

COLLABORATIVE MS RESEARCH CENTER AWARDS

The Society welcomes applications for support of Collaborative MS Research Centers which will help stimulate collaboration and interaction in MS research among independent investigators, strengthen the ties between basic and clinical research, and stimulate recruitment of researchers from other fields into MS research. This will serve to leverage already available research support by stimulating and sustaining interdisciplinary collaborations, by developing new ideas and discoveries, and by attracting more high-caliber investigators to the MS field.

The Society supports fundamental as well as applied studies, non-clinical or clinical in nature, including projects in patient management, care and rehabilitation. To be considered for funding, all projects must show relevance to the Society's research mission to find the cause and cure for multiple sclerosis.

In order to submit a proposal for research support, investigators must first register with our apply online site (www.mssocietyapplyonline.org) and complete a pre-application. Staff of the Research Programs Department will review the pre-application to determine whether the research plan is appropriate and relevant to our goals.

GENERAL

While continuing a strong program of investigator-initiated and targeted research, the Society recognizes and wishes to encourage the potential additive value and synergy of research done in an environment where investigators focused on MS research create a collaborative environment to further understanding of MS, its causes and treatments. Any field of basic and applied research relating to multiple sclerosis is appropriate to this program. A clinical research component is highly desirable.

The awards are designed to encourage interaction among investigators with existing strong MS research base funding to test new research ideas; to adjust rapidly to mid-course findings in ongoing research programs; to recruit talented investigators to the MS field; to purchase shared equipment that will enhance productivity; or for any other purpose that enhances interaction/collaboration among the research group. This support is not intended to be a substitute for substantial MS research or training support, which is available from other programs and sources. The program is designed to expand the horizons of MS research groups, and facilitate cooperation and collaboration, among investigators within the same or different institutions.

ELIGIBILITY

Principal Investigator: Each proposal must have a designated principal investigator (PI), holding M.D., Ph.D., or equivalent degree, who will assume the scientific and administrative oversight for the operation of the collaborative effort. This individual must also be a principal investigator for one of the base funding projects. The PI should be an established, highly qualified scientist with adequate administrative and leadership experience and authority appropriate to managing the collaborative program.

Co-investigators: In addition to the principal investigator, at least 2 researchers (holding M.D., Ph.D., or equivalent degree) with appropriate peer-reviewed base funding must be part of the program. To encourage recruitment of researchers into the field of MS, it is required that at least one of the collaborative investigators be conducting research in a non-MS research area.

Base Funding Requirement: At the time of application, and during the course of the entire funding period, the eligible research collaborative group must be comprised of at least 3 separate, independently funded investigators (with full peer-reviewed research grants providing the base funding level). At least two of the independent investigators, and their base funding research, must be related to the goals of the National MS Society. During the term of the award, the principal investigator must inform the National MS Society at the time that the base funding level falls below the minimum requirement.

Eligible Institutions: The awardee institution is where the principal investigator is located, and is the recipient of the funds. The awardee institution must be located in the United States and must be a non-profit research and/or clinical institution such as a university, college, hospital, or laboratory. Collaborative research among investigators within a given institution, or among investigators from different institutions will be considered, and if the latter, a subcontract may be included in the budget from the awardee institution. Subcontracts to institutions in any country are allowable. Steps to ensure coordination and communication among investigators must be specified. An institution can be the recipient of only one Collaborative Center Award from the National MS Society at any given time.

PREPARATION AND REVIEW OF APPLICATIONS

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Application Forms: The Society utilizes a Web-based facility for the submission of grant applications. All applicants are required to use this facility for the completion of their proposals. In order to submit a proposal for research support, investigators must first register with our apply online site (www.mssocietyapplyonline.org) and complete a pre-application. Staff of the Research Programs Department will review the pre-application to determine whether the research plan is appropriate and relevant to our goals.

Timing: Deadline for completed applications is early September with the earliest possible funding start date of the following April 1. Incomplete applications, or applications that arrive after the deadline, will not be accepted.

