

BY-LAWS

A by-law relating generally to the conduct of the affairs of

NATIONAL MOLECULAR MICROBIOLOGY DIAGNOSTICS USER GROUP INC. (the "Corporation")

BE IT ENACTED as a By-law of the Corporation as follows:

Article 1 Definitions

In this by-law and all other by-laws of the Corporation, unless the context otherwise requires:

"Act" means the *Canada Not-For-Profit Corporations Act* S.C. 2009, c.23 including the Regulations made pursuant to the Act, and any statute or regulations that may be substituted, as amended from time to time;

"articles" means the original or restated articles of incorporation or articles of amendment, amalgamation, continuance, reorganization, arrangement or revival of the Corporation;

"board" means the board of directors of the Corporation and "director" means a member of the board;

"by-law" means this by-law and any other by-law of the Corporation as amended and which are, from time to time, in force and effect;

"meeting of members" includes an annual meeting of members or a special meeting of members;

"special meeting of members" includes a meeting of any class or classes of members and a special meeting of all members entitled to vote at an annual meeting of members;

"ordinary resolution" means a resolution passed by a majority of not less than 50% plus 1 of the votes cast on that resolution;

"proposal" means a proposal submitted by a member of the Corporation that meets the requirements of section 163 (Shareholder Proposals) of the Act;

"Regulations" means the regulations made under the Act, as amended, restated or in effect from time to time; and

"special resolution" means a resolution passed by a majority of not less than two-thirds (2/3) of the votes cast on that resolution.

Article 2 Interpretation

In these by-laws and in all other by-laws of the corporation hereafter passed unless the context otherwise requires, words importing the singular number or the masculine general shall include the plural number or the feminine gender, as the case may be, and vice versa, and references to persons shall include firms and corporation.

Article 3 Corporate Seal

The Corporation may have a corporate seal in the form approved from time to time by the board. If a corporate seal is approved by the board, the secretary of the Corporation shall be the custodian of the corporate seal.

Article 4 Execution of Documents

Contracts, documents or any instruments in writing requiring the signature of the corporation, shall be signed by any two officers and all contracts, documents and instruments in writing so signed shall be binding upon the corporation without any further authorization or formality. The directors shall have power from time to time by resolution to appoint an officer or officers on behalf of the corporation to sign specific contracts, documents and instruments in writing. The directors may give the corporation's power of attorney to any registered dealer in securities for the purposes of the transferring of and dealing with any stocks, bonds, and other securities of the corporation. The seal of the corporation when required may be affixed to contracts, documents and instruments in writing signed as aforesaid or by any officer or officers appointed by resolution of the board of directors.

Article 5 Financial Year End

The financial year end of the Corporation shall be determined by the board of directors.

Article 6 Banking Arrangements

The banking business of the Corporation shall be transacted at such bank, trust company or other firm or corporation carrying on a banking business in Canada or elsewhere as the board of directors may designate, appoint or authorize from time to time by resolution. The banking business or any part of it shall be transacted by an officer or officers of the Corporation and/or other persons as the board of directors may by resolution from time to time designate, direct or authorize.

Article 7
Borrowing Powers

The directors of the Corporation may, with unanimous consent of all members of the Board,

1. borrow money on the credit of the Corporation;
2. issue, reissue, sell, pledge or hypothecate debt obligations of the Corporation;
3. give a guarantee on behalf.

Article 8
Annual Financial Statements

The Corporation shall send to the members a copy of the annual financial statements and other documents referred to in subsection 172(1) (Annual Financial Statements) of the Act or a copy of a publication of the Corporation reproducing the information contained in the documents. Instead of sending the documents, the Corporation may send a summary to each member along with a notice informing the member of the procedure for obtaining a copy of the documents themselves free of charge. The Corporation is not required to send the documents or a summary to a member who, in writing, declines to receive such documents. Alternatively, the Corporation shall post Minutes of the Annual General Meeting which shall include financial status reports on the Corporation's website.

Article 9
Membership Conditions

Subject to the articles, there shall be one class of members in the Corporation. Membership in the Corporation shall be available only to individuals interested in furthering the Corporation's purposes and who have applied for and been accepted into membership in the Corporation by resolution of the board or in such other manner as may be determined by the board. Each member shall be entitled to receive notice of, attend and vote at all meetings of the members of the Corporation. Pursuant to subsection 197(1) (Fundamental Change) of the Act, a special resolution of the members is required to make any amendments to this section of the by-laws if those amendments affect membership rights and/or conditions described in paragraphs 197(1)(e), (h), (l) or (m).

Article 10
Membership Transferability

A membership may only be transferred to the Corporation. Pursuant to Section 197(1) (Fundamental Change) of the Act, a special resolution of the members is required to make any amendment to add, change or delete this section of the by-laws.

