MULTIPLE SCLEROSIS SOCIETY OF CANADA

CATALYST RESEACH GRANT
PROGRAM GUIDE

Revised July 2022

1. **GENERAL INFORMATION**

1.1 MS SOCIETY OF CANADA

Established in 1948, the Multiple Sclerosis Society of Canada (MSSC) is a charity dedicated to providing services to people affected by multiple sclerosis (MS) and funding the highest-quality research to find the cause of MS and its potential prevention and treatment. The MSSC is empowered to make grants of money for use by individuals within lawfully established agencies or institutions to further its mission.

Our Vision: A world free of multiple sclerosis.
The Mission: To connect and empower the MS community to create positive change.

1.2 CATALYST RESEARCH GRANT

The Catalyst Research Grant program awards seed funding that allows researchers to pursue novel and innovative research questions and pursue pioneering approaches that have a high potential to advance the MS field. This funding enables researchers to test high-risk/high-potential ideas and collect needed preliminary data to support success in larger grant funding competitions.

The Catalyst Research Grant is open to all ideas and areas of research. Proposals should address research questions in one or more of the impact goal areas identified in the MSSC strategic plan:

- **Advance Treatment and Care:** Research that aims to advance treatment and care for people affected by MS (e.g. symptom management; diagnosis; developing new treatments and understanding their mechanisms; understanding and evaluating interventions to address mental health, wellness/self-care, and rehabilitation in people living with MS; innovations in the provision of health services, clinical care practices and models of care; and advances in healthcare delivery/policy).

- **Enhance Well-being:** Research that aims to understand how to enhance the well-being of people affected by MS within communities (e.g. understanding the social determinants of health; assessing the health economics/cost benefit analysis on MS interventions and support structures and systems; evaluation of community-based programs; and advances in health systems research/policy).

- **Understand and Halt Disease Progression:** Research that aims to understand the etiology and mechanisms of MS, disease progression, progressive MS, and neuroprotection/repair (e.g., myelin biology, neurobiology, neurophysiology, immunology, neuropathology, and imaging).

- **Prevent MS:** Research that aims to prevent MS (e.g. identifying risk factors for disease, effective interventions for prevention, health economic/cost benefit analysis on prevention, and defining highest risk populations).

Early career researchers (ECRs), who are seeking needed preliminary data, are encouraged to apply to this competition as a stepping stone for success in larger grant funding competitions.

1.3 ADMINISTRATION OF THE CATALYST RESEARCH GRANT

The administration of the Catalyst Research Grant program is the responsibility and function of the MSSC'S Research Department at the National Office.

2. COMPETITION AND GRANT INFORMATION

2.1 MSSC COMPETITION SCHEDULE

The Catalyst Research Grant competition is launched as part of the annual research and awards competition that also includes Discovery Research Grants and endMS Personnel awards. The MSSC offers an annual research grants and awards competition which launches at the end of July and closes on October 3 at 4:00 p.m. Eastern Time. For full details visit the MS Society website.

2.2 ELIGIBILITY

Principal Investigator (PI): The PI is listed as the primary applicant/contact and is responsible for overseeing the research conducted as part of the proposal. The PI must be considered eligible by his or her institution to apply for a research grant. The PI does not have to be a Canadian citizen, but must be conducting research in a Canadian institution which is recognized by the Tri-Council Agencies. The PI is autonomous regarding their research activities, has a faculty appointment that allows the individual to pursue the proposed research, and is equipped to supervise trainees and publish research activities. There can be only one (1) PI per grant application who will assume scientific and administrative oversight for the study.

Co-Principal Investigator (Co-PI): The Co-PI is an individual who shares responsibility for the direction of the proposed research project with the PI and meets the eligibility criteria of a PI. There are no restrictions as to the number of Co-PIs per application.

Co-Applicant: The Co-Applicant contributes to the progress of the research, and conducts components of the project under the leadership of the PI. The contribution of the Co-Applicant must be clearly outlined. A Co-Applicant must have an appointment in a university department, but no specific rank is required. A postdoctoral fellow can be a co-applicant but must be in the same university department as the PI (or Co PI).

Collaborator: A Collaborator is an individual external to the research team whose role is to provide a specific service to support and advance the proposed research (e.g. access to equipment, training in a specialized technique, statistical analysis etc.). Collaborators are required to provide a letter of collaboration which outlines their role on the project. Collaborators can be recruited from international institutions only if their role fills an unmet need that is not available in Canada.

