Introduction

Academic general pediatrics (AGP) is an important component to the activities in research education, career development, advocacy and patient care that are conducted within a Department of Pediatrics. There has been a decline in the number and status of academic generalists. Establishing a process for accrediting fellowship-training programs is a small but significant step in a series of actions that must be taken to strengthen academic general pediatrics within the academic medical centers and throughout the field of pediatrics.

At the current time, no registry precisely documents the number of AGP fellowship programs, their training goals, or the number of trainees they serve. It is estimated that approximately 50 generalist academic pediatric general programs exist, accompanied by 7 child abuse programs and others including pediatric hospital medicine and environmental health. Our goal is to strengthen fellowship programs and to work out procedures to approve or accredit them, but not to certify individual trainees.

In the remainder of this document, we define the minimum requirements for an AGP fellowship program, so that programs may produce AGP fellows who possess the knowledge, skills and attitudes to pursue successful academic careers that employ skills in discovery, integration, and application of new knowledge. Academic general pediatric careers include activities that encompass traditional research, medical education, program evaluation, advocacy, and creation and dissemination of child health care policy. All fellowship trainees should be offered a balance of activities in patient care, research, education, career development, leadership, and advocacy. AGP fellowship training may
include attainment of advanced clinical skills in either a broad general pediatric area or in a more narrowly focused area of pediatrics, such as child abuse, environmental health, or hospital-based pediatrics.

We have developed a process for consultation, evaluation, and accreditation of an AGP fellowship program. We have used the models of the American Board of Pediatrics (ABP) and Accreditation Council for Graduate Medical Education (ACGME) as templates for our work, but have simplified the required documentation and added more structured curriculum requirements and emphasize scholarship.

**Purpose of Accreditation Requirements**

1. Ensure that future faculty are equipped with the fundamental skills to succeed in academic pediatrics.
2. Enhance the quality and consistency of academic general pediatric fellowships.
3. Allow for individuality of programs, yet enable them to achieve core goals and objectives.
4. Promote more recognition of AGP fellowships.
5. Encourage more residents to select academic general pediatrics as a career choice.

**Program Requirements for Fellowship Education in Academic General Pediatrics**

**I. Introduction**

An accredited AGP fellowship program should exist in a division that is an integral part of a core pediatric residency program accredited by the Accreditation Council for Graduate Medical Education (ACGME). Interaction of the AGP fellows and faculty with the residents in the core pediatrics residency program is strongly encouraged. Lines of responsibility for the pediatric residents and the academic general pediatric fellows should be clearly defined. The presence of the fellowship program should enhance, rather than detract from, the education of the pediatric residents.

**II. Institutional Organization**

A. **Sponsoring Organization**

The AGP fellowship program should be sponsored by the same institution that sponsors the related core pediatrics residency program. The institution must provide sufficient support to the Program Director, support staff and trainees to show an ongoing commitment to fellowship education.

B. **Appointment of AGP Fellows**

Prerequisite training for entry into a pediatric fellowship program should include the satisfactory completion of an ACGME-accredited pediatric residency or other training judged suitable by the program director (e.g. residency training in internal medicine/pediatrics, family medicine, or international pediatrics, or a PhD program).

To determine the appropriate level of training for a fellow transferring from another AGP fellowship program, the program director must receive from the director of that program written verification of the resident's educational experiences in the fellowship and a statement regarding his/her performance.

**III. Duration and Scope of Training**

A. **Length of Training**

AGP fellowship programs must provide at least two years of training. A longer training period may be required if
specific clinical or scholarly goals are to be fulfilled (e.g. completion of a Masters of Public Health or Masters in Clinical Research or Epidemiology, or advanced clinical training, for example in child abuse). For those trainees who have completed a Chief Residency or other comparable advanced training, one year of a three-year program may be waived.

A. **Scope of Training**
The fellowship program must develop in its fellows a commitment to lifelong learning and must emphasize scholarship, self-evaluation and self-directed learning, and planning for continuous learning. Fellows who are clinicians should develop skills in evidenced based medicine, critical analysis of clinical problems, clinical decision making, quality improvement, and understanding of the health care system. Progressive acquisition of skills in investigative efforts related to the field is essential, as is the ability to effectively communicate ideas, information and policy needs. Fellows should formulate a focus of scholarly activity that will serve as a base for future career development, and should develop expertise in a specific content area that relates to their scholarly interest.