Article 11
Notice of Members Meeting

Notice of the time and place of a meeting of members shall be given to each member entitled to vote at the meeting by the following means:

1. by mail, courier or personal delivery to each member entitled to vote at the meeting, during a period of not less than 3 months with a reminder not less than 21 days before the day on which the meeting is to be held; or
2. by telephonic, electronic or other communication facility to each member entitled to vote at the meeting, during a period of not less than 3 months with a reminder 21 days before the day on which the meeting is to be held.

Pursuant to subsection 197(1) (Fundamental Change) of the Act, a special resolution of the members is required to make any amendment to the by-laws of the Corporation to change the manner of giving notice to members entitled to vote at a meeting of members.

Article 12
Members Calling a Members' Meeting

The board of directors shall call a special meeting of members in accordance with Section 167 of the Act, on written requisition of members carrying not less than 5% of the voting rights. If the directors do not call a meeting within twenty-one (21) days of receiving the requisition, any member who signed the requisition may call the meeting.

Article 13
Absentee Voting at Members' Meeting

Pursuant to section 171(1) (Absentee Voting) of the Act, a member entitled to vote at a meeting of members may vote by means of a telephonic, electronic or other communication facility if the Corporation has a system that:

1. enables the votes to be gathered in a manner that permits their subsequent verification, and
2. permits the tallied votes to be presented to the Corporation without it being possible for the Corporation to identify how each member voted.

Pursuant to subsection 197(1) (Fundamental Change) of the Act, a special resolution of the members is required to make any amendment to the by-laws of the Corporation to change this method of voting by members not in attendance at a meeting of members.

Article 14
Membership Dues

Members shall be notified in writing of the membership dues at any time payable by them and, if any are not paid within one (1) calendar month of the membership renewal date the members in default shall automatically cease to be members of the Corporation.

Article 15
Termination of Membership

A membership in the Corporation is terminated when:

1. the member dies or resigns;
2. the member is expelled or their membership is otherwise terminated in accordance with the articles or by-laws;
3. the member's term of membership expires;
4. the member is declared bankrupt or makes an assignment into bankruptcy or a creditor proposal;
5. a member fails to maintain any qualifications for membership described in the section on membership conditions of these by-laws;
6. the Corporation is liquidated and dissolved under the Act.

Article 16
Effect of Termination of Membership

Subject to the articles, upon any termination of membership, the rights of the member, including any rights in the property of the Corporation, automatically cease to exist.

Article 17
Place of Members Meeting

Subject to compliance with section 159 (Place of Members' Meetings) of the Act, meetings of the members may be held at any place within Canada determined by the board or, if all of the members entitled to vote at such meeting so agree, outside Canada.

Article 18
Persons Entitled to be Present at Members' Meetings

The only persons entitled to be present at a meeting of members shall be those entitled to vote at the meeting, the directors and the public accountant of the Corporation and such other persons who are entitled or required under any provision of the Act, articles or by-laws of the Corporation to be present at the meeting. Any other person may be admitted only on the invitation of the chair of the meeting or by resolution of the members.

Article 19
Quorum at Members' Meetings

A quorum at any meeting of the members (unless a greater number of members are required to be present by the Act) shall be a majority of the members entitled to vote at the meeting. If a quorum is present at the opening of a meeting of members, the members present may proceed with the business of the meeting even if a quorum is not present throughout the meeting.

Article 20
Votes to Govern at Members Meetings

At any meeting of members every question shall, unless otherwise provided by the articles or by-laws or by the Act, be determined by a majority of the votes cast on the questions. In case of an equality of votes either on a show of hands or on a ballot or on the results of electronic voting, the chair of the meeting in addition to an original vote shall have a second or casting vote.

Article 21
Participation by Electronic Means at Members' Meetings

If the Corporation chooses to make available a telephonic, electronic or other communication facility that permits all participants to communicate adequately with each other during a meeting of members, any person entitled to attend such meeting may participate in the meeting by means of such telephonic, electronic or other communication facility in the manner provided by the Act. A person participating in a meeting by such means is deemed to be present at the meeting. Notwithstanding any other provision of this by-law, any person participating in a meeting of members pursuant to this section who is entitled to vote at that meeting may vote, in accordance with the Act, by means of any telephonic, electronic or other communication facility that the Corporation has made available for that purpose.

Article 22
Members' Meeting Held Entirety by Electronic Means

Meetings of members may not be held entirely by telephonic, an electronic or other communication facility.

Article 23
Number of Directors

The board shall consist of the number of directors specified in the articles. If the articles provide for a minimum and maximum number of directors, the board shall be comprised of the fixed number of directors as determined from time to time by the members by ordinary resolution or, if the ordinary resolution empowers the directors to determine the number, by resolution of the board. In the case of a soliciting corporation the minimum number of directors may not be fewer than three (3), at least two of whom are not officers or employees of the Corporation or its affiliates.