Institution: Institutions are the official recipients of grants made for the support of specific research by the PI. MSSC only accepts applications from Canadian post-secondary institutions and their affiliated institutions including hospitals and research institutes.

Concurrent Grant Submissions: The PI may concurrently submit a maximum of one (1) new Catalyst Research Grant application and one (1) new Discovery Research Grant application per competition. The PI can hold a maximum of two (2) Discovery Research Grant(s) and one Catalyst Research Grant at any one time. Data and outcomes that will be derived from the Catalyst Research Grant should not overlap with those from a Discovery Research Grant, but the topics can be related.

2.3 TERM AND FUNDING

Term of Funding: The MSSC supports Catalyst Research Grants for up to two (2) years. These grants are non-renewable.

Amount of Funding: The maximum amount that may be requested is $50,000.

2.4 RESUBMISSION AND RENEWAL

Renewal Grants: Catalyst Research Grants are non-renewable. Grants submitted to the Discovery Research Grant competition that build on the preliminary data obtained from a Catalyst Research Grant would be eligible.

Resubmissions: Applications that were unsuccessful in their previous submission to the MSSC Pilot/Catalyst Research Grant competition are considered resubmissions. Resubmitting an application is permitted under MSSC competition rules. An application is considered to be a resubmission if the overall research plan (hypothesis and aims) are similar to what was outlined in the initial and subsequent submission. The MSSC may choose to reclassify a new application as a resubmission if it is very similar to a previous application from the PI. Resubmissions will be assessed according to the review criteria for a new application, and must include a "response to the previous review" demonstrating substantive modification to the proposal addressing the reviewers' comments. A Catalyst Research Grant application can only be re-submitted once, for a total of two submissions.

2.5 PARTNERSHIP FUNDING

The MSSC reserves the right to establish funding partnerships with relevant provincial and federal funding agencies for any or all of its funding opportunities. Applicants will be notified in a timely manner of partnership terms and conditions.

The ratios for matching the partner's financial contribution (in cash and, if applicable, in-kind) will vary depending on the funding opportunity. The letter of agreement or amendment to the agreement will specify the amounts to be contributed by both MSSC and the partner. Please visit the MS Society's website for information on available partnership funding.

3. REVIEW AND RESULTS

3.1 REVIEW PROCESS

3.1.1. INDEPENDENT REVIEW COMMITTEE

Applications submitted to the Catalyst Research Grant competition are reviewed by members of an independent review committee selected by the MSSC. The overarching principles inherent in the allocation of MSSC funds are excellence, equity of opportunity, impact and due diligence in the use of MSSC funds.

The MSSC engages the scientific and clinical communities as well as the public in the review process. Individuals affected by MS who serve on the review committee are called community representatives. Involvement of community representatives ensures transparency of the review process and effective communication with public stakeholders. The committee includes a Chair, an established researcher in the MS scientific community who oversees the entire process and presides over the review meetings to guide the committee. The committee also includes a scientific officer (SO), who is a senior MS researcher tasked with taking detailed notes throughout the review process.

Scientific reviewers assess the scientific merit, feasibility, novelty, and the human and research impact of each application. Community representatives review the lay sections of each application: lay title, lay summary, and impact and relevance to MS. Final scores from both the scientific and community representative reviewers will be considered in making final funding decisions. If the lay documents of an approved grant are deemed to be unsatisfactory by a community representative, the applicant will be notified of conditional approval of their grant, and funding of the grant is subject to the receipt and approval of revised lay documents.

3.1.2. EVALUATION AND STREAMLINING OF APPLICATIONS

Once all applications are submitted, the MSSC, in collaboration with the committee Chair assign applications to reviewers based on their expertise. Each application is reviewed by two scientific reviewers – referred to as the primary reviewer and secondary reviewer – and one community representative based on the following review criteria:

Review Criteria for Scientific Reviewers

A. **Research approach**: clarity of research questions, completeness of literature review and relevance to study design /research plan, clarity of rationale for the research approach and methodology, appropriateness of research design and methods, feasibility of research approach. Any preliminary data should be included.
B. **Originality of the proposal:** novel idea that has not been previously explored to a great extent for MS, with high potential to create new knowledge in order to advance the MS field.
C. **Impact of research**: addresses a significant need or gap in MS research with potential to improve quality of life for people with MS, and provides a strong foundation for further research.
D. **Investigator(s):** qualifications of applicant(s), expertise and experience in the proposed area of research, scientific productivity, appropriateness of the team of applicants, and ability to disseminate research findings. .
E. **Resources and environment**: availability and accessibility of personnel, facilities and infrastructure required to conduct the research, suitability of the environment to conduct the proposed research and for the training of personnel.