The program must provide the AGP fellow with appropriate opportunities to maintain skills as members or leaders of patient care teams, or other groups in which they participate as researcher, educator, health advocate, or manager. For fellows who are clinicians, it is recommended that clinical work should include at least 15% time and not exceed 50% time over the course of the fellowship. Programs with a heavy clinical load should provide a curricular rationale for this heavy load and consider a three-year training cycle.

IV. **Program Personnel**
The program director and the teaching staff are responsible for the general administration of a program. These activities include, but are not limited to, the recruitment, selection, instruction, supervision, counseling, evaluation, and advancement of AGP fellows and the maintenance of records related to program accreditation.

1. **Program Director**
   There must be a single program director based at the primary teaching site who is fully committed to the program and devotes sufficient time to ensure achievement of the educational goals and objectives. In many cases, an associate or assistant program director will share leadership with the executive director of different fellowship tracks. The APA must be notified in writing of a change in leadership of the program.

   1. Qualifications
      The director must:

      - document possession of the requisite educational, investigative, and administrative abilities and experience.
      - have an appointment in good standing to an academic institution participating in the program.

   2. Responsibilities
      The program director, assisted by an associate/assistant program director, if available, is responsible for the following:

      - Preparation of a written curriculum, as described in Section VI. Educational Program. This curriculum must be distributed to AGP fellows when they enter the program, as well as to faculty, and reviewed and modified over time, based on periodic program evaluations.
      - Selection of AGPs fellows for appointment to the program in accordance with institutional and departmental policies and procedures.
• Selection and supervision of core teaching staff. If the program is conducted at more than one institution, the program director should provide overall coordination to assure that the needs of individual fellows are meet.
• Oversight of AGP fellows for their clinical responsibilities (if applicable) through explicit written guidelines describing lines of responsibility for the care of patients. Such guidelines must be communicated to all members of the program staff. AGP fellows must be provided with prompt, reliable systems for communication and interaction with physicians providing oversight.
• Implementation of fair procedures, as established by the sponsoring institution, regarding academic discipline and AGP fellows' complaints or grievances.
• Monitoring stress in AGP fellows, including mental or emotional conditions inhibiting performance or learning and drug- or alcohol- related dysfunction. Program directors and teaching staff should be sensitive to the need for timely provision of confidential counseling and psychological support services related to AGP fellows. Training situations that consistently produce unhealthy stress for fellows must be evaluated and modified.

A. Mentor
Each trainee must have at least one faculty member who will guide the fellow's career decisions through the training period. The mentor must supervise the academic advancement of the fellow, be certain that the Scholarship Oversight Committee is active and effective, and oversee the professional well being of the trainee.

B. Teaching Staff
There must be sufficient numbers of teaching staff who devote adequate time to the educational program to enable it to meet its educational goals and objectives. In addition to the AGP program director, there must be at least one other qualified member of the teaching staff.

The teaching staff must provide evidence of a commitment to and productivity in the disciplines that are central to the program's core curriculum, including research and education, and ongoing pursuit of scholarship. The APA will consider the following as indicative of the commitment of the teaching staff to scholarly activity:

0. Projects funded by agencies requiring peer review
1. Publications in peer-reviewed journals
2. Presentations at national, regional, or international scientific meetings
3. Research protocols approved by the local Institutional Review Board and implemented.
4. Leadership in research networks or regional/national educational organizations.

All members of the teaching staff must demonstrate a strong interest in the education of AGP fellows, sound clinical and teaching abilities, support of the goals and objectives of the program, a commitment to their own continuing education, and participation in scholarly activities. They must devote adequate time to each of these endeavors.

C. Other Professional Personnel
Programs must have access to the additional professional, technical, and clerical personnel needed to support the administrative and educational activities of the fellowship program. Consultants should be available, including biostatisticians, methodologists, programmers, medical education specialists, economists and others as needed.
D. Scholarship Oversight Committee

Review of scholarly activity will occur at the program level. Each fellow must have a Scholarship Oversight Committee, which should consist of three or more individuals, at least one of whom is based outside the academic general pediatric discipline. The fellowship program director may serve as a trainee’s mentor and participate in the activities of the oversight committee. In some programs, the same committee will provide scholarly oversight for more than one fellow.

