



Neuromuscular Research Program

2021-2022 Grant Competition

MUSCULAR DYSTROPHY CANADA
40 EGLINTON AVENUE EAST SUITE 500 TORONTO, ONTARIO M4P 3A2
WWW.MUSCLE.CA/RESEARCHERS | RESEARCH@MUSCLE.CA

Table of Contents

Request for Proposals 2021/2022 Neuromuscular Disorder Research Program	3
About the Funding Program	3
About Muscular Dystrophy Canada	3
2021-2022 Research Grant Guidelines	4
1. Objectives	4
1.1. Translational Science Seed Grants	4
1.2. Clinical Research Grants	5
2. Funding	6
3. Applicant Eligibility	6
4. Resubmissions and Renewals	7
5. Co-Funding & Partnerships	7
6. Grant Application	7
6.1. Submitting a Grant Application through proposalCENTRAL	7
6.2. Application Questions and Uploads	8
6.3. ORCID ID	8
6.4. Language	9
6.5. Level of Funding and Expenses	9
6.6. Other Funds	10
6.7. Ethics	10
6.8. Reviewer Exclusions	10
6.9. Uploaded document: Project Description	10
7. Evaluation Process and Criteria	12
7.1. Evaluation Criteria	12
8. Notification	12
9. Grant Reporting	12
10. MDC's Disorder Umbrella	13
11. Requests for Extension	14
12. For Support	14

Request for Proposals 2021/2022 Neuromuscular Disorder Research Program

About the Funding Program

Muscular Dystrophy Canada's annual **Neuromuscular Disorder Research Grant Program** invests in meritorious projects related to the diagnosis, treatment, or clinical care of neuromuscular disorders. These grants are intended to: fill gaps in the existing funding landscape; enable researchers to build new and innovative research; support proof-of-concept, feasibility and pilot studies in preparation for larger-scale, longer-term grants from external sources.

Application Open:	September 1, 2021
Full Application Deadline:	October 29, 2021 at 11:59 pm (EDT)
Notice of Decision:	March 2022
Funding Start Date:	May 1, 2022

In addition to general funds supporting varied research focused on neuromuscular disorders (NMD), funds are also available in disorder-specific areas, through designated funds generously provided by donors. Grants relevant to any NMD will be considered for funding and **this year, additional funds are available for the disorders noted below:**

MDC strongly encourages submission of applications in these disorder-specific areas of Charcot-Marie-Tooth disease, facioscapulohumeral muscular dystrophy, Friedreich ataxia, limb-girdle muscular dystrophy, myositis and related immune-mediated myopathies, myotonic muscular dystrophy, and spinal muscular atrophy.

About Muscular Dystrophy Canada

Muscular Dystrophy Canada (MDC) is a national, non-profit organization whose mission is to enhance the lives of those impacted with neuromuscular disorders by continually working to provide ongoing support and resources while relentlessly searching for cures through well-funded research.

MDC works to support individuals affected by NMDs in the *"here and now"* through our programs and services outside of the traditional circle of care. These include equipment and assistive technology, transportation, housing, employment, and education. At the same time, we also invest in *"tomorrow"* by funding research, which fosters advances in improving health outcomes and influencing positive change systemically.

If you have any questions about this research program or would like to inquire if your proposed research would fit MDC's research mandate, please contact:

Daria Wojtal, PhD
Director of Research & Evaluation, Muscular Dystrophy Canada
research@muscle.ca

2021-2022 Research Grant Guidelines

Compliance with this guide is a condition of applying for, holding or, administering MDC grant funds.

1. Objectives

The primary objective of this grant competition is to solicit research proposals under the two categories outlined below that will have an impact on a single neuromuscular disorder (NMD) or cross-cutting across different types of NMDs covered under Muscular Dystrophy Canada's umbrella. *See Section 10 for a description of disorders which fall under MDC's umbrella.*

Applicants may apply for one of the following two categories: Please select the category where your proposal would align best.