F. **Budget**: realistic in terms of aims, methodology, and anticipated timeline. All budgeted items must be justified and comply with MSSC policies.

Review Criteria for Community Representatives

Community representatives review the lay sections of each Catalyst Research Grant application. They provide an enthusiasm rating and comments based on the following:

- Relevance to critical needs and challenges faced by people affected by MS
- Capacity for the project to yield outcomes that will impact the health management and quality of life of people affected by MS
- Comprehension/accessibility of the lay summary

Scoring and Streamlining of Applications

The scientific reviewers and community representatives assign a preliminary score or enthusiasm rating respectively for each application they assess based on the charts below. The Chair and Scientific Officer (SO) do not assign preliminary scores. The scientific scores provide the MSSC and committee Chair with an indication of the quality of the proposals submitted. They also serve as benchmarks for determining which applications will be discussed at the review meeting. Any application that receives a score below 3.5 from **both** the primary and secondary scientific reviewer, or a suitable cut-off score as determined by MSSC in discussion with the review committee Chair, might not be discussed at the review meeting. The community representative's enthusiasm rating provides an indication of the proposal's relevance to MS, potential impact, and comprehensibility to a lay audience.

Scientific Scoring Chart

Descriptor	Range	Definition
Outstanding	4.5 – 4.9	The application excels in most or all relevant aspects. Any shortcomings are minimal. If an application is innovative, fills an important critical gap in knowledge, has very few flaws, and the investigators are well poised to perform the research and have a very productive track record.
Excellent	4.0 – 4.4	The application excels in many relevant aspects, and reasonably addresses all others. Certain improvements are possible. If an application is very interesting, makes important advances, the team is excellent, but there are some minor limitations that need to be addressed or a clear description of impact is missing.
Good	3.5 – 3.9	The application excels in some relevant aspects, and reasonably addresses all others. Some improvements are necessary. If an application is compelling, but has limited scope or impact, and/or raised some concerns about the feasibility and/or team; or in other words, the grant has strengths, but needs work.
Fair	3.0 – 3.4	The application broadly addresses relevant aspects. Major revisions are required. If an application has merits but also has many limitations. *Will not be funded*.
Poor	0.0 – 2.9	The application fails to provide convincing information and/or has serious inherent flaws or gaps. If an application has significant flaws and is not ready to be funded. *Will not be funded*.

Community Representative Overall Enthusiasm Level Chart

Overall Enthusiasm Level	Definition
3 – High	Highly relevant with potential to impact health and quality of life for people affected by MS; lay documents are well written using clear, understandable, and engaging language. No to minor revisions are needed to lay documents.
2.5 – Medium/High	Moderate or highly relevant with potential to impact health and quality of life for people affected by MS; lay documents are well written using clear and understandable language. No to minor revisions needed to lay documents.
2 – Medium	Good to moderate relevance with potential to impact health and quality of life for people affected by MS; lay documents are written adequately in terms of using clear and engaging language, but still uses some technical language. Moderate revisions may be needed to lay documents.
1.5 – Medium/Low	Little relevance with little potential for impact for people affected by MS; lay documents use too much technical language and require revisions.
1 – Low	Low to no relevance with low to no potential for impact for people affected by MS; lay documents are poorly written and excessive use of technical language. Requires major revisions to lay documents.

3.1.3. IN-PERSON REVIEW AND FINAL RECOMMENDATIONS

Once the primary and secondary scientific reviewers as well as the community representatives evaluate the applications, the review committee meets to engage in an open discussion about the applications. For each application, the primary, secondary and community representative reviewers discuss their comments and raise any issues that should be deliberated by the committee. The committee Chair then asks for a consensus score (a score that the two scientific reviewers can agree upon based on the discussion), after which each scientific committee member (except for the Chair and SO) votes within 0.5 points above or below the scientific consensus score. The committee Chair will re-engage the community representative and confirm if their enthusiasm level has changed as a result of the discussion. Community representatives will then participate in the voting process by entering their overall enthusiasm level following the discussion.