An equivalent advisory group may substitute for the Scholarship Oversight Committee if fellows have scholarly oversight through a degree component of the program (e.g., an MPH thesis committee). However, the fellowship program director or a designated mentor must oversee the coordination and integration of the fellows' scholarly, clinical, and administrative activities, and provide access to a fair process for conflict resolution, if needed.

The Scholarship Oversight Committee (or equivalent) will:

0. Determine whether a specific activity is appropriate to meet the APA guidelines for scholarly activity
1. Determine a course of preparation beyond the core fellowship curriculum to ensure successful completion of the project
2. Evaluate the fellow's progress as related to scholarly activity
3. Meet with the fellow early in the training period and regularly thereafter, at least once a year
4. Require the fellow to present/defend the project related to his/her scholarly activity
5. Advise the program director on the fellow's progress and assess whether the fellow has satisfactorily met the guidelines associated with the requirement for active participation in scholarly activities.

V. Facilities and Resources

The sponsoring institution is responsible for ensuring that the fellowship program has adequate facilities and resources to achieve its educational objectives.

A. Resources for Research and Scholarly Activities

There must be adequate resources for scholarly activity, research and critical analysis, including adequate laboratory space, equipment, teaching facilities and access to learning, financial support, and computer services.

B. Library Facilities and Computer Access

AGP fellows must have access to an on-site or online library or collection of appropriate texts or journals and to electronic databases and other data processing applications required for their scholarly work.

B. Inpatient and Outpatient Facilities

Fellows must have access to patient populations and clinical facilities needed for their scholarly activities in research and/or education.

VI. Educational Program

A. Curriculum Design

The required elements of a planned curriculum are described in Addendum A: Core Curriculum Requirements. Every program must develop written educational goals and objectives (Curriculum Requirement A), learner needs assessment and progress tracking (Curr Req B), learning activities (Curr Req C), and evaluation methods (Curr Req D), all of which should be linked to the program’s goals and objectives. In addition, programs must put in place a process for annual program self-evaluation and improvement (Curr Req E).
Educational activities must be provided in three academic competency domains: 1) Research, 2) Education, and 3) Career Development and Leadership. Within these domains, 13 educational goals must be included in the curriculum of the fellowship program (see table below). All accredited fellowship programs must include some educational activities and evaluation methods that relate to the required goals, but programs are expected to vary in their degree of emphasis on different required goals. For example, for the required goal on pediatric advocacy, one program might choose to address the goal with 2-3 seminar presentations, while another program might require fellows to conduct and evaluate advocacy projects.

In addition, the AGP fellowship program should provide for fellows who are clinicians to acquire expertise as a provider, consultant, and care coordinator in the field, where applicable. Integration of these clinical activities with the fellow’s educational and other scholarly work is required.

### REQUIRED ACADEMIC GOALS

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<th>Competency Domain 1: Research</th>
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<td><strong>GOAL: Research Design.</strong> Plan research projects that derive from testable research questions and/or hypotheses, and use sounds methods for sampling, measurement, and analysis.</td>
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<td><strong>GOAL: Clinical Epidemiology and Evidence-Based Medicine.</strong> Use the principles of clinical epidemiology and evidence-based medicine to critically appraise the medical literature, and make sound clinical decisions.</td>
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<td><strong>GOAL: Statistical Analyses.</strong> Utilize statistical techniques to organize information and make valid inferences from the results of data collection.</td>
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<td><strong>GOAL: Scientific Communications.</strong> Summarize, present, and publish the results of research, in order to communicate, teach, and disseminate knowledge, using standard oral and written formats.</td>
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<th>Competency Domain 2: Education</th>
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<td><strong>GOAL: Teaching.</strong> Effectively teach students, colleagues and other professionals, and lay groups, assessing learner needs, providing timely and constructive feedback, developing plans for improvement, and using sound evaluation tools and processes.</td>
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<td><strong>GOAL: Evaluation of Learners.</strong> Develop and use sound methods and processes to evaluate learners, based on predefined learning goals and objectives.</td>
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<th>Competency Domain 3: Career Development and Leadership</th>
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<td><strong>GOAL: Professionalism.</strong> Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.</td>
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<td><strong>GOAL: Habit of Life-long Learning.</strong> Demonstrate a commitment to self-assessment and improvement, and proficiency in the development and pursuit of life-long learning plans, including a personal plan for continuing education and recertification.</td>
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<td><strong>GOAL: Career Planning.</strong> Formulate career plans to make the transition from training to independence in an academic setting.</td>
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<tr>
<td><strong>GOAL: Academic Leadership and Administration.</strong> Practice the skills required to be a successful leader in the academic setting, including visioning, management, finance, interpersonal skills, and negotiation.</td>
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<tr>
<td><strong>GOAL: Health Care Organization and Delivery.</strong> Understand the structure and functions of complex healthcare systems and models for the delivery of health care to children.</td>
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<tr>
<td><strong>GOAL: Pediatric Advocacy.</strong> Understand and apply the principles and methods of child advocacy.</td>
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A curricular resource for fellowship programs is provided in **Addendum B. Academic Goals and Suggested Objectives for General Pediatrics Fellows.** Thirteen required academic goals are marked; others are recommended, but may not fit every fellowship program. Programs are encouraged to develop additional goals, including clinical goals, that reflect the content emphasis of the fellowship.

