

**REQUEST FOR APPLICATIONS**  
**THE NATIONAL HEMOPHILIA FOUNDATION**  
**CLINICAL FELLOWSHIP PROGRAM**  
**Award Start Date: July 1, 2003**  
**Application Deadline: February 10, 2003**  
**Supplemental Candidate Application Deadline: May 1, 2003**

**Background**

Hemophilia is an anomaly in the current medical arena because the majority of hemophilia patients are treated in comprehensive care centers. However, this highly specialized care system has become increasingly fragile as hemophilia treatment center (HTC) physicians retire or leave the field. Such departures have accelerated as an ironic byproduct of the HTCs' success: more and more patients are able to self-treat at home, thus reducing patient contact hours. This, coupled with the relatively low number of hemophilia patients, has imperiled the profession as a viable full-time practice. Other systemic problems have included the lack of training programs for bleeding disorder specialists and reduced institutional support for hemophilia clinical care and research.

At the same time, an inadequate system exists for meeting the needs of those with thrombophilic disorders. One proposed solution for meeting the needs of both thrombophilic and hemophilic patients is to train physicians who are skilled in the treatment of both conditions at specially designated centers. It has been suggested that this would increase the number of centers, locations, and providers and spur institutional support.

**Overall Program Description**

The National Hemophilia Foundation Clinical Fellowship Program is intended to increase the number of skilled clinicians committed to providing comprehensive care for individuals with bleeding and clotting disorders and to prepare candidates for academic careers. The program is designed for licensed physicians who are seeking hands-on training in bleeding and clotting disorders care and research.

It is the aim of the program that graduates will become expert clinicians, role models and leaders able to help shape health policy, and providers of training and support to others in hemostasis and thrombosis care. The program is also designed to prepare fellows for academic careers by providing critical training in an environment that fosters clinical and/or basic research. To further support the academic development of the fellows, the program also intends to offer medical school loan assistance and tuition reimbursement for fellows choosing to pursue relevant advanced degrees during their tenure.

Training will take place in qualified hemophilia/thrombophilia treatment centers in the United States. The program's goals will be reached through the provision of an intensive, focused training in hemostasis and thrombosis clinical care and coagulation disorder-related clinical research for the select group of physicians recruited as NHF fellows. The

NHF fellowship program will offer didactic and experiential training in diagnostic and therapeutic procedures, comprehensive care, and clinical research methodology. Training will be provided to fellows by the institutions for up to two years. Institutions will be encouraged to make available a third- and fourth-year fellowship for additional, optional clinical or basic research training. NHF is committed to working with institutions to ensure adequate funding for such training.

The competition for this award will be a two-step process. The first part is approval of the institution and will be based on the capacity of the institution to fulfill the training requirements of the program. Institutions will submit applications to NHF for qualification as an acceptable training environment; all applications will be subjected to a rigorous peer review process. Up to 15 institutions best meeting the requirements for an appropriate environment will be qualified for five years with a required annual update on any changes that might affect their ability to deliver training. Institutional approval does not result in funding, but qualifies the institution for the second part of the application process, the funding of training fellows. Thus, applications in this initial step of the process will be scored based on institutional capacity to train individuals and not on the individuals. Institutions not initially qualified may under certain circumstances apply for qualification after the initial round and also qualify for five years.

The second part of the application process is submission by the approved institutions of candidate training fellows. Once training candidates are identified, approved institutions should submit a supplemental candidate application. The supplemental candidate application will be reviewed expeditiously by the National Hemophilia Foundation and will be judged primarily on the commitment of the candidate to the field and academic qualifications. Funding accrues to approved institutions upon identification of appropriate candidates.

## **Eligibility**

### *Institutions*

Successful applicant institutions must have well established hemophilia/thrombophilia treatment centers with qualified clinical and research faculty. The institution will demonstrate a commitment to the development of the candidate as a skilled clinician and independent investigator. The center must submit an appropriate candidate recruitment plan as part of its application for funding.

