumes and hemoglobin. Know the differential diagnosis for low values.</p> <p><b>g. BRONCHODILATOR TESTING:</b> Describe how the application of bronchodilator administration can aid in diagnosis with PFTs. Define the criteria for a positive response.</p> <p><b>h. BRONCHOPROVOCATION TESTS:</b> Describe the rationalization for bronchoprovocation testing. Contrast the different types of challenges implemented. Interpret what constitutes a positive response and the role of PC20 and PD20. Predict the possible complications and contraindications for bronchoprovocation testing</p> <p><b>i. EXERCISE TESTING:</b> Recognize indications for measuring exercise tolerance versus exercise challenge (EIA). Contrast the various methods used to test exercise tolerance. Recognize what criteria constitutes a positive response. Predict the complications and contraindications to exercise testing.</p> <p><b>j. INFANT PFTs:</b> Recognize the various methods of determining infant PFTs. Predict the risks and advantages of each method.</p> <p><b>k. INTERPRETATION:</b> Demonstrate the ability to explain the limitations of prediction equations in interpreting PFTs.</p>	1	SA	1,2,3
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**2) Patient Care Skills (including technical skills to be learned and demonstrated – must cover and assess)**

**a. SPIROMETRY:** Identify the relative variabilities of measuring FVC, FEV1, FEF25-75, FEF50, FEF75, PEF, and how to calculate each of these from the spirogram. Recognize how the flow-volume curve can aid in the interpretation of spirometry.

**b. HELIUM DILUTION:** Demonstrate the ability to calculate FRC from helium dilution data.

**c. NITROGEN WASHOUT:**  
Demonstrate the ability to calculate FRC from nitrogen washout data.

**d. BODY PLETHYSMOGRAPHY:**  
Differentiate between FRC and TGV and description of how the method of determining TGV affects the values obtained.

**e. RESPIRATORY MUSCLE TESTING:** Demonstrate how to measure inspiratory and expiratory muscle strength.

**f. DIFFUSION CAPACITY:**  
Calculate the correction of DLCO for lung volumes and hemoglobin.

**g. BRONCHODILATOR TESTING:**  
Define the criteria for a positive response.

**h. BRONCHOPROVOCATION TESTS:** Interpret what constitutes a positive response and the role of PC20 and PD20.

**i. EXERCISE TESTING:** Recognize what criteria constitute a positive response.

<p>j. INFANT PFTS: Demonstrate the ability to interpret the different variables measure by infant PFTs.</p> <p>k. INTERPRETATION: With the help of the attending, the fellow should demonstrate the ability to differentiate obstructive, restrictive, intrathoracic and extrathoracic obstruction, muscle weakness, diffusion problems.</p>			
<p><b>3) Interpersonal and Communication Skills</b></p> <p>a. Demonstrate the ability to explain to patients and their families the indications, limitations, and techniques for various measures of lung function with some help from attending</p> <p>b. Demonstrate the ability to communicate effectively with other member of the team (technicians, schedulers, billing, etc.)</p>	1,2	A, B, C, D, SA, T	1,2,3
<p><b>4) Professionalism</b></p> <p>a. Demonstrate an appreciation of patient diversity and the ethical principles of conducting pulmonary function studies in children</p>	1,2	A, B, C, D, SA, T	1,2,3
<p><b>5) Systems-Based Practice</b></p> <p>a. Demonstrate an understanding of the principles behind coding and billing practices for all laboratory procedures</p> <p>b. Demonstrate an understanding of resource allocation and demonstrate advocacy on behalf of patient care in regard to measures of lung function.</p>	1,2	A, B, C, D, SA, T	1,2,3

<b>6) Practice-Based Learning and Improvement</b> <b>a.</b> Demonstrate the ability to teach residents and medical students indications, limitations, and techniques for various measures of lung function with some help from attending. <b>b.</b> Demonstrate the ability to review the literature and assimilate advances in their understanding of the indications, limitations, and techniques for various measures of lung function	1,2	A, B, C, D, SA, T	1,2,3
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## Outside Rotations

Are you a UF Resident and want to do an outside rotation?

- Discuss your plans with your advisor and program director at UF.
- Complete the “External Short Term Hospital” form <http://www.med.ufl.edu/personel/brenda/resident%20short%20hospital%20rev%2003%2006.pdf> for a single resident.
- Or complete the “External Rotation Agreement” <http://www.med.ufl.edu/personel/brenda/Housestaff/shorttermrotationuf.PDF> for multiple residents.
- Obtain from the Program Director at the external site
  - a description of the goals and objectives of the rotation,
  - a work schedule to include all call dates and
  - an average number of pediatric patients you will be seeing and
  - Approval of the program director/preceptor and the chief executive officer at the external site where you will be completing this rotation.

This program director/preceptor must agree to evaluate you at the end of your rotation and that evaluation must be sent to your UF program director and included in your personnel file at the end of this rotation.

- Once you have the above documents, submit the documents to the Pediatric Education office for approval. This office will obtain the approval of the Institutional Graduate Medical Education Office and the UF Contract Office. A completely executed copy is required prior to beginning an outside rotation. This means all signatures, from both institutions, must be executed and a copy in your program director’s possession prior to starting this rotation.
- If the institution you wish to rotate through replaces our contract with their own institutional contract, the exact same process as above must follow. Their contract with appropriate signatures has to be reviewed and signed by your program director and the Institutional Graduate Medical Education Office and the UF Contract Office.
- Please refer to the [ACGME website](#) for requirements on outside rotations.

# Visiting Residents

Do you want to do a visiting rotation here as a resident?