Article 24
Term of Office of Directors

The directors shall be elected to hold office for a term expiring not later than the close of the second annual meeting of members following the election.

Article 25
Calling of Meetings of Board of Directors

Meetings of the board may be called by the chair of the board, the vice-chair of the board or any two (2) directors at any time. If the Corporation has only one director, that director may call and constitute a meeting.

Article 26
Notice of Meeting of Board of Directors

Notice of the time and place for the holding of a meeting of the board shall be given in the manner provided in the section on giving notice of meeting of directors of this by-law to every director of the Corporation not less than ten (10) days before the time when the meeting is to be held. Notice of a meeting shall not be necessary if all of the directors are present, and none objects to the holding of the meeting, or if those absent have waived notice of or have otherwise signified their consent to the holding of such meeting. Notice of an adjourned meeting is not required if the time and place of the adjourned meeting is announced at the original meeting. Unless the by-law otherwise provides, no notice of meeting need specify the purpose or the business to be transacted at the meeting except that a notice of meeting of directors shall specify any matter referred to in subsection 138(2) (Limits on Authority) of the Act that is to be dealt with at the meeting.

Article 27
Votes to Govern at Meetings of the Board of Directors

At all meetings of the board, every question shall be decided by a majority of the votes cast on the question. In case of an equality of votes, the chair of the meeting in addition to an original vote shall have a second or casting vote.

Article 28
Appointment of Officers

The board shall appoint officers on an annual or more frequent basis and, subject to the Act, delegate to such officers the power to manage the affairs of the Corporation. An officer may, but need not be, a director unless these by-laws otherwise provide. Two or more offices may be held by the same person.

Article 29
Duties of Officers

The president shall be the chief executive officer of the corporation. He/she shall preside at all meetings of the corporation and the board of directors. He/she shall have the general and active management of the affairs of the corporation. He/she shall see that all orders and resolutions of the board of directors are carried into effect.

The Vice-President shall, in the absence or disability of the president, perform the duties and exercise the powers of the president and shall perform such other duties as shall from time to time be imposed upon him/her by the board of directors.

The treasurer shall have the custody of the funds and securities of the corporation and shall keep full and accurate accounts of all assets, liabilities, receipts and disbursements of the corporation in the books belonging to the corporation and shall deposit all monies, securities and other valuable effects in the name and to the credit of the corporation in such chartered bank or trust company, or, in the case of securities, in such registered dealer in securities as may be designated by the board of directors from time to time. He/she shall disburse the funds of the corporation as may be directed by proper authority taking proper vouchers for such disbursements, and shall render to the president and directors at the regular meeting of the board of directors, or whenever they may require it, an accounting of all the transactions and a statement of the financial position, of the corporation. He/she shall also perform such other duties as may from time to time be directed by the board of directors.

The secretary shall attend all meetings and act as clerk or oversee a clerk and record all votes and minutes of all proceedings in the books to be kept for that purpose. The secretary shall give or cause to be given notice of all meetings of the members and of the board of directors, and shall perform such other duties as may be prescribed by the board of directors or president, under whose supervision the secretary shall be. The secretary shall be the custodian of the seal of the corporation.

The duties of all other officers of the corporation shall be such as the terms of their engagement call for or the board of directors requires of them.

Article 30
Committees of the Board of Directors

The board may from time to time appoint any committee or other advisory body, as it deems necessary or appropriate for such purposes and, subject to the Act, with such powers as the board shall see fit. Any such committee may formulate its own rules of procedure, subject to such regulations or directions as the board may from time to time make. Any committee member may be removed by a majority vote of during at the board meeting that has achieved quorum (50% of members plus 1)..

Article 31

Method of Giving any Notice

Any notice (which term includes any communication or document), other than notice of a meeting of members or a meeting of the board of directors, to be given (which term includes sent, delivered or served) pursuant to the Act, the articles, the by-laws or otherwise to a member, director, officer or member of a committee of the board or to the public accountant shall be sufficiently given:

1. if delivered personally to the person to whom it is to be given or if delivered to such person's address as shown in the records of the Corporation or in the case of notice to a director to the latest address as shown in the last notice that was sent by the Corporation in accordance with section 128 (Notice of directors) or 134 (Notice of change of directors) and received by the Director;
2. if mailed to such person at such person's recorded address by prepaid ordinary or air mail;
3. if sent to such person by telephonic, electronic or other communication facility at such person's recorded address for that purpose; or
4. if provided in the form of an electronic document in accordance with Part 17 of the Act.