Once all of the scores are tallied, the committee discusses appropriate potential cut-off scores for funding depending on the distribution of scores from both the scientific and community representative reviewers, which will be considered together. All applications recommended for funding must meet the scientific cut-off score to be considered fundable. Committee members who were identified as having a conflict of interest with a particular application are not included in the discussion and scoring of the application.

3.1.4. **FINAL APPROVAL**

A recommendation for funding is discussed with the MSSC's Medical Advisory Committee (MAC) – a committee of the MS Society's Board of Directors – comprised of researchers and clinicians who oversee scientific and medical matters that impact the MSSC and its stakeholders. The MAC assesses the review committee's recommendation through a wider lens of emerging trends in research and the strategic priorities of the MSSC, and provides their input and advice to the MSSC's National Board of Directors that approves final funding decisions.

3.2 COMMUNICATION OF RESULTS

All applicants will be notified by MSSC regarding the funding status of their applications regardless of the outcome and will be provided reviewer comments, both the scientific and lay evaluations of their application, which are anonymized.

For **successful applications only**, the MSSC will post limited information on the website (i.e. name of the applicants, department, institution, term and amount of award, project title, and a summary of the research proposal). The MSSC does not publish or otherwise disclose details related to unsuccessful applications.

4. ONLINE APPLICATION PROCEDURE

The MSSC uses an online research grants and awards management system called **ProposalCentral** which enables researchers to submit and review applications. ProposalCentral can be accessed through the following website: https://proposalcentral.com.

Interested applicants **must create a profile on ProposalCentral** through which they can complete the application process. Important things to note:

- If you have already created a profile and forgot your login information, click on the "Forgot Your Password?" link. If you have any difficulties registering, logging in, or creating your application, contact ProposalCentral customer support at: 800-875-2562 (Toll-free U.S. and Canada) or by email at pcsupport@altum.com. See the ProposalCentral FAQ for additional information.

- For new applicants, ensure that you complete your Professional and Institutional Profiles before starting an application. **Completion of the following sections in your Professional Profile is required: Contact Information, Degrees, Personal Data, and Account Information.**

- Applicants are required to connect their ORCiD identifier, a persistent and unique digital identifier, to the ProposalCentral profile. ORCiD will connect your iD with your professional information (e.g., grants, publications, funding, etc.). If you don't have an ORCiD, you can easily create one in a few minutes.

- Please review the MSSC Catalyst Research Grant Policies prior to submitting an application. If you have any questions regarding eligibility, please contact ms.grants@mssociety.ca.

- Please ensure that your contact information (institution, address, phone number, and e-mail) are **correct** and **up to date**. It is the applicant's responsibility to ensure the submitted application contains all required components.

- **Applications that are incomplete, do not adhere to the format and assigned page limits, or are submitted after the deadline may be disqualified from the competition.**

- The MSSC accepts applications in French. French applications might be translated into English for reviewers' convenience.

CATALYST RESEARCH GRANT

To start your application, login to your ProposalCentral account, click on the Grant Opportunities button at the top right hand corner, and enter "Multiple Sclerosis Society of Canada" in the search box. You must apply to the program called "Catalyst Research Grant".

Below is a list of required information and documents as part of the Catalyst Research Grant application. Satisfactory completion and submission of all documents is required for consideration in the competition.

4.1. FIELDS TO BE COMPLETED IN PROPOSALCENTRAL

1. **TITLE PAGE**
   This section contains the following fields that must be completed in ProposalCentral.
   - **Project Title:** Enter a **scientific title** for your research project. Ensure that the title accurately and concisely captures the overall objective of your research project.
   - **Sub-program:** Select the most appropriate stream for your research project:
     - **Biomedical Research:** Research that uncovers the biological, pathological, and mechanistic aspects of MS, and provides fundamental knowledge about the development, progression, prevention and treatment of MS disease. Studies can involve *in vitro*, animal, and/or human models.
     - **Clinical & Population Health:** Research with the goal of improving diagnosis, treatment, or the health and quality of life of individuals with MS; health services research; encompasses research on, or for the treatment of, people affected by MS; supports **population health research** that aims to understand the complex, biological, social, cultural and environmental interactions that determine the health of individuals and populations.
   - **Eligibility Quiz:** Applicants must successfully pass the Eligibility Quiz for the application to be considered. False information will result in an application being disqualified.
   - **Resubmission Questions:** Indicate if the research proposal has been submitted to a previous Pilot/Catalyst Research Grant competition (include the application title and ID of the previous submission). A Catalyst Research Grant application can only be re-submitted once, for a total of two submissions.

