These quidelines for the Accelerated Research Pathway and the Integrated Research Pathway were downloaded from the American Board of Pediatrics website (http://www.abp.org).

Accelerated Research Pathway (ARP)

General Information

The Accelerated Research Pathway (ARP) is designed to accommodate and encourage candidates who are committed to an academic career as physician scientists with a strong research emphasis in a pediatric subspecialty. This pathway is not intended to be the only route to accomplish such a goal but provides flexibility and additional time for research training during the subspecialty fellowship without lengthening training beyond six years. Candidates entering the ARP may begin subspecialty training after completion of two years of general comprehensive pediatric training. A structured curriculum and close observation of the progress of the trainee during the core general pediatrics training is essential. The length of subspecialty fellowship will be a minimum of four years. The availability of this pathway in any particular program will be at the discretion of the general pediatrics program director/subspecialty fellowship program director. Although it may be advantageous for both general pediatrics and subspecialty training to occur in the same institution, this is not a requirement of the pathway. If training occurs in the same institution, it is advisable for the general pediatrics program director and the subspecialty program director to work in concert to monitor the progress of the trainee.

- 1. There will be no specific eligibility criteria with the exception that candidates must be committed to an academic career with a strong research emphasis in a pediatric subspecialty.
- Candidates for this pathway should be identified early, preferably prior to the start of the PL-1 year but no later than nine months into the PL-1 year. This is necessary so that the second year of training can be adapted in such a way that specified curricular requirements in general pediatrics will be met.
- The program director and candidate will not be required to seek prospective approval by the ABP, but must notify the ABP by means of the tracking roster in May of the PL-1 year.
- 4. There will be no mandatory screening examination.
- 5. Whether a trainee may remain in the pathway will depend on the assessment of the general pediatrics program director, who will be required to verify competence at the end of two years of core training. The program director must be able to attest that trainee performance has been satisfactory and the curricular requirements have been met. The ABP suggests that the program director utilize the In-training Examination results at the beginning of the PL-2 year as a measure of medical knowledge competence. A

score at or above the mean of general pediatrics trainees nationwide would provide objective evidence of acquisition of knowledge commensurate with length of training.

Training Requirements

- 1. General Pediatrics Curricular Requirements
- 2. The curriculum for the PL-1 and PL-2 years of general pediatrics training should include a broad exposure to the specialty and must include 22 months of clinical experiences, 20 months of which are specified. The additional two months of training will be at the discretion of the general pediatrics program director but should not include electives in the intended subspecialty. The 20 months specified experiences will consist of the following:
 - General pediatric inpatient rotations (five months)
 - Emergency room/acute outpatient care (four months)
 - Term nursery (one month)
 - Developmental-behavioral pediatrics (one month)
 - Adolescent medicine (one month)
 - NICU (three months)
 - PICU (one month)
 - Subspecialties (four months) consisting of one month each in four different core subspecialties required by the RRC
- 3. The 20 months of specified experience must include four months of supervisory experience in both the inpatient and outpatient setting, as well as continuity clinic of one-half day per week. Except for the provisions specified above, the training must conform to the program requirements for accreditation of general pediatrics residencies.

Subspecialty Fellowship Requirements

Subspecialty training must be at least four years in duration and in a discipline for which the ABP offers a Certificate of Special Qualifications (CSQ). The duration of clinical training will be dependent on the pediatric subspecialty. It is understood that a minimum of one year of clinical training is required. Some subspecialties of pediatrics may require more than one year of clinical training for a fellow to be able to attain the clinical competencies necessary to practice the subspecialty. All subspecialty trainees will be expected to participate in a core curriculum in scholarly activity skills (eg, study design, statistics, principles of evidence-based medicine, manuscript preparation, biomedical ethics, educational techniques). Trainees will be required to meet the same standards for scholarly achievement as defined for those in the standard three-year subspecialty fellowship training programs.

Eligibility for Certification

To meet the eligibility requirements for certification in general pediatrics, the trainee must satisfactorily complete two years of core general pediatrics training (22 clinical months) and an additional year (11 months of clinical experience) in the subspecialty fellowship. Verification of clinical competence and training will be required from both the general pediatrics program director and the subspecialty training program director. Eligibility to take the subspecialty certifying examination will require completion of a total of six years of training (two years of general pediatrics and four years of subspecialty training). The subspecialty program director will be required to verify training dates, as well as clinical and research competence.

Integrated Research Pathway (IRP)

Objectives

The objectives of the Integrated Research Pathway (IRP) are:

- 1. to attract committed young physician-scientists to pediatrics;
- 2. to provide mechanisms to sustain research interest, skills, knowledge, and productivity during core pediatric training;
- 3. to offer a means for fostering transition to a physician-scientist career;
- 4. to ensure that trainees accomplish the requisite training and acquire the skills to function as competent pediatricians in the independent care of children.

General Requirements

Individuals may apply for this pathway either before entering an accredited pediatric residency program or during the first nine months of the PL-1 year. This pathway is open to individuals with MD/PhD degrees or others who can demonstrate equivalent evidence of research experience and commitment.

Training in pediatrics must be completed in an accredited general pediatrics residency program. It is anticipated that in most instances the research component will be completed in the same academic health center. The curricular components that constitute the pediatric residency training must be taken from those experiences that have been approved by the Review Committee for Pediatrics as part of the requirements for pediatric residency training.

Except for the following provisions, the IRP must conform to the program requirements for accreditation of a general pediatrics residency.