1.1. Translational Science Seed Grants

Research under this theme will apply knowledge from basic biology to develop potential diagnostic and/or therapeutic interventions in the pre-clinical setting. The aim of these grants will be to obtain results that will be leveraged by the researcher to apply for larger grants outside of MDC. This may include:

- Pre-clinical testing (cell or animal model) of potential therapeutic interventions
- Pre-clinical validation of new diagnostic tools/tests
- Pre-clinical validation of approved compounds or therapeutic intervention in new models of disease
- Earlier stage research may be considered for grants focusing on disorders where there is limited understanding of the disorder itself hindering a translational project

Translational Science Seed Grants should include:

- A description of how this research will impact those living with NMDs and/or how the project fulfills an unmet need in the specific research area
- A defined plan to collect preliminary data and to lay the foundation for a larger study including defined path for translation i.e. plans for commercialization, technology transfer, and/or clinical trial development; these may include strategic partnerships or leveraging of data to apply for government/industry innovation grants, planned incubator/accelerator opportunities that will be pursued etc.
- A proper and thorough literature review and solid plan for data analysis and dissemination of results through at least a peer-reviewed publication
- Collaboration between researchers, clinicians and knowledge-users

Grants that will not be considered are:

- Projects that focus solely on basic science research and do not clearly delineate a path to translation or clearly fill an unmet need.
- Projects with significant overlap with a grant held by the PI or collaborators that are already receiving funding from MDC or another funder. Any overlap should be explained in the funding justification of budget in online application

1.2. Clinical Research Grants

Research under this theme will seek to improve or inform treatment, clinical care and policy including decreasing secondary health conditions, improving quality of life and informing standards of care. This includes:

- Studies seeking to inform evidence-based clinical decision making, health policy/ program policies
- Studies on the natural history of neuromuscular disorders, pathophysiology, mechanisms underlying success or failure of interventions
- Clinical studies including pilot clinical trials focused on evaluating novel or re-purposed potential therapeutic interventions like physical agents; medical devices; surgery; pharmaceuticals; biologics
- Studies aimed at improving quality of life through the assessment of new technology, new treatment methods, rehabilitation and/or the assessment of impact of NMDs on dimensions of psychosocial health
- Clinical studies identifying/optimizing new methodologies for health monitoring (with or without treatment)

Clinical Research Seed Grants should include:

- Description of how this research will impact individuals' lives; or how the project fulfills an unmet need in the specific research area;
- A proper and thorough literature review and solid plan for data analysis and dissemination of results through at least a peer-reviewed publication
- A defined path for knowledge translation*
- Mitigation strategy in case COVID19 restrictions persist through the duration of grant i.e. method of patient recruitment, in-person study requirements
- If the study involves healthcare system and services research it must be conducted in Canada or with the inclusion of the Canadian healthcare system and be relevant to Canadians affected by NMDs.

Grants that will not be considered are:

- Projects with significant overlap with a grant held by the PI or collaborators that are already receiving funding from MDC or another funder. Any overlap should be explained in the funding justification of budget in online application
- Projects that do not answer a fundamental research question but rather develop a product or a collection of resources i.e. Project where the sole aim is to produce a knowledge translation product*, funding for training or educational initiatives, establishment/upkeep of research resources such as registry or biobank.

***NOTE:** If appropriate proposals should include knowledge translation as an outcome, there must be a clearly defined research objective. Also it should be clearly defined who the knowledge users are and which (if any) patient groups/charities are involved as knowledge users or patient experts or if applicant will be requesting in kind support from MDC.

A plan for formal, peer-reviewed publication of results or findings is expected in order to benefit the wider neuromuscular community.

2. Funding

This cycle the available project funding is **\$50,000 per year for up to 2 years** (total value up to \$100,000). Projects should be carried out within a maximum two-year period, beginning May 2022.