Term and Amount of Award: The maximum amount that can be requested from the Society made under this program is \$150,000 per year in direct costs, for a term of five years, for a total of \$750,000. Additional indirect costs will be applied according to applicable Society policies (refer to “Indirect Costs” section below).

Application Contents: To facilitate the review of the application, the discussion of the Proposed Collaborative Research Center Plan should be organized in the following manner with the appropriate subtitles:

1. **Changes to Previous Application, if any (Page limit of this section is one page):** This section is only for a revised, resubmitted application and must summarize the substantial additions, deletions, and changes from previous proposal. The changes in the Collaborative Plan must be clearly marked by appropriate bracketing, indenting, or changing of typography, unless changes are so extreme as to include most of the text. This exception should be explained in the Introduction. Any changes should not be indicated by colored text or shading.
2. **New Proposals from Previous Society’s Center Awardees (Page limit of this section is one page):** Competitive renewals are not allowed in order to further encourage new investigators to MS research. However, current and past recipients of Society’s Center Awards may apply at the end of the award period with a new application in which at least two new investigators from a non-MS research field are included. Past Center Awardees should include a brief summary of the outcome of their previous award including a list of collaborative publications and a description of the success of the “new investigators to MS” resulting from the previous award. In addition, the applicant needs to indicate how the current application is unique and different from the previous funding.
3. **Proposed Program (This section is divided by the following subtitles a-e, and the entire section should not exceed six pages. The Collaborative Plan (section c) should comprise of at least two pages of this section.):**
 - a. Overall Goal and Theme: Describe the overall goal of the proposed collaboration program for a 5-year period. A diagram can be included to illustrate how the projects are integrated around a central theme.
 - b. Research Team: Describe each member of the collaborative team highlighting the expertise that he/she would bring to the collaborative group. Include any information that will help establish the experience and competence of the investigators. This is especially true for the new investigators to the MS field and what their expertise is, and how will they interact.
 - c. Collaborative Plan: Describe the plan for enhancing the collaboration among the investigators, including the vision of the group to maximize collaborative research across specific disciplines, how the goals of the collaborative group fit within the Society’s mission, and the likelihood that funds will in fact be additive to the ongoing research efforts. The description should include statements about how the group will operate, how the collaboration will be encouraged, and how one can ensure that the direction of MS research by the non-MS investigator will continue. Since the base funding projects, which constitute an eligible research group, will already have been scientifically reviewed and funded, they can be very briefly summarized if relevant to the Center. If the projects are new ones, then they should be presented. The relevance of the project to MS should be apparent throughout the proposal. Describe how the award will support the interface between basic and clinical research, and address research topics and concepts, which could not readily be approached through independent research.
 - d. Pilot Research Studies: A program for exploring pilot research that take maximum advantage of new research opportunities explored by this collaborative team must be described.
 - e. Recruitment Plan: A recruitment plan for attracting students, postdoctoral fellows, and other young investigators to work in MS must be included. Describe the educational environment and the monitoring availability to train postdoctoral fellows, and share any success stories. Indicate how this recruitment plan for postdoctoral fellows will not substitute, but enhance the number of additional applicants to our regular fellowship program.

4. **Supporting Information:**

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- a brief description of each base funding project (title/abstract/funding term and amount). The minimum requirement is 3 separate, independently funded investigators with peer-reviewed research grants.
 - a brief *curriculum vitae* with bibliography for the principal investigator and each co-investigator, with a listing of all actively funded projects and their sources of funding.
 - a description of any currently shared facilities and currently shared activities (group seminars; retreats; etc.)
5. **Budget Information:**
- a plan for anticipated expenditure of funds during the first year, and to the extent possible, subsequent years. It is the intent of the Collaborative MS Research Center program that the funds remain flexible to allow the investigators and co-investigators to support a variety of activities that can enhance productivity and discovery. Transfer of funds between and among budgetary items may be made at the discretion of the grantee institution.
 - Percent effort of principal investigators or of senior co-investigators: The principal investigator is responsible for determining the most efficient use of these funds to meet the objectives of the program. Percent effort of the P.I. and of the other senior investigators is not expected, or required. However, it is understood that the PI and the other senior investigators remain committed to the project and its completion.

