



Research Operating Grants Review Guidelines and Criteria

Revised November 2017

Review Guidelines and Criteria: Research Operating Grants

On behalf of the MS Society of Canada (MSSC), we would like to thank you for agreeing to serve as a reviewer. The success of the independent review process is made possible by dedicated people like you who generously give their time and expertise. Your efforts are greatly appreciated by the MSSC and our stakeholders.

COMPETITION OVERVIEW

The primary aim of the MSSC is to stimulate and support research in multiple sclerosis (MS). The MSSC welcomes research operating grant applications that are fundamental as well as applied studies, non-clinical or clinical in nature, including projects in patient management, care and rehabilitation. The approximate value of an operating grant is \$100,000 per year. The MSSC welcomes applications from researchers with studies related to MS which may serve in any way to advance the mission of the MSSC. Operating grants must pertain to one of following streams:

- **Biomedical Research Operating Grants** support research which uncovers the biological, pathological, and mechanistic aspects of MS, and provides fundamental knowledge about the development, progression, and treatment of MS disease. Topics include myelin biology, neurobiology, neurophysiology, immunology, neuropathology, imaging, and studies can involve in vitro, animal, and/or human models.
- **Clinical and Population Health (CPH) Operating Grants** support research on topics such as epidemiology, health economics, risk factors, health care delivery/policy, treatment monitoring and health assessment, symptom management, rehabilitation and social aspects of MS.

The MSSC also invites applications for early stage CPH projects in order to encourage researchers to develop innovative research questions, test new ideas, and pursue pioneering approaches that have the potential to impact the MS field.

COMMITTEE ROLES:

The composition of the independent review committee will include the following:

- **Chair** will oversee the review process and act as a facilitator to establish a positive, constructive, fair minded environment in which all applications under review are evaluated. The Chair is responsible for providing a report to the Medical Advisory Committee (MAC) outlining the outcomes of the review meeting.

- **Scientific Officer (SO)** supports the Chair during the review meeting; as such, the SO will not review applications. The SO is responsible for taking clear and concise notes that summarize the committee's discussion for each application which will be provided along with other review comments to the applicant.
- **Scientific Reviewers** are non-conflicted researchers recruited with specific expertise to provide a critical assessment and constructive written feedback based on MSSC review criteria for applications assigned to them. Scientific Reviewers will participate in the review meeting to discuss and provide a quantitative assessment (score) for all non-conflicted applications.
- **Community Representatives** are people affected by MS who are invited to participate in the review meetings. The Community Representatives evaluate, through a non-scientific lens, the comprehensibility of the lay documents and discuss the relevance of the research to the MS community, and potential of the research to translate into meaningful impacts that will improve quality of life for people living with MS. Community Representatives will provide a qualitative assessment of impact and relevance of non-conflicted applications.

THE REVIEW PROCESS

The principles that guide the independent review at the MSSC are confidentiality, conflict of interest and fairness.

The evaluation of applications for funding has two steps: (1) an in-depth "at-home" review by at least two Scientific Reviewers (primary, secondary and possibly external) and one Community Representative to produce written evaluations, and (2) a committee meeting to discuss and rate the applications, from which the MSSC generates a rank-order priority list to inform its funding decisions.

Review of the applications will be based on the review criteria outlined below, and will be submitted by the committee via the MSSC's online grants platform [Easygrants](#).

After considering the review criteria, Scientific Reviewers will prepare written comments for each application to which they have been assigned as primary or secondary reviewer. They will provide a preliminary score using the scoring chart below. This score may be used by the Chair of the review committee for triage purposes, if needed. The Chair and scientific officer do not assign preliminary scores. These preliminary scores will not be used for ranking purposes, but provide the MSSC and the committee chair with an indication of the quality of the proposals submitted. They also serve as benchmarks for determining which applications will be triaged. Any application that receives a score below 3.5 from both the primary and secondary reviewers, will be considered for triage, and triaged applications will not to be discussed at the review meeting.

The Community Representatives will provide written comments from a non-scientific perspective, and are asked to review relevant sections of all assigned applications. The Community

Representative will assess the sections based on comprehensibility, impact and relevance to MS and a level of enthusiasm will be provided based on the specific review criteria provided.

