

(Approved by the Fermilab Board of Overseers 9 June 2006)

POLICY ON FERMILAB SCIENTIFIC APPOINTMENTS

I. PRINCIPLES

Personnel practices for scientific staff at Fermilab are based on the following principles:

- (a) Fermilab was built as a national laboratory and is intended primarily for the use of visiting scientists. Every member of the scientific staff at Fermilab is expected to contribute to the development and operation of the Laboratory.
- (b) In order to ensure that Fermilab's program is of the highest quality, it is essential that members of the scientific staff, as noted in Section IV, be given the opportunity to engage in self-directed research in areas of science related to the Laboratory programs.
- (c) Intellectual contributions in areas of physics related to the Laboratory programs, technology related to the Laboratory programs, and leadership, shall be recognized on an equal footing.
- (d) Personnel practices shall be uncomplicated and made known to all who are affected by them. They shall be applied fairly and uniformly.
- (e) Fermilab will strive to remain competitive with other similar institutions in attracting and retaining qualified scientific staff members.
- (f) It is the policy of Fermilab to pursue its scientific goals with an emphasis on equal employment opportunity and a special dedication to human rights, diversity, and dignity.

II. COMMITTEE ON SCIENTIFIC APPOINTMENTS

The Director shall appoint a Fermilab Committee on Scientific Appointments (FCSA) normally consisting of about ten Scientists or Applied Scientists who would serve staggered three-year terms. FCSA shall be involved in the hiring, review, promotion, and termination of scientific staff members in order to ensure that the personnel practices are applied fairly and uniformly, and that the proper professional standards are maintained.

FCSA shall be an advisory committee to the Director. The Director shall appoint an individual to function as a permanent, non-voting, secretary to FCSA.

III. CLASSIFICATIONS

The following classifications exist for members of the scientific staff at Fermilab:

- (a) Associate Scientist (includes Wilson Fellow and Peoples Fellow): Scientific staff members on term appointments are appointed as Associate Scientists. This appointment usually represents the first step beyond the level of Research Associate. Associate Scientists are appointed by the Director, after review by FCSA, and they serve at the Director's pleasure. The position roughly corresponds to Assistant Professor at a university. The letter of appointment shall specify the exact duration of the term appointment (generally three years) and shall indicate the fraction of time which the appointee may devote to self-directed research in areas of science related to the Laboratory programs. (This time fraction will henceforth be referred to as the research fraction). Since Wilson and Peoples Fellows are devoted entirely to research, the direction of their work is made by agreement with the appropriate Associate Director.
- (b) Applications Physicist: Scientific staff members who have the experience typical of a Ph.D. and several years in science related to the Laboratory's programs, who have specific areas of expertise, and who can apply the skills of that background to Fermilab's accelerator and facility support, may qualify for appointment as an Applications Physicist. This appointment may be without time limit and is made by the Director, who may request FCSA advice on the appointment. Applications Physicists serve at the Director's pleasure.
- (c) Applied Scientist: Scientific staff members who have distinguished themselves by their contributions in one particular area of applied science may qualify for an appointment without time limit as Applied Scientist. These appointments are made by the Director, after review of the candidate's qualifications by FCSA. Initial appointment as an Applied Scientist or Scientist is subject to approval by the Fermilab Board of Overseers. The Applied Scientist classification is subdivided into three levels of increasing rank: Applied Scientist I, Applied Scientist II and Applied Scientist III (roughly corresponding to university Associate Professor, Full Professor, and Distinguished/University Professor, respectively).

In the event that an Applied Scientist must be terminated, such an action shall require a written statement of the reasons, a majority vote of FCSA, the consent of the Director, and approval by the Fermilab Board of Overseers. In

exceptional circumstances such as a major restructuring of the Laboratory, termination of Applied Scientists will require the approval of only the Fermilab Board of Overseers.

- (d) Scientist: Scientific staff members who have distinguished themselves by a wide range of contributions in physics related to the Laboratory programs, technology related to the Laboratory programs, or leadership, may be recognized by an appointment without time limit as Scientist. These appointments are made by the Director, after review of the candidate's qualifications by FCSA. Initial appointment as a Scientist or Applied Scientist is subject to approval by the Fermilab Board of Overseers. The Scientist classification is subdivided into three levels of increasing rank: Scientist I, Scientist II and Scientist III (roughly corresponding to university Associate Professor, Full Professor, and Distinguished/University Professor, respectively).

In the event that a Scientist must be terminated, such an action shall require a written statement of the reasons, a majority vote of FCSA, the consent of the Director, and approval by the Fermilab Board of Overseers. In exceptional circumstances such as a major restructuring of the Laboratory, termination of Scientists will require the approval of only the Fermilab Board of Overseers.