1. <u>The Resident</u>. A resident may enter the IRP only at the PL-1 level. Approval for this pathway must be obtained from the ABP either before beginning residency training or during the first nine months of the PL-1 year. A resident may not transfer into this program beyond the PL-1 year or from another categorical program. Applications from program directors that provide an

- outline of proposed training will be reviewed; programs will not be approved.
- 2. Supervision of the Resident: A supervisory/review committee must be established by the residency program and the research mentors to ensure that each trainee is meeting the requirements of training and is successfully completing each experience to be continued in the pathway. The general pediatrics program director must provide careful evaluation of clinical training to determine whether the resident is attaining the knowledge and experience necessary to provide independent care of children. A research mentor must oversee the research experiences to ensure that the trainee is accomplishing pathway goals. The committee should meet at least every six months to evaluate and advise the resident. Meetings and evaluations must be documented.
- 3. Core Curricular Requirements: There must be 24 months of training in pediatrics and up to 12 months of research training opportunities. One month of leave is allowed in each year of training. Leave in excess of three months, whether for vacation, sickness, parental, or other, must be made up. The curricular components that compose the mandatory 22 months of core clinical pediatric residency include:
 - Inpatient Experience: A minimum of five months of general pediatric inpatient care must be completed. The resident's responsibility should be that of the primary caregiver, with at least two months in a supervisory role during the latter part of training.
 - Intensive Care Experience: Four months of intensive care experience are required, consisting of three months of NICU and one month of PICU.
 - Normal Newborn Nursery: At least one month must be spent in the care
 of the normal newborn infant.
 - <u>Developmental-Behavioral Pediatrics</u>: At least one month of a structured, focused experience in developmental-behavioral pediatrics must be provided. The experience must be supervised by faculty with training and/or experience in the developmental-behavioral aspects of pediatrics.
 - <u>Subspecialty Experience</u>: There must be time to allow the resident to broaden his/her pediatric experience in the pediatric subspecialties. There must be a minimum of four months of required pediatric subspecialty experiences listed in the Program Requirements for Residency Education in Pediatrics. The rotations may be either inpatient or outpatient, or a combination thereof.
 - Adolescent Medicine: There must be a minimum of one month of adolescent medicine experience.
 - <u>Ambulatory Service</u>: In keeping with the commitment of pediatrics to primary and comprehensive care, 50% of the pediatric experience must be in ambulatory pediatrics. This may include all assignments in

continuity clinic, acute illness and emergency department, and community-based experiences, as well as the ambulatory portion of the normal newborn, subspecialty, developmental-behavioral, and adolescent experiences. Three months of acute illness experience is required, including at least a one-month block rotation in an emergency department that serves as the receiving point for EMS transport and ambulance traffic, and is the access point for seriously injured and acutely ill pediatric patients in the service area. Training in minor surgery and orthopedics should be included in this rotation. Assignment to an acute care center or walk-in clinic to which patients are triaged from the emergency department will not fulfill this requirement. Continuity clinic is required throughout the three years of the IRP. The resident must be responsible for the continuity of care for a group of pediatric patients in the same manner as categorical pediatric residents. The continuity experience should be a minimum of one-half day per week, during which time the resident is relieved from other duties.

• <u>Supervisory Experience</u>: The resident in this pathway must have graduated patient care responsibility throughout the three years. It is essential that the resident have senior supervisory responsibility for at least four months that includes inpatient and outpatient experiences.

Clinical and Research Assignments

During the PL-1 year, a minimum of 10 months of clinical pediatric residency training is required. Residents in this pathway must have the opportunity to establish general pediatric skills along with the cohort of categorical pediatric residents. It is incumbent that the pediatric program director assess the progress of the resident in this pathway at nine months of the PL-1 year to determine whether the resident has developed the requisite experience and skills to continue in light of the truncated clinical training.

During the remaining training there may be as much as 11 months of research experience, of which a minimum of five months must be in the PL-3 year. During the research experience not more than 20% of time may be spent in clinical activities, including continuity clinic.

Evaluation

Periodic evaluation with feedback of the educational progress of the resident should occur as outlined in the Program Requirements for Pediatrics. Included in this evaluation must be resident's knowledge, skills, attitudes, and interpersonal relationships. Similarly, the research mentor(s) must evaluate the resident's experiences and progress in their areas of supervision. These evaluations should be regularly discussed with the resident and must be kept on file and available for review. Final evaluation should include the approval of a summary progress report of the trainee's research experience by the program director or mentor. Evaluations of the pathway and faculty are required of the resident.

Eligibility for Certification

To meet the eligibility requirements for certification in general pediatrics, the resident must satisfactorily complete the 36 months of the IRP. The pediatric program director must verify that the resident has completed the prescribed training and verify clinical competence. An additional 12 months of pediatric clinical experience must be completed successfully to be eligible for the certifying examination in general pediatrics. This experience must be in an accredited specialty residency or subspecialty fellowship approved by the ABP. The program director of the additional clinical experience will be asked to verify clinical competence and training. The certifying examination may not be taken until all training requirements (ie, the three-year IRP and the additional one year of clinical training) have been completed.

Interface with Research in Subspecialty Training

Some residents who have made early commitments to subspecialty training may benefit from an integrated research experience spanning core and subspecialty training. In these cases, subspecialty program directors should join the trainee's supervisory committee.

Residents accepted into the IRP may be eligible for subspecialty fast-tracking by virtue of having a PhD degree or sustained research achievement relative to the chosen subspecialty or career path. Petitions for subspecialty fast-tracking must be approved by the credentials committee of the relevant subboard. This petition must be made either before the beginning of subspecialty training or during the first year of training.