2. **DOWNLOAD TEMPLATES & INSTRUCTIONS**
   The Catalyst Research Grant Policies, Program Guidelines, FAQ, and all application templates can be downloaded. See Section 4.2 for instructions on how to complete and upload the templates provided (i.e., Research Proposal, Sex and/or Gender, Figures, Research Timeline, References, Expected Outcomes and Next Steps, Addressing Reviewers' Recommendations, and Required Signatures). Please note that the application also requires uploads for which templates are not provided (i.e., Applicant and Co-Applicant CV).

3. **APPLICANT INFORMATION**
   - Enter your name, institution, program details, and contact information directly into ProposalCentral. Some information may be pre-populated from your profile; please update the information as required.
   - Please indicate if you are an Early Career Researcher as defined by the Canadian Institutes of Health Research (CIHR).

4. **EQUITY AND DIVERSITY**
   Complete the Equity and Diversity questionnaire. Some information may be pre-populated from your profile; please update the information as required.

   Please note that your information will only be seen by authorized MSSC staff. Chairs, Scientific Officers, and review committee members will NOT be able to see this information. The data collected will only be used in aggregated form in order to protect the identity of individuals. This data is important to evaluate and understand equity and diversity in our programs.

5. **INSTITUTION**
   Enter the details of your primary institution (where funding will be received). Some information may be pre-populated from your profile; please update the information as required.

6. **KEY PERSONNEL**
   Enter the e-mail address of Co-Principal Investigator(s), Co-Applicant(s) and Collaborator(s) (if applicable), and use the pop-up box to enter their name and professional affiliation. Please ensure that all information is correct and up to date. Consult the Eligibility section above and the MSSC Catalyst Research Grant Policies for personnel definitions.

7. **PROJECT INFORMATION**
   This section contains the following fields that must be completed in ProposalCentral. Ensure that all character limits are adhered to; additional characters will be removed.
   - **Brief Scientific Project Description:** Provide a brief summary of the proposed research project. Maximum 200 words or equivalent character count. Please note that the Scientific Project Description will be sent to potential scientific reviewers to identify conflict of interest and levels of expertise, therefore, ensure that the project description is a clear representation of the research project being proposed.

   - **Non-Scientific Summary:** Please note this section will be reviewed by the lay reviewers on the review committee, referred to as Community Representatives. This information may also be shared with various stakeholders – including people living with MS, staff, volunteers, and donors - to describe the value of the research supported through our

programs. Please note that Community Representative reviews will be considered in making final funding decisions Additionally, failure to meet the criteria of a satisfactory lay and relevance summary as determined by the Community Representatives will result in the applicant resubmitting this section for approval.

- o **Lay Project Title:** Enter a project title for public use. This will be used in public communications about the project with the lay summary.
- o **Lay Summary:** Provide a summary of the proposed research in non-technical, everyday language. Describe your project in an engaging way, placing the person affected by MS at the centre, and providing details that are relevant to them and their lived experience with MS (See Guide to Writing a Lay Summary). Maximum 250 words or equivalent character count.
- o **Impact and Relevance to MS:** In non-technical, everyday language, describe why the proposed research is important and relevant to people affected by MS (e.g. Does the research address an important scientific question, key gaps, and needs for people living with MS? Does the research identify new therapeutic targets?). Identify the anticipated short-term and long-term outcomes of the research (e.g. advancing knowledge of the biological and/or clinical, psychosocial and societal impacts of MS, providing clues about the cause and progression of the disease, identifying new disease management strategies, etc.). Furthermore, explain how this research will contribute to the MS research field and how the results of your study will influence or impact the lives of people affected by MS. Maximum 500 words or equivalent character count.

- **Subject Areas:** Select the subject area(s) that best describe your research. If you selected "Other", please enter relevant key words that describe your research project.

- **Impact Goal Areas:** Select which MSSC impact goal area best represents your research project:
  - o **Advance Treatment and Care:** Research that aims to advance treatment and care for people affected by MS (e.g. symptom management; diagnosis; developing new treatments and understanding their mechanisms; understanding and evaluating interventions to address mental health, wellness/self-care, and rehabilitation in people living with MS; innovations in the provision of health services, clinical care practices and models of care; and advances in healthcare delivery/policy).