Applicant institutions should demonstrate a strong capacity to provide training in the area of blood coagulation, hemostasis, thrombosis, treatment of hemophilia, von Willebrand disease and other bleeding disorders, and treatment of thrombophilia and thrombotic diseases. This should include descriptions of training faculty, the numbers and types of patients seen on an annual basis, the institutional resources for training, and the history of the institution as a training center. Applicant institutions should also demonstrate a rich research environment, both clinical and basic, in the same areas. Although this is not a research training grant, the strength of the training program is directly related to the

research environment, and opportunities for clinical fellows to transition into a research track should be available and be demonstrated.

### *Fellows*

Candidate fellows must have a medical degree or its equivalent by the time the fellowship begins. U.S. citizenship or permanent resident status is required. Fellows are expected to be eligible for subspecialty board certification at the completion of their training program; the two-year NHF fellowship may occur at anytime during that sequence.

### **Program Requirements**

Successful applicant institutions must have a physician designated as **Program Medical Director** who is responsible for the overall direction of the program. This includes oversight of all clinical education and training, clinical mentoring of the fellows, the identification of preceptors, and oversight of faculty. The Program Medical Director must be an expert in the diagnosis and management of coagulation disorders. The Program Medical Director ensures that each fellow receives appropriate clinical and research experience. The Program Medical Director is responsible for scheduling and coordinating fellows' activities; providing assistance and guidance to the fellows as needed; ensuring appropriate workspace with computer access including Internet and e-mail capabilities; and ensuring that adequate support services are available.

A wide range of faculty must be available to the fellows. Applicant institutions must demonstrate existing linkages and collaborative arrangements with hemophilia/thrombophilia service organizations. Fellows and Program Medical Directors will be required to attend a semiannual colloquium convened by NHF to address programmatic and clinically related issues. NHF will also make periodic site visits to assess the quality of the experience provided to the fellows.

Fellows will be encouraged to attend the NHF annual meeting. Fellows will be reimbursed for reasonable expenses according to the NHF travel policy.

### **Criteria for Selection**

#### *A. Capability and Experience*

The applicant institution's capability regarding hemophilia and thrombophilia disease management, both inpatient and outpatient, and experience in implementing similar training initiatives.

#### *B. Structure of Program, On-Site Resources and Workplan*

1. The organization and structure of the program (e.g., where within the institution the program will be based, how it will be administered, who will direct the program, reporting requirements, etc.).

The roles and responsibilities of the Program Medical Director and how s/he relates to the fellows must be clearly described. Clinical preceptors responsible for overseeing the fellow's clinical training and potential mentors for research projects should be identified. Their participation and responsibilities should be outlined.

2. The on-site academic, clinical and public health resources that can be made available to scholars to enrich their training experience.
3. The applicant institution's demonstrated capacity to meet the scope of training experiences required, and a workplan detailing how program standards will be met.
  - a. Clinical care component. Applicant institutions must describe the plan for the core clinical experience, including number of clinic sessions per week, identifying preceptors, rotations, multidisciplinary rounds, and other clinical assignments designed to ensure that fellows will have the opportunity to gain competency and skills in managing bleeding and clotting disorders. Formal didactic clinical training events in which fellows will participate, as well as additional activities planned for their benefit (e.g., rounds, conferences, journal clubs, etc.) should be described. Applicant institutions should outline their plan for assessing each scholar's knowledge and familiarity with bleeding/clotting disorders care at the beginning of the program and how they intend to tailor their program to ensure a smooth transition into managing cases of increased complexity.
  - b. Clinical research component. Clinical trials to test the safety and efficacy of therapies for hemophilia and thrombophilia are highly complex and require special expertise and knowledge to monitor these conditions.

It is the intent of this program that the individual with an MD or equivalent medical degree will acquire formal training, under the tutelage of an established investigator, in key elements associated with conducting clinical trials in coagulation disorders. These may include design of study protocols, recruitment of patients, power calculations, randomization procedures, use of controls, identification of appropriate entrance and exclusion criteria, identification of primary and secondary outcome measures, maintenance and assessment of blinding, informed consent, safety monitoring and evaluation, and data access and statistical analysis. These elements must be integrated in the plan of training.