Agreement for Rotation of an External Institution's Resident /Subspecialty Resident at the University of Florida College of Medicine/Gainesville

## Instructions

- Complete the “[Short Term Rotation at UF](#)”. Application must be made 90 days prior to beginning the rotation in order to complete all required paperwork.
- Please obtain from your selected UF preceptor, a description of the rotation you wish to complete with stated goals and objectives, length of rotation and days of call required. Submit this description along with the contract (see above link) to your program director and institutional official at your institution.
- After receiving approval, submit this contract and description to the preceptor you have selected at UF for their signature. Then forward with above attachments to:

UF Pediatric Education

PO Box 100296

Gainesville, FL 32610-0296

for our program director's approval. This office will also obtain the approval of our institutional GME office.

- Approval must be obtained in advance to allow for scheduling and to allow you time to complete a courtesy agreement/contract package with the University of Florida/Gainesville . You will receive this packet from the Pediatric Education Office once all approvals have been received. This will include the Unlicensed Physician Application to the Florida Board of Medicine. (There will be a Florida Board of Medicine fee to be paid by you.) The application and fee has to be submitted by our office to the Florida Board of Medicine at least 60 days in advance of beginning the rotation. We will forward this application, with your attached fee, to the board when you return all the above required paperwork. Our office address is:

Pediatric Education

PO 100296

Gainesville, Florida 32610-0296 or you may fax it to 352-273-8593.

- The UF faculty member you have chosen to work with will send an approval letter to your program director and agree to evaluate you at the end of your rotation at the University of Florida. If your program has an evaluation form to be completed, please bring this form to the UF program director/preceptor for completion.
- Your institution may require your own institutional contract, the exact same process as above must follow. The contract has to be reviewed and signed by your program director, your institutional official, and forwarded to UF Pediatrics Education for processing.
- Refer to the [ACGME website \(www.acgme.org\)](http://www.acgme.org) for the requirements for outside rotations.



# External Rotations

- Forms for External Rotations  
<http://www.med.ufl.edu/personel/brenda/resident%20short%20hospital%20rev%2003%2006.pdf>  
<http://www.med.ufl.edu/personel/brenda/Housestaff/shorttermrotationuf.PDF>

## Job Description

### **PEDIATRIC PULMONOLOGY SUBSPECIALTY RESIDENT JOB DESCRIPTION**

**University of Florida**

**Updated 2/25/2012**

#### **Graduated Levels of Responsibility**

Graduate medical education is based on the principle of progressively increasing levels of responsibility in caring for patients, under the supervision of the faculty. These levels are defined as postgraduate years (PGY) and refer to the clinical years of training that the resident is pursuing. The faculty is responsible for evaluating the progress of each resident in acquiring the skills necessary for the resident to progress to the next level of training. Factors considered in this evaluation include the resident's clinical experience, judgment, professionalism, cognitive knowledge and technical skills. Collectively, the ACGME core competencies will be used to assess progress. The requirements for training in the primary care specialties such as pediatrics, call for three years of training (PGY1, 2 and 3). Subspecialty training, traditionally called fellowship, includes considerable autonomy especially in the tasks already mastered in the core, specialty program. At each level of training, there is a set of competencies that each resident is expected to master. As these competencies are acquired, greater independence is granted the resident in the routine care of the patient. This independence is at the discretion of the faculty who, at all times, remain responsible for all aspects of the care of the patient. Individuals engaged in training beyond the core residency program are expected to be competent in the skills learned in the core residency. They should be focused on becoming proficient in the skills defined by the subspecialty they are pursuing. As they progress through the training program, they are given progressive responsibility in the skills that make up the information and psychomotor content of the specialty at the discretion of the faculty.

**Evaluation** – At each level of pediatric training the competency of the individual PG physician is evaluated based on the six ACGME competencies. An internet web-based scoring and evaluation system (New Innovations) is used by pediatric pulmonary faculty to document the resident's progress. The program director meets at least biannually with each resident and on an as needed basis.

## **Pediatric Pulmonology Subspecialty Training**

The goal of our fellowship program is to develop academic pediatric pulmonologists by the end of the training. The fellows will be capable and committed to the care of children with all types of respiratory disease, including those with acute and chronic respiratory failure, as well as, those requiring mechanical ventilation and transplantation. The training program will foster an environment that will allow fellows to acquire the clinical and/or basic research skills necessary to make a significant contribution to the understanding of the patho-physiology and treatment of diseases that affect the lung and respiratory system. Finally, we expect the fellow to gain the necessary skills to become an excellent teacher. This will be accomplished utilizing all components of the following curriculum.

## **Pediatric Pulmonology Subspecialty Lines of Responsibility**

Whether in clinic or on the inpatient service, the subspecialty resident will be directly responsible to the faculty member attending that clinic or the inpatient service. When on elective rotations, the resident will be responsible to the attending on that service. When assigned to research rotations, the fellow will be directly responsible to the faculty investigator/mentor. If there is a conflict or problem, the subspecialty resident is expected to discuss the issue with the subspecialty Training Director/Division Chief.

## **PGY 4 (first year pulmonary subspecialty resident = 1<sup>st</sup> year fellow): In-patient Responsibilities**

The first year pediatric pulmonary resident will have approximately four months of inpatient care experience along with weekly Fellow's Continuity outpatient clinic. Our service handles approximately 150 admissions to the inpatient service per year along with over 100 bronchoscopies and 150 requests for inpatient consultations. Over 1000 outpatient pediatric sleep studies were performed last year and 82 patients seen in our pediatric sleep medicine clinic.