3. Applicant Eligibility

A **Lead Applicant/ Principal Investigator** is recognized by MDC as the author of the intellectual content of the application submitted. In the case of multi-authored applications, MDC will correspond with the first (principal) applicant listed. *See Co-applicant/Investigator below.* A lead Principal Investigator (PI) will assume the administrative and financial responsibilities for the team grant even if Co-applicants/Co-Investigators are listed. The lead PI's institution will be deemed the host institution for the grant and will receive the funding disbursements from MDC.

Principal Investigators must hold an academic position in an affiliated Canadian institution, or an internationally recognized academic institution and have at least one academic Canadian Co-Investigator. Eligible research institutions include those that are accepted under CIHR and NSERC's grant policies <https://cihr-irsc.gc.ca/e/36374.html>. Other institutions, including those outside of Canada, will be considered on an ad hoc basis during the peer review process, and may be required to provide additional documentation to support the application. If the PI does not hold an academic appointment at the time of submitting an application but will by the start date of the grant, a letter from the Dean of the Faculty or Department Chair must be uploaded with the application, indicating the planned position and the date it will take effect.

A **Co-applicant/ investigator** is the co-author of the intellectual content of the application submitted. This is an individual who is expected to actively participate in the proposed activities but not to direct them. This may include individuals with academic positions or individuals outside of academia but with relevant expertise.

A **Collaborator** is an individual whose role in the proposed activities is to provide a specific service (e.g. access to equipment, provision of specific reagents, training in a specialized technique, statistical analysis, access to a patient population, patient expert input etc.).

We encourage collaborations from multicenter and multidisciplinary teams to strengthen and innovate research projects.

***NOTE:** Private corporate entities are not eligible for funding, but they can receive money indirectly by providing a service to the applicant.

Concurrent Grant Submission: A lead principal investigator may only apply to one of the two research themes in a given year (Translational Seed Grant or Clinical Research Seed Grants). In the same competition, a maximum of two applications may be submitted in the circumstance that one is as a Principal Investigator and the other as a Co-Applicant which is not receiving direct funding in the Co-Applicant capacity. There are no limitations on collaborators as long as direct funding is not received from multiple grants in this competition.

Currently MDC Funded PIs: Previously funded Investigators either with active or expired grants, should indicate if there is overlap with any previously directly funded or co-funded by MDC and the current application.

*An active grant is defined as:

1. A MDC funded grant for which the end date occurs after the funding start date of current competition OR
2. A MDC funded grant that is currently on a no-cost extension and completion date occurs after the funding start date of current competition.

4. Resubmissions and Renewals

Grant Renewals: Support beyond the initial term of the grant will require submission of a new grant application that will be subject to review in direct competition with other new grant applications. It is the intent of the seed grant program to provide researchers with pilot data to apply for larger grants externally. Applicant should indicate in their proposals any efforts towards this goal to date (e.g. grant submissions to other agencies, industry partnerships sought, etc.).

Resubmissions: Applications that were unsuccessful in their previous submission to MDC's Seed Grant competition are considered resubmissions. An application is considered to be a resubmission if the overall research plan are similar to what was outlined in the initial or subsequent submissions. MDC 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 pro proposal addressing the reviewers' comments. Responses can be uploaded as supplementary material in ProposalCENTRAL. Application can only be re-submitted twice, for a total of three submissions.

5. Co-Funding & Partnerships

Periodically, donors (specifically individual donors and other not-for-profit or government organizations) wish to co-funded awards with MDC. To support these efforts, MDC reserves the right to establish funding partnerships with like-minded organizations and share submitted proposals. This information may include applicant's name, institution, project title, project abstracts. Applicants who are funded through a partnership will be notified in a timely manner of partnership terms and conditions.

6. Grant Application

Applicants must complete the online applications available via the **proposalCENTRAL** website by the deadline specified. Applications are not accepted via email or mail. It is the responsibility of applicants to ensure their applications are complete. Incomplete applications will be disqualified from the competition. An email acknowledging receipt of the application will be sent.