The committee will convene for an in-person meeting which will go as follows: The Community Representative will state their enthusiasm level, after which the primary and secondary Scientific Reviewers will state their preliminary scores. The Community Representative will then discuss their assessment, highlighting any strengths or weakness of the lay documents and describing their enthusiasm for the application.

The primary Scientific Reviewer will present their assessment, describing the strengths and weaknesses of the application as a whole. The secondary Scientific Reviewer will follow, concentrating on points of agreement or disagreement and elaborating points not addressed by the primary reviewer.

The Chair will lead the committee into an overall discussion of the application. The Chair will then seek a consensus score from the primary and secondary Scientific Reviewers. Non-conflicted scientific committee members, excluding the Chair and Scientific Officer, will cast an individual confidential score within ± 0.5 of the consensus rating. The final score assigned to the proposal will be the average of these confidential scores. At the same time, the Community Representatives will also be requested to provide a final overall level of enthusiasm. A rank-order priority list will be generated of all applications to make funding decisions.

The committee's recommendation will be brought forward to the Medical Advisory Committee and the Multiple Sclerosis Board of Directors for final approval.

REVIEW CRITERIA

The MSSC will transmit comments from each reviewer to the applicants whose proposals they reviewed. Please ensure your review is clear and concise, using objective and non-inflammatory language and include justification for your comments and suggestions. Constructive advice to the applicant from the Scientific Reviewers will allow him/her to improve the quality and efficiency of the proposed research, while feedback from the Community Representatives will allow the applicant to potentially improve his/her lay documents and better articulate the impact of the proposed research. Please do not identify yourself to ensure the confidentiality of the research process.

Scientific Reviewer:

Provide a brief synopsis of the funding application, an assessment of its strengths and weaknesses and comment on issues that should be flagged. Use the following instructions and questions to guide your assessment.

Research Proposal Description:

Please provide a concise description of the research proposal, including the purpose of the proposal, the hypothesis to be tested and questions to be answered, the objectives to be achieved and approach proposed / procedures and progress made to date (if this is an ongoing research program).

Critique of Research Proposal:

- Discuss the strengths and weaknesses of various aspects of the proposal.
- Are the research questions clear?
- Are the aims logical?
- Is the literature review comprehensive and unbiased, and is it relevant to the study design/research plan?
- Is the approach valid and adequately justified?
- Are the procedures feasible?
- Is the proposal original and does it have the potential to create new knowledge and concepts, or will it confirm existing hypotheses?

Originality of the proposal:

- Is the proposal original
- Does the application have the potential to create new knowledge and concepts, or will it confirm existing hypotheses ?

Impact and Relevance:

- Does the proposal address a significant need or gap in health research and have the potential to make a significant contribution to improvement of quality of life for people affected by MS?
- Does the proposal have an appropriate plan for dissemination and exchange of research findings?

Investigators:

- Discuss the capability and background of the investigators (such as qualifications, experience in the proposed area of research, productivity, ability to disseminate research findings).
- Discuss the appropriateness of the team of applicants (if more than one applicant) to carry out the proposed research, in terms of complementarity of expertise and synergistic potential.
- Identify any unusual aspects concerning personnel who will work on the project.

Resources and Environment:

- Comment on the availability and accessibility of personnel, facilities and infrastructure required to conduct the research.
- Discuss special aspects of facilities, equipment and extent of departmental and interdepartmental cooperation.
- Comment on the availability of special animal models, tissue preparation tools, clinical case materials, etc., as appropriate.
- Assess the suitability of the environment to conduct the proposed research and for the training of personnel.

Budget:

- Is the proposed budget realistic in terms of the proposed aims and methodology?
- Are all items justified on the basis of the approach, procedures and analysis of data proposed?
- Itemize and provide specific reasons for reductions in the time or amount recommended, if applicable.
- For supplementary requests, comment on supplementary budget in relation to the already approved parent budget.
- Please view the MSSC policies and procedures [here](#) if you have any questions regarding expenditures in the budget section of the application.