On each admission to the hospital, the subspecialty resident will perform a history and physical. She/he will usually perform this in the presence of the faculty attending. The subspecialty resident and the attending will discuss the patient first between themselves and then with the general pediatric residents. A plan of evaluation and therapy will be developed first by the subspecialty resident and faculty member and then with the General Pediatric Residents. The subspecialty resident will enter a history and physical exam into the electronic medical record (EMR) (EPIC) to be reviewed by the faculty member, corrected where indicated and electronically verified and signed.

The pediatric pulmonology resident will thus develop the following competencies: They will learn patient care by performing a history and physical with the attending and formulating a care plan under the attending's guidance. They will increase medical knowledge by discussing the pathophysiology of the patient with the attending. They will learn systems based practice by discussing the case, learning how to

order tests and medications with the general pediatric residents, floor nurses, social workers, and/or dietitians. They will learn professionalism by dictating the history and physical in a timely fashion, reviewing the documentation with the faculty member and in their interactions with the General Pediatric Residents, medical students, patient and family.

The subspecialty resident will evaluate all consults when on the inpatient service. The resident is expected to perform a quick literature review of the problem. She/he will then present the patient to the faculty attending. The subspecialty resident and the pulmonary attending will discuss the patient with the physicians requesting the consult. The consult will be documented in the EMR by the subspecialty resident and the faculty member will review, discuss the dictation with the subspecialty resident and electronically verify the consult.

The subspecialty resident will learn practice based learning by the literature review exposing him/her to recent and current thinking on a specific problem. This will also improve the resident's overall medical knowledge. The subspecialty resident will learn professionalism by dictating the consult. Her/his systems based learning will improve by communicating with the other health care professionals asking for the consult and assisting them in evaluating the patient.

The pulmonary subspecialty resident will independently assess and write a note on each patient every morning. The pulmonary resident will discuss the patient with the pediatric resident, medical student, nurse and all others involved in the care of the patient. Following this, the resident assesses and writes a note for all consults. Later in the morning, he/she presents the patients to the pulmonary faculty attending who may edit and always countersigns subspecialty resident's note and writes his own note. Following this discussion the pulmonary resident under faculty supervision is expected to discuss the patient once again with the general pediatric resident and other consulting staff as might be necessary to modify the diagnosis and treatment.

The subspecialty resident will learn patient care by reviewing the patient each day and presenting the patient to the attending. His/her medical knowledge will increase by reading the most current information on each disease process and discussing the information not only with the attending but with the housestaff and medical students. Professionalism will be increased by writing accurate notes in the chart on all consults and service patients. Interpersonal skills will be improved by communicating with the general pediatric residents and with the staff including nurses, dietitians and social workers. Practice based learning will occur as the subspecialty resident observes the results of the orders and plans written and carried out on each patient. The subspecialty resident will improve his/her knowledge of systems based practice by working with the dialysis staff and the general pediatric staff in accomplishing certain goals with each patient.

The Pulmonary resident will be the first contact regarding the care of patients. When appropriate he will discuss the call with the attending. The nursing staff and residents are informed to call the attending should the resident not answer the call after a reasonable time has elapsed.

The subspecialty resident will learn professionalism by promptly responding to the page from the general residents and the nursing staff. System based learning will occur as the subspecialty resident learns which calls can be handled directly and which should be discussed first with the attending. Medical knowledge will improve as the subspecialty resident learns the information necessary to answer questions and patient care as he/she learns to make independent decisions. The best way to learn such information is by discussing the decisions with the attendings and to seek out articles and studies to substantiate the decisions. Hence practice based learning occurs.

The pulmonary resident prepares patients and families for bronchoscopy, including doing an initial history and physical exam, working with the pediatric resident in ordering the appropriate pre- and post-bronchoscopy.

The subspecialty resident will learn patient care by preparing the patient to undergo the procedure. He/She will be explaining the procedure to the patient and her/his family and will acquire interpersonal and communicative skills. The subspecialty residents will learn professionalism by being responsible for orders and scheduling. Systems based practice will be learned as the subspecialty resident learns to work with nurse specialist in evaluating and arranging for conscious sedation and ultrasound guidance for the biopsy.

The pulmonary resident will do the bronchoscopy and write the bronchoscopy report in the Provisions System in the Pulmonary Function/Bronchoscopy suite. Post-bronchoscopy orders will be written with the direct supervision of the pulmonary attending. The faculty will review the note, correct with feedback and sign the note. The pediatric pulmonary resident will arrange to review the results of the bronchoscopy and sample studies the pulmonary attending present at the bronchoscopy.

The subspecialty resident will increase her/his medical knowledge by performing the procedure under the guidance of the attending who will be physically present and give advice during each bronchoscopy. Practice based learning will occur as the pulmonary resident performs more bronchoscopies, learns to perform bronchoalveolar lavage and transbronchial biopsies. He/she will develop the judgment to minimize risks and complications of conscious sedation and bronchoscopy. Professionalism is learned by the subspecialty resident being responsible for documenting the biopsy procedure note and accurately reporting the events during the biopsy. Medical knowledge is learned by reviewing the bronchoscopy findings with the attending pulmonologist. Practice based learning occurs as the pulmonary resident learns what can be gained and not gained from a bronchoscopy and systems based learning is improved

by the subspecialty resident learning to interact with the staff in the pulmonary function/bronchoscopy laboratory.

The subspecialty resident learns professionalism by learning the orderly maintenance and documentation of the progress and care of the pediatric pulmonary patient. She/he will increase her/his medical knowledge by assessing the complications and progress of the child with respiratory disease. The pulmonary resident learns patient care by learning management changes to improve each problem noted in the systematic evaluation and management of each patient. The subspecialty resident learns system-based practice by utilizing other medical personnel such as nurses, dieticians and social workers in the care of the pediatric pulmonary patient.