As discussed in **Addendum A. Educational Principles of the Accreditation Process,** a planned curriculum
needs goals that define broad areas of learning, but these goals should be elaborated with specific learning objectives. Objectives that describe precisely what should be learned are essential for both teaching and evaluation. For all the goals included in Addendum B, suggested learning objectives are provided. None of the specific objectives listed is required. However, each program must develop specific objectives to fit its educational emphasis and setting. Goals that are outside the focal area of emphasis for a fellowship program need only a few (2-3) objectives. High priority teaching goals will require more objectives. However, for any goal, we recommend selecting carefully among possible objectives and keeping the list short (8-12).

Teaching and learning activities in the program must be linked to the written goals and objectives of the curriculum. There must be a formally structured educational program in academic general pediatrics that uses an effective combination of didactic, interactive, and experiential activities. The AGP fellow should actively participate in the planning and implementation of these educational activities. At the time of entry into the program, each fellow must develop an individual learning plan that includes both required and self-directed educational activities that will prepare the fellow for his/her chosen career path.

VII.

. Scholarly Activity

Each program is expected to engage fellows in scholarly activities that relate to the core academic competency domains of Research, Education, and Career Development and Leadership. These activities should develop fellows’ ability to critically analyze their own work and that of others; to assimilate new knowledge, concepts, and techniques related to the field of their practice; to formulate clear and testable questions from a body of information/data so as to be prepared to function as an effective academic generalist and to advance research in pediatrics; to translate ideas into written and oral forms as teachers; to serve as consultants for colleagues in other medical or scientific specialties; and to develop as leaders and advocates in their fields. Didactic, interactive, and experiential activities should be offered.

The core experience of the fellowship curriculum should be a research or scholarly project. All fellows must engage in hypothesis-testing projects or in projects of substantive scholarly exploration and analysis that require critical thinking. Areas in which scholarly activity may be pursued include, but are not limited to: basic, clinical, or translational biological or behavioral medicine; education; health services; quality improvement or program evaluation; bioethics; community advocacy; and public policy. Fellows must acquire and analyze data, derive and defend conclusions, place conclusions in the context of what is known or not known about a specific area of inquiry, and present their work in oral and written form to their Scholarly Oversight Committee (or an equivalent advisory group) and in other appropriate venues.

The Scholarship Oversight Committee (or equivalent advisory group) in conjunction with the fellow, the mentor, and the program director will determine whether a specific project is appropriate to meet the guidelines for scholarly activities. In addition to biomedical research, examples of acceptable activities might include a critical meta-analysis of the literature, a systematic review of clinical practice with the scope and rigor of a Cochrane review, a critical analysis of public policy relevant to academic generalism, or a curriculum development project with needs assessment and evaluation components. All projects require active participation by the fellow and must be mentored.

A. Teaching Activities

AGP fellows must be given the opportunity to teach using a variety of methods and settings. Didactic and interactive activities about teaching and evaluation should also be included in the curriculum. Fellows should gain experience in planning and leading conferences, experiential projects, and teaching sessions with students, residents, or other learners. Fellows with a strong interest in teaching should be encouraged to develop a teaching portfolio that documents his/her teaching experiences and evaluation of these teaching efforts.