  - o **Enhance Well-being:** Research that aims to understand how to enhance the well-being of people affected by MS within communities (e.g. understanding the social determinants of health; assessing the health economics/cost benefit analysis on MS interventions and support structures and systems; evaluation of community-based programs; and advances in health systems research/policy).

  - o **Understand and Halt Disease Progression:** Research that aims to understand the etiology and mechanisms of MS, disease progression, progressive MS, and neuroprotection/repair (e.g., myelin biology, neurobiology, neurophysiology, immunology, neuropathology, and imaging).

  - o **Prevent MS:** Research that aims to prevent MS (e.g. identifying risk factors for disease, effective interventions for prevention, health economic/cost benefit analysis on prevention, and defining highest risk populations).

- **Priority Areas:** Select a research priority area that best represents your research project (e.g. Cause and risk factors of MS; Cognition and mental health; Diagnosis; Life-modifying therapies; Progression/progressive MS; Repair/remyelination).

8. **BUDGET PERIOD DETAIL**
   Enter the budget per year for a maximum of 2 years (i.e. Period 1-2). The maximum amount that can be requested over the grant term is $50,000. If the timeline for the project is longer than 2 years, there must be an appropriate justification provided. Consult the Policies for all eligible expenditures.

9. **BUDGET SUMMARY AND JUSTIFICATION**
   Use this section to provide a justification for the proposed budget.
   - Details and justification of all budget items relative to the proposed research are required.
   - In the **Appendix**, applicants may include electronic copies of quotations and other information useful to the reviewers.
   - The MSSC does not fund indirect costs. Consult the Policies for all eligible expenditures. Note that use of funds for conference travel is not permitted. Travel necessary for the conduct of the study will be considered on a case-by-case basis.

4.2. UPLOADS

The documents that may be uploaded for this application are listed below. Note that some uploads will have templates available in ProposalCentral (see Section 2). **Do NOT upload any password protected, secured or encrypted documents as they will not upload properly to your application.**

Required Uploads	Template Availability
A. Research Proposal	Yes
B. Sex and/or Gender	Yes
C. Figures	Yes
D. Research Timeline	Yes
E. References	Yes
F. Expected Outcomes and Next Steps	Yes
G. Addressing Reviewers' Recommendations (for resubmissions only)	Yes
H. CV (for Principal Investigator, Co-Principal Investigator(s), and Co-Applicant(s))	No
I. Relevant Publications	No
J. Required Signatures	Yes

K. Appendix • Letters of Collaboration	No

Formatting Instructions: Single spaced; font style and size must be Times New Roman 12 points; margins must be no less than ½"; pages in excess of the limit will not be reviewed. **All uploads must contain relevant headers within the documents; e.g. Research Proposal, Figures, References, etc.**

A. **Research Proposal:**
- Provide a detailed research proposal, including rationale, an overview of preliminary data and findings (if applicable), hypotheses, scientific aims, and methodology. The Research Proposal should stand alone (i.e. it should contain all of the information required to support your research plan and should contain a self-contained, complete description of your project).
- Five (5) pages maximum. Any content beyond five (5) pages will be removed from the application and will not be reviewed.

In the Research Proposal, you should include:
- A description of the objective(s), central research questions/hypotheses and scientific aims of the project.
- Brief background on why you are conducting this work and how it is relevant to MS, with appropriate references to the scientific literature.
- A description of the novelty and innovation of the project, with a discussion of how it will provide new knowledge that has not previously been tested and how it will encourage the pursuit of new areas of research in the field.
- A plan of investigation and methodology, including experimental methods, techniques and analyses that will be used to collect data and test the proposed hypotheses. Where possible, include justifications for methodology, for example intervention and follow-up timelines, sample size, inclusion of individuals of a specific age, use of specific assay or outcomes measure, etc.
- A description of your qualifications and research environment, including relevant prior experience, productivity and skills, and capacity of your collaborators to address any knowledge and technical gaps, if applicable.
- A plan for building on the preliminary data gathered over the term of the grant to pursue further funding and research to expand on the findings.