Review Process: The review of the applications will be conducted by a special review panel constituted by the Society. Award letters for successful applications will be issued after the final approval by the Research Programs Advisory Committee and the CEO/President of the Society, with funds available no sooner than April 1.

Evaluation Criteria: Since the base funding projects which constitute an eligible research group will already have been scientifically reviewed and funded by the Society and/or other funding agencies, review of these Collaborative MS Research Center proposals will be based on the vision of the Center to maximize collaborative research and the likelihood that funds will support the interface between basic and clinical research and address research topics and concepts which could not readily be approached through independent research.

The following criteria are among those that will be considered by the review committee:

- Significance of the overall project goals and its merit as a whole.
- Potential to enhance MS research – How relevant is the research program to the mission of the National MS Society and its strategic response? Will the project be likely to promote excellence in research that may lead to an increase in our understanding of MS?
- Potential for Interaction and Synergy – Evaluation of the research strengths, the multidisciplinary nature and the cohesiveness of the proposing group and the coordination and interrelationships of individual projects to a common theme.
- Investigators – Assessment of the leadership and scientific ability of the PI of the project: his/her ability to develop and manage a program of integrated research projects with a well-defined central research focus; and his/her commitment and ability to devote adequate time and effort to the program. Assessment of the qualities and capabilities of each of the group investigators.
- Training and career development plan, if proposed - Will the research setting permit research training and career development that will lead to commitment to MS research?
- Developmental research projects, if proposed - what is the ability of the group to pursue new and innovative ideas in MS research?
- Core facilities – Are the necessary core facilities available and adequate for any collaborative research proposed?
- Organization and communication – Will the organizational aspects of the center allow for regular communication among investigators? If the investigators are not all in the same institution, is there an adequate plan for communication among them?
- Institutional support – What is the institutional commitment to the project?

CONDITIONS OF AWARD

Notification: The principal investigator and the awardee institution will each be advised by letter of the duration and amount of the award provided. Payment of the award will be remitted quarterly to the financial officer at the awardee institution. Payment of subsequent years is dependent upon a) availability of funds; and b) receipt, review, and approval by the Society of annual financial and research progress reports.

Allowable Expenses: It is the intent of the Collaborative MS Research Center program that the funds remain flexible to allow the investigators to support a variety of activities that can enhance productivity and discovery. Allowable expenses may include the purchase of shared equipment, recruitment of new staff scientists and/or physicians with outstanding potential who are interested in working in MS, exploration of new ideas in MS research or clinical studies, short term postdoctoral training support (this is not intended to replace independent Society or NIH postdoctoral fellowship support), travel that will enhance

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collaborations among the research group, or for any other activity/program that will enhance the synergy among a collaborative research group.

Required Base Funding Level: If at any time during the funding period the base funding for the research group drops below the minimum required (i.e., at least 3 separate, independently funded investigators with full peer-reviewed research grants), the principal investigator must inform the Society and the award will enter into an interim probationary period of 6 months. After 6 months, if the investigator group has not been able to reestablish base funding or funding commitment, the award will be terminated.

Renewal of Awards: Competitive renewals are not allowed in order to further encourage new investigators to MS research. However, current and past recipients of National MS Society Center Awards may apply at the end of the award period with a new application in which at least two new investigators from a non-MS research field are included. Past Center Awardees should include a brief summary of the outcome of their previous award including a list of collaborative publications and a description of the success of the “new investigators to MS” resulting from the previous award. In addition, the applicant needs to indicate how the current application is unique and different from the previous funding.

Unobligated Funds: Because budgets in applications are estimates of the funds required to achieve the goals of the program, unexpended funds may remain at the end of each year and at the termination of the award. Any unexpended funds remaining at the end of each award year may be carried over to the next year. However, unexpended funds remaining at the termination of the award must be returned to the Society if renewal support is not awarded.

Extension of Term: An extension of the term of an award without additional funds is not typically allowed with the Collaborative Center Awards.