B. Career Development and Leadership

Educational activities related to career development and leadership can take many forms, but should involve role modeling and mentoring by senior faculty. Periodic discussion of career plans with fellows is an essential part of a fellowship training. The fellows must learn the important skills of time management and balancing multiple priorities, which are essential to the role of the generalist. Fellows should also be given one or more administrative assignments, so they can refine their skills in planning, leadership, organizational development, advocacy, and professional teamwork.
An AGP fellowship program must provide an environment that demands high standards of professionalism and a commitment to continued learning and improvement. The values of professionalism must be fostered in fellows throughout their training. These values include placing the needs of one’s patients and learners ahead of one’s self-interest; being responsive to the needs of society; maintaining a commitment to scholarship and to high standards of research; demonstrating dedication to effective communication and information transfer with patients, learners, and colleagues; and enhancing the ability of all colleagues in the medical profession to discharge their responsibilities.

C. Clinical Activities
An AGP fellowship program is encouraged to offer supervised training to ensure the acquisition of the necessary clinical skills appropriate to the content emphasis of the fellowship. All fellows who are engaged in clinical activity should develop sound judgment and decision-making skills that affect patient treatment and management. Fellows should learn how sociocultural factors affect patients and their families as well as learners, and are encouraged to participate in clinical teaching and quality improvement activities. Programs are encouraged to design the clinical curriculum so that it addresses the core competencies related to their field.

VIII. Evaluation, Guidance, and Oversight
There must be formal mechanisms for evaluation of the fellow's performance, faculty performance, and the program's achievement of its educational objectives. The evaluation mechanisms must be in compliance with the specific guidelines provided below.

A. Evaluation of Fellows
The fellow must be given a copy of the written educational goals and objectives at the start of training. The program must have formal mechanisms by which the knowledge, skills, and professional growth of the AGP fellows, based on the program's written educational goals and objectives, are evaluated at least annually. Faculty should be skilled in evaluating fellows and providing constructive feedback.

A written record of these evaluations must be maintained, must be formally reviewed with the AGP fellow at least annually, and must be accessible to authorized personnel. More frequent, informal assessment and feedback sessions between the fellow and mentor and/or Scholarship Oversight Committee (or an equivalent advisory group) are strongly recommended. AGP fellows should be advanced to positions of higher responsibility only on the basis of evidence that they are making satisfactory progress in scholarship and professional growth.

The program director, in consultation with the teaching staff and Scholarship Oversight Committee, must provide a written final evaluation for each AGP fellow who completes the program. This evaluation must include a review of the fellow's performance during the final period of training. The program must verify that the fellow has demonstrated sufficient scholarly and professional ability and acquisition of appropriate clinical and procedural skills, when appropriate, to practice competently and independently. This final evaluation should be part of the AGP fellow's permanent record, which must be maintained by the institution.

B. Evaluation of Faculty
Mentors and teaching faculty must be evaluated at least annually by fellows and the program director. Documentation of faculty evaluation must include an assessment of their teaching ability and commitment to teaching, their clinical knowledge (if applicable), their ability as evaluators, and their active participation in scholarly activity. There must be a formal mechanism by which fellows participate in faculty evaluations, and faculty should receive formal feedback from these evaluations.

B. Evaluation of the Program
The teaching staff must be organized and have regular, documented meetings to review program goals and objectives as well as program effectiveness in achieving them. They should annually review AGP fellows' time allocations (to clinical care, teaching, and research) and evaluate the fellows' academic performance in relation to their educational goals and objectives.

Periodically, the program should evaluate the academic outcomes of program graduates. The evaluation should also review the quality of supervision of fellows, the teaching quality of faculty, and the program's use of available resources, e.g., financial and administrative support of the program, the volume and variety of patients
available for educational purposes, and the contributions of the participating institutions. Written evaluations of
the program by fellows should be included in this process. Information gained from these evaluations should be
used to implement improvements in the program.

Annual review and evaluation of the program in relation to the educational goals, the quality of the curriculum,
the needs of the AGP fellows, and the clinical and research responsibilities of the faculty must be documented.
At least one AGP fellow representative should participate in these annual reviews.