6.1. Submitting a Grant Application through proposalCENTRAL

1. Visit <https://proposalcentral.altum.com/>
2. Login using your ORCID ID, or create a new ORCID account for first-time users
3. Select the "Grant Opportunities" tab.
4. Filter the list by grant maker: "Muscular Dystrophy Canada".
5. Find the appropriate program on the list and click "Apply Now".

Please note there are two Muscular Dystrophy Canada applications listed in proposalCENTRAL, one for grants falling under the scope of Translational Science and the other for Clinical Research grants. See Objectives in Section 1 and Eligibility Section 3 for full details.

6. The system will take you through the application steps. Clicking “next” will save the previous section’s entry.
7. Please note the application instructions in the light blue boxes on each page of the application. Consult this grant guidelines document for further details
8. Upload all necessary documents (templates provided).
9. Provide e-signatures or ink where prompted
10. Validate your application and submit.

PLEASE NOTE THAT WHEN COMPLETING AN APPLICATION, THE SYSTEM ASKS FOR INFORMATION THAT MUSCULAR DYSTROPHY CANADA DOES NOT REQUIRE. OPTIONAL FIELDS ARE INDICATED ON THE FORMS. FOR CLARITY, THE FIELDS NOT REQUIRED BY MUSCULAR DYSTROPHY CANADA INCLUDE: DATE OF BIRTH, PASSPORT NUMBER, AND SOCIAL SECURITY NUMBER. DO NOT PROVIDE THIS INFORMATION.

6.2. Application Questions and Uploads

The application consists of a series of online questions typed directly into the application as well as the PDFs listed below which are to be uploaded on the online grant portal. Progress can be saved online at multiple stages but we do suggest that all typed answers are also saved outside of proposalCENTRAL as a backup in case of a technical issue. CV for collaborators are not required you may comment on team expertise in your proposal.

Mandatory Uploaded PDFs

1. Proposal with Figures should be a total of 6 pages: 4 page Project description with 2 pages of Figures. Figures and Tables should not be interwoven with the text of the Research Plan, instead please add to the end of document.
2. References/bibliography for proposal should be uploaded as a separate document and does not count towards page limit of Proposal with Figures
3. NIH style- 4 page Biosketch version (template provided) for Principal Investigator
4. NIH style- 4 page Biosketch version (template provided) for Co-Investigators(s) (if applicable)

Optional (if Applicable) Uploaded PDFs:

5. Appropriate research ethics human subject approvals (e.g., IRB, IRB Approved Patient Consent Forms) and/or animal approvals (e.g., approval letter from IACUC or Exemption letter from IACUC)
6. Additional supporting documents

6.3. ORCID ID

ORCID id is required to start an MDC Grant application. This is a unique numerical identifier which stores information about an individual similar to what you would see on a CV or resume including biographical information, employment, education, awards and distinctions, funding and works.

ORCID ID is integrated into ProposalCENTRAL and can be used to pre-fill some sections of any grant application on ProposalCENTRAL without having to retype fields. For more information and guidelines see:

ORCID 101 for Individuals (4 min. video): <https://youtu.be/G2GI0rVq-Jg>

ORCID 101 for Individuals (text): <https://www.lyrasis.org/Leadership/Pages/ORCID-101-for-Individuals.aspx>

Adding works to ORCID: <https://support.orcid.org/hc/en-us/articles/360006973133-Add-works-to-your-ORCID-record>

Adding funding to ORCID: <https://support.orcid.org/hc/en-us/articles/360006897214-Add-funding-information-to-your-ORCID-record>

6.4. Language

MDC is a nation-wide organization and serves the scientific community and public in either of Canada's official languages where feasible. We ask however that application themselves be submitted in English as MDC prioritizes scientific expertise when selecting Canadian and international reviewers. As such we are unable to guarantee French speaking reviewers who also have the appropriate scientific expertise. MDC will not translate applications submitted in French, however applicants may choose to write their application in French and solicit the assistance of a professional translation service to submit the application in English. However, the applicant is responsible for the scientific accuracy of the submission.