Transfer of an Award: The Society retains the right to transfer an award from one institution to another, along with the transfer of the principal investigator, upon the principal investigator's written request. However, since the Center Award is very dependent upon the collaborative nature of the team of investigators, any request for transfer to a new institution must clearly describe how the team will continue to collaborate and act cohesively as a team. For the approval of such a transfer, the Society requires a new application face sheet and budget request form, and must be signed by the new institution. In addition, letters of documentation must be received from the principal investigator, each of the coinvestigators, and an official at the new institution ensuring that the transfer of the principal investigator to a new institution will not impede the work of the collaborative team and the overall goal of the Award. For research involving human subjects and/or animals, written approval from the new institution's Institutional Review Board and/or the Animal Care and Use Committee must be received prior to initiation of payment. The original institution must submit an acceptable report of expenditures and return all unexpended funds to the Society before a final transfer can be made. No interruption of financial support should be involved if the request to transfer the award is received by the Society at least 90 days prior to the anticipated date of transfer and the financial report is submitted from the old institution prior to the transfer date. Transfer of equipment purchased with the award is encouraged, consistent with institutional policy.

Change of Principal Investigator: In most cases, an award terminates when the principal investigator becomes unable to continue supervision of the research. However, within 30 days after such an occurrence, the original awardee institution may request that the award be continued with the responsibility transferred to a new principal investigator until the award can be terminated appropriately or until a new, complete application can be submitted by the new principal investigator. Such changes cannot be effected without prior approval in writing by the Society.

Termination of Award: A research award may be terminated before the end of the project if (1) the principal investigator requests, in writing, that the award be terminated; (2) the principal investigator is unable to carry out the research at the original institution; (3) after the 6-month probationary period (see above), the base funding for the research group drops below the minimum required; (4) the sponsoring institution requests in writing that the award be terminated because of the awardee's termination of academic appointment; (5) the principal investigator fails to notify the Society of any change in his/her affiliation with the department or institution on record at the time the award was made; (6) the principal investigator changes any aspect of the award from that which was originally approved by the Society, including significant changes in the specific aims of the research studies, without prior notification and approval by the Society; (7) annual reports of progress are not received from the principal investigator within one month of the end of each award anniversary year; (8) the principal investigator is found by an institutional investigation to have committed scientific misconduct or fraud; or (9) by action of the Board of Directors of the Society.

GENERAL CATEGORIES OF EXPENDITURES

Expenditures may be charged against this award with maximum flexibility at a total cost of \$150,000 per year in direct costs. Investigators may request funds for the following categories of expenditure: salaries for professional and non-professional personnel, patient costs, permanent equipment, consumable supplies, travel, costs related to the mechanism(s) used to enhance collaboration, other expenditures not included under the above categories, and indirect costs. Although the use of the funds

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provided with this award, and any rebudgeting throughout the term of the award, may be done at the discretion of the principal investigator and the coinvestigators, the expenditures should be budgeted within the guidelines set forth by the National MS Society listed below.

Personnel: The salaries of all personnel paid from award funds shall be in accordance with the prevailing policies of the awardee institution. Requested salaries are not to be used to replace salaries or portions of salaries already assured by institutional or other funds.

1) **Professional Support**

The principal investigator may request up to 75% of his or her salary in proportion to the time spent directly on the work supported by the award. Salary for other investigators associated with the award may be requested in proportion to the time they spend directly on research supported by the award. In all cases, the Society will not pay pro-rated annual salaries that exceed \$196,700. Please note that on Center Awards, the percent effort of the PI and of the other senior investigators is not expected, or required. However, it is understood that the PI and the other senior investigators remain committed to the project and its completion.

2) **Postdoctoral Training Support**

Postdoctoral Research Associates may be supported on Collaborative Center Awards using the salary scale below. The current annual salary for postdoctoral associates is determined by the number of FULL years of relevant postdoctoral experience at the time of application. Relevant experience may include research experience, internship, or residency. No departure from the established salary schedule will be allowed. A biographical sketch must be included for any postdoctoral associate listed on the proposals.