The pulmonary resident may call the referring physician on discharged patients at the discretion of the attending, summarizing the hospital course.

The subspecialty resident will develop interpersonal and communicative skills discussing the patient with the referring physician. He/she will develop professionalism by learning the necessity for good communications with referring physicians. Systems-based practice will be learned by the pulmonary resident involving the referring physician in the care plan for the patient who will now likely be followed jointly. The resident will also learn when it is appropriate for the referring physician to assume primary care of the patient after consultation with the subspecialist and when the subspecialist should assume primary care of a problem.

At times there will be a general pediatric resident on a pediatric pulmonary elective. The pulmonary resident is expected to participate in the teaching and evaluation of the resident. The subspecialty resident will learn communication skills important to teaching. She/He will increase her/his medical knowledge for as one teaches a subject, one's understanding of the topic improves. Professionalism is learned since it is an important role of the academic physician to teach and evaluate physicians in training.

The subspecialty resident will take call from home on week nights. The faculty assigned to the inpatient service will also take call from home on week nights and will serve as back-up for any questions and will accompany the subspecialty resident in evaluating any emergency admissions or consults.

Patient care is learned by the pulmonary resident by being initially presented with a clinical problem. The subspecialty resident will be expected to research a new or novel presentation of a problem and will thus experience practice based learning. Medical knowledge is increased by learning about new problems under the direction and leadership of the faculty.

The subspecialty resident will be on call one weekend each month throughout the year along with the pulmonary attending on call for the weekend. She/he will be first call for any calls from physicians or patients/parents. This will be followed by a discussion with the attending for final disposition. She/he will round with the faculty on the weekends.

The subspecialty resident will learn systems based practice by interacting with the general pediatric residents, other general and subspecialty attendings and nurses. Patient care will be learned by directly interacting with patients and their families. Medical knowledge will be improved by reading the literature regarding any questions that arise concerning the patients, by interactions with the attending both rounding on the patient and from the patient problems discussed. Practice based learning will occur as the resident performs literature reviews on specific patient problems.

The pulmonary subspecialty resident will be asked to lead the daily discussion of pulmonary inpatients with the General Pediatric Resident team and its assigned medical students and nurses. She/he will answer questions and teach about pulmonary problems in this setting. She/he will teach pulmonary function test interpretation over the course of each two week rotation on the inpatient service. While assigned to the inpatient service, the pulmonary fellow will attend General pediatric resident Morning Report at 8a.m. (M-Th).

Interpersonal and communication skills will thus improve as the subspecialty resident is required to teach medical students and general pediatric residents. The attending will be present and will be able to give the pulmonary resident direct feedback on methods of teaching and points to be covered. Medical knowledge will improve since the subspecialty resident will be required to research a topic prior to the presentation.

The pulmonary resident will be required to give pediatric pulmonary presentations during the Pediatric Pulmonary Case Conference seminars which are held monthly.

Interpersonal skills will improve as the resident prepares topics to present and medical knowledge improves as the pulmonary resident reads the material to be presented. Practice based learning occurs as the resident discusses how the new information impacts the practice of Pediatric Pulmonology.

He/she will also be responsible for presenting at least twice a year at the Pediatric Pulmonary Journal Club held monthly in the division conference room.

Professionalism is learned by being responsible for the conferences and systems based practice is learned by the interactions with other physicians and staff. Medical knowledge is increased by reviewing the literature and consulting with other physicians and other health professionals.

The pediatric pulmonary resident is expected to read about each patient in a major pediatric pulmonary textbook and make an electronic search of the current literature. All of the major pediatric and pulmonology textbooks are in the pediatric pulmonary offices of the Health Science Center Library for the resident's use.

This forms the basis of practice based learning. The pulmonary resident is expected to read in pulmonary texts and journals about each new patient's clinical condition and possible therapeutic approaches. He/she will develop a critical sense of how to interpret an article and whether a change in the therapeutic or diagnostic approach is warranted. The attendings will play a critical role in helping the pulmonary resident to develop a perspective on the use of literature in making medical decisions and changing therapeutic and diagnostic practices.

**Administrative Tasks:** While assigned to the inpatient service, the pediatric pulmonary resident must maintain her/his fellowship portfolio (all teaching activities) and with the assistance of the attending physician and fellowship coordinator, a list of procedures and inpatient consultations. These data are reviewed with the fellowship director twice yearly to assess teaching and clinical experience. Fulfilling this responsibility adds to experience with professionalism. By the fellowship coordinator, he/she is sent the goals and objectives of each rotation at the beginning of the rotation. In addition, the pediatric pulmonary fellow (PGY4-6) will create an individual learning plan every six months to discuss with the fellowship director.

#### **Pediatric Pulmonology Subspecialty Resident (PGY 4) Outpatient Job Description**

The pediatric pulmonary resident will have weekly outpatient experience in his/her continuity care clinic. In addition, he/she will attend other outpatient pulmonary clinics that focus on technology dependent children, children with muscular weakness, cystic fibrosis and sleep disorders. There are eight half-day pulmonary clinics held each week in addition to 3 sleep disorder clinics per week. He/she will attend at least 6 of each of these clinics during the year. The resident is to arrive at the clinic on time. She/he is expected to independently assess and develop a plan for diagnosis and treatment of patients for subsequent individual review by the attending present in that clinic. For each patient, she/he will document the patient's visit details in the EMR for the pulmonary attending to review and electronically sign. The resident is also responsible for entering the patient into the New Innovations data base to be evaluated by the attending in that clinic.