The proposal must provide documentation that:

- the clinical fellow will be actively involved in ongoing coagulation disorder clinical trials
- a formal curriculum appropriate for clinical trial training, including courses in biostatistics, epidemiology, or other related courses is available at the institution and will be part of the fellowship experience.

### *C. Recruitment*

A detailed recruitment plan must be prepared and submitted by the applicant institution. The National Hemophilia Foundation is particularly interested in attracting qualified minority candidates.

*D. Outside Linkages and Resources*

Existing linkages and collaborative arrangements with hemophilia/thrombophilia service organizations should be demonstrated. Applications that demonstrate collaborative relationships with other centers and/or community-based organizations that build on the strengths of each institution will receive preferential consideration.

*E. Evaluation*

An evaluation plan for assessing the program's impact on fellows and for monitoring the training experience must be submitted. Suitable testing mechanisms must be developed to ascertain that fellows have successfully completed the program.

**Awards**

Awards to institutions will be up to \$100,000 per fellow per year, including stipend and fringe consistent with the salary structure of the center and indirect costs not to exceed 10%. Up to \$2,000 for travel to educational meetings and up to \$5,000 for coursework may be requested. Up to \$10,000 per year in medical education loan reimbursement is available to fellows if the fellow enters a career in academic medicine specializing in coagulation disorders. The first installment of \$10,000 will be payable upon completion of the program with the second installment payable upon the first anniversary of completion.

**SUBMISSION OF APPLICATIONS**

Please submit one (1) original and five (5) copies of the initial institutional application for qualification as an acceptable training environment to the National Hemophilia Foundation at the address below. Applications must be received by 5:00 p.m. on February 10, 2003. ***Applicants are responsible for ensuring that adequate time is allocated for postal delivery to meet this deadline.***

The original application must bear the original signature of the chief executive officer of the organization making the application. Applications must be submitted to:

Rita Barsky, PhD  
Assistant Director of Research  
National Hemophilia Foundation  
116 W. 32<sup>nd</sup> Street, 11<sup>th</sup> Floor  
New York, New York 10001

Inquiries may be directed to Rita Barsky at 212-328-3730.

Applications that fail to adhere to the following page limitations will not be considered for funding.

Executive Summary	1 page
Program Narrative	15 pages, double-spaced (font size, 12 pt minimum)

### **FORMAT FOR RESPONDING TO THE RFA**

A) Executive Summary

Provide a summary of the application including a brief statement of the workplan including goals and objectives; training options to be developed; amount of funding requested with a brief narrative to support the request.

B) Program Narrative

1. Applicant organization capabilities and experience.
2. Workplan describing each of the two program components as indicated above.
3. Program Organization and Structure
4. Recruitment Plan
5. Outside Linkages and Collaboration

Please include letters of commitment describing functional arrangements with organizations that will be involved in the training (e.g. rotations) of fellows.

6. Evaluation

### **OTHER INFORMATION**

A) Review Process

Each proposal will be evaluated by a panel of reviewers. Application components will be weighted as follows:

Program Narrative

Agency capability and experience	10 points
Workplan	65 points
Program organization and structure	10 points
Recruitment plan	5 points
Outside linkages/collaboration & letters of agreement	5 points
Evaluation plan	5 points
<b>TOTAL</b>	<b>100 points</b>

Applicants will be qualified based upon evaluation of materials submitted. Only those applicants submitting a complete proposal will be considered for funding. Applicants will be notified on March 31, 2003 if they qualify as acceptable training environments. Institutions will then be required to submit their supplemental candidate application and proposed budget by May 1, 2003. Institutions will be notified if their candidates have been approved no later than June 15, 2003.

#### B) Monitoring and Evaluation

The National Hemophilia Foundation will closely monitor and evaluate program implementation and performance through periodic site visits, quarterly program reports, project meetings, and ongoing communication with the sites and fellows.

Criteria for evaluation of each program site will include, at a minimum, the following:

1. Compliance with program standards
2. Fellows' satisfaction
3. Follow-up assessment of fellows' careers