## **Definitions of Pharmacy Residencies and Fellowships**

Pharmacy residencies (originally termed "internships") began in the early 1930s, primarily for the purpose of training pharmacists for the management of pharmacy services in hospitals. The first nonacademic residency program is believed to have been conducted by Harvey A. K. Whitney at the University of Michigan Hospital. Approximately 10 years later, the first residency program combined with formal graduate studies was created. Developments in these programs eventually led the American Society of Hospital Pharmacists to establish, in 1948, standards for pharmacy internships in hospitals. Those standards defined an internship as "a period of organized training in an accredited hospital pharmacy under the direction and supervision of personnel qualified to offer such training."

Two types of internships were recognized, nonacademic and academic. The nonacademic internship consisted of a period of training in a hospital pharmacy. The academic internship consisted of training in a hospital pharmacy and study in an accredited graduate school associated with a college of pharmacy and leading to a Master of Science degree.

In 1962, following several revisions in the standards, ASHP established an accreditation process and accreditation standards for residencies in hospital pharmacy. <sup>4,5</sup> In this action, the term "internship" was replaced by "residency." A residency was defined as "a postgraduate program of organized training . .." (and further detailed within the various standards). In 1985, the concept that a resident's training should be *directed* was incorporated into the definition. <sup>6-9</sup> It was also acknowledged that a residency is practice oriented and that it is possible for a residency to focus on a defined (specialized) area.

During the early 1970s, numerous residencies developed in *clinical* practice, leading to the establishment, in 1980, of accreditation standards for clinical pharmacy and specialized residency training. <sup>10,11</sup> In 1986, the American Pharmaceutical Association published a compilation of programmatic essentials for community pharmacy residencies. <sup>12</sup> In that same year, the American College of Apothecaries published specific guidelines for the accreditation of community pharmacy residencies. <sup>13</sup>

Paralleling these developments and fostered by a growing sophistication and clinical thrust in institutional pharmacy practice, postgraduate research-oriented programs (generally termed "fellowships") developed in the 1970s. These programs were conducted primarily in colleges of pharmacy and in academically based health centers to educate and train individuals to conduct pharmacy research. A 1981 survey of fellowship programs reported the existence of 58 fellowships in 19 topic areas.<sup>14</sup> Two-thirds of these fellowships had existed for 3 years or less. The oldest program had existed for less than 9 years. The ASHP Research and Education Foundation initiated clinical fellowships in 1978 and defined a pharmacy fellowship as "a directed, but highly individualized program [that] emphasizes research. The focus of a pharmacy fellowship is to develop the participant's (the fellow's) ability to conduct research in his or her area of specialization."15,16

ASHP publishes an annual directory of ASHP-accredited residency programs. In 1985, there were 184 accredited programs.<sup>17</sup> The American College of Clinical

Pharmacy publishes an annual listing of residencies and fellowships conducted by its members. In 1985, ACCP reported the availability of 51 such residencies and 83 such fellowships. <sup>18</sup> Another source reported 115 known fellowships in 1986. <sup>19</sup> In that year, there were 12 clinical fellowships sponsored by the ASHP Research and Education Foundation in nine areas of specialization.

By 1986, a lack of conformity had arisen in the use of the terms "residency" and "fellowship," and considerable potential existed for program applicants to be misinformed or misled regarding program purposes and content. In 1986, at the recommendation of the ASHP Commission on Credentialing, ASHP invited six other national pharmacy organizations to discuss the issue and develop consensus definitions for the terms. The definitions and interpretations that follow resulted from that conference. These definitions and interpretations are viewed as accurate for current residencies and fellowships yet sufficiently broad and flexible to allow the development of new types of programs. Education, practice, and research developments may generate changes in residencies and fellowships and ultimately stimulate revisions in the definitions and interpretations.

## Residency

**Definition.** A pharmacy residency is an organized, directed, postgraduate training program in a defined area of pharmacy practice.

Interpretation. Residencies exist primarily to train pharmacists in professional practice and management activities. Residencies provide experience in integrating pharmacy services with the comprehensive needs of individual practice settings and provide indepth experiences leading to advanced practice skills and knowledge. Residencies foster an ability to conceptualize new and improved pharmacy services. Within a given residency program, there is considerable consistency in content for each resident. In addition, accreditation standards and program guidelines produced by national pharmacy associations provide considerable program content detail and foster consistency among programs.

A residency is typically 12 months or longer in duration, and the resident's practice experiences are closely directed and evaluated by a qualified practitioner–preceptor. A residency may occur at any career point following an entry-level degree in pharmacy. Individuals planning practice-oriented careers are encouraged to complete all formal academic education before entry into a residency.

## **Fellowship**

**Definition.** A pharmacy fellowship is a directed, highly individualized, postgraduate program designed to prepare the participant to become an independent researcher.

*Interpretation.* Fellowships exist primarily to develop competency in the scientific research process, including conceptualizing, planning, conducting, and reporting research. Under the close direction and instruction of a qualified researcher-

preceptor, the participant (the fellow) receives a highly individualized learning experience that utilizes research interests and knowledge needs as a focus for his or her education and training. A fellowship graduate should be capable of conducting collaborative research or functioning as a principal investigator.

Fellowships are typically offered through colleges of pharmacy, academic health centers, or specialized health-care institutions. Fellowships are usually offered for predetermined, finite periods of time, often exceeding 12 or even 24 months. Individuals planning research-oriented careers should expect to complete formal education in research design and statistics either before or during a fellowship. A fellowship candidate is expected to possess basic practice skills relevant to the knowledge area of the fellowship. Such skills may be obtained through practice experience or through an appropriate residency and should be maintained during the program.

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