The subspecialty resident will develop a sense of professionalism by attending clinic and by being responsible for the summary of the clinic visit in a timely manner. Patient care is learned by evaluating each patient, developing a plan and presenting the patient and the plan to the attending. Medical knowledge is increased by reviewing each patient, their clinical course, the diagnostic evaluations and therapeutic options with the attendings in clinic. Since the clinic attendings are different the pulmonary

resident will learn various options within the range of acceptable medical practice. Again practice based learning is accomplished by the resident reading about a problem and discussing the material with the attending. The attending will promote this by making suggestions about certain topics to be researched and later following up with the subspecialty resident.

The resident will attend his/her continuity clinic even when also assigned to the inpatient service. He/she may elect to attend other clinics if the inpatient service is not busy and time/assignments allow.

As previously outlined, the subspecialty resident learns systems based practice by interacting with nurses, general Pediatric residents and other attendings. The pulmonary attendings will provide the pulmonary resident with medical knowledge and the resident continues to gain knowledge in patient care. Practice based learning is stimulated by the resident under the attendings encouragement researching information on complex medical problems and therapies. Professionalism is encouraged as the resident assumes responsibility for a group of in-patients over the week-end that she/he is not responsible for during the week.

The outpatient service permits time in for reading, preparing presentations, planning research projects, attending APPCI classes (if appropriate) or case reports for publication, correction of patient letters, meeting with individual faculty and communicating with other subspecialty residents, pediatric residents and allied health staff such as pharmacy, nutrition, social service, nursing, etc.

System based practice is learned by interacting with the other health care professionals involved in the care of the clinic patient. Medical knowledge increases as the resident reads and researches about specific patient problems and practice based learning occurs as the subspecialty resident learns new possible methods of evaluation and therapy under the guidance of the pulmonary faculty.

### **Pulmonary Subspecialty Resident (PGY 4) Research**

The subspecialty resident will spend three months during the first 8 months of his/her fellowship doing one month research rotations in three different laboratories with three different potential research mentors. These rotations are intended to expose the new pulmonary fellow to various areas of scientific investigation, laboratory techniques and research scientists. Following these rotations, the first year of fellow, will choose a lab and mentor for developing his/her own research project in that laboratory. The potential mentors are discussed with the PGY4 fellow with the Fellowship Director to create the list of lab rotations that are of interest to the fellow. The lab/research mentor may or may not be a member of the Pulmonary Division.

The PGY4 pulmonary fellow will spend three additional months working in the laboratory of his/her choosing with the aim of developing and beginning his/her research project. It is expected that by the end



of the PGY4 year, the fellow will be planning to write a grant proposal based on his/her project. That grant will be submitted to funding agencies in the fall of the PGY5 year.

Medical knowledge is increased by the researching of a specific clinical or basic science project. Interpersonal and communication skills are improved as the subspecialty resident discusses the project with her/his mentor and writes a grant for the proposed study. Practice based learning occurs as the renal resident asks specific questions that have a direct impact upon patient care and diseases processes.

### **PGY 5: (Second Year Pulmonary Resident)**

The second year will include both clinical and research blocks of time. The clinical blocks will be approximately 3 months of inpatient, and 8 months of 15% outpatient time. There will be approximately 8 full months of research time and 3 months of 85% research time. The APPCI courses will continue. The resident will continue to choose cases for case report publications.

The in-patient and out-patient experiences will build the subspecialty resident's understanding of patient care and his/her medical knowledge. Professionalism continues to grow and develop as the subspecialty resident continues to be responsible for scheduling and documentation of patient procedures. Systems based learning continues as the pulmonary resident interacts with the general Pediatric residents, other attendings, nurses, social workers and dieticians. Interpersonal and communication skills continue to be enhanced and the resident presents conferences to the general Pediatric residents and the medical students. These skills are also used in the educational meetings with the Pediatric Pulmonology faculty and the other subspecialty residents. Practice based learning continues as the subspecialty resident continues to read and research patient problems. This is especially true when papers are presented at conferences by the subspecialty resident and she/he is required to relate the information to the current practice of pediatric Pulmonology. The continued involvement in research increases the subspecialty resident's medical knowledge and communication skills. Practice based learning continues as the research project progress and new information is assimilated.

The inpatient and outpatient experience for the second year pulmonary subspecialty resident is essentially the same as the first year. However, the resident responsibility will increase. He/she is expected to have the ability to formulate patient care diagnosis and treatment plans more precisely and expeditiously. His/her bronchoscopy skills and confidence are expected to have increased. The resident should be able to work with more confidence in relating to patients, parents, residents, other faculty and paramedical personnel. His/her presentations during attending rounds should be more concise, accurate and clear. Pages and outside phone call should be better handled with more confidence. The pulmonary resident as a result of experience and reading should require a decreasing need for prolonged

explanations by the attending physicians as related to patient care issues. The working relationship with other services should be more efficient and effective.

Practice based learning should increase rapidly as the subspecialty resident reads more and is exposed to more information presented by the other subspecialty residents and the pulmonology faculty. The information is incorporated into practice and the subspecialty resident has the opportunity to see the effect first hand. By this time the pulmonary resident will have established her/himself as a member of the pulmonary team and will thus assume more of a leadership role with the general Pediatric residents, other attendings, nurses, social workers, etc. Communication skills especially with patients will have improved to the point that the patients and their families will have greater confidence in the decisions of the subspecialty resident and will begin to see her/him as an authority in the subspecialty of Pediatric pulmonology. Professionalism will now become second nature to the subspecialty resident and he/she will not need as frequent reminders from the faculty as to the necessity to perform certain duties. Medical knowledge and patient care skill will have become more advanced as information is gained and the subspecialty resident is exposed to more patient care problems.