Other Requirements and Considerations:
- Catalyst Research Grants do not have to demonstrate that sufficient preliminary data for the project has been collected in order to be competitive, as the objective of the program is to provide seed funding to support the generation of preliminary data that could be used as the basis for submitting larger grants and further pursuing the proposed research direction.
- A detailed breakdown of the proposed budget for the Catalyst Research Grant as well as a strong budget justification should be provided. Please consult the Policies for allowed expenses.
- Justify team structure; your team should have the necessary expertise. The curriculum vitae (CV) of the PI leading the project will be required as part of the application.

B. **Sex and/or Gender**: Describe how sex and/or gender are integrated into the project's research design, methods, analysis and interpretation, or dissemination of findings.

C. **Figures:** Where possible, include key tables, charts, figures, or photographs in the body of the research proposal. It is not mandatory to upload figures to the proposal – if there is a need for additional tables, charts, figures, etc. there is a 2-page limit.

D. **Research Timeline:** Provide the expected timeline to achieve the aims of your project. If the grant is awarded, this timeline will be used to follow-up on the progress of the research in the annual progress report.

E. **References:** Cite relevant references mentioned in the proposal. There is no page limit. Upload of references to the proposal is mandatory.

F. **Expected Outcomes and Next Steps:**
   - Describe why the proposed project is novel and how it will generate new data and open new avenues of research in MS.
   - Explain how the data generated will be used to spur subsequent relevant studies and why this proposed project in particular is critical to advancing ongoing research in this area of interest.
   - One (1) page maximum.

G. **Addressing Reviewers' Recommendations (for resubmissions only):**
   - A Catalyst/Pilot Research Grant application that was **unsuccessful in the previous competition** is considered a resubmission. A grant application can only be submitted a total of two times (1 original submission and 1 resubmission).
   - State how the reviewers' concerns (both scientific and lay), as outlined in the written critiques from the previous competition, have been addressed in the current application.
   The previous reviewers' comments will be provided to the review committee to ensure that the concerns have been addressed.
   - Two (2) page maximum.

H. **CV:** The applicant is required to upload the CV of the Principal Investigator, Co-Principal Investigator (if applicable) and Co-Applicants. The MSSC requires CVs to be submitted using the **Common CV format**, the template for which can be found at https://ccv-cvc.ca/.

   - Please choose "MSSC" as the agency and select Pilot Grant Template. Save the Common CV to your Desktop and upload it in ProposalCentral.
   - The CV **must include** publications (relevant to your project) from the **past five (5) years**.
   - Enter all the relevant and necessary information and click **"Done".** A validation will automatically be performed and errors, if any, will be displayed.
   - Review the CCV data online via a preview of the PDF and submit when complete. Record the confirmation number that is displayed with the status message (which can also be found under the "History" tab and on the first page of the CCV PDF).

I. **Relevant Publications:**
   - Up to two (2) full publications and or manuscripts may be uploaded.
   - Please upload the relevant publications in the order that you would like them to appear. These can be publications authored by the team or others most relevant to the proposal.

- Any additional manuscripts that have been accepted for publication after the grant submission deadline must be submitted by e-mail to msresearchgrants@mssociety.ca by **December 5, 2022**.

J. **Required Signatures:** Signatures from the Principal Investigator, Co-Principal Investigator (if applicable), Head of Department and Dean of Faculty or Institution are required. Electronic signatures will be accepted. A template is provided in ProposalCentral (see Section 2).

K. **Appendix:** Additional relevant documents such as letters of collaboration, letters of support, quotes to support the budget notes, survey questionnaires, etc. may be uploaded in the Appendix.

4.3 REVIEW AND SUBMISSION

Please review the application in full before submitting. Select "Validate" to check for any missing required information or files. It is the applicant's responsibility to ensure the submitted application is complete, contains all required components, and adheres to the format and page or character limits assigned. **Changes cannot be made to an application once it is submitted.** Select "Submit" to complete the submission. **You will receive a confirmation email of your submission**.

5.   QUESTIONS, ADMINISTRATIVE AND TECHNICAL SUPPORT

For questions related to site technical support, contact ProposalCentral customer support at: 800-875-2562 (Toll-free U.S. and Canada) or by email at pcsupport@altum.com. Hours of operation are Monday – Friday between 9:00 to 16:00 ET.

For all inquiries related to the Catalyst Research Grant competition, please direct questions to ms.grants@mssociety.ca. Hours of operation for MSSC's administrative support are Monday - Friday from 9:00 to 16:00 ET.