

FUNDING ANNOUNCEMENT - REQUEST FOR APPLICATIONS

RISK FACTORS FOR PROGRESSION IN MS

The National Multiple Sclerosis Society is pleased to announce a new research initiative to develop and pilot test innovative methodology to test risk factors that predict, and correlate with, disease progression in multiple sclerosis (MS). The goal of this initiative is to establish a core consortium to support the initial development of prospective studies on the risk factors for progression in MS. These pilot studies, which should be conducted during a two year period at a total cost of up to \$650,000, are not expected to resolve the questions related to progression, but should help establish the feasibility of conducting longitudinal studies as described above over a longer period of time. This Request for Applications (RFA) is supported by special funds provided by the National MS Society's Greater Delaware Valley Chapter.

In responding to this RFA, investigators need to define and identify a sufficiently large cohort of patients, show how and where these patients will be recruited, identify the samples to be collected, describe how and where the data and biological samples will be stored, standardize the data collection methods, and help frame the methodology for the later study. A secondary goal of this RFA is to identify biomarkers in patients with MS and link them with clinical disease parameters, such as the extent of inflammation and rate of disease progression, to try to better understand the disease.

BACKGROUND

Longitudinal studies have contributed greatly to the understanding of a number of diseases and, in many cases, have led to improvements in diagnosis and treatment. MS is a chronic disease that evolves over time. Studies over the past 10-20 years have provided important information about the disease itself as well as the effects of therapeutic agents. However, despite these advances, there remain several outstanding challenges in MS research, one of the most pressing of which is the slowing or halting of disease progression.

In order to understand MS disease progression and to slow or stop it, new longitudinal studies using innovative methods are needed. The major purpose of this RFA is to fund a study that will extrapolate lessons learned from previous longitudinal studies and from our current understanding of MS, and develop strategies that can be applied to studies of MS, including helping to define subtypes related to disease progression.

TIMELINE

January 14, 2010	Launch of Request for Applications (RFA)
March 12, 2010	Full Applications Due
Late June 2010	Announcement of Funding Decisions
October 1, 2010	Anticipated Start Date of Funding
Term and Amount of award	Total Funding available is up to \$650,000 in
	total costs for up to two years of support

OBJECTIVES

At a Society-sponsored international workshop on Risk Factors in MS and Frequency in early 2009, the attendees identified several challenges in identifying predictors of disease progression. These included: 1) defining disease progression; 2) measuring disease progression; 3) identifying the patient cohort(s) that could be most efficiently studied; and 4) describing how and where the data and the biological samples will be collected and at what frequency.

The purpose of this RFA is to establish a core consortium to collect prospective, comprehensive, and population-based longitudinal data in multiple sclerosis patients for the purpose of identifying factors linked to disease progression, as well as to factors associated with the clinical and biologic heterogeneity of the disease as these subtypes pertain to progression. Patients progress at varying rates; while this may be due to differences in the underlying pathological processes, progression is also likely to be due to as yet unknown risk factors. With our expanding knowledge of MS, it is clear that now is the time to begin to pilot the concept of longitudinal studies in MS, including identifying patient selection and number, statistical considerations, MRI imaging and blood/CSF markers. A successful application will also outline how the National MS Society funds will be leveraged with other funds or with the use of existing patient samples from other studies.

Although subsequent "longitudinal studies" are expected to be many years in duration, and with samples collections powered to detect significant risk factors for progression, the primary goal of this RFA is to support the initial development and pilot testing of data collection over a two year period to define variables that are associated with increasing disability in MS. This information will help establish the feasibility, likely effect sizes, and the immediate and short-term reliability and validity of such data.

Interested applicants need to identify a cohort of MS patients who will be followed long term and who will best address the goals of this RFA. The application should define the outcome measures that will be evaluated during the study and the timing of the datapoint collection should be detailed. These may include imaging, immunological assessments, genetic analysis, and other potentially innovative biomarkers to define the time course for risk factor association with disease progression. It is not expected that the pilot study for this RFA will be able to identify all clinical, imaging, immunologic and genetic biomarkers for disease progression; however, the applicants need to describe the approach that is likely to yield a promising model. Only by following patients over a longer time period will we be able to define variables that are associated with progression. Projects do not need to be powered to detect any specified effect size, but investigators need to determine what type of analysis they plan to do and what effect size would be of interest and then power the study accordingly.