The call schedule will be the same. The pulmonary attending will continue to advise on handling all consultations and patient care calls, but the need for extended discussion will be lessened. The fellow will have read the literature before discussing inpatient consultations if the clinical circumstances permit.

It is important for the faculty maintain involved with the subspecialty resident and to be present to confirm the subspecialty resident's impressions of problems and his/her plans for evaluation and therapy. Medical knowledge, patient care skills and practice based learning are thus stimulated.

The bronchoscopies are expected to go more smoothly. However, the pulmonary attending will continue to directly supervise all procedures.

Medical knowledge and patient care skills will continue to improve as the subspecialty resident becomes more familiar with each patient care situation. The pulmonary faculty continue to provide direction and to stimulate practice based learning by challenging the subspecialty resident to think about each new situation and to research new and different approaches.

The pulmonary resident presentations at Journal Club, Case Conferences and Core Curriculum will continue and are expected to improve compared to the PGY4 year. Each fellow will have completed the College of Medicine Residents as Teachers course.

Communication and interpersonal skills continue to improve as the subspecialty resident refines their teaching skills particularly with feedback from the faculty. Systems based practice is also learned as the

subspecialty resident interacts with the other health care professionals. Medical knowledge increases as more cases are reviewed with the pulmonary and other attendings.

#### **Research Block PGY5:**

During the first year, the program director and pulmonary resident will have identified a research mentor who may or may not be a pediatric pulmonologist. The resident will have formed his Scholarship Advisory Committee and met with that group every 6 months through the remainder of the program. He/she will have performed a literature search, developed a plan for research and have begun writing a grant for funding. This research protocol will be implemented during the PGY4 year and continued through the PGY5 and PGY6 years.

The research experience will continue will continue to expand the subspecialty resident's medical knowledge and practice based learning as she/he proceeds with the project and learns the implications of what is being investigated. Communication skills are improved by the grant writing process and the interactions between the subspecialty resident and his/her mentor.

This activity is essential, since a submitted first authored peer-reviewed hypothesis-driven manuscript is a prerequisite for eligibility to take the American Board of Pediatrics: Pediatric Pulmonology Sub-Board exam.

Communication skills are essential in writing a paper and are learned by the process and the review of the work by the subspecialty resident's mentor and other involved faculty.

In the PGY5 and PGY6 years there is also time to write a case report or two for publication. Case reports do not replace the requirement to publish a first authored peer reviewed article. These case reports will be usually under the direction of the pediatric pulmonary faculty. The conference and call schedules with associated responsibilities will continue during this block of time.

Communication skills are important in writing papers for publication and presenting that information to the Nephrology faculty and the other subspecialty residents. Professionalism is learned by the subspecialty resident having both research duties, clinical and educational responsibilities.

#### **PGY 6 (Third Year Pediatric Pulmonary Resident)**

The third year pediatric pulmonary resident will have approximately 8 months of full time research and approximately three months of 80% research time. He or she will work closely with a research mentor.

The goal is to complete a research project that results in the publication of a first authored peer reviewed paper. At a minimum, such a paper must be submitted for publication. In the process, the pulmonary resident will gain the necessary experience for a successful future in academic medicine. An additional goal is to submit the research for presentation at a national meeting in order to begin to network with his/her mentor.

Interpersonal and communication skills are increased by the subspecialty resident's interactions with his/her mentor and pulmonology faculty members in presenting the data and writing the papers. Presenting at a national meeting provides the subspecialty resident to communicate ideas to an unfamiliar audience and to answer questions from the audience. Practice sessions with questions from the Pulmonology faculty and the other subspecialty residents will provide invaluable help. Practiced based learning has really improved as the subspecialty resident has had the opportunity to evaluate the significance of her/his research and relate the research to the current field of medical knowledge.

There will be two-three months of inpatient work – depending upon need for additional clinical training as judged by the faculty and upon the fellow's career goals. During this time, the subspecialty resident will be expected to function at an attending level making decisions and teaching. She/he will have a faculty attending supervising at all times.

At this point the subspecialty resident will have most of the interpersonal and communication skills to effectively teach general Pediatric residents and medical students. It is the job of the Pulmonary attending to help the subspecialty resident to refine these skills to attain a faculty level. It is now likely that the subspecialty resident will have achieved most of the patient care skills to function independently. The Pulmonary faculty's role is now to observe and to advise when the subspecialty resident needs help. It is most important that the faculty member be present but remains mostly quiet - commenting only when necessary. Medical knowledge should have progressed to the level of a faculty member and the faculty's role should be one of helping the subspecialty resident devise methods of keeping themselves current in the future. Practice based learning should at this point be second nature and the subspecialty resident should be actively researching problems with little prompting by the faculty. The subspecialty resident should begin encouraging other subspecialty residents, general pediatric residents and medical students to participate in practice based learning. The subspecialty resident should have acquired the skills to lead a team of physicians, nurses, social workers and other health care providers in dealing with patient care problems thus mastering systems based practice. The Pulmonary faculty should serve primarily as an advisor to the subspecialty resident. The subspecialty resident should have achieved the level of professionalism to be responsible for dictations, calling referring physicians, answering patient calls and documentation of patient care.

There will be one-three months of outpatient rotations – including continuation of the resident’s weekly continuity clinic. The subspecialty resident will be expected to function at near a faculty member’s level but still with supervision. The primary care plan should come from the subspecialty resident.