A notice so delivered shall be deemed to have been given when it is delivered personally or to the recorded address as aforesaid; a notice so mailed shall be deemed to have been given when deposited in a post office or public letter box; and a notice so sent by any means of transmitted or recorded communication shall be deemed to have been given when dispatched or delivered to the appropriate communication company or agency or its representative for dispatch. The secretary may change or cause to be changed the recorded address of any member, director, officer, public accountant or member of a committee of the board in accordance with any information believed by the secretary to be reliable. The declaration by the secretary that notice has been given pursuant to this by-law shall be sufficient and conclusive evidence of the giving of such notice. The signature of any director or officer of the Corporation to any notice or other document to be given by the Corporation may be written, stamped, type-written or printed or partly written, stamped, type-written or printed.

Article 32

Indemnification

1. Every Director and Officer of the Corporation in exercising the powers and discharging the duties of a Director or Officer shall act honestly and in good faith with a view to the best interest of the Corporation and exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Subject to the foregoing, no Director or Officer shall be liable for the acts, receipts, neglects or defaults of any other Director, Officer or employee, or for joining in any receipt or other act for conformity, or for any loss, damage or expense happening to the Corporation through the insufficiency or deficiency of title to any property acquired for or on behalf of the Corporation, or for the insufficiency or deficiency of any security in or upon which any of the monies of the Corporation shall be invested, or for any loss or damage arising from the bankruptcy, insolvency or tortious acts of any person with whom any of the monies, securities or effects of the Corporation shall be deposited, or for any loss occasioned by any error of judgment

or oversight on the part of the Director or Officer, or for any other loss, damage or misfortune which shall happen in the execution of the duties of such office or in relation thereto; provided that nothing herein shall relieve any Director or any Officer from the duty to act in accordance with the Act and the regulations thereunder or from liability for any breach thereof.

2. Every Director, Officer, employee or agent of the Corporation and his or her heirs, executors and administrators, and estate and effects, shall from time to time and at all times be indemnified and saved harmless out of the funds of the Corporation from and against:

- (a) All costs, charges and expenses whatsoever that he or she sustains or incurs in or about any action, suit or proceedings that is brought, commenced, or prosecuted against him or her, for or in respect of any act, deed, matter or thing whatsoever made, done or permitted by him or her, in or about the execution of the duties of his or her office; and
- (b) All other reasonable costs, charges and expenses that he or she sustains or incurs in or about or in relation to the affairs thereof, except such costs, charges or expenses as are occasioned by his or her own willful neglect or default.

3. If any employee of the Corporation is named in a civil suit and the subject matter relates to the person's employment by the Corporation, the Corporation will pay for the employee's legal representation in the proceedings and any appeal, and will pay any sum of money the employee or the employee's estate becomes liable to pay in connection with the matter but, if the court finds that the employee has been deliberately dishonest or has committed a criminal offence, the Corporation will not be liable for such payment.

4. Any indemnification under paragraph 2 of this Section 34, of the present article, unless ordered by a court, shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification of the director, officer, member of a committee, employee or agent is proper in the circumstances because he has met the applicable standard of conduct set forth in this article. The determination shall be made by the Board of Directors by a majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding, and if such a quorum is not obtainable, or even if obtainable a quorum of disinterested directors so directs, by independent legal counsel in a written opinion, or by the members.

Article 33 **Insurance**

The corporation shall be required to purchase and maintain insurance, if available, on behalf of each and every of its directors, officers, former directors and former officers against any liability incurred or alleged to have been incurred by them by reason of being or having been directors or officers of the corporation. The corporation shall purchase insurance in respect of potential liabilities of the directors and officers whether or not the corporation would have the power to indemnify them against any such liability.

Article 34
Invalidity of any Provisions of this By-law

The invalidity or unenforceability of any provision of this by-law shall not affect the validity or enforceability of the remaining provisions of this by-law.

Article 35
Omissions and Errors

The accidental omission to give any notice to any member, director, officer, member of a committee of the board or public accountant, or the non-receipt of any notice by any such person where the corporation has provided notice in accordance with the by-laws or any error in any notice not affecting its substance shall not invalidate any action taken at any meeting to which the notice pertained or otherwise founded on such notice.

Article 36
By-laws and Effective Date

Subject to the articles, the board of directors may, by resolution, make, amend or repeal any by-laws that regulate the activities or affairs of the Corporation. Any such by-law, amendment or repeal shall be effective from the date of the resolution of directors until the next meeting of members where it may be confirmed, rejected or amended by the members by ordinary resolution. If the by-law, amendment or repeal is confirmed or confirmed as amended by the members it remains effective in the form in which it was confirmed. The by-law, amendment or repeal ceases to have effect if it is not submitted to the members at the next meeting of members or if it is rejected by the members at the meeting.

This section does not apply to a by-law that requires a special resolution of the members according to subsection 197(1) (fundamental change) of the Act because such by-law amendments or repeals are only effective when confirmed by members.