6.5. Level of Funding and Expenses

The maximum total budget per project is \$50,000/yr for a maximum of 2 years (total up to \$100,000 over two years). The amount requested must be quoted in Canadian dollars. Payments will be made every 6 months, exact dates and amounts will be outlined in the award letter to successful applicants based on budget requested.

Generally, funds will be awarded bi-annually as follows:

35% of Funding Amount upon award notification

15% of Funding Amount six months from grant start date contingent on receipt of ethics and animal approval(s) if not obtained prior to grant application

35% of Funding Amount on receipt of Year 1 Progress Report

15% of Funding Amount at one and a half years post start date

MDC follows the Canadian Tri-Agency Guide on Financial Administration*, these 4 basic principles govern the appropriate use of grant funds.

Grant expenditures must:

- contribute to the direct costs of the research/activities for which the funds were awarded, with benefits directly attributable to the grant
- be effective and economical meaning that it achieves the intended outcome with due regard for minimizing cost by avoiding unnecessary expense. This means the expenditure is considered an optimal use of the funds, which may not necessarily mean the "lowest cost."
- not result in personal gain for members of the research team

In this Grant Program allowable expenses include:

- Salaries for staff engaged with the project, including technicians, research coordinators and qualified students and postdoctoral fellows
- Costs for direct data and information collection

- Travel/hospitality expenses
- Acquisition of goods and services for the funded research/activities like Research reagents, materials, research equipment (not supplied by research institution).

Ineligible expenses include:

- Indirect expenses (i.e. payments towards general institutional overhead for work and services provided by the administering institution to other research personnel, such as routine lab maintenance, security, etc.

Administering institutions are responsible for ensuring that the funded research items are:

- authorized by grant recipients or their delegate(s)
- eligible, in accordance with MDC grant guidelines
- procured and paid/reimbursed in accordance with the administering institution's policies and processes

*For more details see: https://www.nserc-crsng.gc.ca/InterAgency-Interorganismes/TAFA-AFTO/guide-guide_eng.asp

6.6. Other Funds

All applicants must list all active and submitted grants as well as grant that expired within the **last 3 years**. For active and submitted grants, state the nature and percentage of overlap. The title, summary, budget, agency, precise dates, and tenure of these award(s) must be provided. If an application on the same subject is pending from another agency, the applicant should immediately notify Muscular Dystrophy Canada of the results as soon as they are known. Summary and budget pages for other grants held by Co-Principal Investigators are not required.

6.7. Ethics

Ethics approval if not already obtained at the time of application must be obtained within 6 (six) months from the award date. If it is not obtained, funding will be withheld until it is received. Proof of Ethics approvals should be uploaded with the application if available at the time of submission otherwise, it should be provided to Muscular Dystrophy Canada once obtained.

6.8. Reviewer Exclusions

Up to three individuals may be excluded as reviewers. These individuals may be Canadian- or internationally based- scientists.

6.9. Uploaded document: Project Description

Applicants should provide a clear, concise description of their research proposal and upload to *Section: Attachments*. A **maximum of 4 pages + 2 pages of figure may be submitted**. Page limits do not include references which should be uploaded as separate document. Questionnaires and consent forms may be uploaded as appendices, where applicable.

Research Report Formatting:

- Text must be single-spaced, 11 point Arial font size (including labels and descriptions accompanying figures, tables, charts, photographs, etc.)

- Header: Principal Investigator's surname in right corner.
- Footer: Number the pages consecutively
- Leave a minimum 2 cm margins on all sides

Describe the research project using the following headings.

1. Background

Please supply information for the reviewers to better understand the context of the proposal. A full literature review is not expected however include a proper and thorough literature review and solid plan for proper data analysis and peer-reviewed publication. Include a brief description of your Team's expertise and capacity as well the research environment.