Salary Scale for Postdoctoral Research Associates

<u>Full Years of Relevant Postdoctoral Experience</u>	<u>Salary</u>
Less than 1	\$39,264
1	\$41,364
2	\$44,340
3	\$46,092
4	\$47,820
5	\$49,884
6	\$51,582
7 or more	\$54,180

3) **Technical and Non-Professional Support**

Salaries for technical and non-professional personnel may be requested in proportion to the time they will spend on research directly supported by the award.

Fringe Benefits: Costs to the awardee institution of Social Security, retirement and group insurance plans may be requested in the application for persons whose salaries are to be paid from the award. All such expenditures are to be in accordance with the prevailing policies of the awardee institution and proportional to the percentage of the employee's time devoted to the research for which the award is made.

Equipment and Supplies: Scientific equipment purchased with Society funds becomes the property of the awardee institution. Consumable supplies may include any type of laboratory supplies, including purchase and maintenance of experimental animals.

Travel: Expenses for domestic or foreign travel related to the successful performance of the program may be charged to the award. However, it is understood that all expenses for travel will be based on economy class fares and other similar expenses within reason. Travel expenses whenever charged to award funds shall be in accordance with awardee institutional policies and procedures.

Indirect Costs: The awardee institution, through the officer signing the application, may add an amount for indirect costs up to 10% of the sum requested by the principal investigator except that indirect costs are not allowed in connection with funds requested or expended for: (a) patient costs, or (b) purchase, modification or installation of equipment. Although the awardee institution must be located in the United States, subcontracts to institutions in any country are allowable, but indirect costs to institutions outside the United States will not be provided.

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ACCOUNTING PROCEDURES

Annual Financial Reports: A brief account of the expenses made for each award is due before each anniversary date during the term of an award. Any unexpended funds remaining at the end of each year may be carried over to the next award year. Forms and instructions for this report will be sent to investigators, along with the forms for the annual research report (see below) about 30 days before the anniversary date of the award.

Final Financial Reports: A full account of all expenses made for an award is due within 90 days of the termination of the award. Unexpended funds remaining at the end of the award must be returned to the Society if renewal support is not awarded. If renewal support is provided, remaining funds from the previous award will be applied to the first payment of the renewal award. Forms for this report will be sent to the financial officer of the awardee's institution with the final quarterly payment for the award. These forms are self-explanatory. The Society is not responsible for over-expenditures of awards.

Bonded Financial Officer: The Society requires that the financial officer administering award funds be bonded. Unless otherwise indicated in the application for an award, it is understood that such officials are bonded as a prerequisite to assumption of office.

PROGRESS REPORTS

Annual Research Report: A report of progress made on the project is due before each anniversary date during the term of an award along with a copy of the annual approval letter from the IRB and/or IACUC. Forms and instructions for the annual research report will be sent to investigators about 30 days before the anniversary date of the award. This report includes a form to be used to submit an annual Report of Expenditures (see above under "Annual Financial Reports"). Payment for continued support of a research project beyond the anniversary date depends on the receipt, review, and approval of the annual research progress report.

Final Research Report: A final progress report is due within 15 days of the termination of an award. This report is in addition to any progress report that may have been included in an application to the Society for further research support. Forms and instructions for the final research report will be sent to investigators about 30 days before the termination of an award.

PUBLICATIONS AND REPRINTS

The Society expects that the results of research will be published in appropriate journals. The responsibility for publication lies with the principal investigator. The results of any work supported by an award from the Society may be published without review by the Society. Therefore, responsibility for direction of the work is not to be ascribed to the Society.

As soon as a manuscript is accepted for publication, a copy of it, with the name of the journal and the expected date of publication, should be sent by email to the Associate Vice President of Research Information (cathy.carlson@nmss.org). Manuscripts will be respected as privileged communications. As soon as reprints of a published article are available, or if a press release from the institution is being prepared for distribution, please send to cathy.carlson@nmss.org.

The National Multiple Sclerosis Society must be acknowledged in all dissemination materials (e.g., publications, scientific exhibits, scientific presentations, press releases, etc.) related to research supported in full or in part by the Society. The following acknowledgment, or its equivalent, should be used:

*"This investigation was supported (in part) by (a) Collaborative
MS Research Center Award from the National Multiple Sclerosis Society."*