ELIGIBILITY

It is expected that the person indicated as the Principal Investigator in an application for a grant is the one who is personally and actively responsible for the conduct of the research and who is considered eligible by his or her institution to apply for a research grant. The Principal Investigator must be conducting research at an academically-centered institution. The National MS Society invites applications from qualified investigators from around the world; United States citizenship is not required of the principal investigator.

PREPARATION OF APPLICATION

A. Application Submission

Applicants wishing to submit an application in response to this RFA should contact Dr. Patricia O'Looney at the National MS Society at the contact information below to obtain the necessary credentials to submit an application no later than 5:00pm EST on March 12, 2010. Incomplete or late applications will **NOT** be accepted.

This funding opportunity will comply with the policies and procedures of a research grant from the National MS Society. For further details regarding the conditions of this funding program, please view the Policies and Procedures on the Society's research webpage:

http://www.nationalmssociety.org/for-professionals/researchers/get-funding/apply-online/index.aspx

The Apply Online facility can be accessed through the National Multiple Sclerosis Society's Web site using a standard Web browser. **All applicants are required to use the Apply Online facility** for the completion of their proposals. The Society will **NOT** accept paper-based applications.

The full online application consists of:

- a. **Scientific Summary of Research Proposal**: Provide a scientific summary of the research proposal.
- b. **Lay Summary**: Provide a summary of your research proposal understandable for readers who are not health professionals.
- c. **Budget and Budget Justification.** Provide details and justification of all budget items relative to the proposed research. Applicants may request funds for <u>up to two years of support, not exceeding \$650,000 in total costs</u>. The budget section is part of the "Research Proposal" section that is uploaded from the Apply Online site. Investigators may request the funds necessary to complete their studies in the following categories of expenditure: salaries for professional and non-professional personnel, patient costs, permanent equipment, consumable supplies, travel, other expenditures not included under the above categories, and indirect costs. Please view the Society's policies and procedures under "Research Grants" to determine what is deemed acceptable when developing a budget.
- d. **Biographical Sketches**. Brief 2-page CV of the principal investigator and key co-investigators must be included. This should include a list of relevant publications.
- e. **Research Narrative Section:** Provide a detailed research proposal not exceeding 10 single-spaced pages. 12 point font size must be used. Proposals will be expected to state the mission, vision, goals, and distinguishing features of the partnership that will ensure likelihood of the achievement of the RFA objective. A clear and compelling research plan for the research activities responsive to the above objectives, for a funding period of up to two years, should be presented. Proposals should describe comprehensive communications and information-sharing plans.
- f. **Relevance to MS**: In a special section in the "Research Proposal" section, describe in 200 words or less the relevance of your research proposal to MS.

B. Review of Applications

Applications that are not deemed to be complete or relevant will be excluded from the competition. The review of these applications will be conducted by a special review panel convened by the National MS Society. The review committee will be created specifically for this competition.

The review criteria for the full application include:

- Strengths and weaknesses of the research proposal
- Expertise of the investigators and the coherence of the team
- Appropriateness of the resources and environment
- Appropriateness of the budget requested
- Relevance to MS

C. Funding Mechanism

The Society anticipates that one application responsive to the goals of this RFA will be supported and will consider a financial commitment not to exceed a total of \$650,000 over a two year period. Funds will be awarded to the home institution of the principal investigator, which may disburse funds to collaborating institutions (if any) as sub-contracts. The award will be paid in regular installments and continued payments will be based on achievement of specific milestones outlined in the successful proposal, and on the availability of funds. The Society reserves the right to make no award.

CONTACT INFORMATION AT THE NATIONAL MS SOCIETY

For any questions, please contact:

Dr. Patricia O'Looney Vice President of Biomedical Research National Multiple Sclerosis Society 733 Third Avenue New York, NY 10017 **Tel**: (212) 476-0413

E-mail: patricia.olooney@nmss.org