2. Rationale for the project

Describe the rationale for the proposed project including hypotheses and questions the proposal plans to address. Outline clearly, what gap this research proposes to fill. Additionally, if the research study is being conducted with disorder specific inclusion criteria or in a model of a specific neuromuscular disorder (NMD), please describe if there is a broader applicability to other NMDs. i.e. what aspects of the methodology, tested treatment, findings may inform treatment and/or care for other neuromuscular disorders. This question may not be applicable to research proposal with a cross-cutting theme.

3. Objectives

State the primary and secondary objectives.

4. Primary data

Provide preliminary data if existing

5. Methodology

Describe the activities, methods and processes for achieving the identified objectives. Provide a work plan with corresponding timelines. Discuss potential difficulties and/or limitations of the proposed procedures and alternative approaches to achieve aims. Please include where applicable, power-analysis, relevant ethical, cultural, sex and gender considerations.

6. Deliverables

Identify if your research question is answered how will you share, lift, or inform this information and how will it inform future directions? Deliverables should also include formal, peer-reviewed publication of the research in order to disseminate the results to the broader NMD research community. In addition address how will this lay the foundation for a larger study i.e. are there plans for commercialization, technology transfer, clinical trial development, any strategic partnerships in place and/or plan to leverage data to apply for government/industry innovation grants, any incubator/accelerator opportunities that will be pursued etc.

7. Evaluation Process and Criteria

Applications will be assessed through a competitive peer-review process by Canadian and international scientific reviewers as well as members impacted by a NMD for a lived experience perspective. As such MDC places a high priority on ensuring appropriate lay summaries are submitted as part of each application.

Review panel members will declare any conflict of interest with any application and excuse themselves from its review. This includes individuals from the same institution as the applicants or individuals working in close collaboration with the applicant or direct competitors. Final approval will be through MDC's Board of Directors.

7.1. Evaluation Criteria

Each application is assessed on a 5-point scale adapted from CIHR. The score assignment is based on the review panel's assessments of the application, consideration of the application itself, and the reports of the reviewers. The Evaluation criteria include Significance/Impact including prospect for translatability; Originality; Research Strategy, Feasibility and Budget; Investigator and Team. If applicable, a history of fund usage of past MDC funding including compliance with end-of-grant reporting will be considered. Summarized anonymous feedback will be provided for all applications submitted, whether they were successful or not.

Reviewers are matched based on relevant scientific expertise and management of conflicts of interest. MDC considers a conflict of interest as anything that interferes with, or could reasonably be perceived as interfering with, the full and objective peer review. This includes a co-applicant or collaborator relation with the applicant, employment at the same institution as the primary applicant, active collaboration on any ongoing research projects and/or you both hold an active research grant with the primary applicant, a personal relationship with the primary applicant including mentor/mentee, research supervisor, graduate student.

Applicants are also permitted to list up to three individuals based in Canada or internationally who they would wish to exclude as reviewers due to direct competition.

8. Notification

Applicants will receive notification on proposalCENTRAL with summary of reviewer comments. An official notification of Muscular Dystrophy Canada's decision will follow. . The lead PI should notify all collaborators and their grants office of the award.

9. Grant Reporting

With acceptance of seed grant funding, researchers accept the following commitments:

- ensuring that the funds provided are utilized towards achieving the aims and outcomes as described in the application for funding.
- advise Muscular Dystrophy Canada immediately with regards to any funding overlap i.e. if you are a receipt or become eligible to receive any funding from another source for any part of this project.
- adhere to Muscular Dystrophy Canada's payment and funding guidelines, and understand that Muscular Dystrophy Canada's will remit the funds for this project to my academic institution in trust.