Preliminary Score:

Please provide a preliminary score using the scoring chart below. This preliminary score will not be used for ranking purposes, and you will be asked to provide a final score on the day of the review meeting based on a consensus score.

SCORING CHART

| Descriptor | Range | Outcome |
|----------------------|-----------|---------------|
| Outstanding | 4.5 – 4.9 | May Be Funded |
| Excellent | 4.0 – 4.4 | |
| Very good | 3.5 – 3.9 | |
| Acceptable | 3.0 – 3.4 | Not Fundable |
| Needs revision | 2.5 – 2.9 | |
| Needs major revision | 2.0 – 2.4 | |
| Seriously flawed | 1.0 – 1.9 | |
| Rejected | 0.0 – 0.9 | |

Community Representative

Please read the following sections of the applications that have been assigned to you:

- **Lay summary**
- **Impact and Relevance**

Address the following questions in your written assessment:

Language and Accessibility:

- a) Does the applicant use clear, appropriate language to explain how the findings of their project will benefit people affected by MS?
- b) Does the applicant clearly explain background information and key concepts that form the foundation for the study? If not, what is missing or what can be improved?
- c) What feedback can you provide the applicant that would assist them in making the lay documents more understandable and relevant to the general public?

Impact and Relevance for People Affected by MS:

- a) What are the goals of the research study, and why is the study important to people affected by MS?
- b) Does the application have the potential to make a lasting influence on the health and quality of life and/or quality of clinical care among people affected by MS?
- c) In your view, does the application address a critical gap in knowledge or barriers to progress in the field of MS?
- d) Does the application bring hope and excitement to you as a person who is affected by MS, and will the outcomes of the research resound with the MS community in a positive way?
- e) Upon reading the lay documents, is it clear that the application will have an impact on the lives of those affected by MS? If not, how could the impact of this study be improved?

Enthusiasm Level

Please provide an enthusiasm level based on your feeling of how impactful and relevant you find the application using the chart below. You will be asked to provide a final enthusiasm level the day of the review meeting following discussion of the application by the committee.

ENTHUSIASM LEVEL CHART

| Level of Enthusiasm | Description |
|----------------------------|---|
| High | Highly relevant with high potential to impact health and quality of life for people affected by MS; lay summary is very well written using clear, understandable and engaging language. No or minimal revisions needed to lay documents. |
| Medium | Good with some relevance and potential to impact health and quality of life for people affected by MS; lay summary is adequate in terms of using clear and engaging language, but still uses some technical language. Moderate revisions needed to lay documents. |
| Low | Low relevance and little potential for impact for people affected by MS; poorly written and excessive use of technical language. Requires major revisions to lay documents. |

CONFLICT OF INTEREST

Scientific Reviewers and Community Representatives shall abide at all times by the Society's *Conflict of Interest Guidelines* and *Privacy and Confidentiality Policy*.

Prior to being given access to the applications for review, Scientific Reviewers and Community Representatives will be required to review, sign and submit MSSC's Confidentiality and Conflict of Interest Policy form and declare conflicts of interest with applications. In instances where a Scientific Reviewer or Community Representative has declared a conflict of interest, he or she will not be allowed to review or comment on the applications, and will be excused from the meeting during those committee discussions.

EASYGRANTS ONLINE SYSTEM INSTRUCTIONS

Register or log in to your account at <https://www.mscanadagrants.ca>. This will take you to the homepage.

Scroll down to the **My Tasks** tab; underneath you will see links to your tasks in blue. Select **Submit Review Comments**, which will take you to the **Main** page.

To view all of the applications, select **Download All** under the **Download Zip File** heading. Additionally, you can view each application individually by selecting **View PDF** under **Assignments**. Please note that you will only review and submit comments for the application(s) to which you have been assigned.

Select **Review** on the right side of each assignment. Provide a preliminary score or enthusiasm level in the space provided, and enter your comments. Select **Save and Close**. To submit your

review select **Continue**. Under **Submission** select **Submit**.

To view your submission, select **View PDF** under **View All My Tasks**. Once submitted, all comments are considered final and cannot be altered.

QUESTIONS?

Please contact us at msresearchgrants@mssociety.ca.