- (e) Guest Scientist: This is a term appointment made by the Director. Guest Scientists normally have positions at other institutions and receive appointments at the Laboratory to carry out specific duties and responsibilities related to the Laboratory programs. Fermilab scientists who have retired from employment at the laboratory may also receive Guest Scientist appointments to continue their self-directed activities.
- (f) Emeritus Appointments: The Director may recommend Emeritus status for a retiring Fermilab scientist to the Fermilab Board of Overseers. The Laboratory support and resources to be made available to the Emeritus Staff Member will be determined by the Director. The individual will be eligible to apply for research grants.

On occasion the Laboratory and an Emeritus Staff Member may agree that the latter be returned to active service to assist in some task in either a part-time or full-time salaried position. Continued participation in the Laboratory research activity would be typical.

IV. RESEARCH

Associate Scientists, Applied Scientists and Scientists may undertake self-directed research in areas related to the Laboratory programs, with the fraction of their time

devoted to this being negotiated with the Division/Section Head or in some instances the Director. For Applications Physicists, such work is not normally undertaken, but can be with the approval of the appropriate Division/Section Head.

V. ANNUAL REVIEW OF PERFORMANCE

All Associate Scientists, Applications Physicists, Scientists and Applied Scientists receive annual reviews of their performance; an up-to-date CV shall be provided as a part of this review. Also included in the review will be performance in the area of Environment, Safety and Health. The results of these reviews shall be used as the primary basis for salary adjustments and as part of the basis for promotions. The research fraction may be reviewed and changed through negotiations as noted in Section IV.

VI. APPOINTMENT AND PROMOTION CRITERIA AND EXPECTATIONS

Associate Scientist

Successful candidates for Associate Scientist appointments will be highly recommended from inside and outside the immediate circle in which they work, and from members and non-members of the Fermilab staff. They will also be judged to have the potential to make contributions to the Laboratory that will subsequently qualify them either for a Scientist I or an Applied Scientist I appointment. Candidates' abilities are judged on the basis of past career performance, their qualifications with respect to a posted job description, and on their future potential.

Promotion to Scientist I or Applied Scientist I

Associate Scientists who are promoted to either scientist category will have demonstrated an ability to do self-directed work. They will have made original contributions either in science or in an area of technology. These contributions shall be recognized as significant by the broader international community of scientists working in and out of the candidate's area of expertise.

Scientists will have a broad ability to contribute to the programs of the Laboratory and could be expected to successfully contribute in many of the following areas: development of scientific theory and phenomenology, technology development and construction, software development, initiation and implementation of analyses, publishing of results, and leadership of others in organizations devoted to achieving these goals or in the operation of the Laboratory.

Applied Scientists will have an ability to contribute to the programs of the Laboratory with a level of achievement at the same level as that required of a Scientist but

in a more narrowly focused way with a high level of specialization and achievement in either science or technology.

The criteria to be considered for promotion from Associate Scientist to Scientist I or Applied Scientist I fall generally into three areas: scientific achievements, technical achievements, and leadership. The standard for performance in each of these areas is as follows:

1. Science: The candidate should demonstrate an ability to carry out original, significant research leading to publication in refereed journals. The record of publications will be among the criteria considered. The body of this work should reflect significant intellectual contributions from the candidate that are recognized by scientists working in the area as well as those who are not.
2. Leadership: Leadership can be demonstrated in a number of ways that can range from the successful completion of important projects, from small to large, to the management of a large operating organization. Successful leadership in any of these environments will include the ability to plan, organize, direct, and oversee the work of others and to do so in a way which effectively accomplishes the goal of the organization while inspiring others to follow the direction of the candidate. The ability to make good decisions and take actions which use the resources of the Laboratory effectively and to efficiently carry out the mission of the organization should be demonstrated. Leadership may also be demonstrated by actions taken to influence the scientific or technical direction and success of the Laboratory leading to new programs or capabilities or developing new competencies.
3. Technical expertise: This can be demonstrated by designing or creating technical apparatus or software at or beyond the state-of-the-art to further the scientific program of the Laboratory. The technical expertise should be exceptional in that the candidate should be judged by peers and others to be an acknowledged expert in the area. This expertise will generally consist of a strong technical component and should transcend standard engineering practices. Technical expertise may be demonstrated by publications, drawings, technical memos, or existing software or hardware. The existence of a working system should be accompanied by appropriate publications and documentation. Recognition of technical expertise should also be demonstrated by letters from independent experts.

An Associate Scientist who becomes a parent by birth or adoption will be granted an additional year of this appointment, with a concurrent year's delay in consideration for promotion, upon written request to the Associate Scientist's Division Head and to the Head of the Laboratory Services Section. Other written requests for delay of promotion consideration may be granted for reasons such as serious illness.