- acknowledge Muscular Dystrophy Canada’s contribution in all written documentation and oral presentations related to this project, including scientific articles, news releases/conferences, public lectures and media interviews.
- notify Muscular Dystrophy Canada prior to any news releases or public communications related to the results of this project.
- provide to Muscular Dystrophy Canada a Year 1 Progress update two-weeks before the funding anniversary.
- provide to Muscular Dystrophy Canada an End of Grant Report consisting of a financial and end of grant progress report submitted no more than 3 months after grant expiry submitted via ProposalCENTRAL templates provided. As well as a 2 year-post grant brief survey update. Examples of End Grant Reporting forms can be found here <https://muscle.ca/researchers/forms/>
- Plain language reporting –at minimum one Knowledge Translation activity will be carried out to disseminate the results with MDC. This can consist of a plain language MDC webinar, rapid research rounds, research spotlight or conference presentation in a seminar-style setting at the end of the project.

Compliance with end of grant reporting allows MDC to acknowledge contribution to knowledge synthesis, enable knowledge dissemination, and demonstrate impact to donors supporting the research program as well as ensure that ongoing funding is available for future research initiatives. Failure to meet these commitments precludes future funding through the MDC seed grant program.

10. MDC’s Disorder Umbrella

Muscular Dystrophy Canada provides funding for programs and services including research involving muscular dystrophies as well as neuromuscular disorders more broadly that are medically defined as hereditary or immune-mediated conditions with primarily affect in:

- Muscle (such as muscular dystrophies, hereditary or immune-mediated myopathies),
- Neuromuscular Junction (such as hereditary or immune-mediated myasthenic conditions)
- Peripheral nervous system (such as hereditary motor and sensory neuropathies; immune-mediated neuropathies; lower* motor neuron disorders)

***NOTE** upper motor neuron disorders (Amyotrophic lateral sclerosis /Primary Lateral Sclerosis) are not covered by MDC. Please see ALS Canada for funding opportunities.

Additionally, MDC’s umbrella does not cover health conditions which may be, in some circumstances, systemic and present with a neuromuscular phenotype but where the etiology of the disorder would not lend itself to be medically described as neuromuscular disorders with genetic or autoimmune cause.

These exclusions include:

Anatomy:

- Genetic, autoimmune and paraneoplastic disorders with primary central nervous system (brain, spinal cord) involvement including spinocerebellar ataxias, leukodystrophies, multiple sclerosis, Huntington disease, Parkinson disease, cerebral palsy, encephalopathies, myelitis.
- Health conditions with primary bone or connective tissue involvement i.e. osteoporosis, structural developmental anomalies of the skeleton

Cause:

- Health conditions caused by injury, poisoning or certain other consequences of external causes including
 - acquired traumatic conditions due to birth-related injury and/or other accidents (i.e. brachial plexopathy, spinal cord injuries);
 - acquired traumatic conditions secondary to a non-NMD condition or its treatment (i.e. diabetic polyneuropathy, plexopathy, peripheral neuropathy due to cancer or its treatment);
 - acquired conditions due to poisoning (i.e. alcoholic/drug-induced myopathy, neuromuscular junction disorders due to toxicity);
 - acquired conditions due to age or lack of motion due to an acquired non-NMD underlying condition or procedure like brain injury, post-surgery recovery (i.e. sarcopenia, coma related muscle atrophy)
- Health conditions caused by infection or parasitic diseases (i.e. botulism, Lyme disease, peripheral neuropathy due to HIV)

If you are unsure if a condition is covered by MDC please contact MDC's Research Department

11. Requests for Extension

If a no-cost extensions is required due to a leave of absence and/or unforeseen circumstances please contact Muscular Dystrophy Canada. Requests should indicate reason for required extension, duration as well as identify changes in scope/research aims and budget allocations. All request will be evaluated based on the original proposal and decisions will be made on an ad hoc basis.

12. For Support

For technical support with your online application, contact proposalCENTRAL:

pcsupport@altum.com

Weekdays, 8:00 am to 5:00 pm EST

For program information, guidelines, disorder list, project eligibility contact Muscular Dystrophy Canada's Research Department:

Daria Wojtal, PhD | Director of Research & Evaluation
research@muscle.ca | 1 800 567-2873 ext. 1114