The subspecialty resident will have acquired the above mentioned skill level to function in the out-patient setting as in the in-patient setting.

The conference and call schedule with associated responsibilities will continue throughout the year.

The subspecialty resident should now be able to plan and schedule conferences for a medical group. The pulmonary faculty should serve as advisors as to the quality of the meetings and the caliber of the teaching. The subspecialty resident should now begin to recognize the needs of a group to improve medical knowledge and to choose the type of articles needed to achieve practice based learning for as group.

## Extramural Employment

1. This policy is developed to assure compliance with the regulations of the ACGME requiring that institutions sponsoring residency programs monitor the overall workload of their postgraduate physicians (residents PL1-PL6) and recent policies instituted by the GMEC of Shands Hospital and the University Of Florida College Of Medicine. Monitoring duty hours will be done by each program/subspecialty. Residents (PL1-6) sponsored on J1 visas are not allowed to participate in extramural employment.
2. The programmatic extramural employment sponsored by the Department of Pediatrics includes the following:
  1. Pediatric After Hours Program Saturday 2-10 pm and Sunday 1-9 PL2-6 residents only
  2. Neonatal Transport Team – Shands Hospital PL4-6 Neonatology fellows only
  3. General Pediatric Clinic abstracting charts
3. All extramural will be reported directly to the Education Office in Gainesville by 10:00 am Tuesday of each week. For purpose of remuneration, this should include social security numbers, dates, and hours worked and rate of pay. The Education Office is responsible to submit all programmatic to Pediatric Payroll (This will include everything worked thru the Monday night previous.) Pediatric Payroll will include these hours in the following pay period reported to UF.
4. The only non-programmatic extramural activity available to Pediatric Residents and Fellows would be locum tenens engaged in while on annual leave. Residents may engage in this type of extramural activity as long as they do not violate the Florida Practice Act.
  1. Residents must submit a completed non-programmatic outside employment form for approval by the Residency Program Director and the Dean of the College of Medicine. This approval may be secured by contacting the Pediatric Education Office.
  2. Professional liability insurance must be obtained by the resident for such non-programmatic activity. The resident will not be protected from liability claims for outside employment by JHMHC Insurance Trust Fund for non-programmatic extramural activity.
  5. Approval to participate in extramural employment activities will be contingent on excellent performance in the residency program. Approval will not be granted, or prior approval may be retracted, for any resident who, in the opinion of the faculty and Program Director, is experiencing any academic difficulty.
  6. All other forms of extramural employment are explicitly prohibited. Failure to comply with this policy may result in immediate termination from the residency program.

7. An annual report of programmatic and non-programmatic activity for the Department of Pediatrics will be submitted by the Education Office to appropriate institutional official.
8. All extramural employment must be done within the ACGME work rule guidelines.

## Work hours

1. New Innovations is used for logging work hours
2. If records are not logged by the end of the week, the resident(s) will be personally contacted
3. If work hours are violated the resident will be contact by the Program Coordinator and Program Director
4. **If the Pediatric Pulmonology sub-specialty resident, in performing patient care duties (or any other reason), is required to be awake at night during normal sleeping hours – whether in the hospital or at home – he/she is required to make the attending on call and the Program Director aware. If due to patient care responsibilities, he/she is required to log those hours in New Innovations. In any case, the sub-specialty resident will be relieved of in-home call the following evening/night by the attending on call. And if possible, (if no continuity clinic) in the interest of patient safety, the sub-specialty resident will also leave the Health Center early the day following the night of lost sleep. The sub-specialty fellow will make the Program Director aware of any faculty resistance to being relieved of clinical duties. If indicated, in the interest of safety of the sub-specialty resident, transportation home will be provided/arranged for by the Pediatric Pulmonary Division.**

## Sleep Deprivation and Fatigue

- Signs of fatigue and sleep deprivation must be taken seriously – if you notice a colleague who appears sleep deprived, you could be doing more harm than good by not speaking up.
- Be on the lookout for other signs/symptoms that may be suggestive of something beyond sleep deprivation/fatigue – i.e. depression, hypothyroidism, medication side effect.
- Most people (on average) require 8 hours of sleep every 24 hours – when people get less than 5 hours of sleep over a 24-hour period, their peak mental performance usually deteriorates. This can be disastrous in a medical setting.
- Fatigue and sleep deprivation increase the chances of medical errors, needle-stick accidents, motor vehicle collisions post-call, and greatly affect patient and personal safety.

## Helpful Tips

- Leave “on time” when shift ends – to maximize time off and increase sleep time
- During time periods off, catch up on sleep that was lost with work
- Develop good sleep hygiene (when you can) – establish a set bedtime and awakening time, avoiding caffeine and heavy foods 4-6 hours before sleep, making sure the room temperature and bedding are comfortable, and resolving conflicts before attempting sleep
- Prophylactic naps taken before the shift begins may be helpful (and again after night shifts)
- Take shift naps when possible – they should be brief (15-20 minutes) and frequent (every 2-3 hours); longer naps may prevent sleepiness but may result in “sleep inertia” – impaired cognition, severe disorientation, transitory hypo-vigilance, confusion, and difficulty in fully awakening (often lasting only briefly like a few minutes, but can last longer). For night shift interns on the wards, the intern on the other team could hold your pager for a brief nap (and vice versa). Night shift senior residents and night shift 4200 residents could also hold each other’s pager for a nap. In the PICU and NICU, see if the fellow would be willing to hold your pager to allow a quick nap.
- Measures to help with sleep inertia include standing up, turning on the lights, being physically active, showering, among others
- Consider caffeine pharmacologically (not socially) – caffeine takes approximately 30 minutes for the effects to be felt and with the effects lasting about 3 to 4 hours (consider avoiding caffeine too close to sleeping opportunities)
- Alcohol use should be avoided (due to rebound effect and other reasons!)
- Napping before leaving the hospital after a night shift should be considered if you are too tired to drive home
- Consider public transportation, taxis, or having someone drive you home after a long shift (especially > 24 hours) or if you feel too tired to drive after any shift
- Sleep in a dark, quiet room with a comfortable temperature. Good blinds (e.g., blackout shades) or eye masks can be helpful. Be sure to turn off pagers and phones and consider turning on a fan or other soothing background noise to minimize disruptions.
- Complete the SAFER, aka “Sleep, Alertness and Fatigue Education in Residency” (available in New Innovations)
- Talk to someone if you’re having trouble (program directors, chief residents, class or personal advisors, colleagues, etc.)