Promotion to Scientist II or Applied Scientist II

Promotion to Scientist II or Applied Scientist II requires additional accomplishments beyond the level for Scientist I or Applied Scientist I. The normal expectation would be for promotion to be considered after about six years as Scientist I or Applied Scientist I. Promotion to Scientist II (or Applied Scientist II) is expected in the sense that all Scientist Is (or Applied Scientist Is) should, in the normal course of their work, be promoted. Scientist II or Applied Scientist II is usually the highest rank achieved by a scientist during their career at the Laboratory.

Promotion to Scientist III or Applied Scientist III

For promotion to the level of Scientist III or Applied Scientist III, the same general criteria shall be used as have been established for appointment to the general categories of Scientist and Applied Scientist. However, the candidate must have demonstrated substantial and sustained professional contributions to the Laboratory or have established a comparable record of significant professional achievement in the field, recognized by the broader scientific community.

Clear evidence of superior performance relative to one's peers shall be necessary. Appointment to Scientist III or Applied Scientist III is reserved for those Laboratory scientists who have distinguished themselves by exceptional achievements.

The candidate must have demonstrated considerable and unusual leadership ability pertaining to the scientific or technical achievements of the Laboratory, a professional specialty, or a significant area of laboratory management. Leadership ability is indicated, not only in a managerial context, but also by the person's ability to inspire, influence, and direct others to significant goals and achievements.

VII. FCSA PROCEDURES

Associate Scientist

The initial appointment of an Associate Scientist is generally for a term of three or more years ending on a September 1. Usually, a second Associate Scientist term is recommended by FCSA to the Director, to end on September 1 three years after the end of the first term.

Associate Scientists are reviewed by FCSA again by the beginning of the last year of their term, which gives them a year's notice if there is no further appointment granted. This review generally results in a recommendation to promote (Applications Physicist, Applied Scientist, Scientist) or terminate at the end of the current Associate Scientist term. Consideration by FCSA for promotion of an Associate Scientist before the beginning

of the last year of their term is occasionally carried out on the recommendation of a candidate's Division Head; it can also be initiated by the candidate.

The terms of Peoples and Wilson Fellows, including one evaluation and renewal, are five years. Associate Scientists in particle- or astro- theory have a single five year term.

The candidate's Division Head makes the case to FCSA for a promotion by providing a CV and reference letters; generally about three letters from Fermilab staff members and three letters from persons outside Fermilab are provided.

In its evaluation of a candidate for promotion, FCSA uses the criteria given in Section VI, above. It is looking for overall excellence, with evidence of scientific initiative and innovation. FCSA should be cognizant of the fact that the tasks assigned to the candidate by the Division Head may allow less time for one or more of the three areas of science, technical expertise, and leadership.

Letters supporting promotion are requested by the candidate's Division Head or designee, from suggestions by the candidate and from the Division Head's own knowledge. The request letters should be based on a common template, and comparison of the candidate with others should be included. Some of the letters should be from outside the immediate collaborators of the candidate. FCSA may also obtain additional information on the candidate, by interviews and letters.

FCSA makes a written recommendation to the Director regarding the promotion, or otherwise, of a candidate. The Director may make a recommendation for promotion, together with supporting material, to the Fermilab Board of Overseers. In submitting the recommendation to the Board of Overseers, the Director will make clear what are the expectations for the role that the candidate scientist will play in the Laboratory.

In the case of a candidate for whom the Division/Section recommendation is for no further appointment after the termination of the current Associate Scientist appointment, FCSA will review the documentation supplied by the Division/Section Head for consistency, and make comments on this in a memo to the Director.

Promotions from Scientist or Applied Scientist I to II:

Annually, FCSA requests recommendations from Division Heads for promotions of Scientist/Applied Scientist Is to IIs. The Division Head provides a written recommendation, generally with an accompanying note from the candidate's supervisor. In addition, FCSA reviews all Scientist Is and all Applied Scientist Is, and may decide to consider candidates additional to those suggested by Division Heads; the process can also be initiated by a candidate. FCSA may obtain additional information on candidates, by interviews and letters. In its review of the candidate, an important consideration for the Committee is whether the candidate has demonstrated some significant achievement since becoming a Scientist I or Applied Scientist I.

FCSA provides a written summary to the Director of its recommendations for promotion, and also of any recommendation not to promote a candidate who had been recommended for promotion by a Division Head.

Promotions from Scientist or Applied Scientist II to III:

About every two years, the Director appoints an ad-hoc committee of Scientist IIIs to recommend promotions to Scientist III or Applied Scientist III.

VIII. PERSONNEL PRACTICES

The Laboratory Personnel Policy Guide applies in all instances to scientific staff members except where this policy on appointments makes specific statements regarding procedures.

IX. APPEALS ON APPOINTMENT PROCEDURE

Actions taken or proposed relative to Associate Scientists or Applications Physicists can be appealed through the normal grievance procedure or to the Director. Appeals for individuals classified as Applied Scientists or Scientists can be made through the grievance procedure or to the President of URA. Appeals should be in written form.