## Moonlighting

1. Currently moonlighting opportunities include weekend shifts in the Pediatric After Hours clinic
2. Any outside moonlighting opportunities must be reviewed individually by the residency program director

	<ul style="list-style-type: none"> <li>• Living Quarters</li> <li>• Quality Assurance</li> <li>• Shands Hospital Office of Housestaff Affairs</li> <li>• Annual Leave / Sick Leave</li> <li>• Maternity/Paternity Leave Policy for Residents/Subspecialty Residents</li> </ul>	
<b>IX.</b>	<b>PATIENT CARE POLICIES &amp; PROCEDURES</b>	<b>22</b>
	<ul style="list-style-type: none"> <li>• Consultation Policy</li> <li>• Pediatric Patient Care and Rotation Policies</li> </ul>	
<b>X.</b>	<b>MEDICAL RECORDS</b>	<b>23 - 27</b>
	<ul style="list-style-type: none"> <li>• Documentation – by EMR (Epic) rather than dictation</li> <li>• Chart Completion</li> <li>• Coding</li> <li>• Coding Guidelines for Reporting Other (Additional) Diagnoses</li> <li>• Medical Transcription</li> <li>• Discharge Summaries</li> <li>• Operative Report</li> <li>• Health Information and Record Management</li> <li>• Dictation (rarely used now with EPIC, EMR)</li> <li>• Discharge Summary Format</li> <li>• Dictation Instructions From A Touch Tone Telephone</li> </ul>	
<b>XI.</b>	<b>ROTATION GOALS &amp; OBJECTIVES (OUTPATIENT)</b>	<b>28 - 34</b>
	<ul style="list-style-type: none"> <li>◆ Overall Goal of the Pediatric Pulmonology Sub-specialty Training Program</li> <li>◆ Competencies <ul style="list-style-type: none"> <li>A. Providing Patient Care</li> <li>B. Medical Knowledge</li> <li>C. Practice-Based Learning and Improvement</li> <li>D. Interpersonal and Communication Skills</li> <li>E. Professionalism</li> <li>F. Systems-Based Practice</li> </ul> </li> </ul>	
<b>XII.</b>	<b>ROTATION GOALS &amp; OBJECTIVES (INPATIENT)</b>	<b>34 - 36</b>
	<ul style="list-style-type: none"> <li>• Include All Above Outpatient Goals &amp; Objectives</li> <li>• Thoracentesis</li> <li>• Fiberoptic Bronchoscopy</li> </ul>	
<b>XIII.</b>	<b>OBJECTIVES PEDIATRIC PULMONARY FELLOW IN PICU</b>	<b>36 - 38</b>
	<ul style="list-style-type: none"> <li>◆ Year 1, 2, or 3, One Month Rotation <ol style="list-style-type: none"> <li>1. Medical Knowledge</li> <li>2. Patient Care</li> <li>3. Interpersonal and Communication Skills</li> <li>4. Professionalism</li> <li>5. Practice-based Learning</li> <li>6. Systems-based Learning</li> </ol> </li> </ul>	



**XIV. COMPETENCY-BASED GOALS AND OBJECTIVES FOR PROCEDURES 38 - 46**

- **Fiberoptic Bronchoscopy and Thoracentesis**
  - I. Overall educational goals for the program
  - II. Competency- based goals and objectives for each educational level
    - Patient Care
    - Medical Knowledge
    - Practice- based Learning and Improvement
    - Interpersonal and Communication Skills
    - Professionalism
    - Systems- based Practice

**PGY 4.5- 5/ rotation 3 or 4**

- Patient Care
- Medical Knowledge
- Practice- based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems- based practice

**PGY 5-6 or beginning in Rotations 6-8**

- Patient Care
- Medical Knowledge
- Practice- based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems- based practice

- III. Delineation of fellow responsibilities for patient care, progressive responsibility for patient management, and supervision of fellows over the continuum of the program

**XV. ASTHMA RESEARCH ROTATION FOR PEDIATRIC PULMONARY FELLOWS 46 - 48**

- Overall Goal
- Learning Objectives
  - Patient Care
  - Medical Knowledge
  - Interpersonal and communication skills
  - Professionalism
  - Practice- Based Learning and Improvement
- Learning Activities
- Methods of Evaluation

**XVI. GOALS AND OBJECTIVES FOR PEDIATRIC PULMONARY FELLOWS ON PEDIATRIC SLEEP MEDICINE ROTATION 48 - 53**

- Patient Care
- Medical Knowledge

	<ul style="list-style-type: none"> <li>• Practice- Based Learning and Improvement</li> <li>• Interpersonal and Communication Skills</li> <li>• Professionalism</li> <li>• Systems- Based Practice</li> </ul>	
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